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Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Sandra K. Short-Robbins

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the review committee have been made.

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Walden University
2020

Abstract

Therapeutic Wilderness Experiences and Empathetic Perception

of At-Risk Adolescent Youth

by

Sandra K. Short-Robbins

MA, Regis University, 2011

BS, Colorado State University, 2005

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Human Services Administration

Walden University

October 2020

Abstract

Current research involving wilderness therapy (WT) programs indicates that therapeutic wilderness or outdoor interventions have increased in popularity as alternative approaches for treating at-risk or adjudicated adolescents. However, the role that empathetic perception plays in advancing the efficacy of WT intervention absent from the majority of extant literature. The purpose of this generic qualitative study was to address a gap in research involving how empathetic perception may be affected by WT program participation. The conceptual framework for the project involved ecopsychology, a branch of science that addresses the connection between human beings and the natural world. Nine young adults between the ages of 18 and 20 years were surveyed to determine if they perceived a change in empathetic perception as a result of their WT experiences as adolescents between the ages of 16 and 18 years. The study focused on 3 areas of empathetic perception involvement: camp peers, program staff, and the natural environment in which the programs operated. Study results were hand-coded from subjects' verbatim transcripts, progressing from broader responses to five discrete themes: vocabulary, experiences, self-empathy, personal insight, and camp culture. Data were analyzed based upon the alignment of the subjects' responses to the five identified themes. The resultant data indicated that there was a positive change in empathetic perception towards subjects' WT peer groups, WT program staff, and the natural world. A primary goal of this study was to address the social change implications of how the identification of empathetic perception in at-risk or struggling adolescents, through WT intervention, may positively impact positive mental health stability within this population.

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Dedication

This research document, the first in what will be a long career or research into the care and improvement of adolescent mental health, is dedicated to the following:

- My children Kate and Ben, who taught me patience and perseverance.
- All of my quadrupedal "children," both alive and passed on, who taught me unconditional love.
- The Lord and Lady, who continue to teach me everything else.

Acknowledgments

I extend my sincerest appreciation to my committee members: Dr. Eric Youn, Dr. Rebecca Stout, and Dr. Dorothy Scotten, without whose support I would not have completed this fundamentally crucial project. I would be remiss if I also did not also thank editor Carey L. Brown for diligently correcting my work.

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Chapter 1: Introduction to the Study

Introduction

The focus of this study was exploring whether and how wilderness therapeutic (WT) programs influence changes in empathetic perception among adolescent participants. Empathy is conceptualized as one individual's ability to understand the thoughts and feelings of another (Allemand & Steiger, 2015; Wondra & Ellsworth, 2015). A considerable amount of available literature exploring the positive effects of wilderness therapeutic environments for at-risk youth focuses on qualities such as self-esteem, self-confidence, problem solving, and interpersonal communication. The purpose of this project was to address a gap in research regarding empathy as yet another quality that may be improved in at-risk youth as a result of WT program participation.

Chapter one introduces the rationale of increasing interest in incorporating natural, outdoor, or wilderness environments as an impetus for improved mental health and well-being. In particular, this initial chapter describes the evolution of wilderness therapeutic environments as a means of providing alternative interventions for at-risk youth who are struggling with substance abuse, mental health disorders, and adverse behaviors. In background sections, I differentiate between *well-being* and *wellness* and explain how these terms are used to describe physical and mental health. Further background information is presented in sections titled Wilderness Interventions for Adjudicated Youth and Nonadjudicated Youth, which describe how WT programs have been shown to address a diversity of issues facing challenged adolescents. The presentation of background information in Chapter one concludes with a brief preface on

the characteristics of empathy, as well as the extent to which low empathy has been linked to adverse conduct among at-risk youth, the fundamental demographic targeted by WT programs.

Chapter one also presents detailed information regarding the project's problem statement, the primary research question and its rationale, and the conceptual framework the project was bounded within. Also addressed are certain preliminary assumptions around the study, its research scope, possible study limitations, and the potential significance of this work as a contribution to existing literature involving the benefits of WT programs for youth. Along with these detailed sections, a section defining pertinent terms is included to clarify the nomenclature utilized throughout the project.

Background

Therapeutic wilderness environments have been employed for decades as alternative venues for youth exhibiting unsafe, dysregulated, or criminal behaviors (Berman & Davis-Berman, 2013; Gass, Gillis, & Russell, 2012; Loughmiller, 1979). A WT environment is one in which "nature plays a key therapeutic role in facilitating thought, reflection, and therapeutic change" (Gass et al., 2012, p. 4). In addition, therapeutic wilderness programs have been distinguished from others by the inclusion of trained mental health professionals who design activities based upon individual clinical assessments of clients (Norton et al., 2014). In one of the seminal texts detailing the use of therapeutic wilderness environments, Berman and Davis-Berman (1994) defined this approach as "the use of traditional therapy techniques, especially for group therapy, in an

out-of-doors setting, utilizing outdoor adventure pursuits and other activities to enhance personal growth" (p. 13).

Contemporary wilderness or adventure therapy is defined as "the prescriptive use of adventure experiences provided by mental health professionals, often conducted in natural settings, that kinesthetically engage clients on cognitive, affective, and behavioral levels" (Russell & Gillis, 2017, p. 135). The typical WT participant is an at-risk youth between 13 and 18 years who has been diagnosed with a mental health disorder and may be struggling with substance abuse (Hoag, et al., 2014). An early publication by Russell and Hendee (2000), two original WT investigators, described therapeutic wilderness intervention as a process in which struggling youth are "immersed in unfamiliar environments" (p. 136) and must identify and use basic skills to manage the daily experiences and natural consequences of living outdoors. Knowledge and mastery of these skills are accomplished through a series of designed or randomly occurring obstacles that require camp youth to work both independently and as a group to devise solutions (Berman & Davis-Berman, 2013; Gass et al., 2012; White, 2015). For youth struggling with low self-esteem, communication problems, or mood dysregulation, WT provides an opportunity to address emotions and behaviors in a safe environment that is devoid of common distractions such as peer pressure or technology, the intention of which is the alleviation of negative feelings that may be contributing to their risk-taking behaviors or delinquency (Bowen, Neill, & Crisp, 2016; West & Crompton, 2001; White, 2015).

The ultimate goal of any WT program is to alleviate adverse symptoms and internalized issues that underlie externalized, problematic behaviors by increasing protective factors through the introduction of eustressful situations (Bowen & Neill, 2013). In addition to the presentation of challenging wilderness projects, another aim of WT intervention, the removal of distractions that are often associated with the clients' presenting dysfunction (Mutz, Müller, & Göring, 2018) is a key element of program design because these factors have been directly linked to barriers to overall mental health and well-being in adolescents (George et al., 2017).

Well-Being and Wellness

Natural environments have consistently been linked to increases in both well-being and wellness (Berman et al., 2012; Brymer, Cuddihy, & Sharma-Brymer, 2010; Greenleaf, Bryant, & Pollock, 2014; Reese & Myers, 2012). The terms *well-being* and *wellness* are often used interchangeably to describe the presence of a healthy human condition (National Wellness Institute, n.d., para. 4). While these two terms are similar in theme, each represents a different application.

Well-being is described by the Centers for Disease Control and Prevention (CDC, n.d.) as "the presence of positive emotions and moods … the absence of negative emotions … satisfaction with life … (with) fulfillment and positive functioning" (How Is Well-Being Defined, para. 3.). Wellness, a descriptive expression used in literature to imply health, can be a vaguely applied term. For instance, the World Health Organization (1948) defined wellness (used interchangeably with *health*) as "... a state of complete physical, mental, and social well-being, and not merely the absence of disease or

infirmity" (p. 1). Similarly, the National Wellness Institute (n.d.) defined wellness as "a conscious, self-directed and evolving process of achieving full potential" (para. 4). This concept incorporates includes six dimensions of physical, emotional, spiritual, occupational, social, and intellectual health (National Wellness Institute, n.d., para. 4).

Eco-wellness, a term more recently found in applicable mental health literature, describes yet another dimension of wellness that connects "holistic health" to the bond between human beings and nature (Reese et al., 2018, p. 3). Although eco-wellness may appear to be an appropriate term for the purposes of describing the benefits of nature for mental health, this term is still relatively new. Thus, for the purposes of this project, the term *well-being* is included to express positive mental, physical, and emotional health.

Wilderness-Based Interventions for Adjudicated Youth

Researchers have ascertained that natural interventions used within criminal justice environments also produce measurable benefits for incarcerated adult and juvenile populations (Clem, Prost, & Thyer, 2015; Jones, Lowe, & Risler, 2004; Russell & Walsh, 2011; Sandel, 2004). As concerns surrounding the prevalence of mental health disorders in incarcerated individuals continued to grow (Barnert et al., 2017; Underwood & Washington, 2016), "green prisons" began to surface, offering programs to provide daily access to "therapeutic landscapes" (Moran & Jewkes, 2014, p. 346). For incarcerated adults, green prisons feature options such as working with agriculture, animal care and training, and landscape design (van der Linden, 2015). Subsequent studies have supported these endeavors, indicating that nature-based programs for incarcerated adults resulted in constructive mental health gains and reduced recidivism rates, which might

facilitate a smoother transition from prison settings back into the community (Moeller et al., 2018).

The positive results observed from incorporating natural environments into efforts to rehabilitate incarcerated adults have contributed to increased interest in using WT programs for at-risk and delinquent youth (White, 2015), although a fundamental difference between adult and youth interventions are the availability of nature-oriented rehabilitation for adolescents. While organized prisons provide these services for adults, there are very few models designed for youth offenders as an element of their incarceration, leaving only available community options (McCarthy, Schiraldi, & Shark, 2016). The absence of organized, nature-based interventions for delinquent youth continues to indicate fundamental underutilization of this constructive resource.

Wilderness-Based Interventions for Nonadjudicated Youth

As WT grew in popularity for adjudicated individuals, programs began to expand to include other adolescents struggling with injurious behaviors, most of which were related to substance use or mental health disorders (DeMille & Montgomery, 2016; Hoag, et al., 2014; Russell, Gillis, & Heppner, 2015. For addicted youth, WT provides an environment where addictive substances are replaced by physical activity, problem solving, and team building exercises (Russell et al., 2016).

For both adjudicated youth and as well as adolescents not involved in the legal system, a significant factor affecting individual improvement relies upon the importance of mitigating the inherent challenges that arise (Norton et al., 2014; Russell & Gillis, 2017; Wilson & Lipsey, 2000). Natural consequences result from poor planning, as when

a storm soaks a campfire, a meal goes unprepared for lack of firewood, or a person has an uncomfortable night's sleep because a tent was not erected properly. The mitigation of natural consequences requires developing and using skills, individual ingenuity, and group cooperation to be kept warm, fed, and well rested (Berman & Davis-Berman, 1994; Gass et al., 2012; Russell, Hendee, & Phillips-Miller, 2000; White, 2015).

Empathy and Mental Health

Kohut (1984), through his development of the self-psychology model, defined *empathy* as "the capacity to think and feel oneself into the inner life of another person" (p. 82). Philosophically, empathy has often been referred to in terms of its positive impact on psychotherapy and mental health. Etymologically, therapy for mental health disturbances is an abbreviated version of psychotherapy, a term introduced by W. C. Dendy in 1853 (Haggerty, 2018). Freud, often referred to as the father of psychotherapy, formulated his own description of mental health therapy as a process in which deeply rooted neuroses are brought to the surface during psychoanalysis (Haggerty, 2018). Although mental health has been viewed differently as the field has evolved, empathy has been found to be related to both constructive and destructive mental health (Teding van Berkhout & Malouff, 2016).

For example, there is a growing dilemma regarding the number of adolescents diagnosed with symptoms of low empathy, a deficit that has been directly linked to delinquent and other at-risk behaviors as well as poor mental health (Bock & Hauser, 2014; Mulder et al., 2010; Vachon & Lynam, 2016). Further, research involving outdoor-based intervention programs has shown that a high percentage of youth participating in

WT programs have been diagnosed with at least one mental health disorder (Hoag, et al., 2014; Norton & Peyton, 2017). WT has historically focused upon characteristics such as low self-esteem, self-confidence, and minimal coping skills as targets to evaluate the model's efficacy. However, it has been established that low empathy may also explain one underlying reason for an adolescent to be admitted into a WT program; thus, evaluating the extent to which empathy is changed through participation may add to existing research regarding the benefits of WT intervention.

Problem Statement

Low empathy levels have been associated with conduct issues in adolescents (Euler, Steinlin, & Stadler, 2017; Frick et al., 2014), including problems such as substance abuse, delinquency, and other risk-taking behaviors (Bock & Hauser, 2014; Fanti 2013; Van Langen et al., 2014). *Empathy impairment*, or low empathy, is described in the *Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition* (DSM-5) as a lack of concern for others' feelings and needs (American Psychiatric Association, 2013). Youth who demonstrate such traits comprise the larger population of incarcerated and otherwise at-risk youth (Euler, et al., 2017).

Developmentally, inadequate parenting or lack of appropriate parenting, or a diagnosable mental illness, can result in lower empathy levels through adolescence, which may result in criminal behaviors (Mulder, et al., 2010) or substance abuse (Ferrari et al., 2014). In addition, it has also been found that, when at-risk or delinquent youth are adjudicated, prevailing mental health issues are typically not addressed, often resulting in exacerbation of mental health symptoms brought on by institutional involvement (Lambie

& Randell, 2013). Although inherent empathy levels have been shown to vary between individual adolescents (Allemand & Steiger, 2015), including between genders (Castillo, et al., 2013), studies have shown that empathy may be taught through behavioral modeling (Teding van Berkhout & Malouff, 2016). Restorative justice programs that include empathy modeling as part of the curriculum have shown improvements in levels of perceived empathy among juvenile offenders (Correll, Walker, & Edwards., 2017; Kuehn, Yarnell, Champion., 2014; Office of Juvenile Justice and Delinquency Prevention, 2010).

Similarly, alternative treatment programs, such as outdoor experiential or therapeutic experiences, have been used for decades as a means of working with at-risk youth to reduce risk taking or otherwise delinquent behaviors (Wong et al., 2016). Longstanding programs such as Outward Bound (2017) and VisionQuest (2017) have provided empirical evidence that suggests that living and working in the outdoors results in improved self-confidence, enhanced teamwork and communication skills, and strengthened problem-solving abilities (Fernee et al., 2017). Further, additional studies have indicated that youth who struggle with antisocial conduct have demonstrated increases in their overall mental health and well-being while also showing reductions in problematic behaviors after participating in a WT program (Bowen et al., 2016; Margalit & Ben-Ari, 2014; Mutz & Müeller, 2016).

Adolescents who possess higher levels of empathy are often prone to retain more protective factors, are more socially engaged and demonstrate increased prosocial conduct, are less aggressive, and have stronger support systems (Allemand & Steiger,

2015). Protective factors such as self-esteem, self-confidence, communication skills, and emotional regulation have been shown through plentiful WT research to be positively affected by this form of natural intervention. Although empathy has been shown to be a precursor for certain behaviors, including those that result in deviant behavior, a problem exists in that perceived empathy levels, which may affect positive functioning as well as contribute to delinquent or at-risk behaviors, are missing from much of the extant WT literature as a focus of study.

Purpose of the Study

The purpose of this generic qualitative study was to address a gap in available research concerning the importance of determining whether empathetic functioning is perceived as changed through participation in an accredited wilderness therapeutic program. Appropriate subjects were young adults between 18 and 20 years who participated in a WT program as older adolescents between 16 and 18. In addition to evaluating subjective levels of empathy as a general theme, the young adults surveyed were asked if they recognized any changes of empathy toward specific entities such as other camp youths, program staff, or the natural environment itself.

Social change is a central goal of WT program research in terms of adolescent functioning, and it is also a significant mission for Walden University and its graduates. In 2017, Walden University published a detailed a review of its 5-year plan titled *Walden 2020: A Vision for Social Change*. The first goal, "leveraging Walden research capacities, expertise, networks, and curricula to serve external organizations and communities in the application of social change" (Walden University, 2017, p. 7), coincides with the

university's practical function to "support ongoing, sustainable, community-based research" (p. 12). The primary objective for the project was to contribute to peer-reviewed research that supports existing information regarding the benefits of WT programs for at-risk youth. Resultant data from the project yielded information that increased understanding regarding the importance of how modeling, teaching, and encouraging empathy resulted in overall improvements in mental health for the young adult participants. Furthermore, this project provided an opportunity for the young adult participants to enhance their own understanding of empathy, while explaining, in their own words, what their individual empathetic perception looked like.

Primary Research Question

The foremost objective of my study was to determine whether recent young adult graduates between the ages of 18 and 20 years could articulate a change in empathetic perception as a result of WT program participation. The overarching question was the following: Did young adult graduates of an adolescent WT camp perceive a change in empathy as a result of their experiences in the program? Answers to the primary overarching research question led into more specific questions as interviews with study participants evolved. For example, ensuing subquestions, described comprehensively in Chapter four, were used in an effort to understand whether the young adults recalled *why or when* their empathetic processes shifted, *who or what* their shift in empathy was directed at, and whether they felt that any of the changes experienced in their levels of empathetic processing still existed post discharge.

Conceptual Framework

The conceptual framework of this study involved ecopsychology, a branch of science based upon the seminal work of Theodore Roszak titled *The Voice of the Earth* (1992/2001). Ecopsychologists seek to understand the connection between humans and the natural world through personal, philosophical, psychological, and ecological explorations (Harper, Gabrielsen, & Carpenter, 2018; Roszak, 1992/2001; Roszak, Gomes, & Kanner, 1995). Ecopsychological theory posits that human beings require, and are often drawn to, natural environments in order to thrive, and that increases in modernism and technology have created barriers to interactions with nature, resulting in diminished mental and physical health (Gabrielsen & Harper, 2017; Keys, 2013). An example from Mantler and Logan (2015) illustrates how the evolutionary linkages of human beings and natural environments have been found within many branches of medicine, including immunology, epidemiology, and psychology; however, the frenetic and demanding lives of contemporary human beings, combined with the lack of available "green spaces," is thought to be responsible for a subtle deficit in human effectiveness (Mantler & Logan, 2015, p. 7). WT programs support these conclusions by virtue of their design, which involves introducing youth inhibited by poor mental health and other issues into an environment that challenges their resources, thereby improving their ability to function as they interact with an unfamiliar venue.

Nature of the Study

Qualitative researchers attempt to find meaning through subjective interpretations of individual experiences as they engage within their usual environments (Aspers &

Corte, 2019). It is- been posited that the first recorded professional qualitative studies were conducted individually by Freud, Wundt, and James upon the introduction of psychology as a field in 1879 (Wertz, 2014). During this time, there was a fundamental interest in how human beings operated and what drove their behaviors (Leavy et al., 2014).

Data collection in qualitative research occurs largely through subject observations, interviews, review of documents from both private and public sources, and review of audiovisual materials. However, qualitative inquiry is often subject to challenges in how information is reported as well as in data saturation, as the personal nature of qualitative inquiry often results of smaller sample sizes (Mason, 2010). Qualitative resources do not identify a definitive number of interviews required to saturate a subject area in generic qualitative research (Fusch & Ness, 2015); however, qualitative researchers Kahlke (2014) and Percy, Kostere, and Kostere (2015) noted that sampling procedures should take advantage of as many subjects as possible to more fully understand the topic being explored (Kahlke, 2014).

Data from the current study consisted of video-conferenced interviews with young adults between the ages of 18 to 20 years who participated in a wilderness therapeutic camp while they were 16 or 17 years. While this study focused on the recollections of young adults as they processed their empathetic experiences as minors in a WT camp, due diligence was observed and employed regarding any information divulged by subjects regarding the reasons for their wilderness camp participation. Data collection occurred through observations, interpretations, and insights regarding subjects' reactions,

which were chronicled in a reflexive journal. Data analysis involved verbatim transcriptions of each conversation, followed by the hand-coding of data for embedded themes involving expressions of empathy and empathetic perceptions. Themes were categorized into subtopics that emerged as data were sorted and organized.

Definitions of Key Terms

A common critique of WT research and subsequent literature is that this work lacks standardization of terms that define program descriptions and parameters (Annerstedt & Währborg, 2011). The Outdoor Behavioral Health Council (OBHC) is a national accrediting organization that currently lists 22 accredited WT agencies in its membership; however, a review of program descriptions between the organizations affiliated with the OBHC also revealed a lack of homogeneity regarding which terms are used to describe the agencies and their activities. For example, description conventions include *wilderness therapy*, *adventure-based counseling*, and *expedition-based treatment* (OBHC, n.d., Members, para. 1-3) across the 22 programs. For the purposes of this project, the term *wilderness therapy* was used to encapsulate all programs that incorporate outdoor or wilderness environments within a clinical setting involving at-risk adolescents. In addition to *wilderness therapy*, the terms below are used frequently herein:

Adolescence: A period of intense development between childhood and adulthood, generally between 10 and 19 years, spanning the time from pubertal onset through the legal age of independence (Jaworska & MacQueen, 2015; World Health Organization, 2017, para. 1).

At-risk youth: There is no consistent definition of an at-risk youth; however, the CDC (2017) defines "risks" as factors that may result in disability or death among youth up to age 19. The term *challenged youth* is used interchangeably with *at-risk youth* within this document.

Empathy: This term originates in the German word *Einfühlung*, or "feeling in," which was translated into English by Edward B. Titchener in 1909. Empathy is described as an individual's capacity to understand the thoughts and feelings of another (Allemand & Steiger, 2015; Stueber, 2019; Wondra & Ellsworth, 2015).

Recidivism: Occurs when a previously adjudicated individual commits another crime, often after the original sentence has been completed (National Institute of Justice, 2014).

Well-being: A term that describes a holistic view of health, including physical, emotional, mental, and spiritual elements (Davis, 2019).

Natural environment: Connotes an area that has not been manufactured by human beings and includes both organic and inorganic elements such as terrain, trees, water sources, coastal dunes, and rocks (Coppola, 2015). Natural environments include both organized parks and rural or nondeveloped areas.

Wilderness: Wilderness environments are differentiated from natural environments in that they are nondeveloped and do not contain planned improvements such as roads or infrastructure (Wilderness Act, 1964).

Wilderness therapy (WT): Used interchangeably with *outdoor behavioral healthcare*, *adventure therapy (AT)*, *wilderness adventure therapy (WAT)*, as well as

other terms; defined as “the prescriptive use of wilderness experiences by licensed mental health professionals to meet the therapeutic needs of clients” (OBHC, 2018).

