The promise of the wild for families: factors of the Anasazi Foundation's wilderness therapy program associated with positive parent-adolescent relationships: a project based upon an investigation at The Anasazi Foundation, Mesa, Arizona

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THE PROMISE OF THE WILD FOR FAMILIES:

FACTORS OF THE ANASAZI FOUNDATION'S WILDERNESS THERAPY PROGRAM ASSOCIATED WITH POSITIVE PARENT-ADOLESCENT RELATIONSHIPS

A project based upon an investigation at The Anasazi Foundation, Mesa, Arizona submitted in partial fulfillment of the requirements for the degree of Master of Social Work.

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2015
ABSTRACT

The purpose of this study was to identify which aspects of The Anasazi Foundation’s wilderness therapy treatment are most strongly associated with positive parent-adolescent relationships after treatment. To this end, 59 parents and 36 adolescents completed surveys designed by the Anasazi Foundation to assess individual goal attainment, family relationships, continued connection to The Anasazi Foundation, aftercare follow-through, and physical and spiritual health after the adolescent had been discharged from the program, which lasted at least 49 days. Adolescent study participants ranged in age from 12 to 25 years, and parent study participants had children who ranged in age from 12 to 20 years. Findings show that parental goal attainment after the youth's discharge, adolescent commitment to aftercare, and adolescent spiritual health after treatment are the most strongly correlated with positive parent-adolescent relationships after wilderness therapy treatment. Additional findings show that adolescent physical health post discharge, adolescent connection to Anasazi after treatment, and parental support in the adolescent's aftercare plans are also positively correlated with positive parent-adolescent relationships after wilderness therapy treatment.
ACKNOWLEDGEMENTS

This thesis would not have been possible without the kind, generous, and curious staff members at The Anasazi Foundation. I am grateful to Clinical Director, Nate Mitchell, for his vision of what this project could be and his willingness to support student research. I am also grateful to Nate for turning his attention to this project even when he had many other professional responsibilities. Anasazi Research Coordinator, Jackie Skinner, was fabulous at tracking down details, mastering Excel, and helping me figure out how to reach Nate. I am thankful to all of the Walkers at Anasazi and to their families for completing our surveys and for sharing their journeys with me when I visited the trail at the completion of this project.

The support and encouragement I received from my thesis advisor and research professor, Gael McCarthy, from the very inception of my ideas buoyed me throughout the writing and researching process. Her attention to detail, her knowledge of research methods, her well-placed humor, and her determination to see me across the finish line were invaluable. The assistance I received from the Smith College School for Social Work statistical analyst, Marjorie Postal, helped me finish my thesis in many ways. Not only did Marjorie provide me with time and sanity saving statistical tests results, but she also helped me put this project into perspective on many occasions. Her calm and joyous presence was much appreciated.

I am thankful to my friends in the class of 2014 for providing me with encouragement, tips, distraction, laughter, and strong advice against pursuing an empirical thesis project. Finally, I am grateful to my partner, Julia, for coming home from life as a wilderness therapy guide each week with an endless supply of reminders about the power of wilderness therapy in real life, not just in research. Most of all, I am thankful to Julia for providing me with many reasons to see this thesis to an early, or at least timely, completion.
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CHAPTER I

Introduction

The effectiveness of wilderness therapy (WT) for adolescents and their families has been researched previously with promising results (Bettmann, Russell, & Parry, 2013; Harper, Russell, Cooley, & Cupples, 2007b; Somervell, & Lambie, 2009). This study seeks to understand how wilderness therapy contributes to positive parent-adolescent relationships by asking the question: which programmatic factors are most strongly associated with positive parent-adolescent relationships for families whose children have completed wilderness therapy at The Anasazi Foundation? I hypothesize that both high levels of commitment to parent therapy and high levels of adolescent use of aftercare services are most strongly associated with positive parent-adolescent relationships after completion of wilderness therapy at The Anasazi Foundation. Wilderness therapy as defined and implemented by the Anasazi Foundation consists of: a) a minimum of 49 days hiking and camping in the wilderness of Arizona; b) interventions by Master’s level clinicians and trained staff who interact with the participants daily; c) biological psychoeducation regarding how diet, exercise, sleep habits, and substance abuse affect one’s mood, reasoning abilities and resiliency; d) psychological interventions informed by up to date empirically-based, systems-oriented treatment models including Dialectical Behavioral Therapy and Emotion-focused Family Therapy; e) group work in the form of “bands”/milieu that addresses the social component of wellness, and f) a spiritual component that encourages participants to explore family faith traditions and beliefs and the role those beliefs and values
play in their lives (Anasazi Foundation, 2014c). Many of these components have been discussed as aspects of WT that make it a successful treatment modality (Williams, 2000).

This study examines the associations between participant investment in various components of wilderness therapy at Anasazi and parent and adolescent reports of parent-adolescent relationships. I pay particular attention to levels of parental investment in family therapy and levels of youth commitment to aftercare because I hypothesize these are be the most influential components of Anasazi’s program on positive parent-adolescent relationships. Additionally, my correlational analyses will be able to identify other relationships, if any, between other aspects of Anasazi’s wilderness therapy program and positive parent-adolescent relationships.

Adolescent and youth are used interchangeably and refer to both males and females between the ages of 12 and 17. I define parental investment as parents who focus on their own therapeutic healing and therapeutic goals in sessions, who use weekly letters to their children to address “awakenings, forgiveness, and matters of the heart,” who put significant effort into homework assignments, and who are able to build a strong therapeutic alliance with their therapist (Anasazi Foundation, 2014b). I define youth commitment to aftercare as moving forward on individual and family goals; use of alumni services; commitment to the physical, spiritual, and educational lifestyle learned in treatment; and family relationships that allow for trust, honesty, conflict and repair, authenticity, and a sense of belonging and teamwork (Anasazi Foundation, 2014d). Parent-adolescent relationships are measured with Anasazi’s self designed Walking in the Wilderness of the World instrument (youth and parent versions). Parental investment in therapy is measured by parental goal attainment and could be further measured in future studies with Anasazi’s self-designed Parent Session Evaluation.
Research suggests that wilderness therapy is effective for a variety of adolescent and young adult clients (Bettmann et al., 2013; Harper et al., 2007b; Somervell & Lambie, 2009); however, the factors contributing to the effectiveness of wilderness therapy are less well known. The Anasazi Foundation is unique in its high expectations for parental involvement and for its provision of aftercare services for alumni. This study will develop findings that can support (or are unable to support with available data) the importance of parental therapeutic investment and alumni commitment to aftercare at The Anasazi Foundation. As previously mentioned, this study may also develop findings supporting the importance of other programmatic components on positive parent-adolescent relationships. These findings will help The Anasazi Foundation improve service delivery. Additionally, this study will add to the wilderness therapy field by providing further evidence about which aspects of wilderness therapy at Anasazi are associated with positive parent-adolescent relationships post-treatment.

This study is relevant to social work practice because it will elucidate which aspects of wilderness therapy contribute to client and family success, thereby helping The Anasazi Foundation and the wilderness therapy field develop more effective treatment. This study could influence policy about health insurance coverage of wilderness therapy because Anasazi is a licensed and accredited level II behavioral health care provider (Anasazi Foundation, 2014a). If Anasazi’s use of parental therapeutic involvement and alumni services (or any other variable) are shown to have significant levels of correlation to lasting positive change in families, insurance companies may be more apt to cover wilderness therapy treatment at other programs implementing similar interventions.
CHAPTER II

Literature Review

This review of the literature will look at research concerning the effectiveness of wilderness based mental health treatment. I will begin by reviewing literature that establishes a definition of wilderness therapy (WT). I will then examine literature analyzing wilderness based treatment programs that do not meet Russell's (2001) criteria for WT, yet does suggest that WT is effective. Next, I will look at literature suggesting that WT is effective for a variety of client populations. Lastly I will review literature analyzing the importance of parent involvement in WT treatment.

What is Wilderness Therapy?

Russell’s (2001) article reviews the evolving definition of wilderness therapy from its roots in “tent therapy” to today’s move toward developing a more standardized definition and requirements for licensure. The article concludes that characteristics of wilderness therapy include state licensure, regular client contact with a licensed clinician, program supervision by a licensed clinician, family engagement, trained therapeutic staff, development of a treatment plan for each client, monitoring of clients’ physical wellbeing, evaluation of treatment effectiveness, and follow-up support or case management to ensure client gains are maintained. Russell (2001) calls for further research and discussion to define wilderness therapy, develop standards, and evaluate its effectiveness across different client populations.

Williams’s (2000) article compares and contrasts traditional group therapy with wilderness therapy. The article notes that both types of therapy follow the same stages of group
development. However, wilderness therapy differs from traditional group therapy in “content, intensity and duration” of these stages (Williams, 2000). Specifically, WT provides constant contact with group members and therapeutic staff, so that transferential issues are brought to the surface and resolved more quickly (Williams, 2000). Furthermore, the remoteness of the therapeutic setting requires participants to develop trust and a strong therapeutic alliance more quickly in order to be successful as a group (Williams, 2000). Consequences in WT are natural and immediate, and there is greater peer pressure to cooperate because of the significant role each member plays in the group's success (Williams, 2000). Wilderness therapy also provides staff with a larger window into client behavior than is available in a traditional group setting (Williams, 2000). Finally, WT provides more than just verbal opportunities to learn and express oneself; it encourages physical and emotional risk-taking within the bounds of reasonable safety (Williams, 2000).

**Studies Suggesting Effectiveness of Wilderness Therapy Conducted in non-WT Settings**

Tucker, Javorski, Tracy, and Beale (2013) conducted an exploratory, quasi-experimental study assessing the effectiveness of adventure therapy versus individual and group therapy as a community-based mental health treatment for adolescents. The adventure therapy took place for at least two hours once a week and involved overcoming physical obstacles in order to develop a sense of mastery (Tucker et al., 2013). Of the 1,335 participants, 59% were male and 72% were white. Participants were coping with disruptive disorders (38.7%), adjustment disorders (21.6%), mood disorders (19.1%), and anxiety disorders (12.1%). Ninety percent of the participants qualified for Medicaid and free or reduced lunch (Tucker et al., 2013). The study compared clinician ratings of participants at intake and discharge on the Ohio Youth Problem Severity Scale (Tucker et al., 2013). Some participants were involved in just individual, group or
adventure therapy, while others participated in more than one mode of treatment (Tucker et al., 2013). A shortcoming of Tucker et al.'s (2013) study was that clients were evaluated and assigned to treatment by clinicians in the community health center, meaning the placements were not randomized and there was no comparison population. Furthermore, very few clients participated in only adventure therapy, and clients assigned to adventure therapy or adventure therapy in combination with other therapy presented with greater severity of symptoms, both of which make comparison among groups difficult (Tucker et al., 2013).

The results of the research indicate that clients receiving adventure therapy experienced faster and more significant improvement in symptoms, and clients who received adventure therapy as part of their treatment were more likely to be considered recovered upon discharge (Tucker et al., 2013). The findings also suggest that African-American and female youth are especially responsive to adventure therapy treatment (Tucker et al., 2013). However, the small sample size of African-American adolescents in this study makes these results impossible to generalize. The effectiveness of adventure therapy among adolescents of color deserves further research, as the results of this study indicate that African-American adolescents experience gains equal to that of white adolescents when they participate in adventure therapy, while their gains in individual or group therapy are significantly less than those of white adolescents (Tucker et al., 2013). This study of Anasazi aims to include a diverse sample given Anasazi's non-profit status and scholarship program. Overall, Tucker et al.'s (2013) study suggests adventure therapy in a community-based mental health setting is an effective treatment for adolescents. These findings make it likely that wilderness therapy, which is greater in duration and intensity than adventure therapy, would produce similar if not more positive outcomes, especially with youth of color, than Tucker et al. (2013) found. Given Tucker et al.'s (2013) encouraging findings about the
effectiveness of wilderness based treatment, this study of Anasazi is worthwhile, as it will help to isolate the most influential aspects of WT treatment on parent-adolescent relationships. Hutson’s (2014) empirical study addresses the lack of research looking at the effectiveness of adventure therapy for at-risk populations. Hutson and the urban adventure therapy program that she studied (Chicago Adventure Therapy - CAT) define at-risk adolescents as those meeting one or more of the following criteria: a) between the ages of 15 and 22, b) with insufficient family support, c) with insufficient provision of education, d) with deficiencies in social skills, e) with clinical mental health needs, f) who are involved in the criminal justice system, g) who engage in disruptive behavior, h) who are at-risk of dropping out of school, i) who are gay or lesbian, and/or j) who are living in poverty. Hutson’s (2014) study utilizes both the Resiliency Scales for Children and Adolescents (RSCA) and the Home and Community Social Behaviors Scales (HCBS) to assess program outcomes. This study demonstrates that as participants’ self-reported sense of mastery and relatedness increase, their emotional reactivity decreases significantly. Although Hutson (2014) did not find significant changes in participants' sense of overall social competence or antisocial behavior, she did find a decrease in one aspect of antisocial behavior -- defiant and disruptive behavior (Hutson, 2014).

