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THE WILDERNESS IN WILDERNESS THERAPY TECHNIQUES

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THE WILDERNESS IN WILDERNESS THERAPY TECHNIQUES

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Science
Parks, Recreation and Tourism Management

by
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Accepted by:
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ABSTRACT

The fields of Therapeutic Recreation, Criminal Justice, and Psychology currently use wilderness therapy techniques in the treatment of adolescents experiencing difficult life transitions. While literature exists that reports on the effectiveness of Wilderness Therapy techniques in addressing the issues that adolescents' face, there is a lack of understanding regarding exactly why these programs work. One theme that has been minimally addressed in the literature is the role that the "wilderness" plays in these therapeutic techniques. People's perceptions of the wilderness environment vary due to experience and exposure. These varying perceptions could play a role in the effectiveness of these techniques for each individual person.

The purpose of this study is to explore professionals' perceptions of the relationship between adjudicated and at-risk adolescents' previous experience with the wilderness or other natural areas and wilderness program efficacy. This will be addressed through measures of the professionals' perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs. This information will be collected through surveys that used closed-ended, Likert-like response sets, as well as an open-ended question.

The results of this study showed that the majority of professionals felt that youth would react differently to the natural environment based on their previous experience and exposure to it. Participants reported that these different reactions play a role in youth experiencing a state of disequilibrium, a necessary part of the Wilderness Therapy facilitation process.

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CHAPTER ONE

INTRODUCTION

Overview

The field of Therapeutic Recreation uses Adventure Therapy or Wilderness Therapy, as a facilitation technique in wilderness settings. “The perceived value of Adventure Therapy programs, among practitioners, suggests that Therapeutic Recreation should embrace it as more than just one of many possible efficacious treatment modalities or interventions” (Caldwell, 2001, p. 285). Professionals in the fields of mental health, criminal justice, and physical rehabilitation also use Wilderness Therapy as an alternative facilitation technique for therapeutic processes.

Wilderness areas tend to be perceived as novel and mysterious environments with a myriad of ever changing colors, textures, temperatures, shapes, and living creatures. People in general have different thoughts, feelings, competencies, and attitudes regarding the wilderness because of their own experiences and exposure. “A person’s experience in wilderness surroundings can cause panic and fear, or they can inspire a deep sense of tranquility and peace rarely matched in other surroundings” (Kaplan & Talbot, 1983, p. 163).

These polar opposite reactions to wilderness could play an important role in how people perceive and receive interventions in wilderness settings. It is intuitive that if an individual feels comfortable, safe, and relaxed in the wilderness setting, they would be open to therapeutic approaches that take place in the wilderness. But what if a person is very uncomfortable or afraid in the wilderness. Or, perhaps they are so comfortable that

the physical setting plays little role in therapy. “If the environment is negatively perceived, activities that occur within it may also be avoided. It is quite possible that an individual may be rejecting the environment as much as the activity” (Bixler & Floyd, 1997, p. 444). Yet, some researchers and practitioners suggest that a certain level of fear, anxiety, or discomfort could be beneficial. “Using fear through an outdoor adventure setting can be an attractive component in an environmental education program. Through the use of these types of [risk] activities, the individual can be provided with a learning and experiencing arena difficult to obtain anywhere else in our society” (Ewert, 1986, p. 38).

If professionals in the field of Therapeutic Recreation (TR) are considering using Adventure Therapy (AT) techniques in the wilderness setting as a tool for therapeutic change, they may need to take into account the feelings and attitudes that each participant experiences when exposed to the wilderness. “...the TRS (Therapeutic Recreation Specialist) may find the use of outdoor settings and specific adventure activities to be inappropriate, or not fully effective, depending on the situation and the client population” (Ewert, McCormick, & Voight, 2001, p. 108). Understanding how the background of a person, in terms of how they perceive wilderness, could possibly help therapists either be more effective or avoid causing unnecessary anxiety to participants in their programs.

The “Wilderness” in Wilderness Therapy Techniques

Wilderness does not necessarily mean a wooded expanse of land. It can represent any type of environment that is foreign or that introduces novelty and creates disequilibrium in the client. This can include sailing on the ocean, hiking in the desert,

riding in a wagon train, or maneuvering through a crowded city (Gass, 1993).

Wilderness is only a part of the all-encompassing natural environment that also includes backyard gardens, greenways, ponds, pastures, and front yards. Wilderness-based programs involve sleeping on the ground, no bathroom facilities, water taken from streams, no external temperature control, animals, bugs, dirt, and all types of weather. They can also involve warm breezes, magnificent sunsets, and beautiful vistas, while providing opportunities to achieve great successes like summiting a mountain or climbing a rock face.

Currently, there is literature that discusses how people's perceptions of the natural environment, including wilderness areas, can affect their preferences for these areas, the appeal of working in these environments, and their propensity to learn more effectively in these areas. Research exists that discusses the restorative effects that natural environments can provide, how it improves concentration, increases health benefits, improves affect, and is a source of relaxation (Kaplan & Kaplan, 1989).

Research, "regularly claims that adventure therapy in a wilderness setting is a more effective option when compared to treatment provided in institutional settings" (Williams, 2000, p. 47). If people feel comfortable in this environment they may experience restorative and positive therapeutic affects, but what if they are not comfortable in these settings? "To ignore apprehensions of wildlands and only investigate what is preferred by those already actively involved with wildland environments does little more than support the status quo" (Bixler & Floyd, 1997, p. 444). When working in the wilderness department of a residential program that served

adjudicated teenagers from inner city Philadelphia, the researcher encountered a young boy in the program who got into a physical altercation with another boy just before he was to leave for a week long backpacking trip. The students knew that they would not qualify for outdoor activities if they were involved in physical altercations. When asked why he started the fight, he responded, “So I don’t have to go into the woods.” “There needs to be compatibility between the environment and the individual...without this compatibility, a person’s abilities might not match environmental demands. In such a situation, a person would have a hard time coping: hardly a scenario for renewal” (Davis-Bermen & Berman, 1994, p. 114).

The processes that many professionals implement when using natural areas as a therapeutic tool depend on or assume that people feel a certain way in that environment. This is better explained by examining one of the therapeutic processes that takes place predominately in natural settings called the Adventure Therapy Process.

The Adventure Therapy Process

AT is the use of adventure activities to accomplish treatment related goals (Dattilo, 2000, p.14). AT has its roots in both experiential education and the mental health field. Gillis (1995) has defined AT as:

An active approach to psychotherapy for people seeking behavioral change, either voluntarily or through some court-ordered coercion, that utilizes adventure activities, be they group games and initiatives or wilderness expeditions (with some form of real or perceived risk), as the primary therapeutic medium to bring such change. (p.5)

Using the AT process in the wilderness setting rather than a residential setting is called Wilderness Therapy (WT). WT is defined as a subcategory of AT. WT occurs outside, within groups, usually ranging from 8-15 people and over a multiple-day period lasting anywhere from one to four weeks in most cases (Gass, 1993, p. 9).

According to Gass (1993) there are eight components to an adventure experience that facilitate participants' growth and development. These eight components are :

1. Participant: The participant's role can be defined by their, "...preconceived notions regarding the activity that set the stage for learning. The participant's anticipation of the experience causes a sense on internal stimulation". (Dattilo, p.18)
2. Disequilibrium: "Participants feelings of stimulation create a state of disequilibrium. Disequilibrium occurs when individuals' previously held beliefs regarding a situation do not apply to the current situation. This internal conflict motivates individuals to either change or modify their beliefs and perceptions in an effort to reduce the discomfort disequilibrium produces." (Dattilo, p. 18)

The outcome of this process depends on the client feeling disequilibrium because of a novel environment. Another explanation of this can be seen here:

Disequilibrium:

A state of internal conflict that provides motivation for an individual to make personal changes. It must be present for change to occur in adventure experiences. By involvement in an experience that is beyond

- their comfort zone, individuals are motivated to integrate new knowledge or reshape existing perceptions (Gass, p. 59)
3. Novelty of setting: “Settings in which Adventure Therapy occurs typically are novel because they are conducted in an unfamiliar area such as wilderness areas, a ropes course, and trails, and/or involve unfamiliar activities, such as rock climbing, camping, and initiatives.” (Dattilo, p. 18)
 4. Cooperative environment: An environment that “emphasizes interdependence among group members and cultivates group cohesion. The cooperative environment is generated primarily from establishing group as well as individual goals.” (Gass, p. 59)
 5. Unique problem-solving situations: “Since most individuals who participate in adventure activities will have little previous experience with these activities, they are often forced to rely upon their physical, cognitive, and emotional skills to accomplish tasks” (Dattilo, p. 19)
 6. Feelings of accomplishment: “The increasingly more difficult challenges afford individuals and the group an opportunity to continually develop and refine various skills. This mastery learning situation encourages the group to work together and leads to feelings of accomplishment” (Dattilo, p. 19)
 7. Processing the experience: “Although participants are encouraged to express their thoughts and feelings regarding the adventure activities throughout the program, upon completion of an activity the facilitator will pose questions, and/or provide

comments that encourage the individual and group to reflect upon the experience.

This process is commonly referred to as debriefing” (Dattilo, p.19)

8. Generalization & Transfer: “Thoughtful reflection on and expression of experiences help individuals become more aware of their thoughts, behaviors, and the consequences associated with those behaviors. Increased awareness of one’s actions facilitates individuals’ ability to generalize and transfer the learning to other aspects of their life” (Dattilo, p. 19,).

The AT process depends on “a client’s preconceived notion of that activity to set the stage for learning” and it depends on that preconceived notion to cause participant’s anticipation of the experience to “cause a sense on internal stimulation”(Gass, 1993, p. 59-60). If a client is very comfortable in the outdoor setting, they may not feel that the environment is novel and consequently may not feel disequilibrium. On the other hand, what if the client has had no exposure at all to the natural environment, causing an overstimulation that could lead to absolute avoidance of the experience.

People who may receive treatment through therapeutics approaches in the wilderness setting can come from deeply urban to deeply rural backgrounds and a wide range of socio-economic statuses. Based on their previous life experiences, some participants may feel very comfortable in the wilderness setting; others may be nervous or apprehensive in this environment. In some cases, the participant may be given a choice about being placed in wilderness programs, other times participation is not a choice.