Assumptions

Although empathy is recognized as an aspect of adolescent development, it can be affected by variables such as caregiver environment and upbringing, trauma, and cognitive challenges (Malin et al., 2013; Sengönül, 2018; van der Graaff et al., 2014; Waller & Hyde, 2018). It was presumed that some, if not all, of the OBHC accredited programs that participated in this project provided services for developmentally age-appropriate adolescents as well as those who were considered to be at lower levels of functioning. Both populations were considered for the study; however, the adult candidates selected for the project were screened for their ability to recall their camp experiences as adolescents. It was assumed that each program possessed internal evaluation protocols to gauge participants’ appropriateness and level of functioning typical for an average 16- or 17-year-old youth, and that each youth was placed in a developmentally congruent cohort within the camps. Further, it was assumed that I would have been able to verify subjects’ placement information, if the need had arisen, based upon how responsive each young adult was to the questions asked.

Scope and Delimitations

The specific scope of the research problem involved how young adults between the ages of 18 and 20 years explain changes in empathetic perceptions during their experiences in a therapeutic wilderness environment as late adolescents. Youth are sent to WT programs often as a “last resort” when other programs are ineffective or fail (Hoag et

al., 2014). The goal or mission of WT interventional programs reflects an understanding that natural venues provide a setting that many adolescents may not have access to, and that this approach has been proven to be an effective intervention for assisting at-risk youth who are struggling in ways that contemporary urban or brick-and-mortar programs cannot (Gabrielsen & Harper, 2017; McMahana & Estes, 2015; Norton & Watt, 2014).

Although young adults over age 18 were targeted as sample set for my interviews, WT programs work largely with adolescents under the age of 18 (Hoag, et al., 2014). Further, understanding the experiences of adolescents is important because they represent the life stage immediately prior to adulthood, when resources become less available and the expectations of being an adult can become overwhelming. Research involving late adolescence is crucial to predicting how members of this age group will transition into young adulthood (Scales et al., 2016) amidst the ever-growing challenges of financial instability and societal turmoil (Gabrielsen & Harper, 2017). Factors identified for successful transition into adulthood include "psychological and emotional well-being, life skills, and ethical behavior" (Scales et al., 2016, p. 157). Pao (2017) observed that as contemporary culture changes and becomes more diverse, it has become more crucial for adolescents transitioning into adulthood to also attain a level of social-emotional intelligence, which Pao, referring to Gardner's (1983) description, described as the ability to "discern and respond appropriately to the moods, temperaments, motivations and desires of other people" (p. 3). It was the goal of the study to focus upon the construct of empathetic perception as a factor of social-emotional intelligence that may improve through WT camp participation (Milojević et al., 2016; Petrovici & Dobrescu, 2014).

Delimitations involved the age and developmental maturity of potential subjects. Young adults between the ages of 18 and 20 years were interviewed based upon their wilderness camp involvement that took place between the ages of 16 to 17 years old, inclusive. One reason for the selection of this age group was to ensure a reasonable level of developmental maturity. Young adults may recall their experiences as adolescent participants in a WT camp in greater detail while also having an enriched ability to articulate their answers. Involving young adults also circumvented certain intrinsic ethical or legal concerns that arise when working with vulnerable populations based upon age. The exact age span of adolescents can vary by definition; for example, although the young adults who were selected for interviews were all over the legal age of 18 years old, the World Health Organization defines adolescence through age 19 (para. 1). For this reason, research questions and interactions were framed with care in recognition of the possibility that subjects were still emotionally and cognitively vulnerable.

Study Limitations

There were several forecasted limitations to the study that were taken into consideration. One limitation involved demographics. WT programs are largely privately paid and, statistically, such financial constraints typically limit the youth able to attend to Caucasian adolescents of higher socioeconomic statuses (DeMille et al., 2018). In addition, Chang et al. (2017) found that most WT programs offered little in the realm of diversity, a factor attributed to the emphasis on Western concepts (Chang et al., 2017). Accessibility based upon ability to pay and demographic factors has been observed in other countries as they have attempted to emulate the success of WT programs in the

United States (Chang et al., 2017). Whereas private-pay programs are largely populated by Caucasian youth, government-funded programs are typically comprised of non-White males (Bettman et al., 2016). In a literature review by the Office of Juvenile Justice and Delinquency Prevention (2011), it was noted that non-White and ethnic youth, as well as those from various socioeconomic backgrounds, are often excluded from WT research based upon the availability of private-pay WT programs versus state-regulated programs (Office of Juvenile Justice and Delinquency Prevention, 2017). The disproportion amidst therapeutic camps was a factor recognized two decades ago by Wilson and Lipsey (2000), which indicates that access to, and demographic representation within, WT programs has not changed significantly over time.

Another project limitation concerned extant research. Berman and Davis-Berman (2013) found that much of the data on the benefits of therapeutic wilderness and outdoor-based interventions lacked internal validation and controls, as well as definitions of treatment terms and plans that were consistent within programs. In a meta-analysis project, Gutman and Schoon (2013) supported these observations, noting that there remained a need for a "developmentally appropriate framework" to further understand how the process of WT helps reduce negative adolescent behaviors while concurrently encouraging personal growth in areas such as emotional well-being and regulated behaviors (p. 236). The issue of quality research exploring the efficacy of WT programs has been addressed by the OBHC (2018), which strives to contribute to the body of WT literature by producing valid and empirical data through "comprehensive research (providing) credible, objective information to the industry."

Finally, researcher bias involves values and predilections that may affect subjectivity and objectivity when working with human subjects (Roulston & Shelton, 2015). Qualitative study lends itself to research bias as researchers bring their own opinions, thoughts, and feelings pertaining to the project environment (Fusch, Fusch, & Ness, 2018). A possible area requiring bias mitigation was my own personal and professional interest in the subject being studied. My professional work as a therapist and coach for adolescents and young adults directly involves nature and its inherent healing qualities. Researcher bias may lead to the misinterpretation of data and other factors that affect a project's internal validation and significance (Karagiozis, 2018). A means of mitigating bias in a qualitative research project is to keep a thorough reflexive journal; in this study, I used such a journal to document situations that resulted in my own biases being triggered by the subjects' responses to the project questions. Chapter three more completely addresses the issue of bias mitigation.

Significance

Available research has indicated that youth with low levels of empathy are more likely to engage in behaviors that are harmful to themselves or others (Wymbs et al., 2012). Interventions involving WT have been used for decades as alternative strategies for correcting behaviors and improving mental health (Fernie et al., 2017; Margalit & Ben-Ari, 2014). Much of the data involving the efficacy of WT programs for struggling youth have focused on personal growth and protective factors such as self-esteem, self-confidence, communication, and teamwork (Barnert et al., 2015; Bowen et al., 2016; Clem et al., 2015; Fernee et al., 2017). In contrast, there is a scarcity of research

specifically targeting empathy as a focus of study in WT scholarship. My study addressed this gap in the current literature by assessing whether youth were able to recognize their own empathetic perception, and whether their individual empathetic perception was affected by participation in a therapeutic wilderness program for at-risk adolescents. The study's resultant data may shed additional light upon the efficacy of WT as a model for change, thus affecting how WT programs are practiced by addressing issues of empathy for humans and natural environments. Additionally, this study may foster increased interest in WT research around empathy, as this characteristic has been directly related to at-risk and deviant behaviors yet is a component currently missing from WT literature. This study may promote positive social change by supporting empathetic perception as a key element of efforts to assist at-risk youth in addressing and handling their at-risk behaviors, consequently adding another positive characteristic for youth graduates to use as they return to their own worlds.

Summary

Chapter one described the rationale for and efficacy of the use of WT for at-risk youth. The benefits of wilderness environments for youth who are struggling with mental health issues and deviant behaviors derive from a basic and essential connection that human beings have with natural environments. WT programs for youth offer settings that are devoid of inhibiting distractions such as peer pressure, illicit substances, technology, and negative home environments, Instead, favorable opportunities such as mastering challenges and developing skills to increase wellness are provided and guided by professional mental health and outdoor staff.

Empathy, or the ability to understand the experiences of another, was the focus of this study, in which I sought to address a gap in a body of literature that often focuses on factors such as self-esteem, self-confidence, team building, communication, and problem solving. The overarching research question was the following: Did young adult graduates of an adolescent WT camp perceive changes in empathy as a result of their experiences in the program? Follow-up questions were included within the construct of the generic qualitative study design. Definitions of key words were included in this chapter, along with descriptions of the scope and presumed limitations of the study. Finally, the significance of this project and its contribution to existing literature were discussed.

The literature review in Chapter two synthesizes current WT research focusing on adolescents and young adults. The purpose of a literature review is to evaluate and assess extant research on the subject being studied (Walden University, n.d.) while also building a case for the research topic. Included in Chapter two is a historical perspective on the evolution of outdoor venues as a form of intervention that complements other forms of mental health support. In addition, I detail historical conceptions of empathy; describe how empathy is developed in adolescents, addressing the impact of trauma and environment on normal empathy formation in youth; and explain how these influences may manifest in a youth who is considered at risk.

In Chapter three of this study, I detail the research plan, presenting an explanation and rationale for the choice of a generic qualitative method over more traditional qualitative models. Further, I offer an evaluation of ethics regarding working with vulnerable populations, with a clear discussion regarding how to approach confidentiality

and privacy, focusing particularly on issues around videoconferencing. Finally, the step-wise process of collecting, analyzing, documenting, and reporting the resultant data is outlined, with details describing hand coding of information for theme identification.

Chapter four detailed the research project itself, formally introducing the research question, prepared interview questions, and clarifying subquestions. A thorough explanation is provided on the coding and theming process, as well as a rationale for how the primary themes were ultimately determined. Verbatim data were represented in both tables and block quotes along with introductions for each section. Finally issues of trustworthiness are discussed along with mitigation strategies I utilized to ensure the trustworthiness of the study.

Chapter five summarized the entire project by discussing the results of the study based upon the interview questions and trends in how the themes were organized. I continued my analysis by providing details that led to the final conclusion, that is, all nine study subjects indicated they experienced a change in empathetic perception. Finally, I reviewed the study limitations as well as recommendations for future study in the area of empathy and WT programs.

Chapter 2: Literature Review

Introduction

Empathy is a characteristic that has been shown to be contributory in successful individual functioning; however, empathy is largely missing from extant literature exploring the benefits of wilderness experiential or therapeutic programs for at-risk youth. The purpose of this generic qualitative study was to address this gap in research by exploring whether and how empathetic perception was experienced by young adult graduates of a WT program they attended as adolescents. The following literature review synthesizes extant literature featuring the origins and implementation of outdoor, experiential, and WT programs. In addition, empathy and its historical origins and applications are addressed in relation to the significance of WT programs and their goals of increasing the mental health and wellness of camp participants. Lastly, ecopsychology and the connection between this branch of science and WT are discussed as a basis for further study involving the benefits of natural environments for mental health.

Literature Research Strategies

Twenty-two accredited WT and outdoor adventure programs in the United States were reviewed online to determine the language used to describe the programs, how each program described its demographic and program goals, and each program's therapeutic approach. The organizations were chosen based upon their voluntary involvement with the OBHC (2018), an accrediting body that oversees therapeutic wilderness camps, and through which there is an expectation of adherence to an agreed-upon set of regulations and professional standards designed by the OBHC.

There is a significant difference between outdoor-based programs and their therapeutically designed counterparts. While the general mission of programs in both categories is to address and curb negative behaviors in adolescents, therapeutically designed programs are overseen by mental health professionals. The intent of this study was to explore accredited therapeutically designed programs, defined by Gass et al. (2012) as involving "the prescriptive use of adventure experiences proved by mental health professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels" (p. 1). Therefore, initial searches involved key terms such as *wilderness therapy*, *empathy*, and *adolescents*, in addition to terms related to general themes among the programs such as *adventure therapy*, *self-efficacy*, *self-esteem*, *teamwork*, *problem solving*, and *coping skills*.

Database Search Plan

Varied search arguments were employed to saturate as much available peer-reviewed research as possible. Wilderness or adventure-oriented therapy programs continue to use nonconforming naming conventions (Russell, 2001), including programs accredited by the OBHC. Boolean word strings in the EBSCO database produced most of the data included in this literature review. In addition to searching for database hits using terms such as *wilderness therapy* and *empathy*, I used other relevant terms including *adolescent*, *teen*, *youth*, and *juvenile* to target the specific population being studied. The strategy net was expanded to include search arguments gleaned from reviewed literature, such as *outdoor behavioral therapy (OBT)*, *nature assisted therapy (NAT)*, *outdoor wilderness therapy*, *outdoor adventure interventions (OAI)*, *ecotherapy*, *eco-well-being*,

experiential learning, *adventure therapy (AT)*, *adventure-based therapy (ABT)*, and *wilderness family therapy*. The order of the words applied in the original search arguments was rotated as a means of locating additional information.

Originally, initial search criteria were limited to qualitative studies between the years of 2013 and 2019; however, when it was discovered that most of the data regarding wilderness and outdoor therapeutic programs were quantitative, methodology was removed as a limiting filter within available peer-reviewed journals. PsycInfo and ERIC were the databases most utilized through EBSCO, although, to continue ensuring resource saturation, other databases were included as necessary when certain obscure search arguments did not yield usable information. Additional databases included Education Source, GreenFILE, PsycArticles, PsycBooks, PsycExtra, Academic Search Complete, and SocINDEX.

Subsequent results were reviewed for alignment with the goals and aim of the study: WT-oriented programs, empathy, and adolescents. Results that did not yield useful data or did not contribute the scholarly tone of the research goal were culled. For example, data hits for “adolescent empathy development” yielded nonpertinent results that included cognitive and developmental disorders such as autism, fetal alcohol syndrome, and traumatic brain injury. In addition, studies limited to certain populations such as immigrants, gender-specific youth, or definite geographic regions were removed as the sampling strategy for this study did not focus on a particular group of at-risk adolescents.

Lastly, abstract analysis was conducted to determine if the studies chosen could contribute to a rich literature review. Specific keywords such as *empathy*, *wilderness*, *therapy*, *youth*, and *adolescent* were sought within the articles, abstracts, and keywords. Research articles were determined to be an acceptable fit if the abstract analysis contained information that pertained to WT programs studied within adolescent populations meeting the targeted search terms. Further searching for appropriate literature was conducted later in the process to identify any additional articles published during 2019.

Conceptual Framework

The conceptual model supporting wilderness therapeutic interventions for mental health is indirectly rooted in ecopsychology (Blair, 2011; Gass et al., 2012; Norton, 2009; Taylor Seigel & Harper, 2010; Tudor, 2013; Walsh & Russell, 2010). Ecopsychologists seek to understand the interconnectedness between humans and their natural environments (Roszak, 2001). Ecopsychology has increased in clinical relevance given widely held concerns regarding the upsurge of mental health crises, as reported in the media (Mantler & Logan, 2015), as well as studies indicating that more youth are choosing to be indoors playing video games or watching streaming television rather than spending time outside (Walsh et al., 2018). An increasing focus on mitigating mental health concerns for youth has circled back to nature and its inherent effect on overall well-being (Iwata et al., 2016; Mantler & Logan, 2015).

Ecopsychology, as a philosophy, began in the United States during the 1960s (Kahn & Hasbach, 2012) as a result of the growing counterculture movement against the

Vietnam War (Partridge, 2018). Spurred on by the turbulence of international conflict and domestic governmental corruption, angry youth and young adults became the antithesis of "the establishment" by fighting against 1950s traditions and norms, which they associated with a departure from nature in the name of increased "progress" (Partridge, 2018). Many sought a return to mysticism and nature, through which the ecopsychological model was created (Kahn & Hasbach, 2012) as a science. Ecopsychology, as both a field and a movement, has been shown to be an increasing area of interest for younger generations as prevailing concerns regarding environmental destruction, climate change, and diminishing resources are discussed in social media (Hasbach, 2015). Independent of formal ecopsychological concepts, concerns around the environment and nature have fostered greater attention toward spending time outdoors and ensuing effects on mental health and well-being (Kahn & Hasbach, 2012; Padhy et al., 2015).

The objective of WT is to remove struggling adolescents from environments that do not provide adequate structure for healing or addressing underlying risk-taking behaviors (Russell & Hendee, 2000). The ecopsychological framework of the study centered upon how adolescent participation in a therapeutically adapted wilderness environment may result in perceptive changes in empathetic awareness, which may affect other protective factors such as self-esteem and ability to engage coping skills. In the following section, Literature Review, I evaluate extant research germane to this project's primary theme of how WT programs benefit at-risk adolescent populations.

Literature Review

Historical Roots of Wilderness Therapy Models

One of the earliest recorded American historical situations that addressed the advantages of time spent in outdoor environments arose out of a tuberculosis outbreak in the early 1900s (Berman & Davis-Berman, 1994). Overcrowding of tuberculosis-infected patients in the Manhattan State Hospital required several dozen patients infected with the disease to be housed outdoors in "camps" that separated them from other patients who remained within the hospital (Association of Experiential Education, n.d., para. 1). Practitioners reported that the outdoor environment reduced the severity of TB symptoms, and that the overall mental health of the population seemed improved. Likewise, the TB patients themselves also indicated observable progress in both their physical and emotional well-being (Bryson et al., 2013), which was attributed to both residing in the outdoors as well as having to work together within their small communities to compensate for lack of staff assistance.

Formalization of the concept of incorporating outdoor environments as a technique for education and rehabilitation is credited to German educator Kurt Hahn (1886-1974). Hahn founded the original Welsh model of Outward Bound in 1941 as a means of preparing sailors to understand the dangers of working at sea while improving their seafaring abilities (Outward Bound, 2017). Hahn's intention for an outdoor-based model was to address what he identified as "the six declines" (Hahn, 1959, 1960), a set of character deficiencies he felt that many of the young men he worked with exhibited. The six declines were underutilized physical fitness, low initiative, shallow imagination,

underdeveloped skills, nominal self-discipline, and limited compassion (Colorado Outward Bound, n.d., para. 2; Van Oord, 2010, p. 264). Hahn believed that if young men were engaged in projects and service in rigorous outdoor settings, they would develop skills essential for moral character (White, 2015). This new approach to working within natural elements as a means of improving character deficits heavily influenced the formation of the expeditionary learning model and was the foundation of the original Welsh Outward Bound program in 1941 (Outward Bound, 2017). The Colorado Outward Bound program, founded by Josh Miner in 1962, became the first program established in the United States emulating the European model that Hahn created (Berman & Davis Berman, 1994; Colorado Outward Bound School, n.d., para. 2; White, 2015). Currently, Outward Bound has programs in over 30 countries and works with people of all ages.

Shortly after the formation of the Colorado Outward Bound Program, another model arose with the intent of working with young boys who demonstrated behavior and character problems. In 1946, Campbell Loughmiller organized a camp that, formed through the Dallas Salesmanship Club, differed from its predecessors in being one of the first residential camps in the United States that ran up to 18 consecutive months while including both outdoor camping activities and an onsite school (Loughmiller, 1979; White, 2012). Loughmiller is considered one of the most influential originators of wilderness intervention through a therapeutic lens (Berman & Davis-Berman, 1994) by extending participation to “psychologically challenged youth” (Gass et al., 2012 p. 25). Similarly, the Dallas Salesmanship Club Camp is recognized as the first organization to collaborate with a nationally recognized institution, the University of Texas, to research

the efficacy of using outdoor therapy models for struggling boys. The results of a 1970 study titled *The Worth of a Boy: Report on a Camping Program for Troubled Youngsters* (Smith, 1970) showed a definitive link between youths' experience mitigating challenges in wilderness settings and decreased emotional problems (Loughmiller, 1979).

Other influential work by Outward Bound researchers was conducted in attempts to further establish outdoor, wilderness, and adventure therapies as outcome-positive interventions for youth. One 1968 study measured the percentages of recidivism for adjudicated youth who participated in an adventure therapy program, followed by another project in 1975 that explored adventure therapy approaches with mentally ill youth (White, 2015). Finally, in 1983, the first study that explored the effectiveness of adventure camp programming with substance-abusing adolescents was published, illustrating, along with the previous two projects, a definitive link between outdoor-based therapeutic models and positive "personal growth," including mental health and prosocial behaviors (White, 2012, p. 30).

Later, VisionQuest (VQ), a model similar to Outward Bound with foundations rooted in Native American traditions (VQ, n.d., History, para. 1), was developed in an effort to address increasing numbers of at-risk youth involved in the criminal justice system. VQ was founded in 1973 by Bob Burton, a juvenile corrections officer, and John P. Collins, a local judge, as a means of offering an alternative form of intervention for at-risk and substance-abusing youth (VQ, n.d.). The VQ curriculum emphasized earth-based themes of Native American culture and beliefs, including honoring and respecting the earth and all living things (VQ, n.d., History, para. 2). Similar to the models put forth by

Hahn and Outward Bound, VQ was created to assist adjudicated youth in developing confidence and individual potential through engaging youth both independently and in groups to solve problems within the context of Native American ideals (VQ, n.d., Core Values, para. 3). VQ and its founder, Bob Burton, came under scrutiny in the 1990s after the accidental deaths of 12 minor youth participating in the camp. VQ also received criticism regarding its policies around handling aggressive youth, money management, and organizational transparency (Beyette, 1991). In that VQ leadership does not work to publish or validate the approaches utilized in its protocols, VQ is included in this paper only as a representation of an original outdoor-oriented program model.

Contemporary Wilderness Therapy Programming

Mental health professionals, as well as professionals in the juvenile justice system, have embraced wilderness or adventure therapy as an alternative means of meeting the needs of struggling adolescents and young adults (Clem et al., 2015; Lindquist et al., 2014; Office of Juvenile Justice and Delinquency Prevention, 2018; Paquette & Vitarro, 2014). Several meta-analyses on the efficacy of wilderness therapeutic and outdoor interventional programs (Bettman et al., 2016; Bowen & Neill, 2013; Gutman et al., 2015; Norton et al., 2014; Revell, Duncan, & Cooper, 2014; Wilson et al., 2000) have indicated commonalities in treatment themes for maladaptive behaviors, such as self-esteem, self-efficacy, communication, and coping skills. Over the past 15 years, wilderness therapeutic and outdoor interventional programs have seen increases in both voluntary and mandated participation in both privately and publicly

funded programs as documented problems involving juvenile programs have become a focus of concern (Clem et al., 2015).