Although Hutson’s (2014) study sought to look at the efficacy of adventure therapy with at-risk populations, which are typically under-represented in wilderness therapy, the program was located in an urban setting and was unable to take participants into wilderness environments. Instead, adolescents participated in one of five different adventure programs including paddling, rock climbing, navigation, winter sports, camping, and cycling that lasted between three and nine weeks, two to four hours per session (Hutson, 2014). Though this study did not take place in a WT setting and did not involve an extended length of interaction between participants, peers, and
counselors, it does point to the importance of building mastery and developing relationships in an adventure based setting, both of which are central aspects of WT (Williams, 2000). Given Hutson's (2014) finding that emotional reactivity decreases significantly as mastery and relatedness increase, this study suggests that wilderness therapy may be even more likely to produce similar behavioral outcomes, given that WT involves extended interactions between peers and counselors. It is important to note that Hutson's (2014) sample size is small (N=29), which makes the findings difficult to generalize. This study is encouraging in its findings, however, and more studies that look at at-risk youth participating in WT programs and have a larger sample size are needed. The current study of Anasazi incorporates at-risk populations due to Anasazi's non-profit status and strong scholarship program.

**Effectiveness of Wilderness Therapy**

Smithson’s (2009) master’s thesis completed as partial fulfillment of her Master of Social Work degree conceptualizes WT through relational-cultural theory and narrative theory in order to elucidate why and how various WT practices work. Smithson (2009) states that relational-cultural theory shifts the clinical focus from individuation and separation to relationship and connection. Relational-cultural theory views pathology as stemming from chronic disconnection (Smithson, 2009). Relational therapists help the client move back into growth-fostering relationships while remaining emotionally available, respectful, responsive, open to being moved, and empathetic so as to help clients discover new relational possibilities (Smithson, 2009). The social and environmental structure of WT is based in relational-cultural theory given that field staff are guides rather than authoritarian figures wielding power, given that failures and successes result from clients’ decisions and actions, and given that the group is a central aspect of the therapeutic experience. The relational-cultural theoretical underpinning of WT that
Smithson (2009) elucidates, supports my hypothesis that in order for parent-adolescent relationships to improve, parents must be deeply involved in their own therapy while improving their abilities to create growth-fostering relationships with their children.

Smithson (2009) also analyzes WT through the lens of narrative therapy, which she states views meaning and interpretation as inexorably tied to experience and which helps clients re-author their narratives by externalizing problems and by making clients the experts of their own lives. Smithson (2009) concludes that WT field guides reflect and reframe clients’ existing narratives in order to help them understand the past while providing new experiences and strengthening new narratives in order to broaden clients’ abilities to act differently in the future. These new narratives are formed in a small group setting that provides reinforcement of each client’s new narratives and accompany identity transformation (Smithson, 2009). Written correspondence between clients and their families allows for change in existing family narratives, creation of new expectations, and preparation for future interactions (Smithson, 2009). This narrative theoretical underpinning of WT supports my hypothesis that utilizing aftercare services contributes to positive family relationships because adolescents and families are able to maintain and strengthen narratives they have formed in WT.

In their 2013 study, Bettman, Russell, and Parry acknowledge that many studies have shown the effectiveness of wilderness therapy, yet not much research has been done to examine what specific interventions make WT effective. Bettman et al. (2013) ask if WT can effectively address substance abuse in adolescents by examining a licensed WT program that employs licensed mental health professionals and uses evaluations and analyses of treatment to improve the quality of care. The study began with an N of 189, and participants completed pre, post, and follow-up evaluations and assessments to gauge a) the outcome of the treatment (dependent
variable), b) the stage of change the participant was in at those times, and c) to assess temptation coping responses among adolescents with a history of alcohol and drug abuse. Bettman et al. (2013) used three assessment tools developed by reputable sources: The Youth-Outcome Questionnaire (Y-OQ), The University of Rhode Island Change Assessment (URICA), and The Adolescent Relapse Coping Questionnaire (ARCQ). Unfortunately, Bettman et al. (2013) were unable to obtain follow-up data for a majority of the participants, so they could only provide follow up findings for 41 participants who completed the study. Of the 41 participants, 66% were female, 81% were White/non-Hispanic, and the average age was 15.8 years. Bettman et al. (2013) found that the stage of change going into treatment did not affect the stage of change at the end of treatment. Bettman et al. (2013) also found that participants experienced reduced symptoms in interpersonal distress, somatic, interpersonal relations, critical items (such as suicidality), social problems, and behavioral dysfunction at the end of WT treatment. The greatest predictor of client improvement was the WT program’s ability to instill abstinence-focused coping strategies in its clients (Bettman et al., 2013).

Bettman et al.'s (2013) study cannot be generalized for several reasons including the small number of participants. Additionally, the study does not look at socio-cultural factors of the participants including: race, family involvement, follow-up support, socio-economic status, or communities of origin. While Bettman et al.'s (2013) study encourages referrals to WT for adolescents with substance abuse issues, it does not speak to the effectiveness of interventions specific to WT in treating substance abuse. It would be useful to know what other factors could have contributed to a decrease in substance use after wilderness therapy including parental involvement in their own therapy and adolescent use of aftercare services. This study suggests WT's effectiveness with adolescents engaged in substance use, but it does not address how
change is maintained after treatment. The current study of Anasazi has had as its aim understanding which parts of WT treatment are most strongly associated with positive parent-adolescent relationships, which may also shed light on how substance abuse can be avoided after treatment.

Somervell and Lambie’s (2009) qualitative study sought to evaluate the process and impact of a wilderness therapy program for adolescent sexual offenders aged 13-18. Participants engaged in a four to six day WT experience as one component of a program that included assessment, individual therapy, and family therapy (Somervell & Lambie, 2009). Somervell and Lambie (2009) developed four themes from coded data of participant-observations and interviews with adolescent participants and therapists. Adolescents and therapists noted that WT facilitated change through enhanced relationships, improved view of self, intensity of experience, and aiding disclosure (Somervell & Lambie, 2009). Enhanced relationships were the most commonly reported theme among both the participants and therapists (Somervell & Lambie, 2009). Somervell and Lambie (2009) noted that these themes were difficult to separate from each other, yet they combined to create an environment in which the adolescents were more quickly, easily, and deeply engaged in the therapeutic process, which speaks to the effectiveness of WT due to deep, personal engagement in treatment. The findings recommend WT for treating adolescent sexual offenders among other groups. It is important to note that the small sample size of seven adolescents and four therapists and the lack of a control group for comparison limit the generalizability of Somervell and Lambie's (2009) findings. Facilitating a similar level of deep, personal involvement for both adolescents in WT and their parents may further improve adolescent and family outcomes from WT treatment, as this study of Anasazi has aimed to examine.
Rothwell’s (2008) master’s thesis completed as partial fulfillment of her Masters of Social Work degree examines whether or not spirituality can be a part of wilderness therapy treatment. Twelve wilderness therapy field staff from four WT programs in North Carolina were interviewed about how and when they see spirituality present in the lives of youth in WT programs, the relationship of spiritual experiences to the outdoors, spiritual programmatic components, and staff's own relationship with spirituality (Rothwell, 2008). This study utilized a flexible research design method to collect qualitative data using convenience and snowball sampling, and participants answered nine open-ended questions. Given the lack of information on the intersection of spirituality and wilderness therapy, Rothwell (2008) chose an appropriate research method despite the biases inherent in convenience sampling. It is not clear if the WT programs from which Rothwell (2008) recruited study participants were related to each other by a parent organization given that they were all in North Carolina. Broader geographic sampling may have made the results of this study more generalizable. Rothwell (2008) states that she is a past WT field guide, and this perspective may have influenced her study and findings. Overall, this was a very sound initial, exploratory study.

By coding and analyzing interview transcriptions, Rothwell (2008) found that spirituality in wilderness therapy helps students develop introspection, experience community engagement, and incorporate wellness practices into their lives. In her interviews, Rothwell (2008) also identified a theme that WT is successful because it promotes connection to self and others in addition to promoting new life habits. Rothwell’s (2008) study suggests that Anasazi’s spiritual component of their WT program may contribute to positive parent-adolescent relationships given that personal introspection, community engagement, and wellness are important components of any positive relationship with one’s self and with others. Rothwell’s (2008) finding that WT
promotes connection to self and others while fostering new life habits is further evidence of WT’s effectiveness, and this supports my hypothesis that positive parent-adolescent relationships are associated with parental investment in therapy (connection to self and others) and with youth engagement with aftercare services (connection to self, others, and new life habits).

Harper, Russell, Cooley, and Cupples (2007b) conducted year-long, longitudinal case studies to determine the impact of WT on adolescents' ability to maintain changes made in treatment and the impact of WT on their family's functioning after a 21-day WT program at Catherine Freer Wilderness Therapy (CFWT). The study included 525 participants aged 13-18 years, and 62% of participants were male (Harper et al., 2007b). CFWT therapists surveyed parents of participants over the phone before their child's admission, two-months after treatment, and 12-months post treatment (Harper et al., 2007b). Harper et al. (2007b) designed a 60-item questionnaire through practitioner-academic collaboration that aimed to understand adolescent and family outcomes of WT from the family's perspective by assessing the following five categories: family functioning, adolescent behavior, adolescent mental health, school success, and positive social relations. At two months post treatment, Harper et al. (2007b) found that parents perceived adolescent behavior (following rules, communication, impulsivity, and anger management) to improve significantly (Harper et al., 2007b). In the mental health category, parents perceived their teen's emotional problems and substance use to improve the most (Harper et al., 2007b). Parents reported significant improvement in school attendance in the school success category for males and improvement in appropriate friend selection in the social relations category for females (Harper et al., 2007b). Notably, Harper et al. (2007b) found that family functioning decreased after WT with the only improvement in the category being that the child participated more actively in chores. At 12-months post treatment, the only statistical
differences from the two-month follow up were further decreases in family functioning and
further improvements in adolescent mental health and school performance. Harper et al. (2007b)
reason that, although adolescents showed significant improvements in mental health, problem
behaviors, school success, and social relations, these outcomes did not create significant change
in the family context (Harper et al., 2007b).

This study only used parent perceptions of adolescent progress; however, including
adolescent self-reports and therapist reports would have been a more complete method for
assessing adolescent progress and family functioning. The longitudinal design and N of 525 are
great strengths of this study because changes in behavior, personality, and family functioning are
not always immediately obvious. Further research in the field of maintenance of change should
extend the longitudinal design to more accurately measure changes in the family. It is fascinating
that Harper et al. (2007b) found such improvements in adolescent mental health, problem
behaviors, school success and social relations while also finding that family functioning
continued to decrease after treatment. Future research could examine the motivations (or lack
thereof) that wilderness therapy clients have to establish and maintain change within their
families. Harper et al.'s (2007b) study suggests that family involvement in WT treatment is
essential to creating lasting family change. This study of Anasazi has aimed to include
adolescent perceptions of their own and their families’ outcomes post WT treatment and to
assess for associations between parent involvement and improved parent-adolescent
relationships.

Herrity’s (2009) master’s thesis completed as partial fulfillment of her Master of Social
Work degree was a quantitative, quasi-experimental follow-up study of the Catherine Freer
Wilderness Therapy Program in Albany, Oregon. Due to the primary study’s insufficient data,
Herrity (2009) sought to further assess WT’s potential as a transformative experience for adolescent with histories of trauma. Herrity (2009) defined a transformative experience as a reduction in trauma symptomatology, an increase in psychological resilience, and an increase in psychosocial and occupational functioning as measured by the DSM IV-TR Global Assessment of Functioning Scale (GAF). Herrity (2009) employed a pre-post research design, and study participants completed measures during the initial stage of treatment (six days into a 21 day WT program) and during their termination stage of treatment (day 21). Herrity (2009) used the self-reporting series of the Child PTSD Symptom Scale and the Resiliency Scale to measure trauma symptomatology and psychological resilience. GAF data were taken from participants’ intake and discharge summaries. The sample consisted of 57 participants who had completed a 21-day Catherine Freer Wilderness Therapy Program from April 2008 through March 2009. The majority of participants were male (65%), white (90%), and reported trauma histories (54%). Herrity (2009) found that WT had a significantly positive effect on participants with and without reported trauma histories; however, WT was found to be slightly more effective at producing a transformative experience for adolescents without a reported trauma history. Herrity (2009) reasons that those without trauma histories were more likely to have a transformative experience in WT because trauma can have a detrimental impact on an individual's ability to regulate affect and to connect with others. Herrity's (2009) study brings up the importance of healing from trauma in order move forward in positive relationships with one's self and with others. Therefore Herrity's (2009) study suggests that parental involvement in WT treatment many be an important contributing factor to healing and improving parent-adolescent relationships.
Importance of Parent Involvement in Wilderness Therapy Treatment

Harper’s dissertation (2007a) looks at the impact of family involvement in adolescent WT treatment. In the qualitative portion of Harper's (2007a) study, he interviewed 14 adolescents and their parents and 20 WT staff seeking to answer the following questions; a) What theory guides family involvement in WT programs? b) What processes are utilized in working with families in WT? c) What meaning does the WT experience hold for the families? and d) How did WT affect individual and family outcomes? The quantitative portion of Harper's (2007a) study utilized pre-assessments and post-assessments at two months with 132 adolescents and their families. Adolescent participants were 66% male with an average age of 15.8 years. Using the following instruments: a) Brief Family Assessment Measure (BFAM), b) Youth Outcome Questionnaire, and c) Working Alliance Inventory (WAI) Harper (2007a) aimed to evaluate family functioning, adolescent outcomes, and the working alliance between the adolescents and families, and their mental health providers. Harper (2007a) conducted both the qualitative and quantitative portions of this study in collaboration with two WT programs; one, three-seven week program located in Albany, OR and one, eight-week program located in Loa, UT.