Adolescence

Adolescence is an important part in human development. Kleiber (1999) states, "...adolescence is the beginning of the end of childhood and becoming a person in one's own right with a distinct identity is the principle task of this period. Failure to establish a sense of identity, according to Erickson, results in confusion about who one is and what one is to do" (p. 47). Positive identity development has been associated with long-term health and well-being (Baumeister, 1995). When teens struggle through this period, it can be very difficult on parents, teachers, friends, and the teens themselves.

Adolescence, for some people, can be defined as a period of heightened "storm and stress". It is suggested that some adolescents experience conflict with parents, mood disruptions, and risk behavior. While not all adolescents experience storm and stress, these emotional states are more likely to occur during adolescence than at other age (Arnett, 1999).

Struggling through "storm and stress" periods may result in risk behavior in adolescents. These behaviors can take the shape of delinquent and deviant activities. "A wide variety of motivations contribute to delinquent activity, but for some it is the challenge that is most attractive (Kleiber, 1999, p. 111). "Delinquent behavior can be as 'flow-producing' as other more legitimate activities, and it is also likely to be just as self-defining. There are numerous examples of delinquent activity that show the high competence-to-challenge match associated with flow experience" (Kleiber, 1999, p. 11). Perhaps this is one component that makes the wilderness setting appealing for the treatment of struggling youth. Living in the natural environment inherently presents

challenges. Gass (1993) wrote, “the outdoors in general and the wilderness in particular are unfamiliar and captivating for most delinquent youth. It engages the participants’ senses and increases receptivity to stimuli in their environment” (p. 49). To assume that teens will meet these challenges and novel environments with openness and receptivity may not be a correct, complete or adequate foundation for practice.

Purpose of Study

The purpose of this study was to explore professionals’ perceptions of the relationship between adjudicated and at-risk adolescents’ previous experience with the wilderness or other natural areas and wilderness program efficacy. This will be addressed through measures of the professionals’ perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs.

Significance of Study

There is a lack of empirical research that explores how participants’ perceptions and feelings about the wilderness environment could play a role in their perspective of and approach to WT. In fact there is little research that discusses the wilderness element of wilderness therapy at all. “Interestingly, nowhere in the literature about AT with adolescents does it mention the fact that the treatment occurs outside as opposed to inside” (Williams, 2000, p. 55).

In the field of TR, AT or WT, are seen by some as exciting tools that can be added to the treatment processes used for adolescents (Autry, 2001). Understanding how TR and WT can work together for the betterment of not just teenagers but participants, as a whole, should be an important goal for TR practitioners.

“Ultimately, the role that these types of experiential treatment modalities will serve in the overall scheme of TR is yet to be determined” (Ewert, McCormick, & Voight, 2001, p. 120). As professionals in TR take a closer look at the relationship between TR and WT, it may be important for them to look at the relationship between participants’ previous experiences and exposure to natural environment and their perceptions of that environment.

In Gass’s (1993) book *Adventure Therapy: Therapeutic applications of adventure programming*, Walsh and Golins (1976) are quoted in the following statement about unfamiliar environments and the client, “...the learner’s entry into a contrasting environment is the first step towards reorganizing the meaning and direction of his [sic] experience. (p. 4)”, Gass goes on to say, “It is important to remember that what is unfamiliar for one person may not be for another. Therapists using adventure environments must ensure that the quality of unfamiliarity is met to achieve the goals of this concept” (p. 6-7).

CHAPTER TWO

REVIEW OF THE LITERATURE

Introduction

The purpose of this study was to explore professionals' perceptions of the relationship between adjudicated and at-risk adolescents' previous experience with the wilderness or other natural areas and wilderness program efficacy. This will be addressed through measures of the professionals' perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs.

This chapter begins by reviewing outcome-based literature regarding adjudicated youth in the field of WT. Next the literature on the effects of the wilderness or natural environment on people who are exposed to it on different levels is presented. The final section of this chapter reviews fears and discomforts expressed by students in wildland areas, apprehension about visiting forested areas, preference for wildland and built environments in rural students, and the relationship between fear expectancy, disgust sensitivity, and desire for modern comfort in students.

Wilderness Therapy Outcomes

Outcome-based research provides evidence about the program mechanisms that are efficacious for participants in WT programs. Wilderness programs that serve at-risk and adjudicated youth have conducted outcome-based research. The following reviews both qualitative and quantitative studies on WT outcomes.

Clark, Marmol, Cooley and Gathercoal (2004) examined the effects of a 21-day wilderness therapy program on the youth in the program. The following were used to

collect data from the youth: the Defense Style Questionnaire-40 (DSQ), Millon Adolescent Clinical Inventory (MACI), and Youth Outcome Questionnaire - 2.0 (YOQ), (Millon, 1997). The study addressed the defensive styles, perceived psychosocial stressors (expressed concerns), dysfunctional personality patterns, clinical syndromes, and maladaptive behaviors of 109 troubled adolescents (68 male, 41 female) admitted to Catherine Freer Wilderness Therapy Expeditions Program (CFWTE). The research was conducted with a convenience sample of participants who were admitted to CFWTE over a two-year period. Data were drawn from 23 different wilderness treks over a two-year period. Participants completed the DSQ and the MACI before and after their experience in the Wilderness Therapy program. The DSQ was used to collect data on immature, neurotic and mature defense styles. The MACI was used to collect data on personality patterns, expressed concerns, and clinical syndromes. The YOQ was used to objectively measure youth behavior via the parents or treatment professionals. The effects of WT were evaluated using paired sample *t* tests to compare pre and post-test defense, Dysfunctional Personality Patterns, Clinical Syndromes, Expressed Concerns, and Maladaptive Behavior scores.

Wilderness Therapy was found to have positive significant effects on the immature defense scores, dysfunctional personality pattern scores, expressed concern scores, clinical syndromes scores, and maladaptive behaviors scores of troubled adolescents. Effect sizes were calculated for each of the dependent variables. Wilderness Therapy had a small effect on dysfunctional personality patterns, a moderate effect on immature defense scores, expressed concerns scores

and clinical syndromes scores and a large effect on maladaptive behavior scores. Wilderness Therapy was also found to significantly increase neurotic defense scores and the effect was moderate in size. (p. 225)

Changes in mean pre and post –test scores were compared for each of the MACI Personality Patterns, Clinical Syndromes, and Expressed Concerns scales where participants had clinically elevated pre test scores, and calculated effect sizes. The mean effect size of WT was large for all three clinical domains.

Russell (2003) used a time series research design with a single baseline assessment using the Youth – Outcome Questionnaire (Y-OQ) and SR Y-OQ to examine the effects of Outdoor Behavioral Health (WT) programs on the emotional and behavioral symptoms of 858 adolescent clients, between the ages of 16 – 18 years old, with a variety of disorders according to DSM IV criteria, including Oppositional Defiant Disorder, Substance Disorders, and Depression Disorders. The research was conducted with a convenience sample of participants and their parents. These families worked with one of seven participating treatment programs over a one year period. The researcher asked parents to fill out the Y-OQ and clients to fill out the SR Y-OQ upon entering the various programs as well as after the clients had successfully completed their treatment program. The Y-OQ and SR Y-OQ were used to collect parent assessment and adolescent self-report of client emotional and behavioral symptoms. There were 64 items in the Y-OQ and these items were summed across six content areas to produce a total score. The higher the score, the more serious the symptoms. The results of this study indicated that

Outdoor Behavioral Health clients who participated in this study had reduced behavioral symptoms at the time of discharge.

A field study using a Self-Esteem Questionnaire (Piers & Harris, 1969), a Locus of Control Questionnaire (Rachman, 1974), and field observations was conducted by Romi and Kohan (2004). They examined the effects of a six-day wilderness program, an alternative therapy group, and a contrast group on the self-esteem and locus of control of 94 adolescents who had dropped out of school and displayed behavioral problems. The wilderness program consisted of a six-day backpacking trip with various outdoor challenges and group processing. The alternative therapy group interventions were six-day programs that varied from horseback riding and sailing, to driving and reading literature. The contrast group received traditional treatment by youth care workers. The self-esteem questionnaire was used to measure behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, happiness, and satisfaction. The Locus of Control Questionnaire used 29 questions dealing with topics of general luck, political control, and success via personal initiative, interpersonal relations, and academic status to measure levels of internal and external locus of control. The researchers reported that following the wilderness program participants' self-esteem increased in most components but was not higher than the participants on the alternative research group. The study also found that the "personal initiative" factor of locus of control increased.

The next study reviewed was a qualitative, multi-site, case study approach, by Russell and Phillips-Miller (2002). The study examined four, 38-day long, WT programs

to begin identify the key change agents and how they related to the outcomes for 12 adolescents, ages 13 to 17 who were enrolled in the programs. The researchers chose a randomly selected group of client cases to study. The researchers spent seven to ten days in the field observing the participants. The researchers attempted to gain an insider's perspective of the groups they were observing. They made daily field notes of their observations of the clients' interactions with other clients, as well as staff. The researchers interviewed the clients after treatment using an unstructured interview format.

Questions included:

- A. Why the client thought they had to go to a wilderness therapy program?
- B. What they thought of the process?
- C. What they believed they learned from the process?