One drawback regarding increased research in the area of wilderness and outdoor intervention programs is the production of various nomenclatures indicated as the foci of study. For instance, the term *wilderness adventure therapy* (WAT) was introduced by Australian clinical psychologist Simon Crisp in 1992 to describe interventional programs similar to those in the United States (Crisp & O'Donnell, 1998). Another example is that of *nature-assisted therapy* (NAT), which has been used as a term describing the benefits of outdoor programs for mental health (Annerstedt & Währborg, 2011) in European countries. In addition to the disparity among naming conventions, a clear understanding of what constitutes a therapeutic wilderness program remains mostly absent (Association for Experiential Education, n.d., para. 3; Office of Juvenile Justice and Delinquency Prevention, 2011; Pollack, Eisenberg, & Shipp, 2014). The OBHC was formed in the mid-1990s to address and rectify program concerns while introducing a formal branch of research involving wilderness therapeutic programs.

Outdoor Behavioral Health Council

The upsurge in interest around alternative courses of intervention involving wilderness programs resulted in the creation of the OBHC in 1996 (OBHC, 2018). In addition to providing professional oversight of participating programs, the OBHC contributes peer-reviewed literature regarding many aspects of WT program design and efficacy (OBHC, n.d., About Us, para. 1). For example, WT research has advanced to include dedicated outcome data regarding family therapy (Tucker et al., 2016), cultural

considerations within camps (Chang et al., 2017; Harper, et al., 2018), and youth participants with disabilities (Karoff et al., 2017).

Currently, there are 22 voluntarily accredited WT programs in the United States recognized by the council as performing to the standards put forth by its board of directors. Research remains another primary goal of the OBHC, aiming to continue validating data that support the effectiveness of wilderness programs for struggling youth. The young adults who were selected to participate in this study all received a notification via the 22 OBHC accredited programs.

Wilderness Therapy as an Intervention for At-Risk Youth

Characteristics of an At-Risk Youth

There is no official definition or specific identifiers for what determines an "at-risk youth" (Etzion & Romi, 2015; Fernandes-Alcantara, 2018). An original U.S. Department of Health and Human Services study (Burt, Resnick, & Matheson, 1992) defined an at-risk or vulnerable youths as individuals who possess characteristics or have experienced situations that put them in jeopardy of developing problem behaviors that have the potential to “hurt their community, themselves, or both" (p. 13). The results of current studies involving at-risk youth indicate that when protective factors, attributes that bolster resiliency against negative attitudes and behaviors are missing, adolescent youth are most likely to demonstrate destructive or negative actions (Masten, 2014; Youth.gov, n.d., para. 3). These behaviors include, but are not limited to, drug and alcohol use, unhealthy sexual behaviors, neglect, violence, homelessness, and reductions

in mental health (Otto et al., 2017; Taliaferro, & Muehlenkamp, 2014; World Health Organization, 2017, p, viii, para 1).

Etzion and Romi (2015) sought to create a typification of terms as a means of identifying common themes within at-risk youth populations. Their definition states that an at-risk youth is one who is in "… physical, mental, or spiritual danger" (p. 184). The researchers presented nine broad areas of concern that include life satisfaction, deviant behaviors, self-esteem, sociodemographic factors, family ties, social connections, school experiences, leisure activities, and attachment (Etzion & Romi, 2015, p. 185). Similar to much of the previous research, which describe protective factors as those that include familial stability, social connections, and safety, they found that when these common themes are missing, adverse behaviors are often predictable (Price-Embry, 2015).

In addition to protective factors contributing to criminal or deviant conduct when diminished, youth at risk for mental health problems, such as depression, are also adversely affected when these characteristics are absent (Kugbey et al., 2018; Lu, 2019). Risk factors such as a lack of psychosocial assets or resiliency contribute to an inability to cope, a characteristic that is proportionately large within female adolescent populations (Leventhal et al., 2015) as well as the youth in general who participate in WT programs (Bowen, et al., 2016; Hoag, et al., 2014).

Nature as the Essence of Wilderness Therapy

Nature as a definitive entity is an elusive concept. One prominent reference dictionary defines nature as “the phenomena of the physical world collectively, including plants, animals, the landscape, and other features and products of the earth, as opposed to

humans or human creations" (Oxford Online Dictionary, n.d.). Heidegger described nature as primordial and privative (Cooper, 2005, as found in Heidegger, *Being and Time*, 1962), stating that "Nature is not to be understood as that which is just present-at-hand, nor as the power of Nature. The wood is a forest of timber, the mountain a quarry of rock; the river is water-power, the wind is wind 'in the sails'. As the 'environment' is discovered, the 'Nature' thus discovered is encountered too. If its [sic] kind of Being as ready-to-hand is disregarded, this 'Nature' itself can be discovered and defined simply in its pure presence-at-hand" (Heidegger, 1962, p. 100). Similarly, Roszak did not define nature as an entity in his works, but instead, wrote on the precept that the meaning of nature was implicit, suggesting that a formal definition of nature primarily resides in the eye of the beholder (Roszak, 1992).

Historically, the original reference for nature arose from the term *physis,* translated from Greek to mean to 'grow or appear', referring to the birth of natural life (Ward, 2005). The Greek philosopher described "nature" in terms of *physis*, or *phusis*, as a reference to "nature", as a means of distinguishing between objects that were naturally occurring from those that were considered artifact, stating that "animals, their parts, plants, as well as the simple bodies (i.e., the four elements) are due to nature" and that "each has in itself a source of change and of staying unchanged, whether in respect of place, growth, decay or alteration" (Ward, 2002, p. 2 as found in *Physics* 2.1, 192b20–23). Aristotle, another Greek philosopher, rooted nature in the concepts of physics, exploring the topic through the innate qualities of natural objects themselves as they appeared in his study of physical science. Plato, a contemporary of Aristotle's, shared

many of the same philosophies about the constructs of the natural world; however, Plato viewed nature more from a paradigm of ethics, which he outlined in a dialog which asserts that human beings' views of the natural world should be rooted more in reason, rather than necessity (Johansen, 2008). Johansen opines that in his way, Plato's views may be more in line with the growing ecological emphasis around diminishing global resources.

In contemporary literature, Russell (2001), a pioneer in the field of WT and one of the founders of the OBHC, also avoids defining 'nature' as a precise construct outside of something unmanufactured by humankind, instead conceptualizing wilderness as a form of nature with the capacity of possessing restorative properties. Russell (2001) utilized a description suggested by Powch (1994), in which he differentiated between therapeutic and nontherapeutic natural. Regardless of the curriculum WT programs may offer, which can include ropes courses, challenging tasks, and adventure themes, "wilderness therapy" can only be implemented in a natural environment overseen mental health professionals (Russell, 2001).

Lastly, perhaps the most superlative definition of nature as it pertains to wilderness environments derives from at federal classification outlined in the Wilderness Act of 1964, which states,

> Wilderness, in contrast with those areas where man and his works dominate the landscape, is now recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this Act an area of undeveloped

> Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and that (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value. (88th Congress, Second Session, 1964, p. 2, para. 3).

For the purposes of this project, the essence of *physis*, or nature, is approached from philosophies and contributions of Aristotle and Plato, and the practical descriptions of Russell. Wilderness is described an element of nature that is largely untouched by permanent improvements or infrastructure. WT involves therapeutically supervised interactions between at-risk youth and the elements inherent in an unimproved natural environment.

Wilderness Therapy Foundations and Therapeutic Rationale

Therapeutic wilderness camp models were originally rooted in the concepts of experiential learning theory (Berman & Davis-Berman, 1994; Bowen, et al., 2016; Gass et al., 2012; Tucker et al., 2016; White, 2015). Experiential learning theory is credited to Kolb (1984, 2014) who found that "learning is best conceived as a process, not in terms as outcomes" (1984, p. 26). Kolb asserted that ideas are not "fixed" (p. 26), but are

influenced through individual experiences to new stimuli. In the context of WT, stimuli are present through the daily living experiences and the management of trials that may arise within a wild, and often unstructured, environment (Bowen, et al., 2016). Natural consequences provide the catalyst for growth as camp participants recognize and mitigate physical and mental challenges in new, unfamiliar, spaces.

Experiential Foundations

Experiential learning objectives of WT models involve youth participants resolving issues amidst adverse conditions, often by 'thinking outside the box', while avoiding typical self-defeating habits and patterns of distorted thinking (Kolb, 2014; Russell, 2001). Camp exercises provide opportunities for problem solving that may be regarded metaphorically as similar to those that they may experience once home. Thus, working through problems experientially the youth develop generalizable skill sets to mitigate setbacks that must be rectified in order for the camp to continue functioning smoothly (Combs et al., 2016; DeMille et al., 2018; Harper, 2017; & Loughmiller, 1979).

For example, Loughmiller (1979) described situations in which even the most robustly erected tent succumbed to severe weather, or when a healthy fire extinguished by pouring rain resulted in a ruined meal. Such circumstances required camp participants to call upon skills they either acquired through the camp or already possessed to troubleshoot such dilemmas. Camp challenges and successes as metaphors for the realities of life was a main point of Loughmiller's (1979), where he noted that issues with shelter, food, and weather in general represented the inevitability of having to deal with similar frustrations outside of the camp. Harper (2017) furthered Loughmiller's account

of camp life as a metaphor for home life, by describing how contemporary WT camp use natural environments to provide “unlimited opportunities” to recognize metaphorical similarities and explore their meanings (p. 69).

Therapeutic Rationale

Wilderness therapeutic intervention programs are differentiated from other adventure or outdoor programs in that WT camps include trained mental health professionals as an integral part of the staff (DeMille et al., 2018; Gass et al., 2014). Wilderness therapists focus on the premise that the natural consequences of living and working in outdoors, through the “prescriptive use of adventure experiences provided by mental health professionals”, often results in changes affecting “cognitive, affective and behavioral level(s)” (Gass et al., 2012, p. 1). Fernee et al. (2017) expounded upon this principal, describing WT as a model where outdoor environments that include working and interacting both individually and as a team increased daily living functionality.

A principal goal of accredited WT programs is to provide a therapeutically informed approach by removing distractions such as technology and other daily norms, reducing deleterious behaviors, and increasing protective factors through the intrinsic restorative properties of the natural environment (Russell, 2001). The foundational schema includes nature as a catalyst for change while progressively more challenging tasks can be mastered both individually and as a group. One disparity in available research involves group data. Christian, Brown, and Portrie-Bethke, (2019) noticed that while there is a plethora of peer reviewed data exploring individual WT progress, there was very little in the form of formal group assessment. Fernee et al. (2019) and

Gabrielsen and Harper (2017) also describe the advantages of WT and additional projects that focus upon groups are becoming increasingly available. Both individual and group WT intervention include trained mental health professionals to monitor adverse reactions and provide palliative guidance and interception (Behrens et al., 2017; DeMille et al., 2018; Wilson & Lipsey, 2000).

Trends in Analyzing Past Wilderness Therapy Literature

Research evaluating the effectiveness of outdoor based therapeutic interventions spans decades (Gass et al., 2012; White, 2015); however, a considerable amount of available literature includes older meta-data compendiums and inconsistent descriptive terms for research comparison. For example, Gutman and Schoon (2015), who reviewed meta-analytic data involving successful interventions for adolescents, located only four relevant published analytic studies over fourteen years. Of these, all four studies reviewed other metanalytic research (Cason & Gillis, 1994; Gillis & Speelman, 20; Hans, 2000; & Hattie et al., 1997). Amidst the dated examples of WT research, data indicating the effectiveness of WT programs for at-risk youth indicate congruent results for positive growth and change. Examples include a quantitative analysis by Cason and Gillis (1994) that concluded 62% of youth who participated in outdoor adventure programs expressed improved outlook, while similarly, Hattie et al. (1997) reported metanalytic data that support the lasting effects of outdoor adventure programs.

Other researchers pursued specific areas of study, rather than the generalizations of personal growth models included in much of the previous research. For instance, Hans (2000) provided information on a specific area of interest for adolescents, locus of control

(LOC), and found that the prescribed therapeutic components included in WT programs resulted in a significant impact for camp participants regarding their personal perceptions of influence. Another project conducted by Gillis and Speelman (2008) surveyed metadata around the effectiveness of ropes courses, an abstract form of outdoor adventure programming. Although the researchers determined that efficacy around the mastering the ropes courses increased self-esteem and confidence amongst adolescent participants, the data they surveyed was a departure from the therapeutic model of WT, focusing instead on the activity itself. Thus, while much of the extant research conclude the positive effects of wilderness or adventure therapy programs for at-risk youth, a significant disadvantage to much of the existing information is that it is dated and includes meta-studies of other meta-studies.

More recent studies featuring meta-analysis of other programs feature spans of several decades to further confirm the benefits of WT programs in rehabilitating challenged youth. A common theme included a shift to what has become a focus of most WT research: personal growth characteristics affiliated with mental health and unique population of youth. For instance, Bowen and Neill (2013), examined data collected from 197 studies from 1960 to 2013. The studies reviewed differentiated between types of outdoor programming and related populations, including WT with "juvenile delinquents" (Bowen & Neill, p.29) versus adventure therapy with both adolescent and juvenile delinquents. Their analysis concluded that valid advantages exist in utilizing outdoor environments as a form of intervention for struggling youth. In contrast, there are limitations to generalizing the conclusions of much of the WT projects from older

projects as research foci, clinical approaches, and differences in adolescent development differ between the decades reviewed. For instance, Bettman et al. (2016) performed a quantitative meta-analysis study of thirty-six studies ranging in publication dates from 1982 to 2014, each project emphasizing at least one of five criteria including self-esteem, locus of control, behavioral observations, personal effectiveness, and interpersonal measures (p. 2668). Their findings were consistent with previous wilderness programs that concluded including therapeutic components in WT programs resulted positive feedback from camp participants. However, the populations and conditions varied between the years resulting in useful data that may not be applicable currently.

There is no specificity in what camps offer regarding tasks or obstacles; however, Russell et al., 2000) explained that WT operates within a commonality in themes described as the "integration of wilderness programming theory and a clinically-based, eclectic, therapeutic model guided by a family systems approach" (p. 2). Much of the learning experiences program youth encounter develop as they work through figuring out how to achieve a goal amidst obstacles such as weather conditions, fatigue, and camps "fails" such as matches getting wet. Behaviors and moods are regulated through modeling and reviewing of coping skills and mindfulness around negative attitudes. Campers soon realize that by working together, they can feel the positive effects of surviving in nature without the comfortable structures they are accustomed to.

Finally, OBHC accredited WT programs also strive to provide relevant and empirical data by reviewing interventional models. Much of the evolving research includes information such as adolescent demographics, attitudes around WT

participation, and overall benefits for participants. Emerging research has also expanded to include post-participation outcomes to measure to what extent the skills and strengths gained during participation have conveyed into daily lives once camp youth return home (Hoag et al., 2016; Tucker et al., 2016). Individual clinical assessments and group surveys provide clinical outcomes for review and continue to contribute to a growing body of literature.

Trends in Current Wilderness Therapy Literature

Research generated over the last five years (2014 through 2019) exhibited increased sophistication in identifying measurable clinical outcomes that represent the efficacy of therapeutic wilderness programming. A consistent challenge of WT research has emerged through the realistic lens of how important the availability of technology is to modern-day adolescents, sometimes referred to as the i-Gen cohort (Fernee et al., 2019). Gabrielson & Harper (2018) noted how technological advancements and urban development have negatively impacted youths' ability to adjust to adverse conditions because these environments may lack challenges or solutions that may require time and effort to gain. Research conducted by Fernee et al. (2019) supported these conclusions, noting that adolescents and young adults born after 1995 have developed strong attachments, akin to actual necessity, to their cellphones, tablets, and other technology, which has been proved to interfere with the development maturity and skills mastery necessary for healthy adolescent growth.

WT programs prohibit devices and other forms of electronic distraction in favor of individual and group activities. A 2016 project by Bowen and Neill found that

significant improvements in life skills such as "the capacity to adapt, survive, and thrive" (Bowen & Neill, 2016, p. 38), positive increases in mental health, and a reduction of delinquent behaviors were reported in post-participation outcome data when adolescents were in environments that avoided technological distractions. Moreover, Bryson et al. (2013) found that adolescents valued the in-person narratives of other camp participants, rather than using a form such as texting to communicate, because the opportunity to do "the same sit down and talk" (p. 6) in the outdoor venues was different when compared to traditional psychotherapy models.

Recent projects also featured improved alignment in how mental health, an historically elusive concept, is defined, by taking into consideration the unique differences between adolescents and other age groups. Bowen and Neill (2016) described mental health as "psychological state and level of mental functioning" (p. 38), while Bryson et al. (2013) stated improved mental health includes feeling happier and more hopeful, with reduced anxiety and increased confidence. Their description was supported by Mutz and Müeller (2016) who differentiated mental health into discrete dimensions including "(1) perceived stress, (2) perceived self-efficacy, (3) mindfulness and (4) subjective well-being" (p. 107). Likewise, Mutz and Müeller found that participation in outdoor environments yielded positive results in the youths' overall feeling of well-being, a conclusion found throughout much of WT research.

The Progression From Practical to Therapeutic Focus

Early explorations into the benefits of nature-based interventions for youth focused on adventure curricula and programming, rather than on therapeutic concepts or

mental health models (Gass et al., 2012). One of the first research projects involving the therapeutic advantages of wilderness intervention for challenged youth was published by Bandoroff (1989), in which he conducted a literature review of programs focusing upon delinquent adolescents. He determined much of the same information that WT researcher have also concluded: that involving youth in therapeutically organized wilderness environments often produces reformative outcomes and improvements in well-being. Similarly, early literature reviews focusing on therapeutic benefits by Easley, Passineau, and Driver (1990), Friese, Pittman, and Hendee (1995) and Moore and Russell (2002) also found that WT programs typically yielded data that support the efficacy of this intervention with foci on personal growth elements, including themes such as group structure, such as placing youth in small, cohesive groups to experience new, unfamiliar, challenges as a means of increasing self-efficacy skills. The shift of emphasis from adventure programs to those staffed by trained mental health professionals has provided the essential differential component of WT programs currently evaluated for therapeutic value.

Subsequent research followed in short succession, often with an emphasis on adolescent developmental challenges and focusing on WT goals of increasing "personal growth" (Easley et al., 1990; Friese, et al., 1995; Moore & Russell, 2002), much of which aligns with observations in more recent literature thus creating a background for contemporary WT studies. As WT research continued to develop, the generalized concept of personal growth changed over time, becoming more specific by targeting areas such as

self-esteem, self-confidence, and ability to work with others, which continue to be the major themes of current WT literature.

Similarly, research for evaluating WT programs has adapted to include analysis of what subjective improvements for youth participants are necessary in addition to evaluating program efficacy (Gass et al., 2012). For example, the program evaluation portion considers the theoretical underpinning of selected approaches to the organization, program cost analysis, needs assessment, and other pragmatic concerns (Gass et al., 2012, p. 282). In addition, modern researchers also include an emphasis on understanding how individual students experience their WT program, along with the historically highlighted characteristics such as self-esteem, self-confidence, and coping skills.

Participant Demographics

WT programs provide an alternative therapeutic environment for youth who are not successful, incompatible, with traditional therapeutic models (Tucker et al., 2013). Statistically, WT programs are populated with at-risk adolescents struggling with mood disorders and substance abuse issues (Bettman et al., 2011; Fernee et al., 2017; Hoag et al., 2014; Roberts et al., 2016). Adolescents can be admitted to a WT program as an alternative to other types of residential treatment either voluntarily or without their consent (Tucker et al., 2016) as mandated by state laws, the latter situation has been a source of past controversy as individual youths have levied complaints about their inability to opt-out.

A 2011 study conducted by Bettmann et al. found that most participants in WT camps were male and white and from higher socio-economic levels. Research conducted

by Hoag, Massey, and Roberts (2014) observed similar camp characteristics, finding that most wilderness program participants were overwhelmingly male and white, adding that most also presented with some form of a mood disorder as diagnosed by the Diagnostic Statistical Manual (DSM). Similarly, data produced by Combs et al. (2016) showed that mood disorders represented the largest complaint amongst participants next to substance abuse addictions, which supports clinical data provided by Tucker et al. 2016) that concluded amidst WT clients, most present with comorbid conditions, are male, white, and come from homes financially capable of paying for WT services over a period of time.

Twenty-two WT camps currently accredited by the OBHC were targeted for recruitment. A review of each program's description in the OBHC database indicates that each program could be co-educational, often vary in design and length of stay, and utilize different curriculum descriptions. Generalized information is absent regarding how distinct camps are segregated by background and developmental ability (OBHC, n.d.), or how clinical evaluations are utilized to place new members. Amongst WT programs accredited by the OBHC, five indicate program designs that include single gender or co-educational options; however, a specialization in developmentally disabled youth was not indicated in any of the descriptions (OBHC, n.d., Council Members).

Wilderness Therapy Research Instruments

Adolescents who enter into a WT program are typified as having substance abuse, and mood or behavior disorders (Fernee et al., 2017; Roberts et al., 2017; Tucker et al., 2016). Much of the current research on the efficacy of WT focuses upon common factors

such as increases in self-esteem, self-efficacy, coping skills, communication, and teamwork as these factors have been identified as deficit in struggling at-risk or delinquent youth (Barnert et al., 2015; Bowen, et al., 2016). Over the last two decades, research involving the efficacy of WT camps has grown to include more sophisticated, self-reporting, instruments to measure and evaluate program benefits (Hoag et al., 2014). The Youth-Outcome Questionnaire (Burlingame, et al., 2001) has become a regularly administered instrument in which to evaluate the efficacy of youth experiences in outdoor programs for at-risk or highly clinical youth (Annerstedt & Währborg, 2011). Russell (2003) is credited for introducing the Y-OQ because of its brevity and ease of use. The Y-OQ is a six-factor, 64 question survey that includes interpersonal and somatic distress, interpersonal relations, critical items such as mania and hallucinations, social problems, and behavioral dysfunction (Burlingame et al., 2001).

Annerstedt & Währborg (2011) found that the Y-OQ indicated improvements in overall adolescent behaviors and mental health upon completion of their WT programs; however, *interpersonal relations* (IR), which targets how an adolescent interacts with family, other adults, and peers (p. 365) thus may be the closest category to measuring empathy, does not include it as a measurable factor. Combs et al. (2016) expanded the protocol for the Y-OQ by administering the evaluation more often during a program interval which provided more data per WT client. The researchers confirmed that their results were consistent with other WT literature in that adolescents reported overall improvements in mood and levels of anxiety by the end of their programs (Combs et al., 2016). However, a problem in using an instrument such as the Y-OQ was identified by

Norton et al. (2014), who noted that often instruments, such as the Y-OQ, are standardized to their populations. Thus, in terms of measuring WT and its effects of mental health, some tools including the Y-OQ may not necessarily gauge specific clinical symptoms that would be considered relevant for WT program participants.