Two of the most significant findings in the qualitative portion of Harper's (2007a) study were that WT programs are usually tried after other forms of treatment are found not useful, and that family systems change as individuals undergo their own changes. Families in Harper's (2007a) study turned to WT programs when family and community resources could not meet the adolescent's needs. The philosophy guiding family involvement was based on family systems theory which posits that, “as with any system, attempts to alter one component (or person) in a family system will typically elicit resistance from other members until a new pattern is established by mutual adjustment” (Harper, 2007a). Families in Harper's (2007a) study
recognized that a new dynamic or reorganization in the family occurred during the WT treatment. This finding speaks to the essential nature of parent involvement in WT. Adolescents are only be able to maintain change when families work together to establish new patterns and norms. This study of Anasazi has provided further information on the role of parent involvement in WT treatment.

Harper (2007a) found that The Brief Family Assessment Measurement (BFAM) suggested improved family functioning as a result of WT treatment with effect sizes between $d=0.2$ and $d=0.4$ (between self-rating and general scales) (Harper, 2007a). Results showed that treatment length, gender, and age of participants had slight impacts on the effect sizes (Harper, 2007a). Youth-Outcome Questionnaire results supported the effectiveness of WT as a treatment modality with effect sizes of $d=0.4$ (Harper, 2007a). Working alliances between adolescent, families, and program staff measured by the Working Alliance Inventory (WAI) showed significant effect size of $d=0.5$ (Harper, 2007a). The quantitative portion of Harper's (2007a) study supports the effectiveness of WT, family involvement informed by family systems theory, and strong working alliances between participants, their families, and program staff. Harper’s dissertation is a valuable study looking specifically at what guides family involvement in WT and how family involvement can have an impact on the identified patient and the family system. More research should be done to understand what variables regarding family involvement are most helpful in facilitating positive adolescent and family outcomes in WT treatment. This study of Anasazi has examined levels of parents’ involvement in their own therapy while their adolescents were in WT in order to help answer this question.

Erickson’s (2005) dissertation, completed as partial fulfillment of his Doctor of Philosophy Degree, is a qualitative study of six sets of parents of adolescents who participated in
the Anasazi WT program. Erickson's (2005) study seeks to understand how the Anasazi WT program changed parenting practices and family relationships for study participants. Erickson’s (2005) exploratory study specifically selected a sample of parents who had mixed experiences with Anasazi’s WT program, although he noted that it was difficult to find parents who had negative experiences. Erickson's (2005) qualitative study asked the following questions: a) What is the nature of your relationship with your adolescent child after having experienced the Anasazi program? b) Please tell me about the ideas that most influenced your parenting before Anasazi. What is your opinion about what you see as the common ideas and techniques about parenting adolescents in our culture today? Has your Anasazi experience influenced these opinions? If so how? c) In what ways could the Anasazi experience have been more helpful to you in your parenting and your relationship with your adolescent? and d) What would you say has been the feel of our discussion today in terms of responsiveness versus resistance? (Erickson, 2005). Responsiveness and resistance are two ways of being, which are presented to parents in a training. The main concept is that our way of being is always in relation to others; responsiveness honors the other as a whole person worthy of respect whereas resistance acknowledges the other as an impediment or problem, or simply as irrelevant (Erickson, 2005).

The six major themes that emerged in Erickson’s (2005) analysis of the interviews were: a) the influence of the responsiveness versus resistance ideas on parent-adolescent relationships and lives, b) specific changes in parents-adolescent relationship due to overall Anasazi experience, c) parents adopted a more critical approach to their parenting, d) Anasazi as a spiritual experience, e) disappointments and where Anasazi needs improvement, and f) interviews were a responsive experience. Erickson's (2005) study explores what works in terms of parent involvement and elaborates on the growth parents experienced in their own therapy.
Erickson (2005) also found that parents felt that the aftercare services needed improvement, with several parents suggesting that adolescents could be better prepared to transition home and apply their learning to home-life situations. This study of Anasazi has been built upon Erickson's (2005) findings by looking for patterns between parent involvement and positive family outcomes with a larger sample, and by assessing relationships between use of aftercare services and positive family outcomes.

**Synopsis of Literature**

All of the aforementioned studies provide support for the effectiveness of wilderness therapy with adolescents. Most of the above studies suggest that adolescents, parents, and therapists should be included in the quest to understand adolescent outcomes and their motivation to maintain change post wilderness therapy treatment. Additionally, most studies highlight the importance of continuing to design longitudinal studies. All of the above researchers recognize the need for large sample sizes and a long duration of wilderness therapy treatment, probably a month or more. Although not all of the above authors address it, these studies highlight the need to examine the effectiveness of WT for socioeconomically at-risk youth because this population has not been studied much in the field of wilderness therapy, and there is reason to believe that such treatment could be extremely useful. The research that does exist studying socio-economically diverse adolescents looks at programs that are using only aspects of WT. Being taken out of one’s community of origin and immersed in the wilderness, living and interacting with counselors and peers 24/7, group processing of unfinished business from daily interaction, and the opportunity for solo self-reflection in the wilderness environment are important factors in the efficacy of WT (Williams, 2000). Because the current research does not examine WT programs that provide this kind of intervention for socio-economically
disadvantaged adolescents, I cannot document its efficacy in benefitting the unique issues these populations face. The Tucker et al. (2013) article indicates there may be differences in the effectiveness of adventure therapy among different races and genders. Further research is necessary to confirm this and determine if this would be equally true of wilderness therapy. Harper’s (2007a) and Erickson’s (2005) studies provide findings suggesting the importance of family involvement and aftercare in establishing positive parent-adolescent relationships after wilderness therapy treatment.

Implications for Proposed Study

These articles clarify that self-report data are a reasonably feasible and valid measure of wilderness therapy outcomes, and they emphasize the importance of including adolescents, parents, and therapists in assessment of outcomes if possible. The articles also show that in order to understand the effects of wilderness therapy, researchers should study programs categorized as wilderness therapy as opposed to adventure therapy. This study of Anasazi has developed an evaluation of one wilderness therapy program by examining the relationships between many independent variables, components of Anasazi's wilderness therapy program, and the dependent variable of Anasazi's impact on parent-adolescent relationships by gathering information from youth and parents. Evaluating only one program will allow for control of variation across programs in duration, staffing structure, client population, and therapeutic methods. This study aimed to acquire a sample size of at least 50 families with adolescents participating in a seven week (or longer) wilderness therapy program, and the study also aimed to include some families of lower socioeconomic status backgrounds given Anasazi’s non-profit status, ability to accept insurance payment, and scholarship fund. Most importantly, this study has gone beyond assessing for effectiveness to evaluating specific factors thought to contribute to the success of
wilderness therapy. Considering Erickson’s (2005) research of the Anasazi WT program in particular, this study’s focus on evaluating parent involvement, diversity of participants, and aftercare addresses the issues discovered in his qualitative study with parents.
CHAPTER III

Methodology

Purpose and Question

The purpose of this study was to understand which factors of Anasazi’s wilderness therapy program are most strongly associated with positive parent-adolescent relationships. I hypothesized that high levels of parental therapeutic investment and youth utilization of aftercare services were strongly associated with positive parent-adolescent relationships. This study was designed to either support or be unable to document the relationship of these (or other) programmatic features with positive parent-adolescent relationships after wilderness therapy treatment at Anasazi. The research question was: which programmatic factors are most strongly associated with positive parent-adolescent relationships for families whose children have completed wilderness therapy at The Anasazi Foundation?

Methods and Design

This was a quantitative study using correlational analyses to determine the strength of association between independent variables (programmatic factors) and the dependent variable (parent-adolescent relationship). Data collection was based on surveys that were designed and administered by The Anasazi Foundation, and I provided a secondary data analysis of data that were routinely collected by The Anasazi Foundation; my study proposal was reviewed and approved by the Human Subjects Review Committee of the Smith College School for Social Work before the study began. (The Smith College Human Subjects Committee letter approving
this study is contained in Appendix A of this report.) Adolescent alumni and parents of alumni routinely complete Anasazi's self-designed "Walking in the Wilderness of the World" survey post discharge online or over the phone with Anasazi Alumni Services staff members depending on participant preference and internet access. Anasazi administered the surveys in both formats and obtained participants’ consent to the use of their data. (A copy of the consent is included in Appendix B.) This quantitative secondary data analysis research design allowed for efficient and clear analysis of the relationships between the independent and dependent variables by highlighting which programmatic factors at Anasazi are most strongly associated with positive parent-adolescent relationships. A reliability concern was that respondents had been out of the Anasazi wilderness therapy program for varying amounts of time when they completed the “Walking in the Wilderness of the World” survey; therefore, the instrument’s reliability may have diminished for those who had been out of the program longer. Validity could have been an issue with Anasazi's self-designed instrument, so that what it was aimed at measuring may not have been measuring that element. It is possible that respondents were influenced by the online presentation of the surveys, the Anasazi specific language, and/or the Alumni Services staff member administering the survey over the phone. Respondents could have relied on their general feelings about the program rather than answering based on their actual experiences. Any of these aspects may have influenced the findings in unknown ways.

Sample

This study used a nonprobability sample because a probability sample was not attainable or ethical. The population comprised all Anasazi alumni and parents of alumni who had completed the wilderness therapy program between September 2013 and February 2015. Anasazi used a convenience sample by inviting all Anasazi alumni and parents of alumni to participate in
this study with the understandings that their participation was not required, that they could drop
out at any time, and that their services would not be affected by their participation. The Anasazi
Foundation sent email reminders to all alumni and parents of alumni inviting them to complete
routinely administered post-treatment measures through Outcome Tools, which is Anasazi’s data
collection software. Anasazi staff members followed up via email with those who did not
complete the survey, and Anasazi Alumni Services staff followed up by phone as necessary. The
findings are generalizable to Anasazi clients at best. By inviting all alumni and alumni parents
from September 2013 to February 2015 to participate, Anasazi hoped to obtain a heterogeneous
and representative sample.

A possible bias Anasazi may have encountered with this sampling technique is that
alumni and alumni parents with particularly positive or negative relationships with their
therapists, other staff, or the Anasazi Foundation may have been more likely to participate. This
might have led to a self-selecting sample of clients with especially high or low investment in the
program and with especially positive or negative parent-adolescent relationships. Collecting
these data was feasible given that The Anasazi Foundation was already in that process; however,
there was an initial issue with including informed consent language in the instruments, which
slowed data collection. Other feasibility challenges were the geographic distance between the
Anasazi Foundation and myself as researcher, and Anasazi’s limited staff hours available for this
project.

In order to obtain informed assent and consent of alumni and their parents given the
secondary data analysis structure, I worked with Anasazi staff members to create an informed
assent / consent section of the "Walking in the Wilderness of the World" surveys. This section
explained that the survey was for programmatic evaluation, that participation was entirely
Data Collection Methods

The demographic data collected from youth surveys were: name, date of birth, gender, and Anasazi program (adolescent or young adult). The parent survey asked for the respondent's name, his or her child's name, child's date of birth, and child's gender. Anasazi provided me with information about the respondents' race, which had been asked in other routinely collected measures. Parents were asked one qualitative question about hopes, concerns, and feedback, and adolescents were asked this question in addition to another qualitative question about what kind of physical exercise they had engaged in since discharge. Likert scale questions addressed the following topics: a) attainment of personal/therapeutic goals b) program connection to Anasazi after discharge, c) aftercare follow through, d) physical health (adolescents only), and e) spiritual health (A copy of all survey questions is included in Appendix C).

Quantitative data came from adolescent and parent versions of the "Walking in the Wilderness of the World" survey with Likert scales designed by Anasazi. Adolescent alumni and parents each completed "The Walking in the Wilderness of the World" survey within the first year after the adolescent was discharged. Anasazi plans to administer the "Walking in the Wilderness of the World" survey beyond a year after discharge and to collect data from more matched pairs of adolescents and their parents after the completion of this study. Due to the time frame of this study, any data with the appropriate consent were used. The study aimed to assess 50 matched pairs of adolescents and parents in order to link their responses to assess for levels of
agreement about positive parent-adolescent relationships. Anasazi was only able to collect 23 matched pairs of data in the time allotted, so I also used data from 95 individual participants (59 parents and 36 adolescents).

Obtaining 50 matched pairs of parent and adolescent data sets presented a challenge; however, I was able to obtain statistically significant correlations with p values ranging from .001 to .035 in my analysis of data from individual participants. Alumni Services staff at Anasazi check in with alumni on a monthly basis for a year after discharge via phone, email, or social media. Alumni Services staff were trained to ask participating alums if they had completed the "Walking in the Wilderness of the World" surveys. Alumni Services staff were also trained to administer the survey over the phone and record answers for participants if participants chose this option. The ease of the online survey in addition to in-person help and reminders from Alumni Services probably increased participant response rates. As noted above, data were recorded in Anasazi’s database called Outcome Tools. Data were imported into an Excel spreadsheet and de-identified by Anasazi's Clinical Director and/or Research Coordinator. These data are stored securely and password protected. Any data sent to this researcher and the Smith College School for Social Work statistical analyst were de-identified first.