The researchers also conducted a clinical debriefing session, using group interview techniques, with the WT staff who worked with the clients. They were asked to discuss whether the client had benefited from the WT experience and what aspects of the process helped the client realize the benefits. The researchers also contacted the parents of the clients and asked if they felt their children had received any benefits from the WT treatment. The parents were also asked to describe their perspective of the WT process and how the process worked. The resulting data were organized into data files and analyzed using a constant comparative method. Four main themes emerged from the analysis that described the elements of the WT process that affected outcomes. The themes that emerged were:

- A. Relationships established with Counselors and Leaders. “Clients state that an important aspect of the wilderness therapy process was the relationship established with the wilderness counselor.” (p. 424)
- B. Peer dynamics. “Clients state that an important aspect of the wilderness therapy process was the peer dynamic and relationships with other clients in the program.” (p. 424)
- C. Facilitated reflection on life through use of solo experiences. “Clients state that an important aspect of the wilderness therapy process was that it facilitated reflection on their lives.” (p. 425)
- D. Challenge and structure of the process. “Clients state that an important aspect of the wilderness therapy process was that the process was difficult and challenging.” (p. 425)

Autry (2001) examined the effects of an outdoor based, long-term, psychiatric rehabilitation center on the feelings, attitudes and perceptions of 9 girls ages 13 to 18 with issues that included “aggressiveness, depression, truancy, probation violation, detention, substance abuse, sexual abuse, physical abuse, eating disorders, and/or suicidal ideations or attempts.” The researcher began her study by volunteering at the treatment facility for five months before she collected data. In order to obtain data, the researcher used two tape-recorded interviews with the participants. The interviews varied in length of time from 30 minutes to 2 hours. The researcher conducted follow up interviews. The interval between the first and follow up interviews varied anywhere from 4 days to 3 weeks after the original interviews. An interview guide was used to collect data on the

perceptions, feelings, and attitudes of the girls after they had participated in outdoor experiential activities. This guide consisted of the following questions:

- A. Tell me a little bit about yourself?
- B. How many times have you participated in ropes course and hiking trip activities?
- C. How well do you get along with the other members in your group, your counselors, and the facilitator of the ropes course?
- D. How did the ropes course activities and the hiking trip make you feel in general? How did they make you feel about yourself?
- E. What were your most and least favorite activities and why?
- F. Do you feel that you could generalize or take what you learned about yourself back to campus, when you were in individual and group treatment session? If so, how? If not, why?

The questions evolved as the interviews progressed. The researcher used conformity and repetition of answers to support the validity of the data. The data were analyzed using constant comparison to create codes that were grouped together to form themes. Data analysis revealed four themes that came from the interviews with the participants.:

- A. The outdoor adventure/experiential activities brought out an awareness and existence of trust in oneself and in others.
- B. The participants gained a sense of empowerment from participating in adventure activities.

C. Teamwork improved during the experiential activities.

D. The girls recognized personal values they gained within the experience.

Exposure to the Wilderness

Exposure to the natural environment can have positive and restorative effects on people (Kaplan & Kaplan, 1989). The following studies describe how this exposure may impact an individual.

The first study reviewed was a study that was conducted over a 10-year period to evaluate the effects of a non-therapeutic wilderness program on participants. The Outdoor Challenge Program, run by Hanson and Kaplan (Hanson, 1973; Kaplan, 1974; Kaplan & Kaplan, 1989), spent 10 years empirically testing the effects of wilderness experiences on a variety of individuals. The program began in 1970 and proceeded for the next two years with Hanson taking groups of adolescent boys backpacking into large wilderness areas. During the summers of 1972 and 1973, Hanson introduced control groups and began a true research focus. During those two years, measures were taken of activity preference and self-perceptions. Participants' from both groups completed questionnaires at six-month intervals before and after the summer programs. The findings of this original study (Kaplan, 1974) showed that the control groups' scores remained stable across time and the Outdoor Challenge group showed positive changes on many of the measures. The following summer, the researchers increased the sample sizes and the variables used in the evaluation. "Additional groups were included to compare Outdoor Challenge with other experiences in natural environments, and the control sample was enlarged" (p. 35). A total of 267 male and female high school

students completed the original questionnaires and 200 of those students filled out a subsequent questionnaire. Participants who were involved in the wilderness programs, “were significantly more likely than control individuals to reflect positive changes on a set of measures reflecting positive self-images. In addition, on other scales that measured negative self-assessments, Outdoor Challenge participants were more likely to demonstrate positive shifts than were the other samples” (p. 47).

Using a quantitative design, Taylor, Kuo, and Sullivan (2002) examined the relationship between near-home nature and three forms of self-discipline in 169 inner city girls and boys. A large public housing development in Chicago, Illinois was chosen for the study. Over the years some of the buildings had been left with bare cement surroundings, while other parts of the building were exposed to pockets of green spaces. Parent-child pairs who lived in the housing development were asked to participate in the study. Near-home nature was assessed by asking the parents to rate the views from their apartment windows, stating on a five point scale “how much of your view from your window is man-made?” and “How much of your view from your window is of nature?” Concentration in the child was assessed using four tasks: Symbol Digit Modalities Test (Cimprich, 1992; Lezak, 1983; Smith, 1986), Digit Span Backwards (Cimprich 1992; Wechsler, 1955), Alphabet Backwards (Cimproch, 1992), and Necker Cube Pattern Control (Cimproch, 1990). Inhibition of initial impulses was assessed by combining scores on three measures of impulsivity or impulsive inhibition. These tests were the Matching Familiar Figures Test (e.g. Welsh et al., 1991; Brown and Quay; 1977; Kagan, 1966), Stroop Color-Word Test (Boucugnani & Jones, 1989; Davies et al., 1984; Dyer,

1973), and Category Matching (Melnyk & Das, 1992). Delay of gratification was measured using a version of Rodrigues et al., (1989) task. The study found that there were gender differences on each of the three forms of self-discipline measures. The researchers adjusted their analysis to take gender into consideration in testing for the links between nature and self-discipline. The study found that on average girls with greener views perform better at test of concentration, impulse inhibition, delay of gratification and combined self-discipline. There was no significant difference for boys.

Fear, Discomfort, and Disgust in the Natural Environment

Bixler, Carlisle, Hammitt, & Floyd (1994) used an open-ended survey format to ask environmental interpreters, working with urban children in wildlands, to identify the range of common fears and discomforts expressed by the children while they were in these wildland environments. For every documented observation of fear and discomfort, participants were asked to list grade level, whether the feared object was present or imagined, and how often the response occurred. Responses to the surveys were divided into 23 categories. The top five categories revealed from the responses were snakes, insects, nonindigenous animals, plants, and getting lost. There were a large number of responses that showed fear of getting lost and the emotion of disgust expressed in relation to natural objects. Fearfulness of extremely novel environments was also prevalent.

Using a survey design, Bixler and Floyd (1997) examined the relationship between fear expectancy, disgust sensitivity, desire for modern comfort, and preference for wildland and built environments and related activities amongst 450 suburban and rural eighth grade students. Disgust sensitivity was measured by showing students a list

of 16 items that were disgust-evoking and wildland-related. Students were asked to circle a number from a scale of zero to four, zero representing “not disgusting” and four representing “extremely disgusting” for each item. To evaluate desire for modern comforts, “respondents circled a number between 0 = would not miss to 4 = couldn’t live without, indicating how much they would miss each of 12 modern comforts on a weeklong historical reenactment of the settling of Texas.” To evaluate fear expectancy, the researchers gave the students nine items from the Fear Expectancy Scale (Bixler et al., 1995). The respondents were asked how worried they would be about encountering the nine items during a hypothetical day trip to a forested area. Preferences for wildland environments were measured by asking respondents to rate their preference for recreation activities, walking paths, occupational environments, and biology lab sites. Examples of these items ranged from wildland areas to indoor areas. The study reported that negative perceptions of wildland environments correlated with lower preferences for wildland environments and related school activities.

Ewert (1986) surveyed students in an Outward Bound summer program. Students were asked to rate, on a modified Likert format scale, how concerned they were with forty items that address different types of fear in the outdoors. The items ranged from situational fear to socio/psychological fears. Using factor analysis with varimax rotation, 77 percent of the variance was account for and six dimensions were generated. “...mean scores for each item suggests that many of the fears expressed by the participants were centered around social concerns rather than situational fears” (Ewert, 1986).

Conclusion

It has been suggested that natural environments may be positive and restorative for some people and that WT may be effective in this process as well. Despite these findings, careful consideration must be made when attempting to generalize restorative benefits across different spectrums of people.

As seen in the last section of this chapter, fears and discomforts in the natural environment are very real and can affect a person's desire to be in these environments or learn while they are there. Evaluating fears and discomforts in participants prior to, and during therapeutic interventions in natural environment may be useful.

Some people feel that using fear can be productive as a treatment tool. "Emerson and Golins (n.d.) suggest that using fear and stress in an outdoor program will enhance decision making, discipline, and personal awareness" (Ewert, 1986, p. 51). Is it possible, however, that too much fear or fear used inappropriately can jeopardize participants? Ewert asserts, "There are two major reasons for using fear: to teach people about themselves, and to help them overcome fear. Any use of fear must relate back to one or both of these reasons or the activity may be ethically unsound or damaging" (Ewert, 1986, p. 52). More exploration about this fear and its relationship to a participant's therapeutic experience could prove to be useful in understanding why these programs do and do not work.

CHAPTER THREE

METHODS

Introduction

The purpose of this study was to explore professionals' perceptions of the relationship between adjudicated and at-risk adolescents' previous experience with the wilderness or other natural areas and wilderness program efficacy. This will be addressed through measures of the professionals' perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs. This chapter describes the methods used to conduct the research, beginning by describing the sample and sample selection. It then discusses the development of the survey, the pilot study, and data collection. Finally, data analysis strategies are discussed.

Sample Description and Selection

In order to find potential programs to participate in this study, worked in the website www.wildernesstherapy.org was referenced. This website is sponsored by the Mentor Research Institute which is, "... a 501(c) 3 charitable non-profit consumer protection information, research, health, safety, referral & education site." Developed as a reference for parents, the web site assists families and professionals who are researching programs that use WT as a therapeutic technique option for at-risk teenagers, as well as teenagers with depression, anxiety, and oppositional defiant and conduct disorders, alcohol and other drug and substance abuse, as well as school and academic problems.

The top 25 rated programs listed on the website were reviewed for therapeutic strategies that featured core elements that remained consistent even though each program was unique in their philosophies and missions. The criteria for including the programs were:

- A. worked with teenagers 13 to 18 years old. This age group was chosen because it is the most common age group being provided services in the wilderness setting.
- B. utilized the wilderness environment as the setting for treatment.
- C. used extended backcountry trips and the teaching of backcountry skills and processing as part of their treatment process.
- D. were residential and had an educational, therapeutic, and re-entry elements as part of their treatment.