In addition to the Y-OQ, other established instruments have been introduced into wilderness program research, often alongside the Y-OQ. Mutz and Müeller (2016) utilized several surveys including the Perceived Stress Questionnaire, General Self-efficacy Scale, Mindful Attention and Awareness Scale to evaluate "subjective well-being" including happiness (p. 109). Similarly, a significant study conducted by Bowen, Neill, and Crisp (2016) sought to evaluate the mental health benefits of WT programs by through a targeted focus on self-esteem. They utilized the Resilience Questionnaire, Beck Depression Inventory-II, the Youth Self-Report, Coopersmith Self Esteem Inventory, CORE Family Functioning Questionnaire, and the Life Attitudes Schedule–Short Form. The researchers' results were in alignment with other studies where surveyed youth reported higher levels of self-esteem and emotional functioning although they responded through different questionnaires. The consistency of positive results from WT or outdoor program members through various instruments has increased generalizability of results and compounded acceptance of therapeutic wilderness programs with adjudicated and at-risk populations (Braun & Dierkes, 2017; Moeller et al., 2018).

Empathy

Definition

Conceptualized, empathy is rooted in many and varied definitions, largely dependent upon the theorist or philosopher attempting to explain it. Idiomatically, empathy is often referred to as possessing an understanding of another's experience by "walking in their shoes". Simply put, empathy is "feeling what others feel" (Wondra & Ellsworth, 2015, p. 411). Eisenberg (2018), an authority and scholar on the subject defined empathy as "an effective response that comes from the apprehension or comprehension of another's emotional state and is similar to what another person is feeling or expected to feel" (p. 166). Similarly, Aragno (2008) opined that empathy is not a "thing", but a manner in which one individual interacts with another. In his empathy-altruism hypothesis, Batson (2009) differentiated the concept of empathy into eight descriptions to illustrate on deeper level how empathetic responses may be used depending on certain circumstances (Batson, Lishner, & Stocks, 2015; Olderbak et al., 2014). Semantics notwithstanding, to experience empathy for another person or being, such as animals and nature, means to strive to understand the other entity's reality, a concept that was brought to light as interest into psychological functioning became popular.

Historical Roots and Theories

The origin of the English term empathy was derived from the Germanic term *Einfühlung*, a which translated into "feeling in" by Edward Titchener in 1909 (Ganczarek, Hunefeldt, & Belardinelli, 2018; Stueber, 2019). In one enduring theory on

the history of Einfühlung, philosopher Johann Gottfried Herder linked the foundations of "feeling in" to how humankind interacted with the natural world (Warszawa, 2011). Furthering the connection between humankind, empathy, and nature, Friedrich Theodor Vischer affirmed that there was a spiritual connection felt by people when they experience nature and artistic beauty (Pigman, 1995; Warszawa, 2011). The work of both authors suggests that there was a distinct bond between the human capacity for empathetic expression and natural environments.

The psychoanalytic roots of empathy were presented by Freud in the early 1900s as a means of describing an individual's desire to "fully apprehend the inner experiences of another" while interpreting those experiences on a more personal level (Shaughnessy, 1995, p. 227). Analytic listening, a strategy of psychoanalytical practice, is credited to Freud as an empathetic process in which the analyst becomes attuned to their patient's unconscious communication, originally through recorded audio (Aragno, 2008). Theodor Lipps, a contemporary of Freud and whose writings Freud admired, was another early theorist who explored empathy as a human construct by linking empathetic themes to artistic impression (Jahoda, 2005). Lastly, Kohut translated many of the renowned psychoanalytical theories of empathy into an approach he called vicarious introspection. Kohut's new approach to understanding empathy involved a departure from the original origin of natural or artistic influences into one that focuses on humanistic lens (Kohut, 1981). It is possible that Kohut may have been the first to describe empathy as the ability to "put yourself into the shoes of…" (p. 126), a phrase often used to describe empathetic expression in its most basic form.

As humanistic psychological models in the mid-twentieth century were developed to include empathetic expression as an aspect of human development, theorists such as Carl Rogers offered additional insight and clinical observations on the importance of clinical empathy. Rogers (1980) elucidated that empathy was the ability to “perceive the internal frame of reference of another with accuracy and with the emotional components and meanings which pertain thereto as if one were the person, but without ever losing the "as if" condition” (p. 140). Similar theories uniting empathy with other areas of functioning emerged, such as the Empathy–Altruism Hypothesis (Batson, Fultz, & Schoenrade, 1987), which presented a connection between empathy and altruistic behaviors, suggesting that empathetic human beings are more likely to help out another human being without the expectation of direct personal gain (Baston, Lishner, & Stocks, 2015). Hoffman’s theory of empathy (1986) explained how it impacts moral development by linking empathy with a human’s evolutionary need to develop “moral emotion, motivation, behavior, and cognition” as ways to help other individuals (p. 3). As theories of empathetic functioning continued to evolve, differentiations were presented to separate main empathetic processes into cognitive and affective elements. Cognitive empathy is defined as the intellectual ability to understand what another individual is experiencing without direct emotional involvement, while affective empathy entails one individual’s ability to vicariously feel the emotions of another (Teding van Berkhout & Malouff, 2016).

Lastly, neurological theorists attempted to link neurological development to empathetic traits in humans, leading to developmental concepts about how the brain

functions as a source of empathy. A foremost theory involving the function of mirror neurons as they acted as sources of empathic response was proposed by Rizzolatti and a team of researchers during a study involving macaws in 1992 (Rizzolatti & Craighero, 2004). The researchers found that they were capable of tracking neuronal firing in areas of the brain as the primate subjects observed the behaviors of other macaws while attempting to simulate what they were seeing. This theory of mirror neurons and their relationship to empathic characteristics was coined "monkey see, monkey do", and may explain empathetic responses in human beings (Ferrari & Rizzolatti, 2014; Rizzolatti & Craighero, 2004). Mirror neurons as a developmental foundation for human empathy is not without controversy as detractors argue that while empathy is described as an understanding of another's experiences, the mirror neuron theory infers an unconscious or reflexive replication of action (Lamm, & Majdandžić, 2015).

For the purposes of this study, it is significant to note that, as a result of its more recent humanistic applications, empathy seems to lose its connection to the original artistic and natural influences that formed its earliest connotations. It has been suggested that this newer, more person-centered approach to empathy and its affiliation with mental health has resulted in a dissolution of the connection between humankind and the earth (Blair, 2011). The lack of synergy between nature and human empathy may explain the growing detachment between people and the natural environment, suggesting a possible explanation of why empathy as a characteristic is not explored in WT literature.

Empathetic Development and Adolescent Behavior

Etiologically, empathetic development has been found to be affected by both genetic and environmental factors (McDonald & Messinger, 2010). For example, children born with a genetic autistic disability lack the mental capacity to feel empathy for another person, even though it may be modeled for them (McDonald & Messinger, 2010), while environmental factors, such as authoritative parenting, tend to result in higher levels of empathy in younger children (Şengönül, 2018). Empathy is considered a higher level of emotional intelligence (Milojević et al., 2016; Petrovici, & Dobrescu, 2014); however, empathy as a predictable aspect of a human being's developmental continuum has been debated within scientific communities (Stern & Cassidy, 2018).

For example, Freud believed that a human's disposition for satisfying primary drives overrode the inclination for empathetic thought (Freud, 1958). Similarly, Piaget held that children were not capable of looking beyond themselves (a rendition of empathy) until they reached the "formal operations" stage of development which occurred around the age of twelve and encompassed elements of moral reasoning (Piaget, 1965). Yet another contrasting theory was extended by Hoffman (1994), who believed children were developmentally capable of empathetic thinking and mannerisms if such behaviors were modeled by parents or caregivers (p. 27).

Certain contemporary researchers have explored the many facets of empathetic development, producing conflictual data. For instance, in contrast to research that claims empathy develops positively over time, Van der Graaff et al. (2014) found that empathy often decreased during middle adolescence, particular in adolescent male populations.

Other researchers have concluded that empathy exists in lesser degrees in younger adolescents, yet older adolescents demonstrate higher levels of empathy resulting from opportunities to interact more within their environments, thus they may have more opportunities to experience the feelings of other individuals (Hoffman, 2000; Teding van Berkhout & Malouff, 2016; Overgaauw et al., 2017). Finally, there is a growing body of researchers who have opined that empathy does not emerge developmentally, but is primarily modeled, or taught, in the form of life lessons and subsequent guidance from adults (Heyes, 2018). Allemand et al. (2015) argued that one explanation for such discrepancies pertains to the circumstances influencing self-reported information from adolescent subjects, perhaps suggesting a need to explore the most effective means in which to conduct studies with younger populations.

Empathy and Negative Behavior

Low empathy has been determined to be a characteristic of many incarcerated or otherwise at-risk youth (de Ridder et al., 2016; Lockwood, 2016). For example, van Langen et al. (2014) conducted a meta-analysis of research between 1975 and 2013 that focused upon empathy levels and offending amongst adolescent youth. Through their analysis, the researchers determined that low empathy were consistent within adolescents who demonstrated propensities for both physical and verbal aggression, characteristics that are found in incarcerated youth. Similarly, research conducted by de Ridder et al. (2016) explored the ecological validity of low empathy responses in realistic settings are similar to those in other environments. They sought to determine if callous-unemotional traits were measured at similar levels in natural environments over those that are not

typical for youth, such as a juvenile detention facility. These researchers found that low empathy resulted in higher anger levels for youths involved in the criminal justice system.

Recidivism, or the engagement of repetitive criminal behaviors, has also been linked to characteristically lower levels of empathy (Bock & Hosser, 2014). Research conducted by Kimonis et al. (2016) indicated that in addition to low empathy levels recognized as a precursor to adolescent criminal behaviors, it is also a factor in why adolescents recidivate or continue committing crimes. Bock and Hosser (2014) found that the connection between lower empathy levels and criminal activity amongst adolescents might be linked levels of affective empathy, which unlike cognitive empathy which has been shown to increase in adolescence, often remains stable until a later period of maturation. An objective of WT is to improve functioning in struggling youth by presenting interventions within an environment that is devoid of outside influences such as technology (Fernee et al., 2019), challenging home and school environments, and peer pressure. Adolescents immerse themselves in individual or group activities that circumvent developmental barriers to empathy or pro-social behaviors such as aforementioned developmental, social media, or gaming platforms that may hinder their ability to be successful.

Trauma and Empathy

Traumatic events during childhood or adolescence can predictably influence empathy development in youth, although studies have indicated that traumatic experiences may result in either healthy or adverse empathy development (Eisenberg &

Mussen, 1978; Malin et al., 2013; Şengönül, 2018; Waller & Hyde, 2018). For instance, while some research strongly suggests that adverse childhood experiences may result in higher levels of empathetic behaviors towards others (Greenberg et al., 2018), other studies have concluded that lower empathy levels are directly related to trauma related to neglectful or unfit parenting (Parlar et al., 2014).

Researchers who have explored the negative effects of trauma during childhood have consistently found a direct relationship between trauma, low empathy, and offending youth (Kimonis et al., 2013; van Langen et al., 2014). Further, Kimonis et al. (as noted in Roose et al., 2010) identified traits that were common amongst offending youth who demonstrate low empathy, including lack of remorse and a generalized unemotional response when confronted with their crimes. These findings were supported Bock and Hosser (2014, whose research concluded that low empathy was a predictor of recidivism as this trait is rarely addressed while youth are incarcerated or in a typical rehabilitative setting. Disparately, while low empathy has been associated with various oppositional behaviors, van Noorden et al. (2015) found very little evidence that his same character trait related to other negative actions such as bullying. They argued that, while the connections between normative and high levels of empathy are positively related to positive social functioning, the same antithetical connections cannot be made between lower empathy levels and antisocial behaviors (van Noorden et al., 2015). Further, it has been argued that an excess of empathic response, such as an over-identification with another person's problems, may actually result in similar mood dysregulations as seen with youth diagnosed with low empathy (Oliva, Parra, & Reina, 2014).

Social Media and Empathy

In addition to the effects traumatic experiences may have on empathetic development during childhood, social media and video gaming have emerged as a controversial causal factor in lower empathy development amongst adolescents (Carrier et al., 2015; Coyne et al., 2018). Video game detractors and a plethora of research continue to link video gaming and social media to negative, often criminal, behaviors as both venues create an environment that lacks legal consequences, a contributing characteristic of low empathy (Gabbiadini et al., 2016). However, other research suggests a disparity between general video game playing and lack of empathetic or pro-social behaviors. For example, studies conducted by Hilliard et al. (2018) and Harrington and O'Connell (2016) found that levels of empathy were related to the type of game being played, and that games depicting higher levels of empathy or prosocial behaviors resulting in increased prosocial behaviors modeled by the players rather than negative.

Social media has long been held culpable for lower levels of empathy amongst younger generations (Konrath, 2012). One reason points to the often-camouflaged interactions between strangers online, which may lead to cyberbullying (Brewer & Kerslake, 2015; Shapiro & Margolin, 2014), while other data have concluded a prevailing connection between social media and mental health issues such as depression and low self-image (Radovic et al., 2017). Conversely however, as seen with adolescents who engage in video gaming, social media has also been linked to both emotional stability or increases in empathetic behaviors (Carrier et al., 2015; Shapiro & Margolin, 2014) dependent upon how it is being used by individual youth (Radovic et al., 2017).

Strengths and Weaknesses in Extant Literature

Strengths

The overall strength of WT literature involves a consistent exploration, analysis, and application of varied research approaches to support the efficacy of WT programs. For instance, in an effort to increase validity of WT research, the Youth Outcome Questionnaire (Y-OQ) was introduced and has been utilized in many projects as an instrument to further understand how adolescents respond to WT programming (OBHC, n.d., para. 2). The inclusion of an instrument contributed a different dimension of data that had been missing from previous research, as it provided a level of standardization of answers to critical items, such as interpersonal distress, social problems, and behavioral dysfunction, (Burlingame et al., 2001). The results of the Y-OQ streamlined conclusions between studies without requiring a specific course of WT programming.

WT research focusing on the effectiveness of WT models continues to identify and remedy gaps in extant studies as interest in the industry grows. In one example, DeMille et al. (2018) utilized a treatment as usual (TAU) model to collect WT data as well as a tracking tool for collecting post-discharge data. The TAU approach provided comparison model for the comparison of two groups: one that involved a WT-based curriculum and one in which youth received mental health care in their communities. Another example included a randomized clinical trial (RCT), considered the "gold standard" of rigorous study and is also an identified gap in WT research (Gabrielsen et al., 2015). Although, the researchers determined their foray into a introducing a more rigorous technique of producing valid WT data through RCT failed; their conclusions

provided lessons and ideas for involving other research models to explore the efficacy of WT programs in the future.

Weaknesses

Nongeneralization of data based upon small sample sizes, limited diversity within samples, and reporting of data may be the most significant weakness found throughout WT research. For example, Chang et al. (2017) noted that prevalent WT literature tends to involve westernized philosophies and populations, a limiting factor affecting the extent to which culturally diverse youth would participate in a WT program. In addition, most WT programs are privately run and populated largely by Caucasian males (Bettman et al., 2016), further narrowing the diversity of existing data.

Another weakness in available literature involves the nonstandardized nomenclature utilized to describe the various outdoor programs. Terms such as therapeutic, adventure, outdoor behavioral health, and wilderness programming have added confusion between studies as so many are used interchangeably. Russell (2001) observed disparities amongst outdoor-oriented programs early on, and the growth of such programs has added to the inconsistency. In an effort to identity WT intervention as a specific niche, Gass et al. (2012) defined WT as the "prescriptive use of adventure experiences proved by mental health professionals, often conducted in natural settings that kinesthetically engage clients on cognitive, affective, and behavioral levels" (p. 1). WT research tends to use the same terms throughout as to differentiate this form of programming from others that may be significantly dissimilar.

Small sample sizes and self-reporting of data tend to result in lower internal validity, a weakness found in much of the identified research used in the literature review. The number of WT study participants, particularly in qualitative projects, is historically low (Annerstedt & Währborg, 201l; Bowen, et al., 2016; Clem et al., 2015), often because only one camp or cohort is selected for interviewing. Furthermore, as qualitative inquiry in WT programs involves self-reported data from adolescents (Barton et al., 2016), there is always the chance that the youth interviewed do not understand the questions being asked, thus skewing the data. Most of the studies selected for this literature review relied upon closed ended surveys, questionnaires, or instruments to facilitate data collection. Research has indicated that the least effective method to interview adolescents is through this form of data collection as many of them either do not read the directions provided or do not comprehend what is being asked and often provide inaccurate or outright false information (Fan et al., 2006; Zelener & Schneider, 2016). Although my study sought to reduce ambiguity in responses by conducting direct interviews with young adult subjects, the reality of WT demographics presupposes that identified weaknesses such as diversity and smaller sample sizes may not be addressed or remedied as a result of the project.

Summary

Chapter two presented a literature review of applicable extant data the support the rationale behind my study. The goal of this research project was to determine if young adults between the ages of 18 and 20 years experienced a perceived change in empathy as a result of participation in an accredited WT camp during their late teens. WT programs

for at-risk youth have functionally increased in response to concerns over the ineffectiveness of traditional therapeutic or judicial methods. As a result, there is a growing body of research to determine the value of WT programs as a form of beneficial intervention for at-risk, delinquent, and otherwise challenged youth. Thus far, much of the available research focuses upon qualities recognized in positive mental health and behaviors, including self-esteem, self-efficacy, confidence, improved communication skills, and teamwork. A gap in research was identified regarding how empathy, characterized as one individual's ability to understand the thoughts and feelings of another, may be affected through a WT camp experience. Deficits in empathetic levels have been found to be a trait amongst at-risk or delinquent youth, the foremost demographic in WT programs.

Strengths noted in much of the available literature entail an increasing competency in data collection, methods utilized to study WT populations, and how resultant data are reported, while weaknesses in WT literature include design flaws such as low generalizability, small sample sizes, and data reporting errors as a result of self-reported information.

Chapter three delineates the process of participant selection and rationale. In addition, this chapter provided detailed information regarding the interview process, data collection procedures, and how the information was analyzed. Finally, ethical considerations, including informed consent and legally mandated reporting of disclosures that occur during the interview, were outlined.

Chapter 3: Research Method

Introduction

This qualitative study addressed a gap in available research by focusing upon empathetic perception as a factor that may be constructively altered through participation in a WT program for at-risk youth. Major sections of this chapter address the rationale behind the selection of a generic study research design and the difference between this approach and other established qualitative models. In addition, my role as the researcher is reviewed, including ethical issues that might have arisen through the subjective interviews and how these concerns were mitigated. Further, detailed descriptions of subject selection, delimitations, and sampling methodology are provided. Lastly, elements of the project's trustworthiness, internal and external validity, dependability, and confirmability are clarified, including an explanation of how the data were collected, analyzed, and managed upon project completion.

Research Design and Rationale

A generic qualitative model was implemented to collect and interpret data provided by study participants who were between 18 and 20 years. Generic qualitative designs include either structured or semistructured interviews to obtain subjective data (Percy et al., 2015). Qualified young adult participants described their experiences as 16- or 17-year old adolescents in a WT camp through video-conferenced interviews. I did not utilize any instruments to measure self-reported data because research indicated that this approach often results in answers that are inaccurate due to subjects' inability to clarify the questions directly with the researcher (Fan et al., 2006). Data collection and analysis

were encapsulated through detailed stories of how the young adult participants interpreted and subsequently described any empathetic feelings or scenarios that they experienced.

Research Questions

The overarching research question for my study was the following: Did young adult graduates of an adolescent WT camp perceive a change in empathy as a result of their experiences in the program? Open-ended subquestions that emerged from the initial question included questions addressing procedural topics such as "What happened next?" and queries such as "How did you feel about …?" Generic qualitative research provides a flexible model that is outside the constraints of other definitive qualitative approaches (Fusch & Ness, 2015); therefore, the use of an overarching question followed by clarification questions worked well with this model.

Research Tradition and Rationale

Qualitative research entails looking for rich, meaningful data through the experiences or "voices" (Austin & Sutton, 2014, p. 436) of people involved in a particular topic of interest. Observations and direct accounts from subjects provide a deeper level of understanding that cannot be gleaned through quantitative design (Austin & Sutton, 2014), as this approach focuses upon numerical representations of subject feedback. There are five primary approaches to qualitative inquiry: phenomenological, narrative, grounded theory, ethnographical, and case study (Aspers & Corte, 2019), with each method using a particular structure for inquiry and protocol.

Each of the five main qualitative models was initially considered for the study. None provided an appropriate "fit" of inquiry that benefited my study design, although two models were a closer fit than the remaining three. For example, of the five approaches, phenomenology could have been a strong consideration because phenomenologists look for understanding around the uniquely individual processing of a shared experience (Horrigan-Kelly et al., 2016). Thus, I considered phenomenology because of the relationship between this model and foundational theory, described by Heidegger (as translated by Macquarrie & Robinson, 1962) as one in which there is interplay between individualistic and shared experiences (p. 50), which could have incorporated shared experiences of empathy perception. Although my project explored the phenomenon of WT and its effect on empathetic perception, the design was based upon individualistic experiences and did not reflect the shared meanings of other subjects; thus, this approach was not chosen over the generic qualitative model.

Narrative research was considered as a second option because of its storytelling elements. The narrative approach is designed to gather data by exploring subjects' personal life stories, often through researcher collaboration (Percy et al., 2015). Although storytelling definitely factored into the subjects' answers, such as "I remember when this happened…," a narrative qualitative approach was not selected because the only element of collaboration for data identification was in the form of definitively explaining empathy as a term to the young adults being interviewed so that they understood what was being asked of them.

Grounded theory has been shown to be a similar approach to generic qualitative inquiry due to the possibility of developing a theory from an original generic project (Kahlke, 2014). Kennedy (2016) noted that generic inquiry is flexible enough in its design that it may follow a similar process as grounded theory without the requirement of specifying a theory to align with the project's outcome (Kahlke, 2014). This project did not count on a foundational theory to anchor it; thus, the grounded theory approach was never considered an appropriate option.

Finally, case study and ethnography were determined to be the least appropriate qualitative models based upon their purpose. Case study, a model that focuses on a single subject's experience, was the least suitable model for the study because the data collection goal was to interview as many young adults as possible through the involvement of more than 22 accredited camps. A researcher conducting an ethnographic study seeks to understand individuals' experiences around a culturally oriented theme. For this model to be appropriate, the study's focus would have needed to center upon an element of the camp experience from a cultural perspective, such as gender or socioeconomic status.