**Data Analysis**

This study conducted a correlational secondary data analysis. This study looked for statistically significant levels of correlation between levels of participant commitment to a variety of Anasazi’s programmatic components and positive parent-adolescent relationships. To begin, I calculated the mean response for each quantitative survey question, and then I found the percentage of respondents who gave answers of five or higher, indicating they agreed or strongly agreed with the statement. Next, I took the sum of each participant's quantitative answers in each
of four (parents) or five (for adolescents) categories: goal attainment, program connection to Anasazi after discharge, aftercare follow through, physical health (adolescents only), and spiritual health. I then converted these raw scores for each category into percentages by dividing the raw score by the number of questions in the category. This enabled me to compare adolescents' and parents' scores in each category. I then found the average percentage score in each category. Finally, I calculated the sum of all qualitative questions for each participant, divided this by the number of survey questions and found the average overall score.

I coded the text answers to the qualitative questions asking for feedback into themes, and I sorted responses into the following four categories: positive, negative, dialectic, and suggestions. The dialectic category represented responses expressing the duality of the family's or the adolescent's therapeutic progress and their continued difficulties. I coded the text answers to the question about type and duration of physical exercise on the adolescent survey into the following three categories: no exercise, incidental exercise, and intentional exercise. Incidental exercise included activities such as walking and physically demanding work like construction, babysitting, or retail work. I categorized intentional exercise as occurring at least twice per week for at least 40 minutes at a time, and this included activities such as playing a team sport or going to the gym.

The Smith College School for Social Work statistical analyst ran Pearson's correlations to look for significant correlations between the programmatic elements of a) personal/therapeutic goal attainment, connection to Anasazi after discharge, follow through on aftercare, physical health, and spiritual health and b) positive parent-adolescent relationships. The data analyst also ran Pearson's correlations to look for significant correlations among independent variables. Positive parent-adolescent relationships were measured with self and parent report via the
"Walking in the Wilderness of the World" instrument. My analysis identified which aspects of the Anasazi program are most strongly associated with positive parent-adolescent relationships.

**Discussion**

Evaluating The Anasazi Foundation's wilderness therapy program, with its emphasis on parent involvement, contributes to research that supports a family systems approach to the psychological treatment of adolescents. Collecting data from participants and parents regarding family outcomes provides a broad perspective about which aspects of the Anasazi WT program (aftercare, healthy lifestyle, spirituality, parent involvement, etc.) are most strongly associated with positive parent-adolescent relationships. This study adds to research examining the general effectiveness of WT programs, and it seeks to support WT as an effective treatment modality for adolescents and families. Additionally, this study produced data about the strength of association between adolescent use of aftercare and positive parent-adolescent relationships. This provides information about the practice of aftercare, which is hypothesized to play an important role in the sustainability of positive parent-adolescent relationships after wilderness therapy treatment.

When I envisioned this research, I hoped that if the study provided further support for the effectiveness of WT as a treatment approach for adolescents, insurance companies might be more likely to provide coverage or reimbursement for WT treatment. This would allow greater access to this treatment method rather than its being limited to those who can afford to pay out of pocket. As a result, social workers might be able to refer more clients to WT or work within the WT model of treatment themselves in order to best serve their adolescent clients. This study sought to survey a diverse population of adolescents and their parents with a sample that was varied in age, socioeconomic status, race, and gender. I was not able to attain information about the participants' socioeconomic status, but in the other aforementioned respects, the sample
closely mirrored the Anasazi population. This sample sheds light on the usefulness of WT with populations who are typically served in WT.

In compliance with social work research ethics in regard to justice and respect for participants, Anasazi alumni and their parents were fully informed of the nature, purpose, risks, and benefits of participation through informed assent and consent. As noted above, this included clear communication that participation was voluntary and that clients and their parents could discontinue participation at any time. The confidentiality of study participants was maintained because Anasazi de-identified the data before the Smith College School for Social Work statistical analyst and I saw the data.

Sources of bias in this study include the Anasazi Foundation's and my shared beliefs that WT is an effective treatment for a variety of adolescent clients and our hopes for the research to support our beliefs. This bias is inherent in the reason the Anasazi Foundation was established and its mission. I have experience as an outdoor educator and secondhand knowledge of the WT guide position at several WT companies other than Anasazi. The Anasazi Foundation and I tried to be vigilant for ways in which this bias might impact the results of the study including, but not limited to, ensuring that participants did not feel pressured to provide positive reports of improvement.

The use of longitudinal data is a strength of this study as is its use of both adolescent and parent assessments. Nevertheless, the generalizability of the results may be limited to the Anasazi Foundation’s WT program. Generalizability is also limited by the limited diversity of the sample along race, socioeconomic status, age, and gender. However, the results help to support previous findings of the effectiveness of WT, and the results indicate several aspects of
WT that can be studied in the future to learn more about creating even more effective WT treatment.
CHAPTER IV

Findings

Purpose and Sample

The purpose of this study was to examine which parts of The Anasazi Foundation's wilderness therapy program are most strongly associated with positive parent-adolescent relationships after treatment. The sample included 36 adolescent participants and 59 parent participants after one adolescent participant was removed, with the agreement of Anasazi staff, due to seemingly unreliable responses with perfect scores in all categories, and after three parent participants were removed because they did not provide informed consent. There were 23 matched pairs with parents and adolescents in the same family both completing their respective surveys. In the parent respondent group, there was one set of parents who completed separate surveys in regards to the same adolescent's treatment at Anasazi. There was one parent who completed two surveys in regards to the same adolescent's treatment at Anasazi, once after the adolescent had been out of the program for 30 days and a second survey after the adolescent had been out of the program for 180 days.

The sample included 16 adolescent female identified participants (44%) and 20 male identified adolescent participants (56%). I do not know the gender identities of parent respondents, as parents indicated their child's gender on the survey, and many parents identified as guardians rather than "mother" or "father." Of the parent respondents, 20 (34%) had female identified children and 39 (66%) had male identified children. In the adolescent respondent
group, 32 identified as Caucasian (89%), 2 as Hispanic/Latino (6%), 1 as Asian (2%), and 1 as multi-ethnic (2%). I also do not know the parents' ethnic identities, as they indicated their child's ethnic identity in the survey. In the parent respondent group, 52 (88%) had children who identified as Caucasian, 3 (5%) had children who identified as Hispanic/Latino, and 4 (7%) had children who identified as multi-ethnic. The range in age of adolescent study participants at the time of discharge was from 12 to 25 years old, and the mean age of adolescent participants was 16.4 years old, the median age was 16, and the modal age was 17 years. Parents who participated in the study had children who ranged in age from 12 to 20 years old at the time of discharge, and the mean age was 16.1 years with a median age of 16 years and a modal age of 17 years.

According to data from The Anasazi Foundation representing over 600 students over the course of the past five years, adolescent ages have ranged from 12 to 30 years with a mean age of 16.8 years. Additionally, in the last five years, 35% of Anasazi students have been female and 65% have been male. Finally, in the last five years, 85% of Anasazi students have identified as Caucasian, 6% multi-ethnic, 4.5% Hispanic/Latino, 1.5% Asian, 1% African-American, 1% Native American, 0.5% Pacific Islander, and 0.5% of Anasazi students have identified their racial background as “other” (N. Mitchell, personal communication, April 10, 2015). As shown in Table 1, this sample is generally representative of the population of Anasazi students in the last five years.
Table 1

Sample as Compared to Population

<table>
<thead>
<tr>
<th></th>
<th>Anasazi Population</th>
<th>Adolescent Sample</th>
<th>Parent Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age</td>
<td>16.8 years</td>
<td>16.4 years</td>
<td>16.1 years</td>
</tr>
<tr>
<td>Female</td>
<td>35%</td>
<td>44%</td>
<td>34%</td>
</tr>
<tr>
<td>Male</td>
<td>65%</td>
<td>56%</td>
<td>66%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>85%</td>
<td>89%</td>
<td>88%</td>
</tr>
<tr>
<td>Multi-ethnic</td>
<td>6%</td>
<td>2%</td>
<td>7%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>1.5%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Asian</td>
<td>1.5%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>African-American</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Native American</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>0.5%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0.5%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Adolescent Survey Responses

**Personal goal questions.** The first three questions on the adolescent survey asked respondents to rank their achievement of the three personal goals they set before leaving the program. Participants were asked to rank their progress toward each of their three goals on seven-point Likert scales between "My journey toward this goal has yet to begin; I have reached this goal; and my journey has carried me beyond this goal." Answers to the personal goal questions ranged from one to seven with four meaning they had reached their goal, one through three meaning they had not, and five through seven meaning they had surpassed their goal. Each adolescent's goals were unique, and there was nothing important about the numbering of the personal goals. Five respondents did not answer any questions about their personal goals. In response to the first personal goal question, the mean was 4.4, and the median was 4. A total of 22 respondents (73% of those who answered the question) stated they achieved or exceeded their first personal goal. In response to the second personal goal question, the mean was 4.6, and the
median was 4. A total of 21 participants (78% of those who answered the question) stated they achieved or exceeded their second personal goal. In response to the third personal goal question, the mean was 4.4, and the median was 4. A total of 23 respondents (89% of those who answered the question) stated they achieved or exceeded their third personal goal.

The average composite score for all three personal goal questions among adolescent study participants was 10.3 out of a possible 21 points in this sub category, meaning that, on average, adolescents reported attaining their personal goals post treatment with a 49% success rate. Five youth did not answer any questions about their personal goals and four youth only answered one question about their goals, giving them zeros in these questions. When I took out those adolescents who did not answer all three questions about their goal attainment, the average composite score for all three personal goals questions was 13.4 out of a possible 21 points in this sub category, meaning that, on average, adolescents who answered the personal goal questions reported attaining their goals post treatment with a 64% success rate. The success rates of goal completion for adolescent participants are shown in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Adolescent Goal Attainment</th>
<th>Mean</th>
<th># of respondents</th>
<th>% of respondents who attained/surpassed goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; goal</td>
<td>4.4</td>
<td>30</td>
<td>73%</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; goal</td>
<td>4.6</td>
<td>27</td>
<td>78%</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; goal</td>
<td>4.4</td>
<td>26</td>
<td>89%</td>
</tr>
</tbody>
</table>

**Family relationship questions.** The six family relationship questions asked adolescent participants to rank their answers on seven-point Likert scales in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were
focused on the health and strength of family relationships post treatment. The first family relationship question asked adolescents to rate their agreement with the statement that they have a "positive, healthy" relationship with their parent(s) including the Anasazi language of "the making of a trusting, the making of an asking, speaking of the heart, having sittings, and walking as WE." One adolescent did not answer this question, and the mean for other responses was 5.3. In response to this question, 27 adolescents gave a rating of 5 or higher, meaning that 77% of adolescents who answered this question feel they have a positive, healthy relationship with their parent(s) after treatment. The second family relationship question asked adolescents to rate their agreement with the statement that they can disagree with their parent(s) and can productively resolve conflict without resorting to anger or sarcasm. All adolescents answered this question, and the mean was 4.8. In response to this question, 22 adolescents gave a rating of 5 or higher, meaning that 61% of adolescents in the sample feel they can disagree and manage conflict productively with their parents. The third family relationship question asked adolescents to rate their agreement with the statement that they can "see or feel" their parent(s) "walking forward" or making continued progress after treatment. All adolescents answered this question, and the mean was 4.9. In response to this question, 23 adolescents gave a rating of 5 or higher, meaning that 64% of adolescents in the sample reported they can see their parent(s) making forward progress after treatment. The fourth family relationship question asked adolescents to rate their agreement with the statement that they feel their home/family is their "belonging place." All adolescents answered this question, and the mean was 5.2. In response to this question, 24 adolescents gave a rating of 5 or higher, meaning that 67% of adolescents in the study stated that they feel their home and/or family is their "belonging place." The fifth family relationship question asked adolescents to rate their agreement with the statement that their sibling(s) have "a
belonging place in my heart" even when they are in conflict. All adolescents answered this question, and the mean was 6.1. In response to this question, 34 adolescents gave a rating of 5 or higher, meaning that 94% of adolescents in the sample feel their siblings "have a belonging place in their hearts." The sixth family relationship question asked adolescents to rate their agreement with the statement that their "walking" or therapeutic work at Anasazi helped them "heal and strengthen" their relationship with their parent(s). All adolescents answered this question, and the mean was 5.9. In response to this question, 31 adolescents gave a rating of 5 or higher, meaning that 86% of adolescents in the sample stated that their therapeutic work at Anasazi helped them improve their relationship with their parent(s). The results of the family relationship questions posed to adolescents are summarized in Table 3. The average composite score for all six family relationship questions among adolescent respondents was 32 out of a possible 42 points in this sub category, meaning that, on average, adolescents reported their family relationships to be 76% positive, with 100% being excellent family relationships.