Program Descriptions

After reviewing the websites of the 25 programs, there were 15 programs that met the above criteria and were contacted by the researcher. Four of the programs were adjudicated programs. They were VisionQuest, Camp Woodsen, Abraxas, and Eckerd Youth Alternatives. All four of these programs worked with urban or rural adolescents who became adjudicated by the court systems. These programs were residential in nature and the adolescents went to school at the facilities during their entire duration in the programs. WT techniques were integrated into each organization's treatment goals as a requirement for discharge.

The other eleven programs that met the criteria and were contacted were private placement programs. These programs were: Catherine Freer Wilderness Therapy Programs, Ascent, SageWalk, Aspen Achievement Academy, Voyager Outward Bound – Ascent Courses, Outback Therapeutic, Second Nature Wilderness Program, Anasazi Wilderness Program, SUWS North Carolina, Blackwater Outdoor Experiences, and SolTreks. These programs worked primarily with adolescents who were placed by parents or guardians based on high-risk behaviors at home and school.

Subject Recruitment

Subject recruitment began by contacting the directors of the 15 eligible programs. Whenever possible, phone messages were left or emails were sent that briefly explained the research topic and methods as well as information regarding how to contact the primary researcher if they were interested in their program participating in the research. Directors were told they could either be sent a link to an electronic survey or be sent printed copies of the survey. After this initial contact, three program directors responded within a week's time, each requesting a link to the electronic survey, to pass along to their staff.

A second attempt at contacting the remaining 12 program directors was made one week later. After two weeks, there were no additional responses. The primary researcher then searched the web sites of agencies that had not responded, for email addresses and phone numbers for all of their employees. A list of 50 email addresses was created from websites where staff emails were listed. Next, a general email was sent to all 50 email addresses, as well as the program directors that had not responded to the original contact

attempt, briefly describing the research design, a description of the survey itself, how to access the survey online or how to obtain a printed copy. A copy of the electronic link to the survey and the primary researcher's contact information were also included. After this last email was sent, two more program directors replied and requested printed copies of the survey. Due to the fact that the electronic survey was anonymous, the researcher was unable to determine if any of these responses came from the programs that did not respond directly to the researcher.

Development of Survey

Professional Review

The first step in developing the survey was to conduct a review of the research topic by WT professionals. Seven professionals in the WT field were contacted. Each participant was asked to fill out a preliminary survey about the research topics of disequilibrium, fear, disgust, and discomfort in the outdoor environment and how these may be influenced by students' previous exposure to outdoor areas and the relevance of these issues in WT. At the end of the survey each participant was asked to give written feedback about the survey and the topics it addressed. After the written feedback was returned, the primary researcher held individual conversations with each member of the professional review team to discuss their feedback. As a result of the feedback from the professional review, open-ended questions were added to survey.

Development and Description of the Survey

The survey was created with four sections totaling 23 questions, some of which were close-ended and were modeled after a Likert-like response set. The remaining

questions were open-ended. A copy of the survey can be found in Appendix A. The survey was created for professionals to fill out as either a printed copy or online survey using Survey Monkey.

Survey Section One – Background Questions

Section one of the survey began with five background questions for WT staff to answer about their respective programs. This was followed by two questions about their involvement with their program and the field of WT. The first question asked the participants to report the gender of the adolescents who they worked with. This question was important because males and females may react differently to the wilderness setting. The second and third questions used in this category asked participants to report the average length of stay that youth in their programs would complete and then the total length of time the youth would spend in the actual wilderness. The average length of stay for youth in the wilderness and wilderness programs was important to research because students in very short-term programs or short wilderness experiences may not have an opportunity to overcome issues with fear, discomfort, and disgust. The fourth question asked participants to report how the youth were placed in their programs (i.e. parents or court ordered). How youth are placed in programs may reflect the severity of behaviors that the youth are trying to overcome, which could in turn affect the type of treatment used. The fifth question asked the participants to report the most common group size that their program would take into the wilderness. Knowing group size helps to understand how much attention staff are able to pay to an individual student. If the groups are larger,

it may be difficult for staff members to get an accurate account of how students react to certain situations and transitions through the program.

The second set of questions asked participants to report how long they had worked for wilderness programs and what type of position they held in the current program where they were working. These questions were important because the survey may have gone to staff members who did not have interactions with youth in the wilderness but rather served as an administrator or office manager. Also, people new to the field may not be aware of the typical reactions that youth display while in the wilderness setting.

Section two – Emotional Reactions to the Natural Environment

For the second section of the survey, concepts from several studies that examined disgust sensitivity, fear expectancy, and desire for modern comfort in children and teens were measured using a five point Likert-style scale. (Bixler, Carlisle, Hammitt, & Floyd 1994; Bixler, Floyd, & Hammit, 1995; Bixler & Floyd, 1997; Bixler & Floyd, 1999) These questions asked staff members to rate how young people's emotional reactions (fear, disgust, and discomfort) to the natural environment did or did not affect the therapeutic outcomes in their WT programs. The response categories for the 12 items were 1= strong agreement, 2= agreement, 3=neutral opinion, 4=disagreement, and 5=strong disagreement. At the end of each section of questions, respondents were given an opportunity to answer open-ended questions for each section. A copy of the survey with the specific questions can be found Appendix A.

Survey Section Three – Previous Experience in Natural Environments

This next section listed two questions with three sections each. The first three questions asked staff for their perspective about youth who have had experience in the outdoors and the second three questions asked staff to report about youth who have not had these experiences. The staff were asked to rate the likelihood that a youth will experience fear, discomfort, or disgust based on their previous experiences.

Survey Section Four - Disequilibrium

The last section of the survey explores “disequilibrium” as a part of the WT process (Gass, 1993 p.49). This concept was chosen for the survey because it is a part of the WT process. Research regarding disequilibrium and why it works in the WT process is not readily available. This section first described disequilibrium then used an open-ended question that asked staff to discuss their perceptions of this concept. An example of this question follows:

“There are several components of a wilderness experience that need to occur in order for the participant to experience growth and development. One such component is called ‘disequilibrium’ which is said to occur when ‘individuals previously held beliefs regarding a situation do not apply to the current situation.’ Please use the following space to comment on what you think contributes to disequilibrium in wilderness programs and/or give feedback regarding this concept.”

Approval of Protocol Involving Human Subjects

Once the survey had been finalized, a protocol involving human subjects was submitted to the Clemson University Institutional Review Board (I.R.B.). The study was

given final approval under exempt review. Upon I.R.B. approval, a pilot study was implemented with educational and professional peers.

Pilot Study

After revising the survey, an online copy of it was created using Select Survey software provided through Clemson University. A pilot study was conducted with a group of ten Clemson University graduate students and five professionals in WT. As a result of the pilot study, simple formatting changes were made and some of the general instructions were revised. One concern from all participants was the section on disequilibrium. Originally, the study asked an open-ended question regarding the importance of disequilibrium in programs that use WT. The respondents were unsure if people would understand or be familiar with the term ahead of time. As a result, a definition was placed prior to the question. (See Appendix A for a final copy of the survey).

Data Collection

The survey was made available in both printed and online versions. The directors of the programs who agreed to participate were asked to forward a link for the Internet survey to their staff members. If the staff members were contacted directly via email, a link to the survey was supplied in the email.

If directors requested printed copies of the survey, they were sent the printed copies of the surveys with a self-addressed, stamped, return envelope. The directors were told to make surveys available to their staff members and to leave the self-addressed, stamped envelope available for their staff members to return their surveys. Once the last

staff member had filled out a survey that staff member was instructed to seal the envelope and mail it to the researcher. The survey process was anonymous and took approximately ten minutes for staff members to fill out, depending on time spent on the open-ended questions.

Data Analysis

Data collected and used for this research were gathered during the winter of 2007. Data were analyzed using both quantitative and qualitative methods. SPSS was used to calculate descriptive statistics to describe respondents and the programs they worked for. SPSS was also used to determine frequency in order to describe respondent answers for sections one and three of the survey.

Data collected from sections one and two of the survey were analyzed with SPSS, using regression, to determine if there was a relationship between the independent and dependent variables. The independent variables used for analysis were the answers to section one of the survey questions on staff background. These included: their professional job position, average stay for youth in their programs, how youth were placed in their programs, the gender of the youth in their programs, the length of time that staff worked in the field of WT, the typical group size that they would take into the backcountry, and the length of time they spend in the woods with the youth. The dependent variables analyzed were the staff answers to section two of the survey. These were staff's opinions of the effects of youth's different experienced levels of fear, disgust, and discomfort on the therapeutic benefits of the programs where they worked.

Responses from the open-ended question at the end of the survey were analyzed using techniques used in qualitative data analysis. Narrative answers were compiled into a comprehensive list. Responses were initially reviewed by a primary researcher and a secondary researcher to “get a general sense of the information and to reflect on it’s overall meaning” (Creswell, 2003, p. 191).

The answers were then re-read several times by the primary and secondary researcher. They were looking for general topics to emerge from the data. The categories found to be most consistent were labeled, and reviewed once again. Similar topics were clustered together and renamed. The topics were abbreviated as codes and the text was read once more by the researchers, this time with codes being placed next to appropriate segments of text, to check for new categories or codes. Topics were then narrowed down to eight themes per researcher and labeled. The themes were then compared between the two researchers and themes that were found in common were kept and in some cases combined as subthemes while ones that differed or were not relevant were omitted. From the themes that were kept, three themes were agreed upon by both researchers. Two of the three themes were accompanied by subthemes. Results are derived from 55 usable responses out of 70 total responses received. Out of the 55 usable responses, 40 responses were received in printed copy form and 15 responses were received online.

CHAPTER FOUR

RESULTS

Introduction

The purpose of this study was to explore professionals' perceptions of the relationship between adjudicated and at-risk adolescents' previous experience with the wilderness or other natural areas and wilderness program efficacy. This will be addressed through measures of the professionals' perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs. In this chapter, results of the study are described.