Generic qualitative study does not fit into a particular model yet still "investigates people's reports of their subjective opinions, attitudes, beliefs, or reflections on their experiences, of things in the outer world" (Percy et al., 2015, p. 78). One benefit of generic qualitative inquiry is that it provides flexible methodology (Liu, 2015) through not being "guided by an explicit or established set of philosophic assumptions in the form of one of the known [or more established] qualitative methodologies" (Caelli et al., 2003,

p. 4). Further, generic qualitative research highlights, and makes clear, the primary research focus through open-ended questioning (Agee, 2009), which allowed for me certain liberties as the researcher to clarify terms that might not have been understood by the young adult subjects. It was presumed that there would be issues with certain terminologies inherent within the study; thus, a standardized vocabulary list was populated beforehand so that the same definitions were consistently provided to all subjects when a clarification was required to answer one of the research questions.

Role of the Researcher

Qualitative research differs from quantitative study in that it is less structured and involves an interactive and exploratory approach (Aspers & Corte, 2019). While quantitative research involves unidimensional responses in the form of numerical data, qualitative inquiry involves the researcher's insertion into the natural environment of the subject (Clark & Vealé, 2018); thus, a qualitative researcher is considered to be the most important tool in the project's design. My role as researcher and primary instrument required that I have an understanding of potential issues that might arise through my unavoidable involvement in the project, such as the potential for bias, cultural insensitivity, or misinterpretation of data resulting from a communication gap (Karagiozis, 2018).

This project was an area of interest to me personally and professionally. I approached the project from the perspective of someone who works with younger individuals as a professional counselor, as well as someone with a personal interest in nature as a healing naturopathic force. My clinical specialty involving adolescents and

young adults made me a research "insider," or a person who works within a group or network in which there is an inherent knowledge (Finefter-Rosenbluh, 2017; Green, 2014). While there were advantages in conducting a research project within a population in which I was comfortable, there were also challenges in being an insider in my study approach.

For example, Karagiozis (2018) explained that when researchers have an influential role in the interview process because of their familiarity with a group or subject that they are studying, a situation may occur that results in skewed data. From the onset, I identified that a challenge for me would involve my personal commitment to the subject matter. My awareness of this possible challenge necessitated that I acknowledged any influence that I may have had that regarding potential design pitfalls, such as, a subject's misunderstanding of a keyword, a research question, or any other misinterpretation based upon something I may have said during the interview. This issue was described by Lapum and Hume (2015) as the differentiation between a researcher's own interpretations of respondents' subjective answers versus their objective reactions to the researcher and the interview questions. For instance, subjectively, the young adults being interviewed could have presented information that might have been interpreted by me in a manner inconsistent with their actual meaning. I followed a best-practices approach to the challenge of mitigating subjectivity in qualitative research by balancing any subjectivity with objective observations of my subjects (Lapum & Hume, 2015).

Power Differential

Power differential was another potential issue that I needed to be aware of in my role as the researcher. Power differentials could occur from a subject's underdeveloped sense of self (Karagiozis, 2018), particularly amongst younger people, which may result in some researchers creating a sense of self for them through their interactions. A power differential can occur when there is a perceived difference in control between a professional individual and a person they are working with (Zur, 2009), and it can result in distrust or inaccurate information arising from a need to please (Roemer, 2015; Sullivan & Larson, 2009)—in this case, the interview subjects answering the questions that I was asking in a manner that they thought was correct.

Interviews in this study averaged 1 hour in length and were open ended and semistructured. I interviewed nine young adults between the ages of 18 and 20 years. Although the subjects whom I recruited were no longer considered to be minors, there may have been inherent power differential issues based upon their relative youth as "emerging young adults" (Tanner & Arnett, 2016) had I not been aware of this potentiality and mitigated this possibility up front.

Another power differential pitfall that I was aware of prior to interviewing the research subjects was the *shaman effect*. There is a potential for issues to arise when researchers approach a subject from the perspective of their own knowledge base, thus possibly influencing subjects' reactions by their own (Fusch & Ness, 2015). My responsibility as a professional researcher was to recognize these potential problems and address them accordingly, which I accomplished through research tools such as providing

a set of consistent definitions, precise notes and transcripts for each interview, and the reflexive journal discussed below.

Researcher Bias Mitigation

It is recommended that researchers maintain a reflexive journal in which they acknowledge and address any biases that might arise through the research process, as well as note any concerns with the process itself (Sutton & Austin, 2015). Practicing reflexivity has become a standard protocol for allaying any possible negative results during interviewing and data collection (Finefter-Rosenbluh, 2017). Reflexivity is described as engaging in ongoing inner dialogue and self-critique throughout the research process, particularly with subject interviews. Often, it is recommended that a reflexive journal is kept to document decision-making steps and processes that occur during interviews and during data collection (Finefter-Rosenbluh, 2017; Green, 2014). In the journal that I kept for this project, I noted subjects' responses to questions and explained the rationale behind follow-up questions. I also identified potential areas of concern pertaining to my role as a research insider and any biases that I noticed throughout the project.

Bracketing, a method in which researchers use their past experiences as part of the research process (Sorsa & Åstedt-Kurki, 2015), is a form of reflective journaling. In addition to noting areas of concern, a researcher who is engaged in bracketing annotates insights, thoughts, and feelings throughout the study that may impact internal validity (Sorsa & Åstedt-Kurki, 2015). Theoretical bracketing includes noting any "theory-practice gaps" (Chan, Fung, & Chien, 2013, p. 3) and reflecting upon a competently

constructed literature review. Tufford and Newman (2012) described bracketing as a method that contributes to project rigor as it acknowledges potential biases or other possible intrusions that may affect a researcher's ability to record accurate notes, approach subjects from a thoroughly neutral perspective, and code with correct thematic interpretations. I used bracketing as an ongoing strategy, and it was a significant element of my project's documentation before, during, and after the interviews were conducted, as well as during the data coding process (Tufford & Newman, 2012).

Relationship Statement

The organizations chosen for the project were all accredited members of the OBHC. As the researcher for the study, I had no direct affiliation with either the OBHC or any of the programs that were contacted to recruit potential subjects. The strategy in selecting accredited programs was to ensure a higher level of program organization and ideological accountability. Further, by interviewing as many respondents as possible within the accredited organizations, I was able to create some generalization of data within a particular programming theme.

Ethical Concerns

The IRB mandates that all scholar practitioners involved in research regarding human subjects adhere to the highest standards of integrity and professionalism. A fundamental ethical concern for conducting any study with vulnerable populations rests within their ability to be manipulated by an individual whom they perceive is more powerful than themselves. In addition to the issues around power differential previously described, other forms of perceived imbalance of power stem from subjects' involvement

with “authority figures” ranging from parents and caregivers to teachers, coaches, probation officers, and other law enforcement officials (Van Petegem, 2015). Although the young adults involved in my project were of legal age, they could have still been considered vulnerable adults if they continued to experience any residual mental health concerns or continued to demonstrate a lack of maturity regarding this process. Gambrill (2015) noted that clarity remains, procedurally, one of the more critical aspects of any research project; thus, my interview subjects were encouraged to ask questions or pause the interview if they felt that they were not comprehending what I was asking them.

I was aware of the possibility that information could have been disclosed to me through the subjects’ re-telling of their WT program experiences. In addition to being the author of this project, I am also a legally mandated reporter. A document of informed consent was provided describing, in detail, what actions would be necessary if any of the subjects divulged information was deemed a reportable incident. Reportable events include, but are not limited to: abuse, neglect, or assault and would have been reported to the appropriate law enforcement agencies. Finally, I located community resources, through online searches based upon each subjects’ area of residence, in the event that further mental health intervention was necessary as a result of the interviews.

In conclusion, incentives, which are often included in a project to persuade study participants to continue until its completion, are another ethical issue faced by researchers, particularly those working with challenging populations. Research and debate around offering incentives has shown that such practices may result in skewed data and could be considered a form of coercion (Gelinas et al., 2018), or undue influence

(United States Department of Health and Human Services, 2016). Although federal laws addressing human subjects used in research does not specifically address monetary benefits for individuals who volunteer for study inclusion, most Institutional Review Boards (IRB) do not support incentives as the practice for inclusion in any professional study. Therefore, I offered no incentives to participate in my study, although I was not asked by any of the final study participants to extend one.

Treatment of Data

Data will remain confidential and without access by anyone other than myself. The participants' identities are on the informed consent; however, their names were coded by reversed initials for analysis, for example: "Roger Smith" became SR, a process I currently utilize for my psychotherapy clients. Data is currently stored in a double locked cabinet. The cabinet is kept in a private office in my home where there is little to no risk of a confidentiality breach.

Methodology

Population and Sampling Rationale

The targeted population were young adults, 18 to 20 years old, who participated in a WT program during their late adolescence, preferably between the ages of 16 to 17. One rationale for selecting young adults as interview subjects is that while most WT programs are designed for adolescents between the ages of 13 to 18 years (Bettman et al., 2017), the 18- to 20-year old respondents may possess a more developed maturity to respond to the interview questions. Recruitment of study participants involved the assistance of an accrediting organization, the OBHC, as well as direct solicitations sent to

the accredited programs themselves. There are currently 22 organizations that were contacted through an introductory email. In addition, an introductory email was sent directly to the OBHC explaining the project and requesting assistance in whatever manner they felt was suitable, such as inter-agency communication, newsletters, or social media.

Once the appropriate subjects were identified, they were contacted directly by me with a formal email of consent specifically addressed to them under IRB protocol. Included in the email was the Informed Consent form and the interview questions for their review. Interview schedules were established through my Walden University email account, which included the name of my chair if any additional contact was necessary. Interviews were scheduled within a 2-week window, and conducted through video-conferencing.

The interviews followed a standard protocol, which included a review of the study's purpose and its importance, a reminder that all interviews were to be recorded and transcribed verbatim, a reminder that they could stop the process at any time, and finally an opportunity to ask any questions they may have had prior to starting. At the conclusion of the study, the subjects were debriefed regarding any other questions or concerns they had and were reminded that they could review their individual transcripts if they so desired as part of a member-checking process included in my interview design. Interviews were planned to fit into a 60- to 90-minute time frame; however, an intrinsic factor of the generic qualitative model is its elasticity, therefore interviews could have been longer if necessary, to attain as much information as possible.

My sampling strategy employed a purposeful sampling technique, through snowball or chain referral, as a means of recruiting participants. Through purposeful sampling, I sought to identify the best candidates possible in order to produce relevant and information-rich data (Patton, 2015). I was prepared to eliminate interviews if the young adult participants were not developmentally appropriate for the study, or if they hated their WT experience to the extent of not providing any useful data. Further, the benefits of purposeful sampling rested in the relevance of the participants' understanding of the subject being explored (Yin, 2011). Therefore, as previously indicated, I had planned for the necessity of providing further explanation of what empathy is, how it may be applied, and what individual perception means, and it was presumed these clarifications would be better understood by an older adolescent or burgeoning young adult.

Snowball sampling technique relies on study participants inviting other qualified subjects to participate in a study (Palinkas et al., 2015). For my study, the rationale behind this sampling method took into consideration the possibility of problematic recruitment through the organizations themselves. My participation goal for the study was to identify at least 15 to 20 young adults who graduated from any of the 22 OBHC accredited WT programs when they were 16 through 18. The recruitment of study participants involved direct requests sent to camp directors and other leaders asking them to reach out to graduates through social media, newsletters or websites, as well as indirect contact via the OBHC itself.

Data Saturation

The goal of data saturation in qualitative research is to provide enough supportive information that continued sampling may be discontinued (Saunders et al., 2018). Mason (2010) noted that there is no consensus for what represents an exact number for data saturation in generic qualitative research, although the aim is to achieve as much of a sample as possible to yield accurate and generalizable results. Generic qualitative research often involves larger samples sizes to compensate for the nonspecificity of the research model (Percy et al., 2015). Guidelines for other qualitative approaches include at least 10 participants in a phenomenological study, or an even larger participant base in a grounded theory project (Maxwell, 2013). Fusch and Ness (2015) explained that another means of achieving data saturation with smaller samples sizes is through the use of direct interviews. Face-to-face interviews, as opposed to questionnaires or surveys, increase the possibility of obtaining rich, layered data which may compensate for low participant numbers. The original plan for my project was to conduct face-to-face interviews with subjects whenever possible, or through other 'face-to-face' options such as Doxy® or Zoom®. Phone interviews could have been utilized in the event that face-to-face or video-conferencing options were not available.

Data Collection and Analysis

Initially, the strategy for data coding and analysis was to utilize hand-coding to identify themes. If a large enough sample size was available, Nvivo®, a software analysis tool for qualitative data manufactured by QSR International, could have been implemented to further review and sort the hand-coded information. My analytical focus

would concentrate on themes generated first by the overarching research question, then by subquestions that arose from individual interviewees' answers. Qualitative data collection involves detailed record keeping, analysis, and a unambiguous process, including confidentiality and a clear description of how the records are handled upon study completion (Sanjari et al., 2014). Useable material can include audio and visual recordings of both individual or group subject interviews, field notes to record researcher impressions, and observations and surveys (Sutton & Austin, 2015). Legewie and Nassauer (2018) describe video research as "any research that uses videos or other visual data as the main data material and collects this material from online sources" (p. 3). The authors note that the area of largest area of concern is that of privacy, where participants may be answering questions in an environment in which they are not alone. Video-conferencing with the interview subjects took into account any inherent ethical considerations as part of the research plan's design. The informed consent for my project specifically addressed issues of privacy, how and where the interviews should be conducted and reviewed, and how the materials would be stored. Lo Iacono, Symonds, and Brown (2016) addressed specific issues to be considered while utilizing a HIPPA compliant platform such as Doxy® or Zoom®, including the exchange of information through a third party, online recognition of the participant's online thumbprint, and the interview environment itself. I was aware that the technological nature of these potential issues could have been difficult to mitigate; however, the most important factor in addressing such concerns remained with a thoroughly written, and understood, informed consent that could be reviewed prior to the online interview (Legewie & Nassauer, 2018;

Lo Iacono et al., 2016; Lustgarten & Elhai, 2018). Other plausible barriers to productive video-conferencing interviews could have included dropped calls or inaudible responses that required follow up questions from me that may have diverted the subject's attention away from the topic (Seitz, 2016). A factor included in my interview protocol was a reconnect plan with each interviewee prior to each interview commencement.

I maintained hand-written notes, that included all research questions and definitions, were taken during each interview to record other observable behaviors such as body language, facial expressions, and other impressions I had. It was expected that the online video-conferencing environment may have inhibited some of the observable subject reactions to questions. If this occurred, my plan was to consider this issue a limitation described in the study's conclusion.

Content Validity

Brod et al. (2009) described content validity as "the measurement property that assesses whether items are comprehensive and adequately reflect the patient perspective for the population of interest" (p. 1263). This study enhanced content validity by the utilization of direct interviewing, verbatim transcribed documents, and through the notation of any significant elements in my reflexive journal. Similarly, Noble and Smith (2015) asserted that consistent and meticulous documenting of the entire research project, including details considered insignificant, is a best practices approach to achieving and maintaining content validity. Another method of increasing content validity includes the engagement and expertise of other professional researchers to review material may reduce any possible bias or other issues threatening the study's soundness. A professional

review could be conducted through Walden University's Center for Research Quality (Walden University, n.d.). Lastly, member checking, which involves providing a transcript back to the participant for review and clarification (Morse, 2015), was offered to every subject interviewed through my research design. In addition to increasing content validity, member checking with adolescent subjects and young adults allows them a degree of oversight into their portion of the project, which may have elevated their confidence in what they participated in (Simpson & Quigley, 2016).

Study Conclusion

At the end of the interviews, participants were debriefed regarding any questions or concerns they may have had. Any disclosures deemed concerning would have been reported, as required by state law, to the department of human services or local law enforcement as previously noted. The informed consent also included permission from subjects for me to contact the appropriate WT camp in the event of a report had to be made. Hiriscau et al. (2014) found that although confidentiality is implied in research participation, there was little information available regarding the handling of reportable disclosures involving projects with adolescents. Hiriscau et al. (2016) proposed guidelines for ethical research comprising adolescents that include “competence to give consent, limits of confidentiality, and risk of harm” (pp. 12-14). Similarly, although the subjects interviewed were all over 18 years, the IRB at Walden University would have been consulted on the handling of any reportable disclosures. Once the study concluded, the data were stored in a locked and secure location and will be kept for at least three

years as dictated by federal law (U.S. Department of Health and Human Services, Office for Human Research Protections, 2018).

Issues of Trustworthiness

Trustworthiness in qualitative research refers to the value of the processes defining the study and its conclusions (Connelly, 2016). How trustworthiness is interpreted has been debated because, unlike the numerical and straightforward nature of quantitative data collection, qualitative investigators rely upon their ability to interact with study respondents (Fusch, et al., 2018). Qualitative researchers have sought to identify evaluation processes that minimize the extent in which qualitative data can skewed while increasing the reliability of what is being reported (Carter et al., 2014; Denzin, 2012; Fusch et al., 2018).

The trustworthiness, or rigor, of any qualitative study depends upon the extensiveness in which four criteria: credibility, transferability, confirmability and dependability (Korstjens & Moser, 2017), are completed and presented. Credibility refers to the veracity of what is being presented as legitimate data (Forero et al., 2018), and can be tested through prolonged subject engagement and triangulation (Korstjens & Moser, 2017). Triangulation in qualitative research involves the utilization of varied methods and sources of data collection to increase the level of understanding around the subject being explored (Carter et al., 2014; Denzin, 2012). In my research project, I acted as an observer, recording first-hand information from program graduates who articulated their recollections of perceived empathy during previous camp involvement when they were 16 or 17 years of age.

The second criteria, transferability, refers to the extent in which data can be generalized and incorporated into other, similar, settings (Forero et al., 2018; Korstjens & Moser, 2017). Selecting subjects from OBHC accredited programs was meant to support the assurance that the results produced at the end of the study could be generalized within OBHC accredited WT programs. In contrast, however, the resulting conclusions from this project may not be transferable to organizations outside of OBHC purview.

A study with high confirmability infers that a project's results can be corroborated by other researchers (Forero et al., 2018) and is dependent upon the researcher's ability to perform an unbiased and neutral study (Hays et al., 2016). As outlined in a previous section, a reflexive journal describing every aspect of a study and its organization, including the researcher's reactions and thought processes, is included in the study's documentation as an official audit trail for other researchers to review if the study is to be emulated or expanded upon.

Finally, dependability is defined as the extent to which my study can be reproduced by other researchers (Forero et al., 2018). Documented information for my project includes details involving protocols, strategies, measurement tools, the audit trail mentioned above, as well as feedback from outside reviewers regarding suggestions and required changes to the study process.

Study Limitations

A significant study limitation in my project is that of generalizability. The demographic makeup of WT programs is statistically populated with Caucasian, middle to upper-class adolescent males (Chang et al., 2017; DeMille et al., 2018), a pattern that

has also been observed in other countries (Chang et al. 2017) as they attempt to emulate current American models. In contrast to private pay WT programs, those that offer reduced cost or are government funded through grants involve a largely non-White demographic (Bettman et al., 2016). This study attempted to incorporate data from a variety of OBHC accredited WT programs with the goal of increasing demographic diversity, although WT research inclusive of different genders, culture diversity, and various socio-economic statuses proved to be slim.

The last limitation I anticipated involved the recruitment of qualified study participants. It remained to be seen if the OBHC was willing to assist me in the process of contacting the 22 accredited programs being approached for recruitment. The possibility of only a few organizations willing to participate in my study would limit the goal of 15 to 20 participants, thus could have affected saturation of data. In the event that a smaller than anticipated sample size results from the first wave of recruitment, I planned to seek out guidance from my committee to troubleshoot any potential solutions to increase the participant pool.

Summary

Chapter three described the development of my plan of study. This included research rationale and methodology, ethical considerations and bias mitigation. My role as the researcher was described including my responsibility as a mandated reporter in the event that a disclosure is made to me by a study participant. Finally, practical concerns such as my plan for data handling and addressing potential issues with trustworthiness were also discussed.

Chapter four will provide a detailed account of the operational approach to the study including the demographic and setting information. Data collection and analysis encompassing theme development are thoroughly explained with subjects' verbatim responses to the interview questions represented in tabular form. Further, operational considerations such as setting, issues that arose through the video-conferencing process, and issues of trustworthiness are addressed.

Chapter 4: Results

Introduction

The purpose of this study was to explore whether adolescents who participated in a therapeutic wilderness camp experienced a change in their empathic perception toward their peers, camp staff, and the natural environment they lived and worked in. The overarching research question (Did young adult graduates of an adolescent WT camp perceive a change in empathy as a result of their experiences in the program?) was addressed by five primary interview questions. A generic qualitative approach was used that afforded some flexibility with clarifying follow-up questions based upon the subjects' responses.

Primary Interview Questions

1. How would you describe the difference between the perceived empathy you felt when you started the camp and how you felt when you left?
2. How long did it take for you to feel differently?
3. What experiences, while you were in the camp, affected your perceived empathy?
4. Did your empathy change toward
    a. The other teens in the camp?
    b. The camp staff?
    c. Nature itself, including any animals, plants, insects?
5. Do you feel that the empathetic perception you felt when you left the camp affects how you look at people or nature now?

Follow-Up Questions

Follow-up questions largely involved Interview Question 4c, which pertained to empathy for nature. I predicted that it may be more difficult for some subjects to articulate empathetic perception for nature versus their fellow peers or camp staff as this may have been a new concept for some. For instance, one follow-up question that I included for some of the subjects was "Were you ever in a situation where you encountered a wounded animal or other natural element that affected your empathy perception?" Another common follow-up question posed for clarification was "Do you think it was easier for you to experience a shift in empathetic perception because you were shown empathy from other people?" Half of the subjects described situations in which they felt more comfortable demonstrating empathy for their fellow peers and camp staff because they had been treated with empathy themselves.

In addition to addressing data collection strategies, Chapter four provides information regarding the unique background that became the setting for the study, a brief outline of the subjects' demographic information, and a detailed account of the coding methods used and rationales implemented to move from coded data to themes. Verbatim quotes are provided to support my conclusions. Finally, elements that guided the study's trustworthiness are covered, followed by a discussion and summary of the study's results.

Setting

This study was conducted amidst an unprecedented time, as an international viral pandemic caused medical, economic, and social catastrophe. In February 2020, the World

Health Organization (WHO) officially named this new virus *severe acute respiratory syndrome coronavirus 2* (SARS-CoV-2), with "Covid-19" being used as a reference in much of the news media (CDC, 2020). In addition, the killing of an African American man by police officers in May 2020 resulted in protests throughout the United States as well as globally (Cable News Network, 2020). Although this study focused upon empathy as it may have been perceived and changed through therapeutic wilderness experiences, the pervasive stressors due to the Covid-19 virus and significant civil unrest created a unique situation in which to gauge if, or how, empathy may have affected the subjects' responses to these current crises.