Table 3

<table>
<thead>
<tr>
<th>adolescent Family Relationship Satisfaction</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree with statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive/healthy relationship w parents</td>
<td>5.3</td>
<td>35</td>
<td>77%</td>
</tr>
<tr>
<td>Can productively resolve conflict w parents</td>
<td>4.8</td>
<td>36</td>
<td>61%</td>
</tr>
<tr>
<td>See parents making continued progress</td>
<td>4.9</td>
<td>36</td>
<td>64%</td>
</tr>
<tr>
<td>Feel that home is “belonging place”</td>
<td>5.2</td>
<td>36</td>
<td>67%</td>
</tr>
<tr>
<td>Siblings have “belonging place” in my heart</td>
<td>6.1</td>
<td>36</td>
<td>94%</td>
</tr>
<tr>
<td>Anasazi helped heal/strengthen relationship w parents</td>
<td>5.9</td>
<td>36</td>
<td>86%</td>
</tr>
</tbody>
</table>

Program connection questions. The four program connection questions asked adolescents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were geared
toward assessing the extent to which adolescents remain connected to Anasazi after treatment. The first program connection question asked adolescents to rate their agreement with the statement that they continue to share their "Anasazi story." All adolescents answered this question, and the mean was 5.9. In response to this question, 31 adolescents gave a rating of 5 or higher, meaning that 86% of adolescents in the sample reported that they share their experiences at Anasazi with others. The second program connection question asked adolescents to rate their agreement with the statement that they have contact with Anasazi's Alumni Services at least once per month. One adolescent did not answer this question, and the mean was 4.6. In response to this question, 20 adolescents gave a rating of 5 or higher, meaning that 57% of adolescents who answered this question stated that they maintain fairly regular monthly contact with the Anasazi's Alumni Services after discharge. The third program connection question asked adolescents to rate their agreement with the statement that they continue to use the reading materials recommended by Anasazi. All adolescents answered this question, and the mean was 3.4. In response to this question, only 14 adolescents gave a rating of 5 or higher, meaning that only 39% of adolescents in the sample reported that they continue to use the reading materials recommended by Anasazi after their treatment. The fourth program connection question asked adolescents to rate their agreement with the statement that they connect with other Anasazi alumni after treatment. All adolescents answered this question, and the mean was 4.6. In response to this question, 22 adolescents gave a rating of 5 or higher, meaning that 61% of adolescents in the study reported that they are in contact with other Anasazi alumni after their treatment. The results The average composite score for all four program connection questions among adolescent respondents was 18.4 out of a possible 28 points in this sub category, meaning that, on average, adolescents reported that they were 66% (median 71%) connected to The
Anasazi Foundation after treatment, with 100% connection being in monthly contact with Anasazi though contact with Alumni Services, having regular contact with other alums, using reading materials, and frequently sharing one’s Anasazi story with others.

Table 4

<table>
<thead>
<tr>
<th>Adolescent Program Connection</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Anasazi story</td>
<td>5.9</td>
<td>36</td>
<td>86%</td>
</tr>
<tr>
<td>Monthly contact w Alumni Services</td>
<td>4.6</td>
<td>35</td>
<td>57%</td>
</tr>
<tr>
<td>Use Anasazi reading materials</td>
<td>3.4</td>
<td>36</td>
<td>39%</td>
</tr>
<tr>
<td>Contact with other alums post treatment</td>
<td>4.6</td>
<td>36</td>
<td>61%</td>
</tr>
</tbody>
</table>

Aftercare questions. The two aftercare questions asked adolescents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were geared toward assessing the extent to which adolescents had followed through on the aftercare plans they created with their therapist at Anasazi before they were discharged from the program. The first aftercare question asked adolescents to rate their agreement with the statement that they have followed through on all elements of their aftercare plan. Three adolescents did not answer this question, and the mean was 4.8. In response to this question, 17 adolescents gave a rating of 5 or higher, meaning that 52% of adolescents who answered the question reported that they have generally followed through on their aftercare plan since discharge. The second aftercare question asked adolescents to rate their agreement with the statement that they enjoy "gathering and learning." Anasazi teaches that "gathering from Mother Earth" is the act of doing something physical such as starting a fire with primitive skills or rafting a river. Furthermore, "learning" is explained as the metaphysical and spiritual lessons one can gain from the physical act of "gathering" if one attends to and processes the physical experience. For example, from a river trip, one might learn
about the importance of others on the metaphorical raft, the way life changes like the rough or smooth river, and the importance of listening to the metaphorical guide. (N. Mitchell, personal communication, April 9, 2015). One adolescent did not answer this question, and the mean was 5.1. In response to this question, 23 adolescents gave a rating of 5 or higher, meaning that 66% of adolescents who answered the question reported that they enjoy "gathering and learning." These results are summarized in Table 5. The average composite score for the two aftercare questions among adolescent study participants was 9.4 out of a possible 14 points in this sub category, meaning that, on average, adolescents reported that they were 67% successful with following through on their aftercare plans.

<table>
<thead>
<tr>
<th>Adolescent Aftercare</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-through on all elements of</td>
<td>4.8</td>
<td>33</td>
<td>52%</td>
</tr>
<tr>
<td>aftercare plan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoy gathering &amp; learning</td>
<td>5.1</td>
<td>35</td>
<td>66%</td>
</tr>
</tbody>
</table>

**Physical health questions.** One of the two physical health questions asked adolescents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." The second physical health question allowed for an open response. These questions were geared toward assessing the extent to which adolescents maintain the physically healthy lifestyle they learned and practiced during their time at Anasazi. The first physical health question asked adolescents to rate their agreement with the statement that they maintain the aspects of the lifestyle that helped them at Anasazi including healthy diet, enough sleep, plenty of water, and regular exercise. All adolescents answered this question, and the mean was 4.7. In response to this question, 20 adolescents gave a rating of 5 or
higher, meaning that 56% of adolescents in the study reported that they generally maintain the physically healthy lifestyle they learned at Anasazi. This is shown in Table 6. The average composite score for this physical health question among adolescent respondents was 4.7 out of a possible 7 points in this sub category, meaning that, on average, adolescents reported that they were 67% (median 71%) able to maintain the physically healthy lifestyle learned and practiced during wilderness therapy treatment.

Table 6

<table>
<thead>
<tr>
<th>Adolescent Physical Health</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain Anasazi healthy lifestyle (diet, sleep, water, exercise)</td>
<td>4.7</td>
<td>36</td>
<td>56%</td>
</tr>
</tbody>
</table>

The second physical health question asked adolescents to note the frequency and duration of their physical activity, and 7 participants did not answer this question. Of those that did answer, many did not provide the frequency or duration of their physical activity. Two respondents stated they do not exercise and seven noted that they get exercise in their daily lives through physically demanding work including construction, babysitting, and retail, or through walking their family's dog. Of those who answered this question, 81% (29 adolescents) indicated that they intentionally exercise at least twice per week for at least 40 minutes at a time. Many noted that they play team sports or go to the gym, and others mentioned participating in yoga, running, skating, and weight lifting.

**Spiritual health question.** The spiritual health question asked adolescents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." This question was geared toward assessing the level of spirituality adolescents felt after their treatment at Anasazi. The question asked adolescents to
rate their agreement with the statements that their spiritual beliefs are important to them and they feel connected to a faith or spiritual tradition. All adolescents answered this question, and the mean was 4.7 while the median was 5.5. In response to this question, 21 adolescents gave a rating of 5 or higher, meaning that 58% of adolescents in the study reported that their spiritual beliefs are important, and they feel connected to their spiritual traditions. This is shown in Table 7. The average composite score for the spiritual health question among adolescent study participants was 4.7 out of a possible 7 points in this sub category, meaning that, on average, adolescents reported that they were 67% (median 79%) connected to a faith or spiritual tradition after their time at Anasazi.

Table 7

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel connected to faith or spiritual tradition</td>
<td>4.7</td>
<td>36</td>
<td>58%</td>
</tr>
</tbody>
</table>

Feedback questions. The feedback questions aimed to assess adolescents' general satisfaction with their treatment at The Anasazi Foundation. The first feedback question asked adolescents if they would recommend the program. All adolescents answered this question, and 5 said they would not recommend the Anasazi wilderness therapy program, meaning that 86% (N = 31) of adolescents surveyed would recommend the Anasazi wilderness therapy program. These results are summarized in Table 8.

Table 8

<table>
<thead>
<tr>
<th></th>
<th># of respondents</th>
<th>Yes (N)</th>
<th>% Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would recommend Anasazi</td>
<td>36</td>
<td>31</td>
<td>86%</td>
</tr>
</tbody>
</table>
The second feedback question provided a text box and asked adolescents to "make a speaking, make an asking, or express hopes and concerns." Anasazi teaches that speaking and listening are activities that are always in process, always growing, and always changing; therefore, "making" connotes a more active way of listening or speaking. (N. Mitchell, personal communication, April 9, 2015). Just over half of adolescents surveyed (53%) answered this question, and adolescent comments reflected four themes: deep satisfaction and gratitude toward Anasazi, a dialectical perspective recognizing both the family's struggles and successes, disappointment or frustration with Anasazi, and suggested programmatic changes. The comments reflecting satisfaction included notes that youth planned to return to Anasazi as "trail walkers"/guides or as resources for new parents of youth in treatment. Many adolescents commented on the growth in their families and in themselves as a result of their time at Anasazi, and several highlighted the importance of friendships they made while at Anasazi. Overall, 11 (58% of those who answered this question) adolescents provided positive feedback. As one adolescent put it,

The walking made me think about what I do in life, and how it can affect the ones I love and the ones I have yet to. No one can walk the trail alone, you must be ready to connect and make the long haul. Walking forward will open your eyes, you just have to make the effort.

Those who provided negative comments (4 or 21% of those who answered the question) commented on their beliefs that their parents need to do more therapeutic work, their lack of aftercare plans, and social difficulties with peers at Anasazi. One youth respondent stated,

I wish my parents work on them selves [sic] more because when I came back my parents were still walking backwards and it made it hard to walk forward.

One adolescent suggested programmatic changes by stating the following:
I think that the parents should be made more comfortable and asked if they need a sleeping pad or chair to sit in since some parents are older and have more body functioning problems. Also, at my family camp it was very out in the open and not representative of my experience as well as there being non-Anasazi people camped where we could see and hear them. Also maybe telling kids how it might be hard spending time with the parents, but to remember that their parents are just there to spend time with them and it doesn't matter what they do. Having trail walkers help guide the children in ways they can spend time with their families and things they might want to share.

Finally, two respondents provided feedback that displayed a dialectical perspective acknowledging difficulty and success. One respondent commented on the slow process of healing family communication and trauma, yet new feelings of trust and newly improved communication. The other respondent in this category spoke to the physical and emotional difficulty of adjusting to life at Anasazi and the ensuing life changing experience of deciding to "walk forward" and take responsibility for his own growth and healing. As this participant said,

> It was my immediate response to give up... After many long sittings with caring Trail Walkers as well as my Shadow I decided to continue forward with my walking. This turned out to be, what I believe was, the turning point in my life... I also underwent a complete spiritual overhaul, which for me was the hardest task of all. And most importantly I felt myself coming back.

Finally, I calculated an overall score of post treatment wellbeing by adding all of the points each adolescent respondent had from all of the Likert scale questions on the survey. The average overall wellbeing score of all adolescent respondents was 79.6 out of a total of 119 possible survey points meaning that, on average, adolescents reported their overall wellbeing after wilderness therapy treatment at Anasazi to be 67%. Given that 13 adolescent study participants did not answer all survey questions many respondents had at least one zero score factored into their overall wellbeing score. Thus, I calculated the average overall wellbeing score while only including those respondents who answered all survey questions. When I did so, the
mean overall wellbeing score was 83.1, indicating that, on average, adolescents who answered all survey questions reported their overall wellbeing after wilderness therapy treatment at Anasazi to be 70%. These results are displayed in Table 9.

Table 9

<table>
<thead>
<tr>
<th>Adolescent Wellbeing</th>
<th>Mean all respondents</th>
<th>Mean wellbeing % all respondents</th>
<th>Mean of those who answered all questions</th>
<th>Mean wellbeing % of those who answered all questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wellbeing score</td>
<td>79.6</td>
<td>67%</td>
<td>83.1</td>
<td>70%</td>
</tr>
</tbody>
</table>

The data analyst ran t-tests of each category in the adolescent survey (goals, family relationships, program connection, aftercare, physical health, and spiritual health) by adolescent participant gender, and no significant differences were found.

Parent Survey Responses

**Personal goal questions.** The first three questions on the parent survey asked respondents to rank their achievement of the three personal goals they set before their child was discharged from Anasazi. Parents were asked to rank their progress on each of their three goals on seven-point Likert scales between "My journey toward this goal has yet to begin; I have reached this goal; and my journey has carried me beyond this goal." Answers to the personal goal questions ranged from one to seven with four meaning they had reached their goal, one through three meaning they had not, and five through seven meaning they had surpassed their goal. Each parent's goals were unique, and there was nothing important about the numbering of the personal goals. Three respondents did not answer any questions about their personal goals, and ten additional parent participants only answered one goal related question. In response to the first personal goal question, the mean was 4.1, and the median was 4. A total of 34 respondents (61% of those who answered the question) stated they achieved or exceeded their first personal
goal. In response to the second personal goal question, the mean was 4.4, and the median was 4.5. A total of 31 participants (67% of those who answered the question) stated they achieved or exceeded their second personal goal. In response to the third personal goal question, the mean was 4.2, and the median was 4. A total of 27 respondents (60% of those who answered the question) stated they achieved or exceeded their third personal goal.

The average composite score for all three personal goal questions among parent study participants was 10.6 out of a possible 21 points in this sub category, meaning that, on average, parents reported attaining their personal goals with a 50% success rate. Three parents did not answer any questions about their personal goals, giving them zeros in these questions. When I took out those parents who did not answer any questions about their goal attainment, the average composite score for all three personal goals questions was 12.7 out of a possible 21 points in this sub category, meaning that, on average, parents who answered the goal questions reported attaining their personal goals post treatment with a 61% success rate. The success rates of goal completion for parent study participants are shown in Table 10.