Summary of Results

Results to Survey Section One – Background Questions

Results are derived from 55 usable responses out of 70 total responses received giving a response rate of 78.5%. Out of the 55 usable responses, 40 responses were received in printed copy form and 15 responses were received online. The first set of questions on the survey focused on the individual wilderness programs where the respondents were working.

The first question asked respondents to indicate the gender of the youth who their programs served. Out of the total respondents, 80.0 % reported that their program served both males and females, 18.2 % said they served males only, and 1.8% responded that they served only females.

The second question asked respondents how the youth were placed in their programs. Out of the total responses, 29.1 % of the respondents said that youth were

placed in their program by a parent or legal guardian, 20.0% said youth were placed through a court order, 47.3% said their program accepted both court order placements and private placements, and 3.6% indicated “other”.

The third question asked respondents to report the average length of stay for youth in their program. Out of the total responses, 80.0 % of respondents said that the average stay was 2 to 8 weeks, 12.7 % of respondents said that the average stay was 3 to 6 months, 5.5% responded 7 months to a year and 1.8 % responded “a year or more”.

The next question asked the respondents to indicate the most common length of time a youth would spend in the wilderness setting as part of their time in the program. Out of the total responses, 1.8% of people responded “one night in the woods”, 9.1% of respondents indicated between two and seven nights, 1.8% said between one and two weeks, 5.5% said between two and three weeks, and 81.8% said three weeks or more.

The next question asked the respondents to indicate the most common group size that they took into the wilderness setting during any given trip. Out of the total responses, 1.8% of respondents indicated up to three youth, 78.2% indicated 4 to 8 youth, and 20.0 % indicated 9 or more youth.

The last two questions in the background section asked about the respondents’ work experience. The first question asked respondents to indicate how long they worked in the WT setting. Out of all respondents, 7.3% indicated that they had worked up to one month in the WT setting, 39.4% indicated that they worked two to six months in the WT setting, 4.3% indicated that they had worked 7 -12 months, and 49.0% said that they worked for one or more years in the WT setting.

The last question of this section asked respondents to indicate the type of position they held in the wilderness program where they were employed. Out of the total responses, 3.6 % indicated that they had never worked in the wilderness, 63.6 % of respondents indicated that they lead or co-lead trips in the wilderness, 20.0 % indicated that they were responsible for administrative work, and 12.8% indicated “other”. (See Table I)

Table I

Background Characteristics of WT Programs

	Frequency	Percentage
<u>Sex of Participants</u>		
Both	44	80.0
Male only	10	18.2
Female only	1	1.8
<u>Placement by</u>		
Parents or legal guardian	16	29.1
Court ordered placement	11	20.0
Both	26	47.3
Other	2	3.6
<u>Length of Stay</u>		
2 – 8 weeks	44	80.0
3- 6 months	7	12.7
7 months to a year	3	5.5
A year or more	1	1.8
<u>Nights in the wilderness</u>		
One night	1	1.8
Between two and seven nights	5	9.1
Between one and two weeks	1	1.8

Between two and three weeks	3	5.5
Three weeks or more	45	81.8

Group Size

0-3	1	1.8
4-8	43	78.2
9 or more	11	20.0

Background Characteristics of WT Staff

Length of time in field

0-1 month	4	7.3
2 – 6 months	20	39.4
7 – 12 months	4	4.3
More than one year	27	49.0

Job position

Lead or co-lead trips	35	63.6
Administrative work	11	20.0
No wilderness experience	2	3.6
Other	7	12.8

Results to Survey Section Two – Emotion Reactions to the Wilderness Environment

In this section of the survey, high levels and low levels of fear, comfort, and disgust were listed as possible responses to the wilderness environment. Before each of the questions, participants were given examples of what might cause each of these responses in adolescents in the wilderness setting.

The Effects of High Levels of Experienced Comfort, Fear, and Disgust of the Wilderness on the Benefits of WT

“If a participant initially feels too uncomfortable in the wilderness setting, he or she is less likely to benefit from the therapeutic interventions being introduced.”

Out of the total responses, 30.9% strongly disagreed, 43.6% disagreed, 10.9% marked neutral, 12.7% agreed, and 1.9% strongly agreed.

“If a participant in your program is initially very afraid of the natural environment, he or she is less likely to benefit from the therapeutic interventions being introduced”

Out of the total responses, 16.4% strongly disagreed, 67.3% disagreed, 7.3% marked neutral, 9.0% agreed, and 0.0% strongly agreed.

“If a participant in your program initially experiences extreme feelings of disgust from elements in the outdoor environment, he or she is less likely to benefit from the therapeutic interventions being used.”

Out of the total responses, 14.5% strongly disagreed, 61.8% disagreed, 10.9% marked neutral, 12.8% agreed and 0.0% strongly agreed.

(See Table II)

The Effects of Low Levels of Experienced Comfort, Fear, and Disgust of the
Wilderness on the Benefits of WT

“If a participant initially feels too comfortable in the wilderness, he or she is less likely to benefit from the therapeutic interventions being introduced”

Out of the total response, 16.4% strongly disagreed, 50.9% disagreed, 10.9% marked neutral, 18.2% agreed, and 3.6% strongly agreed.

“If a participant in your program initially experiences minimal fear of the natural environment, he or she is less likely to benefit from the therapeutic interventions being used.”

Out of the total responses, 14.5 % strongly disagreed, 54.5% disagreed, 23.6% marked neutral, 7.4% agreed, and 0.0% strongly agreed.

“If a participant in your program initially experiences minimal feelings of disgust from elements in the outdoor environment he or she is less likely to benefit from the therapeutic interventions being used.”

Out of the total responses, 9.1% strongly disagreed, 74.5% disagreed, 10.9% marked neutral, 5.5% agreed, and 0.0% strongly agreed.

(See Table III)

Experiencing Fear, Comfort, and Disgust to the Wilderness has no Effect on the Benefits of WT

“Being initially afraid of the natural environment has nothing to do with a participant benefiting from the therapeutic interventions being introduced”

Out of the total responses, 0.0% strongly disagreed, 23.6% disagreed, 29.1% marked neutral, 41.8% agreed, and 5.5 % strongly agreed.

“Initially feeling comfortable in the natural environment has nothing to do with benefiting from the therapeutic interventions being introduced”

Out of the total responses, 1.8% strongly disagreed, 21.8% disagreed, 30.9% marked neutral, 36.4% agreed, and 9.1% strongly agreed.

“Experiencing initial feelings of disgust in the outdoor environment has nothing to do with a participant benefiting from the therapeutic interventions being introduced”

Out of the total responses, 5.5% strongly disagreed, 25.5% disagreed, 29.1% marked neutral, 32.7% agreed, and 7.2% strongly agreed.

(See Table IV)

Table II.

Staff Perceptions of the Relationship Between High Emotional Response to the Wilderness and the Efficacy of Wilderness Therapy Techniques.

	Frequency	Percentage
<u>Highly uncomfortable</u>		
Strongly disagree	17.0	30.9
Disagree	24.0	43.6
Neutral	6.0	10.9
Agree	7.0	12.7
Strongly agree	1.0	1.9
<u>High fear</u>		
Strongly disagree	9.0	16.4
Disagree	37.0	67.3
Neutral	4.0	7.3
Agree	5.0	9.0
Strongly Agree	0.0	0.0
<u>High disgust</u>		
Strongly disagree	8.0	14.5
Disagree	34.0	61.8
Neutral	6.0	10.9
Agree	7.0	12.8

Strongly Agree

0.0

0.0

Table III.

Staff Perceptions of the Relationship Between Low Emotional Responses to the Wilderness and the Efficacy of Wilderness Therapy Techniques.

	Frequency	Percentage
<u>Comfortable</u>		
Strongly disagree	9.0	16.4
Disagree	28.0	50.9
Neutral	6.0	10.9
Agree	10.0	18.2
Strongly agree	2.0	3.6
<u>Low fear</u>		
Strongly disagree	8.0	14.5
Disagree	30.0	54.5
Neutral	13.0	23.6
Agree	4.0	7.4
Strongly Agree	0.0	0.0
<u>Low disgust</u>		
Strongly disagree	5.0	9.1
Disagree	41.0	74.5
Neutral	6.0	10.9
Agree	3.0	5.5

Strongly Agree

0.0

0.0

Table IV.

Staff Perceptions that Youths' Emotional Responses to the Wilderness Have No Effect on the Efficacy of Wilderness Therapy Techniques.

	Frequency	Percentage
<u>Initial fear has nothing to with benefits</u>		
Strongly Disagree	0.0	0.0
Disagree	13.0	23.6
Neutral	16.0	29.1
Agree	23.0	41.8
Strongly agree	3.0	5.5
<u>Initial comfort has nothing to with benefits</u>		
Strongly disagree	1.0	1.8
Disagree	12.0	21.8
Neutral	17.0	30.9
Agree	20.0	36.4
Strongly agree	5.0	9.1
<u>Initial disgust has nothing to with benefits</u>		
Strongly disagree	3.0	5.5
Disagree	14.0	25.5
Neutral	16.0	29.1
Agree	18.0	32.7

Strongly agree

4.0

7.2

Staffs Perceptions of the Relationship Between Youths Previous Experiences and
Varying Levels of Emotional Responses to the Wilderness

The questions in this section asked respondents to consider previous exposure to the natural environment or traveling that youth may have had prior to entering WT programs. They were then asked how these experiences could affect youths experienced levels of fear, disgust, and discomfort in wilderness settings.

Previous Exposure

“How likely is it, for participants in your program who have had previous experience in outdoor settings such as scout trips, vacations, camps, family trips, and previous wilderness therapy programs to:”

Experience high levels of fear of the wilderness

Out of the total responses, 14.5% of respondents said that youth with previous exposure were very likely to experience high levels of fear, 21.8% of respondents said that youth with previous experience were likely to experience high levels of fear, 49.1% indicated a neutral answer, 14.5% of respondents said youth with previous exposure were unlikely to experience high levels of fear, and 0.0% of respondents said that youth with previous experience were very unlikely to experience high levels of fear.