Originally, I was concerned that the pandemic in particular would affect the interview process as the accredited programs that I relied upon to publish the study invitation were forced to close temporarily until quarantine restrictions were lifted into the summer. However, most of the study subjects indicated that being quarantined at home provided more time for them to participate in my project. In addition, when developing the original design for the study, I considered the possibility of some face-to-face interviewing. The Covid-19 quarantine made this impossible, and thus all interviews were conducted via secured video conferencing.

Demographics

The original research plan included an ideal sample size of at least 10 subjects between the ages of 18 and 20 years. Although at least 17 people responded to the first study invitation sent out by the partner organizations, many of them did not respond to follow-up emails for interviews. Ultimately, I decided to proceed with a final subject pool

of nine respondents, while simultaneously contacting certain WT programs a second time to request another invitation announcement. The final participant pool included nine Caucasian young adults, with five females and four males. Further, the original research plan focused upon young adults who participated in WT programs when they were either 16 or 17 years; however, one of the qualified respondents had attended a qualified WT program at the age of 15. This slight age deviation was acceptable because this individual was 18 years at the time of interview and indicated clear recollections of the experiences. Table 1 illustrates the ages of participants during their camp experiences, their ages at the time of their interview, the subjects' length of program participation in weeks, and the length of the video-conferenced interview.

Table 1

Age of Study Participants During Their Programs, Age at the Time of Interview, and Length of Program Stay

Participant code by order of interview	Age, Program 1	*Age, Program 2	Current age	Approx. length of program in weeks	Length of the interview
Subject 1	16		19	13	30:48
Subject 2	16	18	19	14, unsure	47:00
Subject 3	17-18		20	9	43:51
Subject 4	16		18	10	31:23
Subject 5	16		20	9	38:46
Subject 6	16		20	9	39:58
Subject 7	16		19	13	1:06:08
Subject 8	16		18	13	29:45
Subject 9	15	17	18	8, 5	35:54

*Two of the subjects attended two separate camps at different intervals.

Data Collection

Twenty-two accredited WT programs, as well as the accrediting organization itself, were asked to distribute invitations through their social media platforms. Email requests were sent to each organization that included (a) a partner organization's letter of support and (b) attachments of individually formatted invitations to be used for Facebook and Instagram platforms, as well as an online newsletter. Several of the organizations responded quickly. For several others, I followed up with phone calls after 1 week of no

response. Of the 22 organizations contacted, 16 responded affirmatively regarding posting the study invitations. Although I did not inquire as to which method of invitation the subjects responded to, a significant portion of respondents who attended one WT program in particular indicated that they saw an Instagram post regarding the study.

The original data collection plan focused on snowball sampling methods as it was presumed that the organizations and study participants would be able to contact other qualified individuals to participate in the project. Ultimately, this sampling technique did not occur as each participant contacted me directly through the social media invitations.

Data were collected through real-time interviews via a secured Zoom® video-conferencing application ("app") that could be downloaded on a computer, tablet, or cellphone. This method was facilitated by the Covid-19 quarantine, as all of the participants were already using Zoom® to continue any courses that they had been pursuing prior to the pandemic. As indicated in a previous section, the original data collection plan included the possibility of face-to-face interviews if possible because two of the accredited WT organizations were within an acceptable driving range. Because the Covid-19 quarantine rendered this impossible, all interviews were conducted virtually through a laptop computer. Zoom® was selected as the platform of choice because it offered an encrypted connection through a paid subscription, which increased confidentiality. Further, each interview was recorded through the Zoom® program directly onto a computer hard drive instead of using cloud-based storage. Backup recordings were also made using a cellphone, although these were deleted once I was assured that the Zoom® recordings were successful. Each participant's name was initially

coded in a manner to protect the participant's identity, then recoded by interview order as depicted in Table 1. Lastly, I designed an interview protocol to facilitate a methodical approach and increase the project's validity.

Interview Protocol

Each subject received a consent form, approved by the Walden University IRB as #04-09-20-0349883, as well as the interview questions, via email prior to connecting through Zoom®. Participants indicated consent through a return email. At the beginning of each interview, I went over the purpose of the project, explained confidentiality regarding the recordings and data storage, and answered any questions that the participant had. I also reiterated certain elements of the informed consent, including participants' rights regarding halting the interview, clarifying my questions, and reviewing their transcripts.

The interviews commenced as I asked the subjects to explain how they understood the concept of empathy in their own words, which served to clarify for me how each subject's understanding of empathy was being applied. Afterward, I asked my five interview questions, with follow-up questions as necessary to clarify participants' responses. All of the interviews went well, with only minor issues, such as one dropped connection, one subject's interview being interrupted by a group of friends, and one circumstance where a fast-moving storm made me pause and change locations, all of which were recorded in the transcripts. Finally, prior to the end of each interview, a safety question was asked to ensure that the subjects felt mentally and emotionally stable, and the recordings were halted. No referrals for support were requested or demonstrated as necessary for any of the interviewees.

Precoding Considerations and Process

Precoding preparation, a fundamental step in the coding process, can illuminate any potential issues that may affect the project's validity as collected data transitions from chunks of information into codes and finally into themes (Adu, 2016). A review of precoding procedures and suggestions was performed using several different resources. My own precoding steps included reviewing the reflexive journal that I maintained during the interview process, identifying my biases, and putting a copy of my overarching question and study purpose in a place where I could constantly see it. The audio recordings were transcribed through a program called Sonix®, and the transcripts were reviewed against the audio recordings as I edited errors in the text, grouped chunks of narrative together, and removed timestamps inserted by the transcription program. Each completed transcript was coded using reversed initials with a number that referred to interview order. Once I had familiarized myself with the transcripts, the initials were dropped, and the respondents were referred to by subject number.

I anticipated and identified my personal biases early in the process, due to my practiced familiarity with the age group that I was interviewing, as well as my professional and personal connection with the natural world. Adu (2016) recommended that researchers handle biases through honest recognition and notation and then consciously set biases aside to reduce the risk of them affecting data interpretation and study validity. For example, although the subjects interviewed were capable of discussing their empathic perceptions toward other teens in their programs as well as camp staff, a few of them struggled with expressing empathy for nature. During the first couple of

reviews, I found myself feeling disappointed and, on two occasions, frustrated by comments such as “I don’t mind killing bugs” and “I don’t really connect with animals.” I handled these issues by being aware of the importance of respecting the subjects’ input while recognizing that their input was important information for the study. Several transcript reviews later, I found my initial bias replaced by a realization that many of the subjects actually expressed empathy for nature using other means of description, which was later identified by the *vocabulary* theme.

As I worked through the steps of precoding, I kept in mind what options were available for coding and theming the data. My initial approach involved the in vivo method due to the importance of keeping the subjects’ verbatim narratives intact. Further, as a novice qualitative researcher, I also wanted to find a method that included a clear, step-wise approach to organizing the data. Ultimately, I chose reflexive thematic analysis to organize, code, and ultimately theme my interview data. This method included a series of clear steps to follow. I was able to use directly quoted material, and the reflexive element required me to use my own experiences and perceptions, which assisted me in further reducing any bias.

Analysis Methodology

Braun, Clark, and Hayfield (2006, 2012, 2019) introduced a six-step method to organize, identify, and present data using the thematic analysis (TA) template. TA is described as a method of coding and theming information across a data set, which “allows the researcher to see and make sense of the collective or shared meanings and experiences” (Braun & Clarke, 2012, p. 57). The reflexive component of TA allowed me

as the researcher to keep myself in mind as I created or identified inherent themes I wanted to focus on. Further, TA is considered a flexible process that fit in well with the generic qualitative design I used for my study. The six steps of the plan that I followed to analyze the data are provided below, followed by explanations.

1. Familiarizing oneself with the data and identifying items of potential interest
2. Generating codes
3. Generating initial themes
4. Reviewing initial themes
5. Defining and naming themes
6. Producing the report

Step 1: Data Familiarization

This was an ongoing process commencing during the precoding stage of my research preparation, and it continued as I revisited the transcripted data frequently. A primary approach I applied from the beginning of the data familiarization process was bracketing, defined as an active process of setting aside any biases a researcher has (Sorsa & Åstedt-Kurki, 2015), including any thoughts, feelings, or judgments the researcher might encounter throughout all stages of project. Data familiarization included listening to each audio recording while reviewing the transcripts to correct any insertion or translation errors through the transcription program. Certain areas of interest, such as self-empathy and multiple camp experiences, became evident immediately during the first editing of the transcripts. Each subsequent data review facilitated the second step of the thematic analysis, generating the initial codes.

Step 2: Generation of Initial Codes

The first round of coding was conducted by hand using seven different color schemes to represent chunks of data including each interview question, follow up questions, and quoted material that supported the original answers. As the texts were analyzed, the targeted data was influenced by research question alignment, a practice that assisted me in focusing on specific words and phrases. Once this was done, a data analysis computer program, Quirkos®, was added for organization and to facilitate retrieval of these words and phrases. Quirkos® features a series of bubbles or "quirks" to organize data selections. Initially, I identified ten primary codes and utilized the Quirkos® program, to consolidate them. Then, I returned to hand coding the transcripts to further identify additional, or subcodes. I found that using Quirkos® made the process confusing and more difficult, as I kept straying away from the original interview questions and onto other tangents. Eventually, I discarded the program and relied upon the hand-coded hard copy documents and my word processor to retrieve specific data.

Step 3: Generating Initial Themes

Some themes were readily evident while others became more apparent as I continued to review the interview transcripts and drill down. A significant initial theme that I identified involved Interview Question 4c, where I inquired how the respondents' empathetic perception may have changed with regard to nature and other natural elements such as trees, animals, water, etc. In answering this question, many of the respondents used words other than "empathy" to describe their feelings for nature. However, when I reviewed their responses contextually, it was clear that they were expressing empathy for

nature without precisely stating this. Thus, the first theme I identified was “vocabulary” to represent the manner in which empathetic themes were expressed.

A second initial theme, “personal insight,” represented a more developmental concept in how the respondents’ described their thoughts and feelings before and after their WT participation. The third theme that appeared through the coded statements was “weather.” This theme arose from a follow up question as a result of Interview Question 3, which asked for examples of camp experience may have affected their empathetic perception. Many of the respondents described how rain, snow, and cold may have affected their empathy because of the challenges inherent around such weather conditions. However, after much consideration about this particular theme, it was replaced with “experiences” as a third theme which incorporated weather-related recollections as well as other examples affecting perceived empathy.

Step 4: Reviewing Initial Themes

The first step of theme identification remained appropriate. However, I added another theme, “camp culture” to incorporate how the operational factors of camp resulted in empathetic perception. This theme arose through respondents’ descriptions of camp activities, such as journaling and communicating as a group, as well as the wilderness environment itself, and they impacted their empathy perception. This theme is in line with extant WT research that has concluded the value around removing technology, social diversions, and general stressors of home and school to allow program youth an opportunity to truly engage and grow through WT intervention.

Step 5: Defining and Naming Themes

Four main themes that influenced or described empathetic perception were identified through the first four steps of the reflexive thematic analysis process: **"**vocabulary," "personal insight," "experience," and "camp culture." A final theme, "self-empathy," was noted during the first interview, and was subsequently repeated through the remaining eight interviews. Clarke (2019) argues that "themes don't passively emerge from the data; they are actively generated by the researcher" (Clarke, 2019, slide 11). While this is the case for the first four identified themes, the fifth theme of "self-empathy" emerged spontaneously through the interviews as subjects described this experience without any prompting or follow up questions. The final five themes are explained, in detail, below.

Vocabulary. Vocabulary as a theme is defined as the words or phrases that study subjects used to explain their understanding of empathetic perception contextually, without actually using the word "empathy." For example, words and phrases that include respect, appreciation, compassion, and value, were used by the respondents in response to the interview question that focused on empathetic perception for nature. This theme emerged as it became clear that empathy for nature was a new concept for the majority of the subjects.

Experiences. This theme related to how specific examples impacted their empathy perception. Several factors influenced this theme such as weather conditions, childhood memories, how they were treated by others, and what the respondents learned in their respective programs. Most of the

experiences related by the respondents were focused on an individual or set of specific incidents they experienced during their camp participation.

Self-empathy. Self-empathy recognizes the subjects' answers regarding how the principals of empathy, described an individual's capacity to understand the thoughts and feelings of another, were applied to themselves. As indicated above, this theme emerged naturally through the subjects' responses and was not included as an original interview question. Instead, the first subject interviewed described how self-empathy became a significant part of the WT experience, and this idea was echoed by other respondents in subsequent interviews.

Personal insight. Personal insight is indicated through the descriptions of how subjects realized, on a deeper level, a connection between their thoughts and behaviors, and how these thoughts and behaviors affected others around them. Personal insight took many forms, from the participants describing their attitudes prior to entering the camp, to how they experienced a shift in empathetic perception while interacting with other people in a natural environment. This theme arose throughout all of the interview sections.

Camp culture. The camp culture theme described the inherent aspects of the WT camps that contributed to empathy perception. These elements included group therapy, camp responsibilities, and day to day life in the wilderness. A significant feature of the camp culture theme was camp membership hierarchy and the rules they had to follow, and how these dynamics impacted their ability to feel empathy for others and for nature.

Step 6: Producing the Report

The final report was generated as a result of the steps outlined above and is detailed in the next section, *Study Results*.

Study Results

I faced a dilemma in deciding how to present the study results due to the vast amount of information I felt was important to include in order to reduce any subjectivity while focusing on objective content. After considering the possibilities, I determined it was important to include all of the data as a strategy to increase reliability, which is often lost in qualitative processes as interview questions are analyzed, particularly if there is an inherent bias (Fusch, et al., 2018; Tufford & Newman, 2012). My own personal and professional biases were mitigated through bracketed interview sections.

The results section is organized into three main parts: *Results Organized by Interview Questions*, which are indicated in Table 2, *Results Organized by Theme*, and finally a *Cumulative Results* section that describes the final data analysis. Both the results by *Interview Questions* and *Theme* sections were checked against the overarching research question for alignment.

Results Organized by Interview Questions

The direct answers to each interview question are indicated below. Follow up questions were asked for clarification only if the participants' answers were vague or confusing, thus they are not included in Tables 2 through 8.

Table 2

Interview Question 1: How Would You Describe the Difference Between the Empathetic Perception You Felt When You Started the camp and How You Felt When You Left?

Subject	Response
Subject 1: Before	So, I think what you are saying about personal empathy, reigns more true (sic) to me from that particular experience … kind of like a void. I was pretty disc disconnected with myself
Subject 1: After	I would say probably more significantly, a difference between how I empathized with myself before versus after
Subject 2: Before	Before I went in. I was. I was pretty selfish and entitled, and my dad would call me entitled and I would refute it, but I am able to recognize now that I was totally self-absorbed … Didn't have a lot of empathy for other people's responsibilities.
Subject 2: After	No direct answer was given.
Subject 3: Before	I was very like so self-involved and didn't really care about what was going on with my other group members.
Subject 3: After	Something I learned over time is because we're all experiencing the exact same thing. The only thing that's different is our perspective on the matter
Subject 4: Before	… less towards people that maybe you'd call an addict … I also didn't necessarily feel too empathetic for people in authority.
Subject 4: After	I think both of those empathy's really turned around for me personally. I think my empathy definitely. I think I was able to gain more empathy by going through the experience.

(*table continues*)

Subject	Response
Subject 5: Before	I was already in full active addiction, so I didn't really have any empathy for anyone, for myself or anybody
Subject 5: After	… wilderness. Kind of forced me. To see. To understand, to relate to work as a team with other people and. Emotions come in, play with that you know, like when one of us fell down. We all fell down.
Subject 6: Before	I think I, like, didn't have any less empathy beforehand, I did at the end. I just didn't know how to I guess like tap into it … I was so. Absorbed in my own struggles and my own issues before going to wilderness therapy that I just like didn't even take a look around and think about how other people might be feeling, especially in regards to how I was acting around them.
Subject 6: After	By the time I left, I realized that my actions impacted a lot of other people and allowed me to I was while I was at (the camp), I had to, you know, look around and think about how other people might have perceived how I acted. And I think it changed as it therefore changed my behavior.
Subject 7: Before	Went in angry, judgmental …, I felt wasn't empathetic at all. I felt like, you know, I was alone. The whole world is against me. And my parents hated me.
Subject 7: After	When I left, I. I left, I realized. But not only. Did they not hate me, but they were struggling as much as I was? You know, it's horrible. I just, you know, through this whole process, I think of how challenging it must be for these parents to send their children away …
Subject 8: Before	… the kind of energy in New York City is that, you know, we don't care about anybody except our friends. And like the people loyal to everybody else, like. Doesn't matter what they feel is not what they think. We're gonna try and do what's best for us. And let's screw them.
Subject 8: after	… I was removed from that environment and put a lot of people who I knew that they all cared about me. And that made me kind of it made it possible for me to unlock this part of myself. Those like instead of just saying, I only care about me and my friends, I'm going to be in a place that, you know, I try and understand where everyone's coming from.

(*table continues*)

Subject	Response
Subject 9: Before	I would say I would say my empathy was pretty minimal. I pretty much just kind of did what I did and I didn't really give a second thought to anything.
Subject 9: After	I definitely got a huge I noticed a huge difference in my perception of empathy … because those are a big thing I noticed.

Table 3

Interview Question 2: How Long Did It Take for You to Feel Differently?

Subject	Response
Subject 1	I would say I felt like it took me a pretty long time to be able to or I guess like when I noticed my empathy changing, but maybe around week eight or nine.
Subject 2	It was about three weeks until I gained more understanding of how I had to contribute.
Subject 3	It took me, I think, a month and a half before I got to that point in the program where I realized, like. I need to learn to be compassionate about what others you're going through.
Subject 4	But a marker that I could say, I felt a real shift in the way I felt about being in wilderness and my empathy towards others. It was about a month in almost halfway through my experience there was when things started shifting.
Subject 5	… it probably came in a lot, honestly, like a month in. It took me a little while to, like, get out of my head.
Subject 6	… about the two-week mark being sort of this milestone in that for I think I spent the first two weeks very much with blinders on, like I had to get out of there and getting doing like trying to check boxes to get out.
Subject 7	it took me almost two months almost those two months. And I was there a total of three. I took a bit longer than I had expected.
Subject 8	(I was there) ninety-three to ninety-three days …probably around two weeks in.
Subject 9	I was there for probably top 55 days. I think about seven days, I think. I think when it really actually I think when I really started to notice the difference

Table 4

Interview Question 3: What Experiences, While You Were in the Camp, Affected Your Empathetic Perception?

Subject	Response
Subject 1	… trying to figure out how I was going to be able to. Like, separate myself from those people and then create what I wanted Wow, like being supportive, like not blocking them off, but just being able to have my own sense of self.
Subject 2	I realize that the be understanding treatment I received went a long way for my own situation. So, feeling like people were being understanding for me, made me realize that it was important for me to be understanding of others.
Subject 3	… after a while, like you're living with these people, suffering with these people, struggling, and then grind with these people, you start to just become really in tune with them and their emotions. And like the emotion of one person affects the whole group.
Subject 4	So, once I finally was like three or four weeks in and I had my first real, real, real meltdown breakdown. I mean, I felt for everyone because I was like, man, this is what this is what it's they've been freaking out about. That's when I started to feel more empathy.
Subject 5	The support that I had gotten from that was pretty, you know, pretty significant. And that's when it first felt like a community. And not just like girls at Sleep Away camp.
Subject 6	Sort of just like these were people who were guiding me at the beginning and then they were my mentors by the end. And then. With my therapist in terms of empathy … He would challenge me on my way of thinking by it, by forcing me to think about it from another person's perspective…there are also the times when I was. Able to make the most progress because I was able to think of how my actions impacted other people
Subject 7	… sort of hearing that, like, you know, other girls are really struggling with Christmas … I like I'm standing with you.… in the arena. I'm standing with you in the arena. I am struggling with you. I understand that. This is not where you want to be, but, you know, all I can do right now is just hold your hand and say like we're here for you when we're here. I finally have this foundation and I'm never going to get that again.… I can make that connection anywhere. I can make those healthy relationships anywhere as long as I sort of come into my own and continue to show vulnerability.

(*table continues*)

Subject	Response
Subject 8	I think this happened by accident, like someone opened up to me and I was there for them, I was only receptive to what they were saying and kind of just trying to be there for them and provide them with support. I don't know why it was the people were just able to be so real in a way that you just never saw back home.
Subject 9	… the nightly group exercise. Where we'd sort of like there'd be a topic and we'd like go around and discuss it. That definitely changed my perception of empathy a lot… like you're just sitting listening to people. Well, so that definitely made a big difference. Trying to help like people in my group and stuff and trying to, you know, like. That's kind of like when I actually noticed explicitly. Like my empathy had actually changed.

Table 5

Interview Question 4a: Did Your Empathetic Perception Change Toward Other Teens in the Camp?

Subject	Response
Subject 1	I guess for other people, for other students, I guess I saw my relation, my ability to have relationships. Really change because of my ability to experience empathy.
Subject 2	So having other girls with me experiencing that was not only like I was able to have empathy for them being away from their families just as I was. But also I think it made us as a group closer because we were all growing empathy in those moments. So that's the holidays were an example of an empathy strengthener
Subject 3	… they sent me back to the camp where everybody comes in and they get accepted and you get to see the people on their first day. They're freaking out. They don't want to be there and they're crying. And there's just complete strangers, you don't know, coming in from all over the country getting plopped down right in front of you. And they're scared … And that's this is where I made this where I made like some of my lasting relationships, like people I kept in contact with after …
Subject 4	They place so much emphasis on like, how do you all feel, let's get it out in front of everyone like that. There's not places like that in real life. And it makes you really be like, well, shit. All right. Yeah, I'm going through stuff over here, but so are they. And their stuff is just as relevant as my struggles. And I mean, to be able to put yourself in their shoes. It's hard.
Subject 5	… this person there. It was freezing rain and they were just like. In short, the shirts we get. The thin pants. And they were just standing in the rain like they just wanted to freeze themselves out…So I got them to get under the balcony and put on a hurry and like, try to warm up…I think that person really, really taught me a lot about compassion and empathy and patience.