Table 10

<table>
<thead>
<tr>
<th>Parent Goal Attainment</th>
<th>Mean</th>
<th># of respondents</th>
<th>% of respondents who attained/surpassed goals</th>
<th>% of youth who attained/surpassed goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st goal</td>
<td>4.1</td>
<td>56</td>
<td>61%</td>
<td>73%</td>
</tr>
<tr>
<td>2nd goal</td>
<td>4.4</td>
<td>46</td>
<td>67%</td>
<td>78%</td>
</tr>
<tr>
<td>3rd goal</td>
<td>4.2</td>
<td>45</td>
<td>60%</td>
<td>89%</td>
</tr>
</tbody>
</table>

Family relationships questions. The five family relationship questions asked parents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were focused on the
health and strength of family relationships post treatment. The first family relationship question asked parents to rate their agreement with the statement that the parent has a "positive, healthy" relationship with his or her child including the Anasazi language of "the making of a trusting, the making of an asking, speaking of the heart, having sittings, and walking as WE." All parents answered this question, and the mean was 4.6. In response to this question, 35 parents gave a rating of 5 or higher, meaning that 59% of parents in the sample feel they have a positive, healthy relationship with their child after treatment. The second family relationship question asked parents to rate their agreement with the statement that the parent can disagree with his or her child productively, resolving conflict without resorting to anger or sarcasm. All parents answered this question, and the mean was 5.0. In response to this question 42 parents gave a rating of 5 or higher, meaning that 71% of parents in the sample feel they can disagree while managing conflict productively with their children. The third family relationship question asked parents to rate their agreement with the statement that they can "see or feel" their child "walking forward" or making continued progress after treatment. All parents answered this question, and the mean was 4.4. In response to this question, 30 parents gave a rating of 5 or higher, meaning that 51% of parents in the sample reported they can see their child making forward progress after treatment. The fourth family relationship question asked parents to rate their agreement with the statement that they feel their home/family is their "belonging place." One parent did not answer this question, and the mean was 5.5. In response to this question, 46 parents gave a rating of 5 or higher, meaning that 78% of parents who answered the question stated that they feel their home and/or family is their "belonging place." The fifth family relationship question asked parents to rate their agreement with the statement that their own "walking" or work with their family therapist at Anasazi helped them "heal and strengthen" their relationship with their child. All
parents answered this question, and the mean was 5.6. In response to this question, 47 parents gave a rating of 5 or higher, meaning that 80% of parents in the sample stated that their own therapeutic work helped them improve their relationship with their child. The results of the questions about family relationship asked of parents are displayed in Table 11. Notably 25 parents (42%) answered this question with the highest agreement rating of a 7. The average composite score for all five family relationship questions among parent respondents was 24.9 out of a possible 35 points in this sub category, meaning that, on average, parents reported their family relationships to be 71% (median 77%) positive, with 100% being excellent family relationships.

Table 11

<table>
<thead>
<tr>
<th>Parent Family Relationship Satisfaction</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
<th>% of youth who agree w parent statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive/healthy relationship w child</td>
<td>4.6</td>
<td>59</td>
<td>59%</td>
<td>77%</td>
</tr>
<tr>
<td>Can productively resolve conflict w child</td>
<td>5.0</td>
<td>59</td>
<td>71%</td>
<td>61%</td>
</tr>
<tr>
<td>See child making continued progress</td>
<td>4.4</td>
<td>59</td>
<td>51%</td>
<td>64%</td>
</tr>
<tr>
<td>Feel that home is “belonging place”</td>
<td>5.5</td>
<td>58</td>
<td>78%</td>
<td>67%</td>
</tr>
<tr>
<td>My own &quot;walk&quot; (work with family therapist) helped heal and strengthen my relationship with my child</td>
<td>5.6</td>
<td>59</td>
<td>80%</td>
<td>86%</td>
</tr>
</tbody>
</table>

**Program connection questions.** The three program connection questions asked parents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were geared toward assessing the extent to which families remain connected to Anasazi after treatment. The first program connection question asked parents to rate their agreement with the statement that they continue to share their family's "Anasazi story." All parents answered this question, and the mean
was 5.3. In response to this question, 40 parents gave a rating of 5 or higher, meaning that 68% of parents in the sample reported that they share their family's experience at Anasazi with others. The second program connection question asked parents to rate their agreement with the statement that they maintain contact with the Anasazi Foundation. All parents answered this question, and the mean was 3.9. In response to this question, only 21 parents gave a rating of 5 or higher, meaning that only 36% of parents in the sample stated that they maintain contact with the Anasazi Foundation after treatment. The third program connection question asked parents to rate their agreement with the statement that they continue to use the reading materials recommended by Anasazi. One parent did not answer this question, and the mean was 4.5. In response to this question, 31 parents gave a rating of 5 or higher, meaning that 53% of parents who answered the question reported that they continue to use the reading materials recommended by Anasazi after their child's discharge from the program. The results of the questions asked of parents about their connection to The Anasazi Foundation after his or her child's treatment are summarized in Table 12. The average composite score for the three program connection questions among parent respondents was 13.5 out of a possible 21 points in this sub category, meaning that, on average, parents reported that they were 64% connected to The Anasazi Foundation after their child’s treatment, with 100% connection being regular use of reading materials, regular contact with the Anasazi Foundation, and frequently sharing the family’s Anasazi story with others.

Table 12

<table>
<thead>
<tr>
<th>Parent Program Connection</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
<th>% of youth who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Anasazi story</td>
<td>5.3</td>
<td>59</td>
<td>68%</td>
<td>86%</td>
</tr>
<tr>
<td>Regular contact w Anasazi</td>
<td>3.9</td>
<td>59</td>
<td>36%</td>
<td>57%</td>
</tr>
<tr>
<td>Use Anasazi reading materials</td>
<td>4.5</td>
<td>58</td>
<td>53%</td>
<td>39%</td>
</tr>
</tbody>
</table>
**Aftercare questions.** The two aftercare questions asked parents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." These questions were geared toward assessing the extent to which parents upheld the aftercare plans created with the help of their family therapist at Anasazi before their child was discharged from the program. The first aftercare question asked parents to rate their agreement with the statement that they have followed through on all elements of the aftercare plan made with the help of their family therapist. Two parents did not answer this question, and the mean was 4.8. In response to this question, 38 parents gave a rating of 5 or higher, meaning that 64% of parents who answered the question reported that they have generally followed through on their child's aftercare plan since discharge. The second aftercare question asked parents to rate their agreement with the statement that they enjoy "gathering and learning." For an explanation of this term, see page 38. Two parents did not answer this question, and the mean was 5.4. In response to this question, 42 parents gave a rating of 5 or higher, meaning that 71% of parents who answered the question reported that they enjoy "gathering and learning." The results of parent participation in adolescent aftercare are presented in Table 13.

The average composite score for the two aftercare questions among parent study participants was 9.8 out of a possible 14 points in this sub category, meaning that, on average, parents reported that they were 70% successful with helping their child follow through on their aftercare plans.

Table 13

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
<th>% of youth who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-through on all elements of child's aftercare plan</td>
<td>4.8</td>
<td>57</td>
<td>64%</td>
<td>52%</td>
</tr>
<tr>
<td>Enjoy gathering &amp; learning</td>
<td>5.4</td>
<td>57</td>
<td>71%</td>
<td>66%</td>
</tr>
</tbody>
</table>
Spiritual health question. The spiritual health question asked parents to rank their answers on a seven point Likert scale in which 1 corresponded with "completely disagree" and 7 corresponded with "completely agree." This question was geared toward assessing the level of spirituality parents felt after their child's treatment at Anasazi. The question asked parents to rate their agreement with the statements that their spiritual beliefs are important to them and they feel connected to a faith or spiritual tradition. All parents answered this question, and the mean was 6.2. In response to this question, 52 parents gave a rating of 5 or higher, meaning that 88% of parents in the study reported that their spiritual beliefs are important, and they feel connected to their spiritual traditions. These results are displayed in Table 14. The average composite score for the spiritual health question among parent study participants was 6.2 out of a possible 7 points in this sub category, meaning that, on average, parents reported that they were 89% (median 100%) connected to a faith or spiritual tradition after their child’s time at Anasazi.

<table>
<thead>
<tr>
<th>Parent Spiritual Health</th>
<th>Mean</th>
<th># of respondents</th>
<th>% who agree w statement</th>
<th>% of youth who agree w statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feel connected to faith or spiritual tradition</td>
<td>6.2</td>
<td>59</td>
<td>88%</td>
<td>58%</td>
</tr>
</tbody>
</table>

As Table 14 elucidates, there was a large discrepancy between the percentage of adolescents and the percentage of parents who agreed with the survey statement about their spiritual health. Without further data is it difficult to understand what this difference means. This discrepancy could simply reflect a sample of youth and parents who differ in their connection to their spirituality. Alternatively, it is possible that adolescents have a different idea about what connection to their spirituality means than adults do. In future research, it may be useful to ask
about specific indicators of spiritual connection so as to determine how often or how intensely respondents feel connected to their faith or spiritual tradition. An example might be, "My spiritual values guide my decision on a daily, weekly, or monthly basis."

**Feedback questions.** The feedback questions aimed to assess parents' general satisfaction with their child's treatment at The Anasazi Foundation. The first feedback question asked parents if they would recommend the program. All parents answered this question, and only 5 parents said "no" meaning that 92% of parents surveyed would recommend the Anasazi wilderness therapy program. The answers to this feedback question are reported in Table 15.

Table 15

<table>
<thead>
<tr>
<th>Parent Feedback</th>
<th># of respondents</th>
<th>Yes (N)</th>
<th>% Yes</th>
<th>% of youth who agree with statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would recommend Anasazi</td>
<td>59</td>
<td>54</td>
<td>92%</td>
<td>86%</td>
</tr>
</tbody>
</table>

The second feedback question provided a text box and asked parents to "make a speaking, make an asking, or express hopes and concerns." For an explanation of these terms, see page 41-2. Just over half of parents surveyed (53%) answered this question, and parental comments reflected four themes: deep satisfaction and gratitude toward Anasazi, a dialectical perspective recognizing both the family's struggles and successes, disappointment or frustration with Anasazi, and suggested programmatic changes.

The parental comments reflecting satisfaction included comments that families appreciated the financial help they had received from Anasazi, that parents appreciated the chance to witness their child's growth during the program, that positive emotional and behavioral changes stuck with children after the program, that parents continue to use what they learned at Anasazi, that family units experienced growth and healing as a result of treatment at Anasazi,
that parents experienced deeply moving personal emotional growth, that parents appreciated continued support from Anasazi and from other parents they met while their children were in treatment, and that families feel they are moving forward as a result of Anasazi. One parent noted,

Anasazi was a transformative experience for us as parents and for our young walker. We will be forever grateful to have had the chance to experience this program. Even [writing this] brings me to tears, because it conjures such powerful and emotional memories of what we went through and what we learned from and about our son and ourselves. Our shadow [therapist] played an essential role in our progress… The Anasazi approach is simply extraordinary… I/we changed in more profound ways more quickly than I ever could have imagined.

Another parent made the following positive comment:

I would recommend the Anasazi program without hesitation! My personal experience was profound. I felt my heart open the minute I arrived at Anasazi and… took the parenting class. Our class was attended by trail walkers, and I learned so much from them and came away with a deep appreciation for the love and sacrifice towards the young walkers. My own walking was an incredible learning experience for me, I trusted the program and was willing to dig deep… Thank you so much for the healing and peace you brought to my life.

The parental comments acknowledging the dialectical tension of both challenge and success tended to focus on the family's journey rather than only the adolescent's or only the parent's journey. For example, several parents commented that, since their child had been in treatment, the parents have realized that emotional and mental health is journey rather than a destination. Others commented that they have found more patience and improved their communication even though their children still continue to exhibit problem behaviors. Many parents were able to recognize their own or their child's setbacks in the context of the family's vast progress. As one parent put it,
[Our daughter] has been home for about a month and a half now. The positive changes she accomplished in the wild have stayed with her for the most part. She is enrolled in classes for her GED and is moving forward with her education. She has stayed sober. She is excited to start skiing again. However, we see some of her old habits of lack of motivation and laziness coming back, so we need to stay very engaged, and we intend to do so... All in all, we... are amazed with the positive changes in her attitude. We know that we won't necessarily live happily ever after without some strife along the way, but we feel very blessed and positive about our future.

Another parent stated the following:

I am trying not to enable my son's backwards walking, and I am working on myself. Anasazi was a great experience for the family, even though things aren't great. If it wasn't for the marijuana, things are really a lot better. There is less fighting and more respect.

Several parents, such as this one, acknowledged family difficulties yet noted that the family is able to approach these issues together and with mutual respect.

Our young walker works daily to continue his Anasazi ways. Even when we disagree he now stands in place and considers the matter, rather than running away in anger. We have had experiences that have caused us to return to our old patterns but have been quick to recognize this and change the reactions to thoughtful responses. He is making choices that serve him and his goals. He has grown so much, as we have also. We continue to grow and live and love.

Some of the comments that acknowledged disappointment or frustration with Anasazi were focused on the organization as a whole, others on individual clinicians, and others on entities over which Anasazi has no control such as schools or insurance companies. Some parents expressed concern that their children were not staying in contact with Anasazi Alumni Services, or that Alumni Services was not contacting their children after discharge. One parent noted confusion about how to contact Anasazi with concerns after their child left the program. Other parental comments expressed sadness, disappointment, or anger about their children
lacking motivation to continue the hard work the adolescent had accomplished while in treatment or frustration and anger that nothing seemed to change after treatment. Two parents commented that they did not feel their child's therapist was effective, and two other parents noted that they felt the peers their children met at Anasazi normalized problematic behaviors. Several parents noted their disappointment in the aftercare planning.