Experience high levels of discomfort in the wilderness

Out of the total responses, 5.5% of respondents said that youth with previous exposure were very likely to experience high levels of discomfort, 23.6% of respondents said that youth with previous exposure were likely to experience high levels of discomfort, 21.8% of respondents indicated a neutral answer, 40.0% of respondents

indicated that youth with previous exposure were unlikely to experience high levels of discomfort, and 9.1% of respondents indicated that youth with previous exposure were very unlikely to experience high levels of discomfort.

Experience high levels of disgust in the wilderness

Out of the total responses, 0.0% of respondents indicated that youth with previous experience were very unlikely to experience high levels of disgust, 16.4 % of respondents said that youth with previous exposure were likely to experience high levels of disgust, 23.6% of respondents indicated a neutral answer, 52.7% of respondents indicated that youth with previous exposure were unlikely to experience high levels of disgust, and 7.3% of respondents indicated that youth with previous exposure were very unlikely to experience high levels of disgust.

Youth Without Previous Exposure

“How likely is it for participants in your program with no outdoor experience or exposure to traveling to:”

Experience high levels of fear of the wilderness

Out of the total responses, 18.2 % of respondents said that youth without previous exposure were very likely to experience high levels of fear, 47.3% of respondents said that youth without previous exposure were likely to experience high levels of fear, 29.1% of respondents indicated a neutral answer, 3.6% of respondents said that youth without previous exposure were unlikely to experience high levels of fear, and 1.8 % of respondents indicated the youth without previous exposure were very unlikely to experience high levels of fear.

Experience high levels of discomfort in the wilderness

Out of the total responses, 32.7 % of respondents said that youth without previous exposure were very likely to experience high levels of discomfort, 40.0 % of respondents said that youth without previous exposure were likely to experience high levels of discomfort, 21.8 % of respondents indicated a neutral answer, 1.8 % of respondents indicated that youth without previous exposure were unlikely to experience high levels of discomfort, and 3.7 % of respondents indicated that youth without previous exposure were very unlikely to experience high levels of discomfort.

Experience high levels of disgust in the wilderness

Out of the total responses, 25.5% of respondents said that youth without previous exposure were very likely to experience high levels of disgust, 38.2% of respondents said that youth without previous exposure were likely to experience high levels of disgust, 29.1% of respondents indicated a neutral answer, 5.5% of respondents indicated that youth without previous exposure were unlikely to experience high levels of disgust, and 1.7% of respondents indicated that youth without previous exposure were very unlikely to experience high levels of disgust.

(See Table V)

Table V.

Staffs Perceptions of the Likeliness that Youths' Previous Exposure To Travel and Wilderness Effect Their Feelings of Fear, Comfort and Disgust in the Wilderness Setting.

<u>Percentages (%)</u>					
Previous Exposure	Very Likely	Likely	Neutral	Unlikely	Very Unlikely
High Fear	14.5	21.8	49.1	14.5	0.0
High Discomfort	5.5	23.6	21.8	40.0	9.1
High Disgust	0.0	16.4	23.6	52.7	7.3
No Exposure					
High Fear	18.2	47.3	29.1	3.6	1.8
High Discomfort	32.7	40.0	21.8	1.8	3.7
High Disgust	25.5	38.2	29.1	5.5	1.7

Results of Regression Analysis

The data collected from sections one and two of the survey were analyzed with SPSS, using regression to determine if there was a relationship between the independent and dependant variables. The independent variables were the responses to the questions from section one of the survey. The dependant variables were the answers to the questions in section two of the survey. No significant results were found from the analysis.

Results of Respondents Interpretation of Disequilibrium

Respondents were given the opportunity to answer an open-ended question about the concept of disequilibrium in WT. Of the 55 respondents, 63 % of people responded to the open-ended question. Answers from the open-ended question were analyzed using techniques derived from qualitative analysis that involved coding responses until themes emerged from the data. (Creswell, pg 191). The question was as follows:

“There are several components of a wilderness experience that need to occur in order for the participant to experience growth and development. One such component is called disequilibrium which is said to occur when “individuals previously held beliefs regarding a situation do not apply to the current situation.” Please use the following space to comment on what you think contributes to disequilibrium in wilderness programs and/or give feedback regarding this concept.”

Respondent's answers were coded into three final themes with sub-themes that were used to help define the main themes. The three main themes found were: instructors, wilderness, and previous personal experiences of youth.

Instructor Role in Disequilibrium

Respondents suggested that instructor experience, style, and presentation were key factors in having therapeutic breakthroughs with youth. There was an emphasis on the idea that a proficient instructor was needed to translate, guide, and process the wilderness experience for each youth focusing on his/her individual experiences, in order for it to be a useful tool in the therapeutic process. Respondents also expressed how important positive role modeling, professional instruction, and meaningful interaction from staff members can be for the therapeutic process. Feedback from instructors was mentioned as being a key way to communicate effectively with youth. The following quotes illustrate these points:

I believe "disequilibrium" is a byproduct of a successfully facilitated Wilderness Therapy program. It is the facilitator's role to challenge each individual in order for growth to occur. A facilitator may be challenging an individual by having him/her recognize his/her strengths if they are timid or lack confidence.

Disequilibrium would potentially occur because that individual may have a preconceived belief that they have very little self worth, but in actuality they have many positive attributes. A facilitator may see that someone is selfish and then challenge that person's belief that they are unselfish. An athlete who is confident in their physical abilities may be challenged by hiking long hours and at a slow

pace in order to challenge their patience with other members of the group. In most instances, disequilibrium results if a facilitator is able to recognize what a specific client needs to work on and is able to challenge him/her in an appropriate way. Disequilibrium can also occur without the intentional aid of the facilitator. This can have a positive or catastrophic effect. If disequilibrium occurs without intention of the facilitator, it is paramount that the facilitator recognizes that it is occurring in order to keep a catastrophic outcome from occurring.

Wilderness Therapy offers challenges for students to face, helps to build trust in the staff, great mentoring opportunities.

Wilderness Therapy allows the student to experience situations that go against their previous held beliefs. One such experience would be the consistent showing of compassion and caring by multiple staff when the student had previously felt that no one cares for them at all.

Instructor experience, style and presentation play a role in disequilibrium and helping youth negotiate through it.

The effect that these feelings and perceptions of self and the environment is easily affected by the attitude, instruction, coaching and role modeling of the outdoor professional who accompanies.

Wilderness as a Part of Disequilibrium

Respondents mentioned the wilderness itself as the main tool that is essential for instructor success with the therapeutic process. Several sub-topics regarding the wilderness were found in the analysis; as a result sub-categories were used to define this theme. These categories include natural elements, natural consequences, the environment/setting, and comfort.

Natural Elements in the Wilderness

Respondents reported that the wilderness supplies a new or novel setting for youth that takes them out of their comfort zone and allows them have a fresh slate for thinking about their life and the decisions they have made. They suggested that being exposed to specific natural elements can cause discomfort or be used as metaphors and ultimately help in changing negative behaviors.

Nature does not provide the normal level of control. It will rain, snow, the sun will set and rise regardless of how the students act or the choices they make.

Living on the land with only primitive materials and exposure to weather and wild animals makes a difference.

Wilderness has the profound ability to challenge the negative coping mechanisms for our students. For instance, slamming a door or threatening another, will not get the student any closer to camp. A common line I've heard used is, 'Look around you, this place is patient...we can be patient too.' This can cause extreme

ranges of behavior as the student finds him/herself to be less and less effective at manipulating their surroundings.

Natural Consequences in the Wilderness

Staff suggested that natural consequences that exist in the wilderness provide youth with opportunity to push and learn from themselves, rather than sticking with the status quo. Respondents suggested that natural consequences can be just as good of a teacher as the instructors themselves, as natural consequences can not be controlled.

Having to care for self and equipment, experiencing the harsh reality of natural consequences, it can happen so fast with weather.

Students being pushed to extend their physical limits in order to adjust to weather problems, difficult hikes, fears, new people, challenging chores etc.

Unlike parents, peers or even the law, natural consequences are not able to be manipulated. Nature acts without discretion.

Wilderness as a New or Different Setting

Respondents wrote that the wilderness is a much different place than home or school for students. In most cases it is a completely new environment. They suggest that despite the new environment, old problems, and behaviors can still exist. According to respondents, the new setting offers tools to help students see patterns in old way and offers opportunities to learn new ways to deal with old behaviors and attitudes.

The new environment... doesn't allow for the old behaviors to work.

The wilderness is a setting like any other, what changes each student is different, it could be living in the woods when they thought they couldn't, for others it's a backpack they built , or a staff who explained something or connected with them, ...it's loss of all their distractions that allow them to see and examine their lives.

Being out of the student's normal life but they are still faced with themselves and for the most part the same issues as home.

Taking them out of an environment that had temptations, drawbacks and other positive and negative factors that contributed to their behavior and putting them in a completely new environment is essential because when they persist in their behaviors they then have no excuses for the way they are acting.

I believe the wilderness serves the purpose of isolation without lockdown first. This is the most important part of Wilderness Therapy. It allows for disequilibrium without the fear of a detention facility.

Disequilibrium and Comfort in the Wilderness

Respondents wrote that being in the wilderness makes students uncomfortable and that this can be helpful in the WT process. The staff wrote about using this feeling as a tool for therapeutic change.

I do believe that removing them from their comfortable environment is a healthy contribution to disequilibrium.

I think it is very important to get them out of their comfort zone. It is very important for growth and learning. Though I don't feel that we specifically try to make them feel scared, uncomfortable, or disgusted.

Situations where complaining does not bring about change in the setting. For example, being, dirty, hungry, or lost.

There are perceived risks (animals, being lost, weather) that the youth feel they have little or no control over. Often, youth in this setting are doing activities they have never done before and must push themselves past their 'comfort zone'.

Youths' Personal Experiences as a Part of Disequilibrium

Some of the respondents spoke of the individual differences that exist across youth as being the main factor in disequilibrium. Most respondents coupled the idea of individualism with the other two themes mentioned saying that together you have the specific recipe needed to achieve disequilibrium that is effective in the therapeutic process. Sub-categories were also used to help define this category: change to individualism, values and beliefs, and media.

Disequilibrium and Change to Individualism

Respondents reported that disequilibrium was a result of a change in students' thoughts of themselves as individuals. They reported that when their capabilities, values, beliefs, and general old ways of thinking were challenged, they entered into a state of disequilibrium.