(*table continues*)

Subject	Response
Subject 6	… he refused to get out of his tarp the one morning, like he just like I'm having a I'm not having a good day. I don't want to do this. And I didn't. I was, like, frustrated. I was like, why? Why wouldn't he get up? Like, we're all. Everyone's having a sucky time. No one really wants to be here. Just get up and deal with it. And. I couldn't really like I wasn't at a point where I could. Understand… made me frustrated and I wanted to talk to him and support him. And. Understand where he is coming from. I think that was like sort of like a complete reversal in how or shift in the way I was thinking.
Subject 7	… this girl is just really bothering me … swearing at this and that … I just stopped and said do, you know, how stupid. You sound… And she was like and it really hurt me when you said that because you finally saw through that … And I was like, wow, you know, I truly did not mean to do that. You know, I'm glad that happened, but I'm. I just judged you straight from the start and thought your mean. And I just didn't want anything to do with it.
Subject 8	… there's this kid who is about a year younger than me I would say around the same maturity level. And it just like we got so close. That was the kid who, like, he opened up to me and I was just kind of there and I validated and understood what he was going through kind of back. And then we became so, so close. And through that I was able to be more open with him. He was able to be more open with me than we'd ever been with anybody before. And that really helped my process.
Subject 9	… seeing my group members and just being like, oh, like. God, you know, like, this is so dumb, like I had so much I hate this pupil so much. And I was still going back and forth. And I think I think I reached a certain point where I realized, like the contradiction between those two things. Then eventually I actually, like, sat down and talked to him. And like I heard him express like his frustration with that. That's all it took for me to realize, like, alive. Then like completely like hypocritical here the whole time. Like, this guy is just Trying to go through like everyone else.

Table 6

Interview Question 4b: Did Your Empathy Change Toward Camp Staff?

Subject	Response
Subject 1	To be honest, I think I was like a little bit too angry. At them, too, to have gotten to a place where I felt a lot of empathy … I've definitely changed in that way since then. But I didn't I just didn't have a great relationship with. The staff while I was there.
Subject 2	I witnessed one staff member. Sit down. And just like put head in their hands. And that was eye opening to me because. It was just like. How could a group of people affect a staff member who's been doing this this job for, you know, who knows how long?
Subject 3	there is a time when I saw the student assault a staff member. And I like I began to understand they were human and they were going through just as much shit as we were. Because I don't think it's fun to be around a bunch of troubled teen type kids having to deal with all their Stuff … Especially on top of like having to hike all day and set up camp sites and deal with all the added nonsense of being responsible for a group of angry adolescents. Definitely began to see, like a shift.
Subject 4	I had panic attacks. And so every night I would wake up and the staff would have to pretty much call me down every night. I think that changed my perspective because I come in and you're like you're like everyone's kind of like, man, f this this sucks. Counselors here suck staff are the worse, but, you know, they care about you literally like their own children. So that that changed my empathy about them.
Subject 5	… there was one … I a little psychotic break. I broke down. I was sobbing. I wanted to die. I was withdrawing I felt terrible. She really had no idea what she was going to do with me in that moment. And just like trying. To help. And that was the most compassion I think anybody oh my God has ever shown me, especially after I just threatened their life. Think. It was a really significant moment. She's amazing.

(*table continues*)

Subject	Response
Subject 6	… the shift in the perception of them as guides to mentors was a really big aspect… I led one hike where I had a freshman with me who who had an anxiety attack on trail and I like could suddenly see what it was like to be on the flip side where I was, like, helping. Someone. Get through a mental challenge, an emotional challenge on trail. And how much work that was. And to think about that, that they did that for seven days on like nonstop. I realized just how exhausting that was. And. It gave me a new level of respect for them
Subject 7	… we are not an easy group to deal with I look at these staff and I am just amazed that they put themselves through just. You know, just even not even working with us itself. But, you know, living in the woods for I mean, who wants to just go out in the woods? Like, disconnected from friends, family. Like, I'm sure the pay is not at all what it should be.
Subject 8	I had to be aware of the stress that I was putting on them because they had to constantly be aware of me. And so that made me have to deal with, you know, OK, I can't just be like singing I stop my lungs all the time because it's this guy. Like two feet next to me who has to listen to me do that. Doesn't want to, OK. So, you know, it kind of happened faster than I think it would. Because of the fact that I was in that situation there.
Subject 9	… definitely something that increased my empathy for them, along with seeing them get emotionally invested. And people like seeing them, you know, like visibly express, like. You know, some emotion about what they saw in front of them having a reaction. I think made me made me realize that, like they're you know, they're also human.

Table 7

Interview Question 4c: Did Your Empathy Change Toward Nature Itself, Including Any Animals, Plants, Insects?

Subject	Response
Subject 1	So we would collect birch bark to build fires … My group got into this really bad habit of cutting it off the trees, which is like so terrible for them … As I was there for longer, I realized, like how special those trees are … when other newer people would want to do that, That made me way more uncomfortable
Subject 2	… you can't just break branches off because it like to try and make fire because the branches will be they're still alive even after you break them off. So, the inside will be too, too wet, really, because it's still taking in water from here … Being mindful and observant of that, I think helped my impulse control
Subject 3	Definitely. I don't. I don't kill bugs anymore … I used to not care when I'd see, like, fields of trees being chopped down for houses. Now that breaks my heart. But it definitely gave me a greater appreciation for being out in nature and a greater love for it.
Subject 4	I didn't have much empathy for nature at all going in. I would I've never really been surrounded by it. And when I got there, it's I think it changed kind of around the time that I said really most my empathy shifted…I can go to a park now and just lay there and look at trees for ten minutes and not be bothered and just feel peaceful. And I never used to have that ability. I didn't have the ability to stop and look at nature or bugs or insects and and think of it as like beautiful or calming or be empathetic towards it.
Subject 5	… more a general respect and compassion and empathy for everything around you like. Don't try this on the tree that way. That hurts the tree. Just kind of aware of like. The health of everything, and not just yourself or people
Subject 6	Made me I think recognize and appreciate things more when I came back to the wilderness. Because it sort of became just part of my. Day to day to not harm the outdoors. You know, the LNT principles just became part of my way of thinking. So I didn't I don't think I noticed it as much once it became part of my way of thinking…there was like no nonsense, like it was not okay to do anything that harmed the planet or harm the woods we were in.

(*table continues*)

Subject	Response
Subject 7	I will admit it. I did not feel this at all when I was there. (later) I. Called out a girl for stealing rocks from Glacier National Park. But it was. They were like beautiful. And I mean, what is one rock really have to do with the whole thing? But I asked her to put it back just because I felt like. You know, I love national power and I just feel like it's a sacred place and it deserves to stay there, it's it's home. You know, you wouldn't tear someone else from their home.
Subject 8	I already had, like, a massive amount of respect for and awe for the natural world … I left with a lot more respect for the how much you can you know, how much you have to ...you can't change natural world like you just have to adapt to that ... I really was able to appreciate how powerful it was after all this in a way that I wasn't before.
Subject 9	I always kind of cared about nature. And like the well-being of nature just a little bit … the biggest thing was like the the idea of like leave no trace. I sort of carry on, carry it with me everywhere, like just kind of try to like minimize my impact on, on my natural surroundings, I cared about it now.

Table 8

Interview Question 5: Do You Feel That the Empathy You Felt When You Left the Camp Affects How You Look at People or Nature Now?

Subject	Response
Subject 1	Yes, definitely … I'm seeking for the positive benefits that that experience gave me. And I think empathy is a huge amount to do with that, because it was the first time that I learned to have, like, really positive relationships with people and with things. And. And then seeing what a big difference that made in my life. It was really easy for me to want to sustain that kind of thinking and like want to have more experiences that help me further develop that experience
Subject 2	How aware I am of others and how I treat others is still I try to keep in mind as much as possible. It's important to have that empathy for everybody, because that's what I would like to know. So that's the moral of it. If I, you know, give to the world what you want back.
Subject 3	Every day in life, like I'm given a point where I can. Reference something that happened out there or something that I gained from it. There's like there's always an opportunity to go any which way when dealing with people. Just something I do a lot of it's taught me a lot of like just understanding…, like, even now with this corona virus thing like this is a perfect example of like we're all in something together, but we're all experiencing it differently.
Subject 4	In the past, I would have. Just made sure my needs were always being met first and that, you know, I was doing what I wanted to do on the time. I don't want to treat anyone like that again… I just feel I'm more cognizant maybe of the people around me and that I'm not the only one that is important.
Subject 5	Yes. One hundred percent, because in wilderness, you let your guard down, you trust people.
Subject 6	With people, I think it's most evident in the in the types of people I seek out, I seek out. And so when I came to college, I think it was a really big goal of mine to find people and create relationships with people that. I saw as having empathy and having the legs that like valuing. they also exhibit a level of empathy that is isn't that that is similar to the one to what I have.

(*table continues*)

Subject	Response
Subject 7	I also use the communication skills that I learned. It's so easy to get caught up in focusing on only myself without realizing how my actions and words affect other people. But that's something I learned to identify. Well, you know it. And I know how to avoid it. Or at least I'm more aware of how to check in with other people and how they're feeling now. If I feel as though I've done something to upset someone, I sort of ask them, you know, like, please tell me how you're feeling
Subject 8	It's all there in the back of your head. What wilderness did for me is it built a foundation … the positive benefits of that which I'm starting to see, like, you know, I'm reaching out to these people that I haven't talked to in many, many years for the first time…what ended up happening is people were very understanding, very empathetic. It makes me not want to act that way, not for the sake of the staff watching me, but for the sake of my well-being
Subject 9	I try to you know, I sort of continuously like tried to take it forward just by, like, continuing to practice with the people that I met. I think in terms of lack, in terms of like the respect I have for nature and kind of the sense of like not wanting to disturb or not wanting to damage it. Yeah. That I was that I was stuck with me.

Once the interviews were completed, I began coding for themes, as I described in the *Defining and Naming Themes* section, to organize the data in a more succinct manner. The themed data presented the continuation of the subjects' experiences through their verbal direct examples. The following themed results are represented by responses in block quotes.

Interview Results Organized by Theme

Five themes emerged from the subjects' answers to the interview questions regarding their change empathetic perception as seen through their use of vocabulary, their experiences, their recognition of self-empathy, personal insights, and the influence of each camp's culture. Each theme is described below with supporting quotes.

Vocabulary. The vocabulary theme is included first amongst the five themes because I noticed that the subjects would often use different terms and phrases to describe empathetic perception in response to my interview questions. Empathetic perception, the primary theme in all of the interview questions, was often expressed using alternative terms such as respect, compassion, understanding, and appreciation. Further, phrases such as “hurt the tree” and “take care of” also implied a perception of empathy without the precise wording. The first example below is from a 19-year old female respondent:

> … I didn't just like the way that people in general experience animals. A lot of the time I think is like really problematic. And like, that's not how I felt at all. And like I felt so connected to nature and to those animals. But like also so different and like acknowledging that I, like, don't have a place there in the same way that they necessarily do.

Another 20-year old female respondent speaks of respect, compassion, and awareness:

> … more a general respect and compassion and empathy for everything around you like. Don't try this on the tree that way. That hurts the tree. Just kind of aware of like the health of everything, and not just yourself or people.

An older male, also 20, described a post-camp experience, and how this affected his empathetic perception toward the program staff:

> I led one hike where I had a freshman with me who had an anxiety attack on a trail and I like could suddenly see what it was like to be on the flip side where I was, like, helping someone get through a mental challenge, an emotional

> challenge on [the] trail and how much work that was. And to think about that, that they [camp staff] did that for seven days on like nonstop. I realized just how exhausting that was and it gave me a new level of respect for them [staff].

Here, empathetic perception is illustrated by this 19-year old female subject's experience while in another outdoor venue, post-graduation:

> I called out a girl for stealing rocks from [a] national park. But it was they were like beautiful. And I mean, what is one rock really have to do with the whole thing? But I asked her to put it back just because I felt like you know, I love national power and I just feel like it's a sacred place and it deserves to stay there, it's home. You know, you wouldn't tear someone else from their home.

This last vocabulary example, as described by an 18-year old male respondent, includes the concept of adapting to something once he developed a deeper understanding:

> Definitely, when you're out there for a long time, like you kind of understand, like what it's like to be, you know, I think what it helped change my understanding of the natural world is I had. I left with a lot more respect for the how much you can you know, how much you have to ... you can't change natural world like you just have to adapt to that.

Experiences. Many of the study participants described their empathetic perception in terms of experiences through their answers to the five interview questions. The camp experiences ranged from how the subjects were treated by other people, to what they observed in their camp environments. Further, many of the respondents described unique experiences that seemed to round out the data set. For example, the first

excerpt below describes how a 20-year old male subject, who was assigned to assist the camp staff with the intakes of new program participants, interpreted his role:

> … [they] sent me back to the camp where everybody comes in and they get accepted—and you get to see the people on their first day. They're freaking out. They don't want to be there and they're crying. And there's just complete strangers, you don't know, coming in from all over the country getting plopped down right in front of you. And they're scared. But because you see people coming in, they don't know what they're getting involved in and it's just fear … and just give me a deep compassion for people like that, people where the world's like out of their hands and they're stuck in something.

A 19-year old female respondent described an experience that depicted the hierarchy of the camp members as they often overlapped each other due to the program's open enrollment:

> I think as I became an older member, my empathy grew… I think the reason my empathy grew so quickly in the three weeks is because of the people around me, because the older group members, again, had empathy already… I feel like he [another peer] had empathy for me because he had been in my shoes, as I had, you know, as I became an older member, I had empathy for the girls because I had been in their shoes. The newer girls.

An example recalled by this 20-year old female respondent describes how she was reminded of her own experiences as a younger person, and how these recollections resulted in her helping a fellow peer in her group:

> It was raining. It was pouring rain, it was freezing…and they were just standing in the rain like they just wanted to freeze themselves out. I don't know, it just reminded me of when I was like eleven, twelve. I had a lot of self-harm issues. So, I got them to get under the balcony and put on a hoodie like, try to warm [them] up…So I think that person really, really taught me a lot about compassion and empathy and patience.

The comment from this 18-year old male participant explains how his perception of empathy developed for staff members who were assigned to keep him safe:

> I had to be aware of the stress that I was putting on them because they had to constantly be aware of me. And so that made me have to deal with, you know, I can't just be like singing at the top of my lungs all the time because it's this guy like two feet next to me who has to listen to me do that. Doesn't want to so, you know, it kind of happened faster than I think it would because of the fact that I was in that situation there.

Lastly, one 19-year old female respondent described a typical day to day experience while living amidst nature:

> I also just like learned to take care of nature in a way that I wouldn’t have otherwise…So we would collect birch bark to build fires…my group got into this really bad habit of cutting it off the trees, which is like so terrible for them…as I was there for longer, I realized, like how special those trees are…when other newer people would want to do that, it made me way more uncomfortable.

The next section, *Self-Empathy*, represents a significant theme that emerged through the subjects' interpretation of the initial research question where I inquired how the participants gauged their awareness of empathetic perception before and after participation in their respective WT programs.

Self-empathy. Self-empathy is often referred to as self-compassion (Bluth & Neff, 2018). However, self-compassion has also been linked to higher levels of healthy empathy without suggesting that they are one in the same terms (Marshal et al., 2019). Riess (2017) described self-empathy as an oft neglected area of interest, despite its importance in how human beings function within their environments. This theme emerged naturally through the interviews as the respondents described not only their perceptions of empathy for their peers, the camp staff, and nature, but also for themselves. For instance, the first interview I conducted featured a 19-year old female respondent who described how her experience in a WT program affected her ability to feel empathy for herself:

> I think what you are saying [is] about personal empathy, reigns more true (sic) to me from that particular experience…before wilderness and during wilderness, I had a really hard time. I'm not like feeling (sic) other people's energies almost are like wanting to be involved in whatever they were experiencing. Kind of like a void. I was pretty disconnected with myself and I was actually feeling most of the time...I guess a lot of people were really pushing me to take a step back from trying to help other people and focus on myself, which is what I was there

> for…Yeah, I would say probably more significantly, a difference between how I empathized with myself before versus after.

This brief response, from a 19-year old female, noted that her first WT experience paved the way for her to advocate for herself, a form of self-empathy, when she was assigned to a new group during a second WT experience:

> … one of the girls said a mean comment to me and I was away from the group… [I said to them] you need to you know I would like to be welcomed. We need to have empathy for each other because we're all in this together.

A younger, 18-year old, female respondent provided an example of her post-camp ability for self-honesty when she is struggling to express her own thoughts or emotions:

> I think I've kept up amazing work. I still tell people, like, I'll be like, oh, no, no, no. that's just me hiding my feelings right now. Don't worry. That's just me not wanting to tell you what I really feel like.

Assertiveness could be considered a result of practicing self-empathy, as described by the 19-year old female respondent below:

> I was like, you know, I really felt that like I could stand up to people and I could be direct with people after that moment, which is something I avoid conflict so much so it was just nice to have that.

Finally, in this section, a 19-year old male respondent suggested that self-empathy was a form of leveling up:

> Like, I definitely spend a significant amount of time and energy, like berating myself for not being empathetic. Or as empathetic as I want to. I feel like that's

> kind of like how I was really able to like take it to the next level by realizing that, like, I'm not an exception…

The subsequent section, *Personal Insight*, includes the subjects' specific examples of how they felt directly affected by their individual development and awareness of empathetic perception as impacted through program participation.

Personal insight. This theme arose from the subjects' descriptions of what they learned through their WT programs. Similar to the experiences theme, the personal insight theme included a range of instances that contributed to a higher level of understanding, illustrating the empathetic perception each of each respondent. The first example in this section is from a 19-year old female subject who was sent to a WT program because she struggled with interpersonal connections. Her insight stemmed from the recognition of her own self-empathy:

> I learned to have, like, really positive relationships with people and with things. And then seeing what a big difference that made in my life. It was really easy for me to want to sustain that kind of thinking and like want to have more experiences that help me further develop that experience.

Many respondents recalled how they felt when they were treated with empathy and understanding by others, as described by this 19-year old female respondent:

> … because you know, the same treat others how you want to be treated. I realize that the be understanding treatment I received went a long way for my own situation. So, feeling like people were being understanding for me, made me realize that it was important for me to be understanding of others.

One 20-year old male respondent noted the similarities of the participants' mutual experiences:

> Something I learned over time is because we're all experiencing the exact same thing. The only thing that's different is our perspective on the matter… A part of this is teaching me stuff that's absent in me and I started talking more to my peers.

Both self-empathy and self-compassion were shown to be based in awareness, as described by this 18-year old female subject:

> In the past, I would have just made sure my needs were always being met first and that, you know, I was doing what I wanted to do on the time…I don't want to treat anyone like that again. I just feel I'm more cognizant maybe of the people around me and that I'm not the only one that is important.

Another 20-year old male respondent described his reactions during a scheduled family visit to his program:

> We took turns listening to each family speak. But like my parents spoke to me about their experience with me and then I spoke to them about my experience with them. And that's how they described how they felt and what they saw in me for the years leading up to [the WT program]. There are a few times when I completely broke down and just cried for a really long time, and that was one of them, whereas like, oh my God this is how this impacted the two most important people in my life.

Journaling is one of several camp exercises that are built into the culture of the programs, as this 18-year old male subject describes:

> I'd feel like sitting by myself journaling and basically sort of like you know, trying to figure out, like try to go through my head … I sort of realized the more I did it the first time I was there I was sort of like creating … I kind of became aware somehow of the fact that I was telling my own side of the story and not I guess like you could say the objective way things happened. I started thinking about that, I started thinking about, like, you know, like what actually happens and why do I think about it the way I do? What does everyone else think about the way they do?

The last section of participant responses, *Camp Culture*, focuses on how each WT program's set of protocols and community engagement impacted the subjects' awareness of empathetic perception.

Camp culture. The benefits of a therapeutic wilderness program are that each participant has an individualized treatment plan. These treatment goals operate in tandem with the day-to-day activities of the campers and include individual journaling, partaking in group, completing chores and responsibilities, and participating in projects and clinical interventions. The impact letter, described by one 20-year old male subject as a letter each youth wrote to their parents or caregivers, is one of the clinical aspects of camp culture required by all participants:

> Just hearing about what got the people sent there, because we got these things called impact letters that the program and what that was, was like letters from their parents or their guardians that sent them there detailing why they felt the need to send their child there. And you can really learn a lot about somebodies

> (sic) life through hearing, like how others perceive their wrongdoings. But I mean, I don't know, because all this stuff these kids are doing, like you can kind of be explained away and you can understand all their situations just by hearing what they were doing and seeing how they react to having to read that out loud, because even like the worst things they were doing, it can all be explained by some sort of trauma.

This female respondent, also 20-years old, explained how she was shown empathy by her fellow tent-mates when she first arrived at her WT program:

> I know when I first got there and the girls were showing me how to pack up when I got there, there was only three of us. So, they were showing me how you pack your bag in the most convenient way. And one of [the girls] she's so sweet. She's one of the sweetest people I've ever met in my life. She was like, listen, if you do it like this before your hands go numb, it won't hurt you.

Another 20-year old male subject described the connection he felt with other camp participants had because they had to work as a unit:

> One of the biggest things was there's this idea that progress for any member of the group (sic)…So whenever anyone had any notable thing happen like, I felt it, too and I could understand what it was like to, like, get a letter from your parents that like...made them like feel a certain way because I was also getting these and I was able to, like, empathize with that feeling.

A younger, 18-year old respondent, briefly noted how the authenticity of his fellow peers and staff influenced his empathetic perception once he graduated:

> …it started [in] wilderness. I don't know why it was the people were just able to be so real in a way that you just never saw back home.

This following example depicts another element of camp culture that is described by this 19-year old male respondent as an experience that affected his empathy perception:

> … the truth circle and I was sort of like the nightly group exercise where we'd sort of like there'd be a topic and we'd like go around and discuss it. That definitely changed my perception of empathy a lot because, … you're just sitting listening to people.

The final statement in this section refers to the group experience as described by an 18-year old female subject:

> … like group therapy helped a lot to be able to just, you know, you're forced to be uncomfortable in that setting and you're forced to tell everyone around you, your rosebud and thorn. I just think it's cool, because when they place so much emphasis on like, how do you all feel, let's get it out in front of everyone like that. There's not (sic) places like that in real life.

Cumulative Results

All of the study participants indicated a positive change in their own empathetic perception as a result of their wilderness camp experiences. Changes reported were influenced by the subjects' individual experiences described through the interview questions, which ultimately emerged as five distinct themes: *Vocabulary, Experience, Self-empathy, Personal Insight,* and *Camp Culture.* The themes were created from the

examples expounded upon from the direct answers to the interview questions. Table 9 summarizes the frequency of subjects' responses per theme.