I really love the Anasazi beliefs and completely believe in them. However, I don't feel it was long enough or had enough aftercare for my son. I felt alone with the aftercare needs he had, and though I have done my best and he has been seeing a counselor twice a month, we are back where we were before, with lying, stealing, and using marijuana. I also feel like the friends he made on the trail have not been good influences and actually helped him believe that his pot smoking was quite minimal. [He] is a very good liar and though we really loved [his therapist], I am not sure that he was entirely honest with her, so I am thinking his aftercare plan was insufficient due to that.

Two parents reported particularly concerning information, such as the following, about serious risks to their children's safety including unsafe drinking water, threats of rape, lack of food, and staff disregard for physical injury.

This is very difficult for me, [my son] was very innocent when we went to Anasazi, and he still feels a great sense of betrayal that we dealt with his depression and computer addiction by subjecting him to the things and people that he experienced there. I liked the ideals espoused, but for us an Anasazi LITE might have been in order? I do not know the answer, but he still has nightmares about being there and having his food stolen, being threatened with rape, and listening to the exploits of others. I am still wrestling if I did the right thing in sending him.

This finding may warrant action from The Anasazi Foundation to ensure that all parents and youth associated with the wilderness therapy program have a clear understanding of how to address threats of any kind of harm while they or their child are enrolled. Furthermore, Anasazi
may wish to explore how they can help this adolescent and his family cope during the aftercare phase of the program.

Common parental suggestions for improvement were increased communication between therapists and families after discharge, more intensive aftercare planning, and more support from Anasazi for adolescents returning home. Comments in this category including the following:

Would love to see parental testimonials of what to expect when your young walker gets home.

I wish that there had been a scheduled contact day for the young walkers as there is for the parents, touching base with him earlier may have helped him stay connected to us and the program.

My only suggestion would be to help a little more with the transition from the trail to home. It was difficult to end the time with [her therapist] so quickly, and I think a few follow up sessions would be extremely beneficial.

Finally, I calculated an overall score of post treatment family wellbeing by adding all of the points each parent respondent had from all of the Likert scale questions on the survey. The average overall family wellbeing score was 65.1 out of a total of 98 possible survey points meaning that, on average, parents reported their family’s overall well-being after their child’s wilderness therapy treatment at Anasazi to be 66%. Given that 17 parent study participants did not answer all survey questions many respondents had at least one zero score factored into their overall wellbeing score. Thus, I calculated the average overall wellbeing score while only including those respondents who answered all survey questions. When I did so, the mean overall wellbeing score was 67.6, indicating that, on average, parents who answered all survey questions reported their family's overall wellbeing after their child's wilderness therapy treatment at Anasazi to be 69%. These results are displayed in Table 16.
Table 16

<table>
<thead>
<tr>
<th>Family Wellbeing</th>
<th>Mean all respondents</th>
<th>Mean wellbeing % all respondents</th>
<th>Mean of those who answered all questions</th>
<th>Mean wellbeing % of those who answered all questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent rated family wellbeing score</td>
<td>65</td>
<td>66%</td>
<td>67.6</td>
<td>69%</td>
</tr>
<tr>
<td>Youth rated family wellbeing score</td>
<td>79.6</td>
<td>67%</td>
<td>88.1</td>
<td>70%</td>
</tr>
</tbody>
</table>

The data analyst ran one-way ANOVA of each category in the parent survey (goals, family relationships, program connection, aftercare, and spiritual health) by parent participant identification as "mother," "father", or "guardian," and no significant differences were found.

**Parental Investment and Significant Correlations**

With the help of the Smith College School for Social Work statistical analyst, Marjorie Postal, I created a Parent Investment scale by combining parental scores on all three goal achievement questions and the following survey statements: 1) "I feel that my family/home is my belonging place," 2) "My walking at Anasazi has helped me heal and strengthen my relationship with my Walker [child]," 3) "I continue to share my family's Anasazi story," and 4) "I have followed through on all the elements of the aftercare plan we made with the help of our Shadow [family therapist]." These questions were found to have strong internal reliability when Cronbachs alpha was run (alpha=.83, N=43, N of items =7), so they were combined into a scale by taking the mean of each parent's responses to the seven questions. The average parent investment score was 31.5 out of a total of 49 possible points for these seven questions meaning that, on average, parents reported their own investment in the family therapeutic process to be 64%. Given that 17 parent study participants did not answer all questions in the Parent Investment scale, many respondents had at least one zero score factored into their parent
investment score. Thus, I calculated the average parent investment score while only including those respondents who answered all questions in the scale. When I did so, the mean parent investment score was 33.9, indicating that, on average, parents who answered all questions in the Parent Investment scale reported their investment in the family therapeutic process to be 69%. These results are displayed in Table 17. No significant differences were found in t-tests between the Parent Investment score of parents who had children out of the program for 30 versus 180 days.

<table>
<thead>
<tr>
<th>Table 17</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parent Investment</strong></td>
</tr>
<tr>
<td>All parent respondents</td>
</tr>
<tr>
<td>Parents who answered all questions in the PI scale</td>
</tr>
</tbody>
</table>

When using t-tests, no significant differences were found between parental goal attainment score, parental family relationship score, parental aftercare score, or parental program connection score and how long youth had been out of Anasazi’s wilderness therapy program. The difference in family relationship by days out of the program approached, but did not reach, significance (t(57)=.1949, p=.056, two tailed). Parents with adolescents out of the program for 30 days had a higher mean family relationship score (m=26.37) than parents with adolescents, out of the program for 180 days (m=22.88).

**Parental correlations.** Pearson correlations were used to determine the significant correlations between parent respondents’ scores in each of Anasazi's programmatic elements (goal attainment, program connection, aftercare, physical health, and spiritual health) and family relationships. A significant positive moderate correlation was found between parental goal attainment scores and parental family relationship scores (r=.432, p=.001. two-tailed). A
significant positive but weak correlation was found between parental aftercare scores and parental family relationship scores. \((r = .271, p = .035, \text{ two-tailed})\). Additionally, a significant positive moderate correlation was found between parental program connection scores and parental spiritual health scores. \((r = .441, p = .000, \text{ two-tailed})\). A significant positive correlation was found between parental program connection scores and parental aftercare scores. \((r = .371, p = .003, \text{ two-tailed})\). Other correlations were not found to be significant. These results are displayed in Tables 18 and 19.

**Adolescent correlations.** Pearson correlations were used to determine the significant correlations between adolescent respondents’ scores in each of Anasazi's programmatic elements (goal attainment, program connection, aftercare, physical health, and spiritual health) and family relationships. Significant positive moderate correlations were found between adolescent family relationship scores and adolescent scores in aftercare \((r = .511, p = .001, \text{ two-tailed})\), physical health \((r = .411, p = .013, \text{ two-tailed})\), and spiritual health \((r = .670, p = .000, \text{ two-tailed})\). A significant positive correlation was found between adolescent family relationship scores and adolescent program connection scores \((r = .379, p = .023, \text{ two-tailed})\). Additionally, a significant positive moderate correlation was found between adolescent program connection scores and adolescent aftercare scores \((r = .484, p = .003, \text{ two-tailed})\). Finally, a significant positive correlation was found between adolescent physical health scores and adolescent spiritual health scores \((r = .364, p = .029, \text{ two tailed})\). Other correlations were not found to be significant. These results are displayed in Tables 18 and 19.
Table 18

**Programmatic Elements Positively Correlating to Family Relationship Scores**

<table>
<thead>
<tr>
<th></th>
<th>Goal attainment</th>
<th>Aftercare</th>
<th>Physical health</th>
<th>Spiritual health</th>
<th>Program connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent</td>
<td>p=.001</td>
<td>p=.035</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Adolescent</td>
<td>n/a</td>
<td>p=.001</td>
<td>p=.013</td>
<td>p=.000</td>
<td>p=.023</td>
</tr>
</tbody>
</table>

Table 19

**Positive Correlations Between Programmatic Elements**

<table>
<thead>
<tr>
<th></th>
<th>Physical health</th>
<th>Aftercare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program connection</td>
<td>Parent p=.000</td>
<td>Parent p=.003</td>
</tr>
<tr>
<td>Physical health</td>
<td>Adolescent p=.029</td>
<td>n/a</td>
</tr>
</tbody>
</table>
CHAPTER V

Discussion

This study aimed to contribute to the limited research on wilderness therapy and to help bring awareness to the potential for healing offered by wilderness therapy intervention with adolescents and families. The purpose of this study was to assess which aspects of Anasazi’s wilderness therapy program are most strongly associated with positive parent-adolescent relationships after treatment; the study's findings confirmed my hypothesis that parents who were more invested in their own therapeutic work and adolescents who remained connected to Anasazi after their time in the program tended to experience more positive family relationships after treatment. In addition to confirming the research hypothesis, this study also sheds light on additional aspects of Anasazi's wilderness therapy program that are positively correlated with productive parent-adolescent relationships after treatment including: parental goal attainment, both parental and adolescent follow-through on youth aftercare plans, adolescent physical health, and adolescent spiritual health. Anasazi and other wilderness therapy programs can learn from and strengthen or adopt some of these practices.

This study found that parental goal attainment was positively correlated (p=.001) with parental ratings of positive family relationships after treatment. This may have been because therapists helped parents set goals related to improving family functioning. Parents who reached their own therapeutic goals may be more likely to foster positive family relationships. Adolescent goal attainment was not significantly correlated to positive parent-adolescent relationships after treatment, and this lack of correlation might indicate that adolescents' goals tended to be more personally focused. Additionally, parental commitment to their child's aftercare plan was positively correlated (p=.035) with parental ratings of positive family
relationships post wilderness therapy treatment at Anasazi. Parents who were able to help their children stick to aftercare plans were probably able to invest continued time, effort, and money in their child and their family even after significant investments on these fronts while their child was in treatment at Anasazi. Attaining or surpassing their goals and helping their children with aftercare are markers of parental investment in the Anasazi therapeutic program. It is likely that parents who were invested in these ways were also invested in their own therapeutic work with their family therapist at Anasazi; although, future research is needed to more accurately measure parental therapeutic investment.

While analyzing the data for this study, I created a Parent Investment scale that incorporated survey questions that were already part of the Family Relationship, Program Connection and Aftercare scales. Given the overlapping questions, the Parent Investment scale could not be used to run correlation tests with Family Relationship scores. While it is interesting to note the general level of parental investment in this sample (parents who answered all questions in the scale were 69% invested in their own therapeutic process), it would be even more helpful to understand the strength of correlation between parental investment and positive family relationships after treatment.

This study found that adolescents' commitment to their own aftercare plans (p=.001) and the importance of their spiritual beliefs (p=.000) were most strongly positively correlated to constructive parent-adolescent relationships after treatment. It is likely that aftercare, which is collaboratively determined by parents, adolescent, and therapist, is designed to provide structure as well as a connection to maintaining positive changes that were initiated in wilderness therapy. Wilderness therapy is know in the literature to face unique challenges in helping clients maintain changes during the transition from an isolated wilderness environment to a more complex "real
world" that often includes access to substances, involvement with peers who promoted negative behaviors, and a community that may expect failure rather than success. Therefore, an adolescent who is able to follow-through on his or her aftercare plan might be more likely to build positive family relationships. It is possible that adolescent spiritual health was strongly correlated with positive family relationships because spiritual beliefs and practices may provide emotional regulation, calmness, and a connection to something greater than one's self. Strong spiritual beliefs might help adolescents develop compassion, understanding, and patience with their parents, siblings, and themselves, which may, in turn, improve parent-adolescent relationships.

Adolescent physical health (p=.013) and connection to The Anasazi Foundation after discharge (p=.023) were also positively correlated, though not as strongly as aftercare and spiritual health, with constructive family relationships after WT treatment. It is possible that maintaining a physically healthy lifestyle provides some adolescents with structure, a way to clam down, and a healthy way to enjoy mood-lifting endorphins. This physical regulation might allow adolescents to engage in positive family relationships with more ease given the well-documented connection between physical and emotional health. Those adolescents who remain connected with The Anasazi Foundation after their discharge are likely to be doing well in general and are likely to have positive feelings about the organization. It is possible that adolescents who are generally doing well are more likely to have positive family relationships and to stay in touch with Anasazi post treatment. It is also possible that staying in touch with Anasazi helps adolescents maintain the changes they established while they were in treatment, which in turn allows them to build strong family relationships.

Interestingly, parental connection to the Anasazi Foundation after their child's treatment was strongly positively correlated (p=.000) with parental spiritual health. This relationship may
be due to the fact that spiritual ideas generated during the family's work with Anasazi had a strong impact on parenting techniques, self-regulation, and a general feeling of peace. These newly awakened spiritual beliefs in parents may also contribute to more positive family relationships in addition to a strong connection to Anasazi. Both parental and adolescent investment in aftercare was strongly positively correlated \( p = .003 \) with connection to Anasazi after treatment. This relationship might be explained by the idea that adolescents and families who are generally doing well after treatment would tend to feel good about maintaining connections with The Anasazi Foundation. Finally, adolescent spiritual and physical health were positively correlated to each other \( p = .029 \), and this finding may represent the relationship between physical and mental health and support the idea that each bolsters the other.