In my opinion, when the feeling of entitlement that many of these kids feels is taken away that largely contributes to disequilibrium.

Disequilibrium could be viewed as the move to balance.

The most frequently occurring disequilibrium that I have seen in the field is when a student has the realization and/or awakening that he/she can do something that he/she previously thought they could not do. Whether this is climbing/peaking a mountain, or communicating effectively with their parents. That is at the core of empowering momentsas I see it.

Disequilibrium and Values and Beliefs

Respondents reported that when students experience disequilibrium, they often are put in a position to examine their value and belief systems. They are forced to cope and learn from their uncomfortable situations, and this process can lead to a change in behavior.

Disequilibrium seems to be the stage where the students strive for balance after realizing that their (often firmly set) beliefs are changing rapidly. Acquiring new beliefs can often be challenging and discombobulating but all in all it is a growing experience that the wilderness can bring out in people.

Wilderness therapy allows the student to experience situations that go against their previously held beliefs.

They are able to realize what their values and beliefs are.

Media and Disequilibrium

Respondents reported that the presence of media in students' lives effects how a student may be affected by or experience disequilibrium. They also discussed how the removal from media can help students experience disequilibrium.

The students are away from distractions such as TV, movies, phones, computers etc. This allows them to be in touch with their true selves without any media influencing them what to believe.

Media and over active imagination contribute to this disequilibrium.

No media, new people, new different relationships need to survive mostly by one's own hand.

Conclusion

Borrowing techniques from both quantitative and qualitative types of research helped to gain a broader perspective of staff's perceptions regarding youth's previous experience with the natural world and how these experiences may or may not have a relationship with wilderness therapy techniques. The quantitative data suggests that staff feel that youth's various emotional reactions to the wilderness or natural world have no effect on the therapeutic benefits derived from wilderness therapy techniques. It also suggests that staff feel that previous exposure to natural environments does have an effect on youth emotional reactions. The qualitative data suggests that staff feel that disequilibrium is important in the therapeutic process while in a wilderness setting. They reported that instructors, wilderness, and previous personal experiences of youth all

contribute to the disequilibrium that may be experience by youth during a wilderness experience.

CHAPTER FIVE

SUMMARY, IMPLICATIONS, FUTURE RECOMMENDATIONS AND LIMITATIONS

Introduction

The purpose of this study was to explore professionals' perceptions of the relationship between adjudicated and at-risk adolescents' previous experience with the wilderness or other natural areas and wilderness program efficacy. This was addressed through measures of the professionals' perceptions of youths displayed levels of fear, discomfort, and disgust while in wilderness programs. This chapter begins by summarizing the results of the study. Next, the chapter discusses the limitations and implications of this research. Lastly, the chapter will address recommendations for future research.

Summary and Discussion of Results

Staff Perceptions of the Relationship between Adolescents Emotional Reactions to the Wilderness and the Therapeutic Benefits of Wilderness Therapy

Over 70% of staff respondents disagreed or strongly disagreed with the idea that, "...if a participant in their program initially experiences minimal or excessive fear, discomfort, or disgust of the natural environment, he or she is less likely to benefit from the therapeutic interventions being used." This is consistent with the idea that fear, discomfort and disgust are typically overcome with exposure and if handled correctly,

they would not prohibit a person from experiencing the therapeutic benefits of WT/AT. If these reactions contribute to disequilibrium, they could actually increase the therapeutic benefits (Gass, 1993, p. 59-60).

Over 60% of staff respondents agreed or strongly agreed with the idea that adolescents experiencing initial feelings of high or low disgust, discomfort or fear in the outdoor environment have nothing to do with them benefiting from the therapeutic interventions being introduced. These results are puzzling because they are not consistent with the open-ended answers to the questions about disequilibrium. In the open-ended answers to the questions, respondents stated that feelings of discomfort or fear are an important part of disequilibrium. This disequilibrium is one of the integral parts of the AT process (Gass, 1993 p. 59-60; Dattilo p. 18 – 19).

Staffs Perceptions of the Relationship Between Youths Previous Experiences With the Wilderness and Varying Levels of Emotional Responses to the Wilderness

Respondents reported that if youth have exposure to the wilderness prior to their WT experience, they are less likely to have high levels of fear, discomfort and disgust. They also reported if youth do not have exposure to the wilderness they are more likely to have high levels of fear, discomfort and disgust. This is consistent with the literature that states that exposure to wilderness or new environments can affect their later preferences or comfort in these environments.

Staffs Perception of the Role of Wilderness Disequilibrium in the Therapeutic Process

Respondents reported that a close relationship between instructors, the wilderness, and previous personal experiences of youth, need to exist for disequilibrium to contribute to the therapeutic process in a positive way. Subcategories of: natural elements, natural consequences, new setting, and comfort were developed to help describe the relationship between the wilderness and therapeutic disequilibrium. Subcategories of: change to individualism, values and beliefs, and media were used to help define the relationship between personal experiences of youth and therapeutic disequilibrium.

Respondents reported that youths' past experiences play an important role in how they react to the wilderness setting, stating that more experience results in low emotional reactions to the wilderness and less experience results in high emotional reactions. This is consistent with the literature which states that previous knowledge and experience with wilderness environments allows peoples to view it as "optimally novel" and predictable, resulting in pleasant experiences. (Kaplan & Kaplan, 1989, Bixler, Carlisle, Hammitt, & Floyd, 1994). On the other hand, people with little or no experience become overwhelmed and can experience "cognitive chaos" (Kaplan & Kaplan, 1983). Studies have shown that youth from urban settings can "express a wide range of fearful responses to natural environment" (Bixler, Carlisle, Hammitt, & Floyd, 1994) and youth with high fear expectancy, disgust sensitivity, and desire for modern comfort dislike wildland environments (Bixler & Floyd, 1997).

Respondents' answers to the open-ended questions suggested high emotional reactions to the wilderness created a state of disequilibrium and that this was necessary for therapeutic benefits. Piaget discussed the idea that, "change occurs when people are put in situations outside of their comfort zones and into a state of disequilibrium" (Piaget, 1977). The literature states that this "disequilibrium" must be present for learning to occur, especially in the wilderness environment (Nadler and Luckner, 1992 p. 7; Gass, 1993, p. 49)

Implications, Recommendations, and Limitations

Implications

This was an exploratory study attempting to gain insight into youths' perceptions and feelings about nature and how these perceptions and feelings may affect the therapeutic process involved in WT practices. Respondents reported that previous experience with the outdoor setting plays a role in clients' emotional responses to nature and these emotional responses may vary greatly. It has been suggested that, "...there are times in which the TRS may find the use of outdoor settings and specific adventure activities to be inappropriate, or not fully effective, depending on the situation and the client population" (Ewert, McCormick, Voight, 2001, p.114). Professionals may want to consider if or how the use of WT is an appropriate facilitation technique for each individual client or participant. Talking with participants about previous experiences with the wilderness and other novel settings, prior to beginning a WT program, could aid staff members in understanding youths experiences with the wilderness and how these experiences have

shaped their perceptions, prior to the youth beginning the program. Understanding these differences in experience could aid staff members in planning program goals specific to the individual.

Respondents reported that the role instructors played in the therapeutic process was paramount to students benefitting from the disequilibrium they experienced in the wilderness setting. They suggested that instructor experience, style, and presentation were key factors in having therapeutic breakthroughs with youth. Respondents stated that a proficient instructor was needed to translate, guide, and process the wilderness experience for each youth. They reported that positive role modeling, professional instruction, and meaningful interaction from staff members are essential. Feedback from instructors was mentioned as being a key way to communicate effectively with youth. Professionals in charge of wilderness programs may benefit from ensuring that their instructors are trained in processing techniques as well as specialized outdoor recreation skills needed for the specific activities that each individual program uses.

The data revealed that professionals felt that the wilderness itself supplied the novel environment, natural consequences, and discomfort needed for youth to experience disequilibrium. Professionals, who use the wilderness as a part of the therapeutic process, should be aware of and consider incorporating each of these factors in their program. In addition, making sure that they practice and teach techniques that preserve these natural environments could ensure that this valuable tool remains available to them for future use. Understanding how the wilderness itself directly affects the therapeutic

process could also prove to be beneficial. Most of the current literature on WT is based on outcomes. There is a gap in the research that leaves people asking, “how and why does it work?” Exploring the “wilderness” itself as a possible role in the success of these program could prove valuable.

Recommendations for Future Research

Future studies of this nature would benefit from surveying the youth in addition to the professionals who work with them. Asking youth about their previous experiences and studying their reactions to the natural environment while they are in it, could give a more accurate picture of their experience during the WT process. The literature suggests that people “will be more likely to say they are more fearful than they actually are and engage in activities in which they are more afraid than they appear” (Rathman, 1978). Getting both the youth and staff perspective could help to gain broader insight.

This study used a survey format that was either mailed or emailed to participants, for them to fill out independently. Future researchers may benefit from arranging to meet with program directors in person, to discuss the study. In order to increase response rate it could help to have someone hand out the questionnaires in person. To take it one step further, interviewing WT professionals and the youth in their programs, in person, could allow for more open-ended discussions.

Implementing an in-depth, qualitative study of the youth in these programs, using observations and interviews that focused on how they react to the elements of the

wilderness and living in the wilderness could help lead to a deeper and more meaningful understanding of their experience. Although this study focuses on at-risk and adjudicated populations, it could be useful to apply it to other populations who are introduced to therapeutic interventions in the wilderness setting. These same techniques could be used with people with physical, cognitive, and emotional disabilities.

Programs paring with researchers may benefit from utilizing Action Research to gain a better knowledge of the environment they work in and are providing for their participants. According to the Center for Collaborative Action Research, “Action Research is the systematic, reflective study of one's actions, and the effects of these actions, in a workplace context. As such, it involves deep inquiry into one's professional practice. The researchers examine their work and seek opportunities for improvement.” Retrieved July 7, 2010, from <http://cadres.pepperdine.edu/ccar/define.html>. All of the current research on AT or WT reflects traditional social science methodologies. Action Research could be an exciting tool used to help programs broaden their perspectives of their professional practices.