Table 9

Themes Organized by Subject and Participant

Themes by subject	Number of participants identified with this theme	Participant code by order of interview
Vocabulary	6	1, 2, 5, 6, 7, 8
Experience	7	1, 2, 3, 4, 5, 7, 8
Self-empathy	5	1, 2, 4, 7, 9
Personal insight	6	3, 4, 5, 6, 8, 9
Camp culture	7	1, 2, 3, 4, 5, 7, 8

Out of the nine study participants, themes involving *Experiences* and *Camp Culture* each contributed the most to the subjects' perceiving a change in empathy as a result of their WT involvement. There was no one single example in which all nine respondents expressed all five themes. The smallest population of respondents was reported for the *Self-Empathy* theme; however, this is not surprising as this one was not included in the interview question set. The next section will address how trustworthiness, which is the degree of confidence in my data that support the rigor of my study, was considered throughout the data analysis process.

Discrepant Cases

There were no noteworthy discrepant data represented in any of the interviews or reviews of the transcripts. One example was how one particular subject indicated that she

didn't experience any empathy for animals or insects. This subject observed that her experiences in a WT program did not affect this characteristic in any measurable way

Evidence of Trustworthiness

Credibility

The credibility, or confidence, around this project was verified using three methods: repeated iterations (Connelly, 2016) of the transcripts, triangulation of sources, and member checking. The transcripts, as well as the audio and video recordings, were reviewed not only for text to text comparisons, but also for intonation and body language as a source of information. Data source triangulation, a method that involves garnering information via different sources (Carter et al., 2014), included both audio and video recordings of structured and unstructured interviews. Further, the inclusion of verbatim answers to the interview questions, in addition to the five themes, also provided an aspect of credibility as they were the source of the final themed data. Method triangulation through observation was also considered; however, the video-conferencing environment compromised some of the authentic meta-responses such as body language below the neck.

Reviewing the audio recordings and subsequent transcripts revealed new information with each examination, a process that helped me identify additional examples of codes and, eventually, themes. Pauses in speech, inflection, and potential incongruences between what the subjects were saying and what their overall metalanguage were noted in the reflexive journal. Further, member checking was offered to all of the subjects, along with the offer of their individual transcripts within a week of

the interviews, although only one respondent actually requested one. There were no stated discrepancies or concerns with what was reported.

Transferability

The purpose of not utilizing a convenience sample was the goal of transferability. The subjects were from different states, including one Canadian, and presented with similar but different reasons for participating in their WT programs. The accreditation process does not require that each program conform to a particular curriculum, thus although the study included only accredited programs, the subjects' narratives indicated enough dissimilarities to suggest the experiences of each subject could be generalized within similar WT programs.

Dependability

A dependable study is one in which a study design can be repeated when using the same approach to a project (Forero et al., 2018). One strategy for achieving dependability with my study involved a consistent questioning pattern, including a review of what each subjects' definition of empathy was, in their own words, prior to beginning the interviews. I approached each interview with a written plan that included a) their personal definition of empathy, b) "follow up questions" that differed by subject, but were flagged on the transcript as not one of the established prepared interview questions, c) sending the interview questions to each subject beforehand, d) an explanation of their rights and the purpose of the study, and e) a safety question that was asked at the end of the interview, the purpose of which was to ensure the well-being of the respondents prior to signing off.

Confirmability

Confirmability was achieved through the utilization of several methods of documenting data. These strategies included spreadsheets of the organizations contacted, dates and names of sources within each organization, schedules of interviews with time zones, saved versions and notes detailing the data analysis iterations, and a reflexive journal denoting my observations after each interview, as well as any concerns I detected during and after each interview. Information included within the methods chapter included the ages of the participants and the length of each interview.

Summary

This project addressed a gap in research involving therapeutic wilderness intervention programs and how these environments affect empathetic perception in adolescent participants. Nine young adults between the ages of 18 and 20 years responded to the invitation to participate in the study. Email was utilized to provide the informed consents and interview questions as well as receive the formal consent to participate in the study. The interviews were conducted through a secured video conferencing program where confidentiality was maintained through both the data encryption through a subscription and transcripts that were saved directly to a computer hard drive. Interview questions were structured to engage in a general discussion regarding empathy perception, then continue into more specific areas such as empathetic perception regarding peers in the same program, camp staff, and nature itself. Follow up questions were included for clarification of initial responses.

Transcripts were organized and hand-coded for organization into major groups, followed by an initial, or open-ended, coding procedure to partition data into smaller segments. This iterative process finally generated five themes of empathy perception: though the subjects' use of vocabulary, their individual experiences, how they realized self-empathy, their development of personal insight, and the influence of camp culture. Verbatim quotes that supported the overarching research question, Did young adult graduates of an adolescent wilderness therapy camp perceive a change in empathy as a result of their experiences in the program? were presented to support study results.

Finally, Chapter four explained how trustworthiness was a focus throughout the project through bracketing of biases and the keeping of a reflexive journal that addressed bias, observations, and any other additional concerns I noticed during the process as a whole.

Chapter five will complete this study by discussing the resulting data and what conclusions were drawn. Chapter five reviews my interpretations of the study, study limitations, and recommendations for future exploration in the area of empathetic perception in adolescents as a result of their therapeutic wilderness experiences. Finally, Chapter five offers a brief commentary on the social significance of this project that transcends the adolescent population studied to include all generations.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to address a gap in existent research concerning how empathetic perception may be affected in adolescents who participate in a WT program. Much of the current literature regarding therapeutic wilderness interventions focuses on protective factors such as self-esteem, self-confidence, teamwork, self-regulation, and communication. For this project, I made the argument that empathetic perception, which has also been described as a protective factor in that it is related to increases in prosocial behaviors, should be included in WT research that is conducted to further understanding of how WT intervention benefits struggling or at-risk youth.

Discussion

This study contributes to extant literature by demonstrating, through direct interviews with qualified WT program participants, how participants' perception of empathy, for both people and nature, may be positively affected through WT intervention. A review of the nine respondents' answers to the interview questions resulted in five themes that reflected back to empathy perception: vocabulary, experiences, self-empathy, personal insight, and camp culture. The following results were congruent with similarly published literature regarding the positive effects of WT intervention. This study is differentiated from previous studies because it may be the first to focus on how empathy is perceived by program participants as a result of their WT involvement. The following sections address how each theme either corresponded or contrasted with applicable literature as reviewed in Chapter two.

Vocabulary

This theme emerged as I observed that the respondents would use other terms aside from *empathy* to describe their feelings and experiences involving people and nature. For example, they used alternative vocabulary such as *trust* and *respect* to describe their concept of empathy perception. In addition to *trust* and *respect*, *appreciation* was a term used often when the study subjects attempted to describe their perception of empathy with regard to nature.

Other WT literature indicates similar use of terms such as *trust* and *respect* in projects involving adolescents (Conlon et al., 2018; Paquette & Vitaro, 2014; Williams et al., 2018). Similarly, data generated from this study aligned with studies conducted by Reese et al. (2018) and Lekies, Yost, and Rode (2015), where the term *awareness* was included as part of subjects' narratives as they described their appreciation, or empathy, for natural environments in particular. The alternative terminology utilized by the young adult subjects to describe their empathetic perception for other people and the natural environment was seen throughout the following themes, beginning with *Experiences*.

Experiences

All of the respondents provided specific incidents or encounters that defined their WT program experiences, and subsequently, their perceptions of empathy. The shift in empathetic perception was often described through examples of their individual growth as they spent weeks in their respective WT programs. Representative examples included how certain respondents noticed the angst of their fellow peers and camp staff. This result was supported by both older (Brymer et al., 2010; Harper, 2009; Russell, 2006) and more

recently published WT literature (Conlon et al., 2018). I found that the examples provided by the study subjects, such as working outdoors with a team, caretaking, or realizing the consequences of not meeting camp expectations, were consistent with common elements seen in much of the research involving WT programs (Kamistsis & Simmons, 2017; Vankanegan et al., 2018) and served as an impetus for change (Fernee et al., 2019).

A significant or catalyzing event was found often in qualitative data detailed in this project's literature review. For example, Conlon et al. (2018) described "key moments" (p. 363) that were often identified as "game-changers" in how WT program subjects detailed their growth and recognized the benefits of their WT programs. In my study, the descriptions of "game-changing" moments related to the subjects' recollections of specific occurrences involving empathetic perception for fellow peers and nature, in which they faced a truth about themselves. These realizations by the subjects in my study resulted in perceived empathy as it took the form of their self-empathy and personal insight.

Self-Empathy

This theme seemed to emerge for five of the subjects as a result of being separated from their chaotic lives and brought to a natural, more calming environment. The respondents noted that their feelings of self-empathy emerged inherently as they observed their fellow peers and camp staff and realized that they were experiencing much of the same challenges and emotions. WT provided the subjects with an opportunity to

"take a break" from being angry, guilty, or otherwise troubled by the situations that resulted in their WT participation originally.

There is very little peer-reviewed research that focuses upon self-empathy, a term that is often used interchangeably with *self-compassion*, and it is nonexistent in WT research. Although neither term was found in the literature review data, alternative phrases such as *self-acceptance* (Barton et al., 2016; Russell, et al., 2015) and *self-worth* (Barton et al., 2016; Reese & Myers, 2011) may be identified as similar themes explored in available WT literature. Similar phrases such as *self-esteem* and *self-efficacy* are also seen throughout both the extant literature sets as well as my study. Although these terms are similar to *self-empathy*, *self-acceptance*, and *self-worth*, they imply a form of empowerment that may exclude the same level of understanding. Self-empathy, which is often referred to as self-compassion, is related to an understanding of oneself (Bluth & Neff, 2018; Neff, 2003). As the project respondents described their experiences of perception of empathy in terms of self-empathy, it was clear that they were also experiencing a newfound strength and personal insight that arose from feeling more worthy, and with a level of acceptance for themselves.

Personal Insight

Personal insight was expressed as a function of discovery during both specific and nonspecific WT experiences in which participants' perception of empathy was central. Perception of empathy was expressed by study subjects through examples involving how they interacted with peers, camp staff, and their parents and caregivers. Insight into nature, as expected, was not as prevalent in this example, although there were certain

examples in which subjects were able to “feel” the pain of a tree or experience sympathy for a wounded animal.

My own data were supported by findings in studies conducted by Reese et al. (2018) and Bowen, Neill, and Crisp (2016), who noted that personal insight in WT youth participants seemed to develop innately once the distractions of technology and stress were removed and replaced with healthier environments. This premise was found in some of the older literature (Bryson et al., 2013; Garst & Baker, 2001) that described elements of participant insight. The final theme, camp culture, was essentially the template or foundation that provided the buttress for the preceding emergent themes.

Camp Culture

How therapeutic wilderness camps are designed had a direct impact on how each participant in my study developed and recognized his or her perception of empathy. Respondents replied to the interview questions by often noting how the organization and expectations of the camp provided a foundation that directly influenced their perception of empathy on a regular basis. Respondents noted how their empathetic experiences were shaped through their group experiences, individual time when they could journal or reflect, and the requirements of their day-to-day life, which were often affected by inclement weather. Their descriptions were similar to those in the majority of WT literature included in my literature review (Barton et al., 2016; Reese et al., 2018; Russell, et al., 2015; Russell & Hendee, 2000; White, 2015). This is to be expected, in that a hallmark of WT programs is that this model provides an opportunity to heal and

increase overall wellness away from the distractions and distresses that are commonplace for much of the WT demographic.

Summary and Conclusions

This study yielded results that were consistent with current literature exploring the benefits of therapeutic wilderness intervention for at-risk or struggling youth. My study contributed to available research by exploring a topic that, prior to this project, had been missing from WT research: how the perception of empathy is affected by youth who participate in WT programming. The young adults interviewed for this study reported overwhelmingly that their experiences in a WT camp positively affected their ability to perceive empathy for themselves, other people, and, with some exceptions, for natural environments.

Five themes emerged via the responses to interview questions. These five themes—vocabulary, experiences, self-empathy, personal insight, and camp culture—resulted from descriptions of how the subjects experienced their individual perceptions of empathy. All of the respondents indicated that they continued to feel and demonstrate empathy for other people as well as nature after their program discharge, and more than half of the subjects (5) stated that they were considering careers in either WT or another form of environmental involvement. Finally, all of the subjects indicated that they felt that their WT experiences helped them improve in their daily functioning, and that their ability to feel empathy for others and the environments around them were beneficial in their attitudes and future outlooks.

In conclusion, this study was able to show that the perception of empathy is a worthwhile topic of exploration in WT research. How at-risk youth and young adults recognize, feel, and express empathy, for themselves and others, is directly related to a healthier level of functioning, and this aligns with much of the current WT research that focuses on self-esteem, self-confidence, and self-efficacy. Lastly, this original project has created possibilities for further exploration into the impacts of WT programs on the perception of empathy.

Conceptual Framework

The conceptual framework for this study was grounded in ecopsychology, the focus of which is exploring how human beings interact with the natural world (Harper et al., 2018; Roszak, 1992, 2001; Roszak, Gomes, & Kanner, 1995). Ecopsychology represents the essence of WT intervention, in that this branch of research extols the benefits of nature for how people think, feel, believe, and exist (Harper et al., 2018; Roszak, 1992, 2001). The significant element inherent in any WT program is that the youths are removed from their busy worlds, their technology, and life pressures, to live in an environment that requires more of them individually and as a group. The rationale of WT programs is that without these distractions, struggling youth will discover other parts of themselves and experience new ways of being.

The scope of this project related directly to ecopsychology, as functioning and healing in the natural environment provided the background of the subjects' experiences. For instance, many of the respondents described situations in which they developed a deep respect for the natural world and a desire to further protect it through their struggles

living outdoors, while at the same not damaging their environments in order to survive. Experiences that contributed to empathetic perception for fellow youths and camp staff occurred in similar ways as the challenges of the outdoors provided a backdrop for my study subjects to observe how others felt and reacted as a result of their own "stuff."

Limitations of the Study

Several limitations were expected to occur, and this was found to be the case as the interviews progressed. Through the literature review, it was noted that many of the therapeutic wilderness camps were private pay, costing tens of thousands of dollars over the months that the youth are there. This was found to have been the case for every one of the study subjects, and thus it may impact the study's generalizability for any WT program outside those that were chosen for their accredited status. Further, as expected, all of the participants were Caucasian and seemed upper middle class, although it is noted that participants' financial status was based upon their stories and my understanding of the fees charged by the programs based upon the programs' websites.

A surprising factor involving the research demographics involved gender, in that five out of the nine young adults interviewed were female, although available WT research indicates that most WT participants are White males. Although this study may not provide conclusive indications as to whether WT demographics are changing, the gender difference may suggest this.

Perhaps the main limitation of the study was the processing of the verbatim interviews. As was indicated in an earlier section, most of the current literature relies upon qualitative instruments or quantitative data to report the efficacy of WT programs.

Although face-to-face interviews provide a richer source of data, they also present a challenge in representing the data accurately and completely. In order to mitigate this potential issue, I used as many checks and balances as were available to me, such as maintaining a project journal, using an iterative process to review data, and the triangulation of both audio and transcripted data to ensure a valid, trustworthy study.

Recommendations

Empathy has been shown to be an important protective factor in developing adolescents. This study provides important information that addresses a gap in extant research regarding WT programs for at-risk youth. The data align with current research addressing the benefits of WT programs for other protective factors such as self-esteem, confidence, and managing emotions. Based upon the study limitations, it is strongly recommended that additional research be conducted involving other demographics of at-risk youth, including non-White youth and those who participate in state-run programs that tend to see more low-income referrals. Further, though this study involved more females than males, which did not align with much of the present research, further studies in this area may benefit from differences in empathetic perception between males and females, which has been shown by previous studies to be differentiated between genders. Generalizability of this project's results will depend on how other demographics of youth are included in future studies.

Implications

It is part of Walden University's mission to promote social change through education and advocacy. WT programs provide an alternative approach to working with

struggling adolescents who have not been successful in the usual clinical environments. Chapter three showed that empathy levels in adolescents have been directly related to both prosocial, beneficial behaviors as well as negative behaviors such as criminality and substance use. The subjects interviewed for Chapter four indicated that their WT experiences benefited them in their return to "normal" lives. As one young lady stated, "I literally would not, for a million dollars, take back that experience. What I learned there was invaluable about myself, about the way I think about … people."

From a practice perspective, this paper addressed two significant elements of how at-risk youth approach empathy: empathy for human beings and empathy for the natural world. I addressed how empathy is often considered developed rather than inherent. Developmental research has shown that empathy is not necessarily a part of typical adolescent growth, but more a factor of how individuals are raised, what examples they see around them in their communities, and how they assimilate this information. It was notable that none of the study participants indicated that empathy was discussed directly or taught as a component of their WT programs, even when they were meeting with their individual therapists. WT programs are already addressing protective factors such as self-confidence and self-efficacy; focusing upon perception of empathy as another protective factor will add to the benefits of WT programs for youth participants. The results of this study strongly indicate that empathy can be developed through inclusion in such an environment. I recommend that WT professionals incorporate empathy as another function of their therapeutic goals to further reinforce the perception of empathy, for both human beings as well as the natural world, as a distinct therapeutic goal.

Recommendations for Further Study

This study contributed to a gap in research regarding how empathetic perception could be recognized in young adults who participated in a WT program as adolescents. Further research into how empathy is expressed by WT program staff may be helpful as all nine subjects indicated that, while interacting with other youth participants, camp staff, and the natural environment with consideration and respect was an expectation, the concept of empathy was not typically a term they heard as part of the camp culture. Further, it was shown that, although subjects interviewed for this study could express their change in empathetic perception for individuals in their programs (peers and camp staff), more than half of them seemed to struggle with the concept of empathy for nature. Subsequent research should be considered as a means of linking the concept of empathy with the natural world. Study that focuses on further exploration involving the empathetic and ecopsychological connections between humans and their natural environments could provide a significant benefit to the 'animal, vegetable, or mineral,' life forms that rely on the earth to exist.

Conclusion

It was previously noted that, at the time of this study, the world is suffering significant turmoil on various fronts, most importantly, because of a disease that has resulted in tens of millions of infections globally with more than one million deaths. Empathy between fellow human beings has been brutally tested as government recommendations clash with individual belief systems. Challenges include wearing masks, social distancing, reduction in work force, the threat of increased infections as

schools open, and a presidential election in the United States that is only four months away, all of which seem to be intersecting on a daily basis.

Environmental scientists and biologists such as Dr. Aaron Bernstein (2020), Interim Director, Center for Climate, Health, and the Global Environment at Harvard University, and Dr. Jane Goodall (2020), a naturalist and primatologist who has spent more than 60 years in Tanzania, have postulated that a possible reason for the devastation of Covid-19 may be found within the natural world as human beings consume natural resources faster than they can be replenished, thereby reducing the effectiveness of natural elements such as forests and oceans to filter and cleanse our environments. Other environmental concerns such as worldwide deforestation, increased health problems and death attributed to pollution, and climate change continue to cause concern amongst scientists and environmental groups.

Empathy for the whole of the earth and all of her denizens may be the crucial element that acts as a catalyst for our survival as a species. Interconnectedness, a major theme for Ecopsychologists, infers that human beings may inherently recognize the value in our connection with the earth through each other. Thus, it is essential that our children, youth, and young adults are encouraged to develop and express interconnectedness and empathy for the natural world. Encouraging and providing resources and opportunities to develop these qualities may be the key to ensuring that they have a safe and stable future.

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Appendix A: Email Sent to Partner Organizations

Partner Organization Letter of Support

April 27, 2020

(Formal title)
(organization)

Dear (names),

My name is Sandi Robbins and I am a doctoral student in Walden University's College of Social and Behavioral Sciences. First, I hope the Corona virus is not affecting your wilderness therapy program too severely and that (organization) will be up and running soon. Our struggling youth need these opportunities!

I am writing this letter to explore the possibility that I may receive support in recruiting subjects for my dissertation capstone study titled: *How do Therapeutic Wilderness Experiences Affect Empathetic Perception in At-Risk Adolescent Youth?*

The purpose of this study is to contribute to the growing body of empirical and peer-reviewed research supporting the value of including therapeutic wilderness programs as an alternative or adjunctive mental health intervention for adolescents who are struggling with mental health or substance disorders. The population of this study involves young adults, between the ages of 18 and 20, who participated in any of the OBHC accredited programs while they were either 16 or 17 years of age.

May I respectfully request assistance from (organization) in posting the attached study invitations on your Facebook page and/or in an online newsletter. Both formats are included as attachments that can be cut & pasted.

The target date for responses from prospective young adult participants is Monday, June 1.

Please feel free to contact me with any questions at **sandra.shortrobbins@waldenu.edu**, or you may reach out to my program chair Dr. Eric Youn at **Eric.Youn@mail.waldenu.edu**

My sincerest thank you for your consideration and assistance!

Sandi

Appendix B: Templates for Partner Organization Invitations

Social Media: Facebook Invitation

Hello!

My name is Sandi Robbins. I am a doctoral student with Walden University.
The purpose of this post is to invite **young adults** who graduated from the (organization) when they were **16 or 17** years old to participate in a brief voluntary study that seeks to understand if or how your ability to feel empathy was affected by your experiences in the program.

Important information:

- The title of the study is: *How do Therapeutic Wilderness Experiences Affect Empathetic perception in At-Risk Adolescent Youth?*
- Empathy is defined as the ability to understand and share the feelings of another person or other living things.
- Ideal participants in the study are those who are between the ages of **18 and 20 years old** who attended a wilderness therapy camp when they were **16 or 17 years old**.
- You will be asked to participate in an interview that should be approximately one-hour long to discuss how you feel your empathy was affected by your program experience.
- The interviews will be conducted in person or through a HIPPA compliant video-conferencing program like Zoom or Doxy.
- This study is completely voluntary and participants may end their involvement at any time.
- Are you interesting in participating? Thanks!
  Please contact Sandi Robbins directly at **sandra.shortrobbins@waldenu.edu.**
  This invitation is scheduled to expire by **Monday June 1, 2020.**
- Information will be sent do you by email (preferably) or through regular mail.

Appendix C: Research and Interview Questions

Overarching Research Question:

Did young adult graduates of an adolescent wilderness therapy camp perceive a change in empathy as a result of their experiences in the program?

Interview Questions:

1. How would you describe the difference between the empathy you felt when you started the camp and how you felt when you left?
2. How long did it take for you to feel differently?
3. What experiences, while you were in the camp, affected your empathy?
4. Did your empathy change towards:
    a. The other teens in the camp?
    b. The camp staff?
    c. Nature itself, including any animals, plants, insects?
5. Do you feel that the empathy you felt when you left the camp affects how you look people or nature now?