Limitations

The most difficult limitation to this study was accessing the youth themselves. Gaining access to youth was restricted by program policies, parental permission, and IRB approval. As an alternative, staff working with the youth were surveyed instead. Examining the opinion of the staff members, instead of the youth, may have provided a less accurate representation of the youths’ emotional responses to the wilderness setting

and how it affects therapeutic outcomes. It is possible that what the youth experience in WT is not completely reflected in the staff responses. The staff are limited to their observations of the youth and how they perceive youth respond in certain situations. In addition, a members check of the qualitative data was not conducted during or after the study.

This study yielded a small sample size. Submitting the surveys in person may have helped to increase the response rate. In addition, the sample may not have been representative of all WT programs. Most of the responses came from private placement programs, rather than juvenile justice programs. Private placement programs tend to serve children from higher socio-economic backgrounds. These youth are typically exposed to many experiences that change their perspectives. Juvenile justice programs tend to serve youth from urban, low–socioeconomic backgrounds, with limited exposure to environments outside of their immediate realities. This may have skewed the results.

The discrepancies between the answers to the close-ended questions and the open-ended questions may reflect ambiguity with the survey. The questions might have been interpreted in ways that differed from their intended meanings. Restructuring the questions to provide a clearer representation of the subject matter may have helped to reduce these discrepancies.

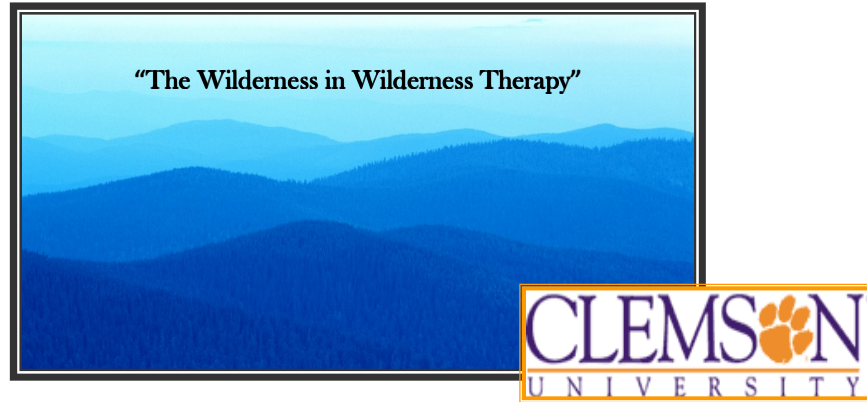
The study did not ask participants about their own backgrounds, outside of their work experience. It is possible that each respondent's, type of education, level of

education, previous work experience, and previous life experiences could have played a role in their responses.

This was not a flawless study. The research process was full of roadblocks and setbacks. Despite these factors, the researcher hopes the study will serve the purpose of reminding professionals that each participant they work with is unique. The main goal of the programs where these professionals work is to help people. Making sure that they, as professionals, put participants in the right situation to fulfill the purpose of helping a participant should be their main priority. Taking the time to explore participant's feelings about natural environments before professionals decide to use these environments as a therapeutic tool may help to accommodate the priority of helping the participant.

Appendix A

Survey



Hello and THANK YOU in advance for taking a few minutes to complete the following survey!

This survey was created to help gain a better understanding of how the wilderness itself can have an effect not only on the teens you serve but also on the interventions that are being used to bring about change.

As you read the survey, take time to reflect on students that you work with and how they have reacted to certain aspects of the wilderness environment. Also think about how you have been able to use teens' reactions to the wilderness as metaphors for therapeutic change or barriers to overcome.

Information Concerning Participation in a Research Study



Clemson University

Title: "An exploratory study that examines wilderness therapy staff members perceptions of teenagers levels of fear, disgust, and modern comforts in the wilderness setting."

Description of the research and your participation:

You are invited to participate in a research study conducted by Dr. Fran McGuire and Jane Brison. The purpose of this research is to gain an understanding of troubled teenagers perceptions of spending several days in the outdoors (their fears, levels of discomfort and experienced disgust of outdoor elements) and how these perceptions might impact in a positive or negative way, the interventions that are being used to bring about positive change. Your participation will involve completing a brief online survey.

The amount of time required for your participation will be approximately 20 minutes.

Risks and discomforts:

There are no known risks associated with this research.

Potential benefits:

There are no known benefits to you that would result from your participation in this research, however this research may help us to understand how to better serve the youth in your program.

Protection of confidentiality:

We will do everything we can to protect your privacy. Your identity will not be revealed in any publication that might result from this study.

Voluntary participation:

Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time. You will not be penalized in any way should you decide not to participate or to withdraw from this study.

Contact information:

If you have any questions or concerns about this study or if any problems arise, please contact Dr. Fran McGuire at Clemson University at 864-656-2183. If you have any questions or concerns about your rights as a research participant, please contact the Clemson University Office of Research Compliance at 864.656.6460.

Part One

Please read the following questions and answer them according to the most TYPICAL situations that you see in the program/agency that you are currently working for. If you have worked for more than one program and/or with more than one type of population, generalize your answer for each question.

1. What is the gender of the population that your program serves?
 - both
 - female
 - male

2. What is the average stay for youth in your program?
 - one week or less
 - 2 - 8 weeks
 - 3 - 6 months
 - 7 months to a year
 - a year or more

3. How are youth placed in your program?
 - parents or legal guardians send them
 - court ordered placement
 - both
 - Other, please specify

4. What is the most common length of time (total) a youth will spend in the backcountry wilderness during his or her stay in your program?
 - one night

- between two nights and seven nights
- between one and two weeks
- between two and three weeks
- three weeks or more

5. What is the most common group size that your program will take into the back country wilderness?

- 0 -3 youth
- 4 - 8 youth
- 9 or more

6. How long have you worked for wilderness therapy programs

- 0 - 1 month
- 2 - 6 months
- 7 - 12 months
- one or more years

7. Which statement best describes your role in the Wilderness Therapy program you are currently working for?

- I lead and/or co-lead trips in the wilderness setting
- I do administrative work and have past and/or current trip leading experience
- I have no past or current work experience in the wilderness setting
- Other, please specify

Part Two

The following statements explain certain aspects of a wilderness experience. Please read each statement *CAREFULLY* and then rate how much you agree or disagree with each aspect playing a role in the positive therapeutic effects of Wilderness Therapy Programming. (Please note: The word "initially" is used in each statement with the idea

that, over time due to exposure and experience, fear, comfort and levels of disgust will change. The word "too" is used to explain a level that goes beyond a normal or healthy level, as seen by YOU the professional.)

Wilderness areas may be uncomfortable places for many of the adolescents that are served by your program. Some examples of what may cause this discomfort are variations in heat or cold, lack of showers, sleeping on the ground, and not having the use of a flush toilet.

8. If a participant initially feels too UNcomfortable in the wilderness setting, he or she is less likely to benefit from the therapeutic interventions being introduced.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

9. If a participant initially feels too comfortable in the wilderness, he or she is less likely to benefit from the therapeutic interventions being introduced.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

10. Initially feeling comfortable in the natural environment has nothing to do with benefiting from the therapeutic interventions being introduced.

- Strongly Agree
- Agree
- Neutral
- Disagree

Strongly Disagree

11. Please use the following space to enter any comments regarding this section of questions.

Wilderness areas can present opportunities for a participant in your program to experience fear. Some examples of fear producing elements in the wilderness setting include: dark areas, poisonous insects, dangerous animals, inclement weather, and heights.

12. If a participant in your program is initially very afraid of the natural environment, he or she is less likely to benefit from the therapeutic interventions being introduced.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

13. If a participant in your program initially experiences minimal fear of the natural environment, he or she is less likely to benefit from the therapeutic interventions being used.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

14. Being initially afraid of the natural environment has nothing to do with a participant benefiting from the therapeutic interventions being introduced.

- Strongly Agree

- Agree
- Neutral
- Disagree
- Strongly Disagree

15. Please use the following space to enter any comments on this section of questions.

Wilderness areas can provide opportunities for participants in your program to come in contact with unpleasant stimuli such as dirt, mud, algae, insect bites, germs and sweat. To some participants these experiences may be unpleasant and create feelings of disgust.

16. If a participant in your program initially experiences, extreme, feelings of disgust from elements in the outdoor environment he or she is less likely to benefit from the therapeutic interventions being used.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

17. If a participant in your program initially experiences minimal feelings of disgust from elements in the outdoor environment he or she is less likely to benefit from the therapeutic interventions being used.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

18. Experiencing initial feelings of disgust in the outdoor environment has nothing to do with

a participant benefiting from the therapeutic interventions being introduced.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree

19. Please use the following space to add any comments regarding this section of questions.

Part Three

Wilderness Therapy programs serve youth from all different types of backgrounds and experiences. As a result, some youth may come to your program very comfortable with the wilderness setting, while others may be quite scared and/or uncomfortable. The following section will ask you to identify some of these differences in youth with regard to the wilderness environment specifically.

20. How likely is it, for participants in your program that have had previous experience in outdoor settings such as scout trips, vacations, camps, family trips and previous wilderness therapy programs to:

	Very Likely	Likely	Neutral	Unlikely	Very Unlikely
experience high levels of fear of the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experience high levels of discomfort in the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experience high levels of disgust in the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21. How likely is it for participants in your program with no outdoor experience or exposure to traveling to:

- Very Likely
- Likely
- Neutral
- Unlikely
- Very

					Unlikely
experience high levels of fear of the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experience high levels of discomfort in the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experience high levels of disgust in the wilderness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. Please enter any additional comments.

Part Four

23. There are several components of a wilderness experience that need to occur in order for the participant to experience growth and development. One such component is called "disequilibrium" which is said to occur when "individuals previously held beliefs regarding a situation do not apply to the current situation." Please use the following space to comment on what you think contributes to disequilibrium in wilderness therapy programs and/or give feedback regarding this concept.

Thank you so much for your participation!

For more questions regarding the research, feel free to contact Jane Brison at brison@clmson.edu.

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