In many cases, the adolescent sample tended to have a higher percentage of individuals who gave ratings of five or higher, indicating agreement or strong agreement with survey statements, than the parent sample. This was especially true in for the personal Goal Attainment, Family Relationship, and Program Connection categories. However, only 86% of the adolescent sample stated they would recommend Anasazi while 92% of parents stated they would. This disparity could be due to the face that adolescents faced greater physical, emotional, and social hardship during WT treatment than their parents did. This disparity could also be due to adolescents recognizing the aspects of the program that helped them while simultaneously not looking back on the overall experience fondly, or it could be that parents were more likely to feel satisfied overall, yet focused on the aspects of the program they did not find useful. Either way, it is also noteworthy that parent and adolescent Family Wellbeing scores were very close to each other. Family Wellbeing scores were calculated by adding the sum of all survey questions for each participant. Percentage Family Wellbeing scores were calculated by dividing the raw score
by the number of survey questions. On average, parents who answered all survey questions rated their family's wellbeing after treatment at 69% and adolescents who answered all survey questions rated their family's wellbeing after treatment at 70%.

Overall, the quantitative data suggest that positive parent-adolescent relationships post WT treatment at Anasazi are best promoted when parents meet their own therapeutic goals and help adolescents follow through on aftercare plans, and when adolescents maintain both spiritual and physical health. Adolescent connection to The Anasazi Foundation after treatment might also be important in fostering strong family relationships; however, it is difficult to discern from this study if positive family relationships promote connection to The Anasazi Foundation or vice versa. The findings of this study are generally in agreement with the literature that parental involvement in wilderness therapy treatment is related to improved family outcomes. This study also expands upon the existing literature by delineating which aspects of wilderness therapy treatment, for adolescents and for parents, are most strongly correlated with improved family relationships.

Strengths of this study were the large sample size and its close resemblance to the Anasazi population, the significant correlations that were found, the specificity of findings about which aspects of wilderness therapy contribute to positive family relationships, and the ways in which this study builds upon past studies. Limitations of this study were the convenience sampling and related possibility that the sample was self-selecting for respondents who felt very negatively or very favorably toward Anasazi; the small number of matched parent and adolescent pairs; the varying amount of time respondents had been out of the program and the possibly diminished reliability of the survey over time; and validity concerns that always exist related to self-reporting and self-designed instruments. This sample could be cautiously generalized to
other wilderness therapy programs with similar demographics; however, a larger sample is
needed for reliable generalizability to other WT programs.

Implications of this study are that wilderness therapy seems to be an effective way to re-
build positive parent-adolescent relationships when parents are involved by meeting their own
therapeutic goals and are able to help their children follow though on aftercare plans.
Furthermore, wilderness therapy seems to be an effective way to re-build positive parent-
adolescent relationships when youth are able to follow through on their aftercare plans, maintain
spiritual and physical health practices established in treatment, and remain connected to the
program after discharge. Anasazi may want to continue their very strong efforts at parent
therapeutic involvement while increasing their efforts to help families follow through on
aftercare planning. Admirably, 80% of parent respondents reported that their own therapeutic
work helped them "heal and strengthen" their relationship with their child. Additionally, 64% of
parent and 52% of adolescent respondents reported following-through on all aspects of the
aftercare plan. Increasing efforts to help adolescents establish and maintain physical and spiritual
health during and after treatment, given that 56% and 58% of adolescents reported maintaining
physical and spiritual health respectively after discharge, may also prove to increase the number
of families who experience improved family relationships after treatment. Anasazi has an
outstanding resource available in its Alumni Services, and it seems that this aspect of aftercare
could be used even more effectively given the strong correlation between youth Program
Connection scores and Family Relationship scores and the relatively low percentage of study
respondents (57%) who report monthly contact with Alumni Services.

Other wilderness therapy programs aiming to foster improved family relationships, as
opposed to focusing solely on the identified client, may wish to examine the ways in which they
ask parents to become involved in their own therapeutic work, how they help families complete aftercare plans, and how they prepare adolescents to maintain spiritual and physical health. These findings may also prove useful to other social work agencies working with families, as this study supports the notion that positive family relationships are not just the responsibility of the identified client but rather of all family members. This study also supports the idea that youth benefit from learning emotional and physical self-regulation and self-care skills.

Future research about the effectiveness of wilderness therapy might continue to use a longitudinal design to assess a large and diverse sample in which differences in socioeconomic status, race, age, and gender are well represented. It would be ideal if future research compared different wilderness therapy programs in order to continue to tease out aspects of the programs that are correlated with positive results so that best practices for effective WT treatment may be determined and utilized among all WT programs. Specifically, future research in this area could track parental therapeutic investment more systematically possibly by using Anasazi's weekly Parent [therapy] Session Evaluations, which are regularly administered to parents while their child is enrolled in the program. This would allow future researchers to examine correlations between parent investment and family relationships. Given the potential importance of adolescent physical and spiritual health, Anasazi may wish to track some of these programmatic aspects more systematically over time. Further questions could ask adolescents to quantify spiritual and physical health by frequency and intensity in order to understand more about these links to positive family relationships. Given the importance of parental goal attainment, further questions could ask parents to categorize each of their goals in order to understand why parental goal attainment may be linked to positive family relationships. Future studies could also employ matched pairs of parents and adolescents, which could provide greater insight about how positive
family relationships are created in wilderness therapy treatment. Finally, it could be helpful to
device a pre and post treatment survey in order to measure Family wellbeing before and after
treatment.
References


APPENDIX A – HSRC Approval Letter

December 12, 2014

Katharine Reynolds

Dear Reyn,

You did a very nice job on your revisions. Your project is now approved by the Human Subjects Review Committee.

Please note the following requirements:

Consent Forms: All subjects should be given a copy of the consent form.

Maintaining Data: You must retain all data and other documents for at least three (3) years past completion of the research activity.

In addition, these requirements may also be applicable:

Amendments: If you wish to change any aspect of the study (such as design, procedures, consent forms or subject population), please submit these changes to the Committee.

Renewal: You are required to apply for renewal of approval every year for as long as the study is active.

Completion: You are required to notify the Chair of the Human Subjects Review Committee when your study is completed (data collection finished). This requirement is met by completion of the thesis project during the Third Summer.

Congratulations and our best wishes on your interesting study.

Sincerely,

Elaine Kersten, Ed.D.
Co-Chair, Human Subjects Review Committee

CC: Gael McCarthy, Research Advisor
APPENDIX B – Parent and Youth Consent

Parent Consent

I approve the use of the regularly collected data from measure my child and I complete while receiving services at the Anasazi Foundation. I understand that these data will be used for purposes of evaluating the program’s effectiveness. I also understand that these data may be incorporated in future analyses of the program’s effectiveness. I understand my privacy and that of my child will be protected because the information in such evaluations or publications will in no way identify my child or me. I also understand that my approval is entirely voluntary, that I may withdraw it at any time prior to the information’s use, and that if I wish not to approve, my refusal will in no way affect my child’s services at Anasazi. Finally, I understand that there is no financial compensation available for the information to be used. By clicking “Yes” below, I understand that I have given consent to participate in this Anasazi study.

Youth Consent

I approve the use of information collected about my participation in the Anasazi program. I understand that this information is being collected to assess the program’s effectiveness and what may need to be changed. I also understand this information may be used in future studies of Anasazi. I understand that the information collected will be identified only by a number, not my name, there will be no way that anyone could identify my answers. I understand that taking part in this study is up to me, that I may refuse to take part at any time, and that withdrawing from the study will not affect my services at Anasazi. Finally, I understand that I will not be paid or compensated for the information I provide. By clicking “Yes” below, I understand that I have given consent to participate in this Anasazi study.
Parent Walking in the Wilderness of the World Survey

How is your walking? We would love to know. First, please read the below paragraph and click "Yes, I consent" or "No, I decline". Then, please fill out the following brief questionnaire.

I approve the use of the regularly collected data from measures my child and I complete while receiving services from the Anasazi Foundation. I understand that these data will be used for purposes of evaluating the program's effectiveness. I also understand that these data may be incorporated in future analyses of the program's effectiveness. I understand my privacy and that of my child will be protected because the information in such evaluations or publications will in no way identify my child or me. I also understand that my approval is entirely voluntary, that I may withdraw it at any time prior to the information's use, and that if I wish not to approve, my refusal will in no way affect my child's services at Anasazi. Finally, I understand that there is no financial compensation available for the information to be used. By clicking "Yes" below, I understand that I have given consent to participate in this Anasazi study.

0 Yes, I consent
0 No, I decline

Your name
Your YoungWalker/SinaguaWalker's name

GOALS
1) Final D #1 This question is in regard to your own walking and the personal goal your Shadow helped you set for yourself (as opposed to your YoungWalker's goals). Please enter a response of "4" if you reached your final 0 (personal goal). A response of "7" means your forward walking has carried you beyond this final 0 and a response of "1" means your journey toward this final 0 has yet to begin.

1 2 3 4 5 6 7

2) Final D #2 This question is in regard to your own walking and the personal goal your Shadow helped you set for yourself (as opposed to your YoungWalker's goals). Please enter a response of "4" if you reached your final 0 (personal goal). A response of "7" means your forward walking has carried you beyond this final 0 and a response of "1" means your journey toward this final 0 has yet to begin.

1 2 3 4 5 6 7

3) Final D #3 This question is in regard to your own walking and the personal goal your Shadow helped you set for yourself (as opposed to your YoungWalker's goals). Please enter a response of "4" if you reached your final 0 (personal goal). A response of "7" means your forward walking has carried you beyond this final D and a response of "1" means your journey toward this final D has yet to begin.

1 2 3 4 5 6 7
FAMILY RELATIONSHIPS
4) I have a positive, healthy relationship with my YoungWalker/SinaguaWalker (This includes the making of a trusting, speaking of the heart, having sittings and walking as WE)
   1 2 3 4 5 6 7
completely disagree completely agree

5) I can disagree with my YoungWalker/SinaguaWalker without my heart going to war. (If conflict arises we resolve it in a productive way without withdrawing or resorting to anger or sarcasm)
   1 2 3 4 5 6 7
completely disagree completely agree

6) I see/feel my YoungWalker/SinaguaWalker walking forward
   1 2 3 4 5 6 7
completely disagree completely agree

7) I feel that my family/home is my belonging place
   1 2 3 4 5 6 7
completely disagree completely agree

8) My walking at ANASAZI has helped me heal and strengthen my relationship with my YoungWalker/SinaguaWalker
   1 2 3 4 5 6 7
completely disagree completely agree

PROGRAM CONNECTION
9) I continue to share my family's ANASAZI story.
   1 2 3 4 5 6 7
completely disagree completely agree

10) I keep in contact with the ANASAZI Foundation. (newsletters, Facebook, gatherings, alumni events etc...)
    1 2 3 4 5 6 7
completely disagree completely agree

11) I continue to use the reading materials recommended at ANASAZI. (The Seven Paths, The Anatomy of Peace, Leadership and Self-Deception, etc...)
    1 2 3 4 5 6 7
completely disagree completely agree

AFTERCARE
12) I have followed through on all the elements of the after care plan we made with the help of our Shadow. (individual therapy, family therapy, couples therapy, AA, Al-Anon, etc...)
   1 2 3 4 5 6 7
completely disagree completely agree
13) I enjoy gathering and learning. (I continue to make and share awakening that I gather from Mother Earth and from beyond the clouds)
   1  2  3  4  5  6  7
completely disagree  completely agree

SPIRITUAL HEALTH
14) Spiritual beliefs are important to me. (I feel connected to a faith or spiritual tradition.)
   1  2  3  4  5  6  7
completely disagree  completely agree

FEEDBACK
15) After your experience and knowing what the ANASAZI trail is like, would you recommend the program to someone else, such as a family member or a friend? Please use the space provided to make a speaking, make an asking, or express your hopes or concerns.
   0 yes
   0 no

16) Please use the space provided to make a speaking, make and asking, or express your hopes or concerns.

Complete Later     Submit Now

Youth Walking in the Wilderness of the World Survey

How is your walking? We would love to know. First, please read the below paragraph and click Yes, I consent" or "No, I decline". Then, please fill out the following brief questionnaire.

I approve the use of information collected about my participation in the Anasazi program. I understand that this information is being collected to assess the program's effectiveness and what may need to be changed. I also understand this information may be used in future studies of Anasazi. I understand that the information collected will be identified only by a number, not my name, and there will be no way that anyone could identify my answers. I understand that taking part in this study is up to me, that I may refuse to take part at any time, and that withdrawing from the study will not affect my services at Anasazi. Finally, I understand that I will not be paid or compensated for the information I provide. By clicking "Yes" below, I understand that I have given consent to participate in this Anasazi study.
0 Yes, I consent
0 No, I decline

Your full Name
Anasazi Trail Name
Your date of birth example: 07/15/99 (for July 15, 1999)

0 male
0 female
Number of months since discharge from Anasazi

0 YoungWalker
0 SinaguaWalker

GOALS
1) Final D #1 * Please enter a response of "4" if you reached your final D. A response of "7"
means your forward walking has carried you beyond this final D and a response of "1"
means your journey toward this final D has yet to begin.

   1  2  3  4  5  6  7

2) Final D #2 Please enter a response of "4" if you reached your final D. A response of "7"
means your forward walking has carried you beyond this final D and a response of "1"
means your journey toward this final D has yet to begin.

   1  2  3  4  5  6  7

3) Final D #3 Please enter a response of "4" if you reached your final D. A response of "7"
means your forward walking has carried you beyond this final D and a response of "1"
means your journey toward this final D has yet to begin.

   1  2  3  4  5  6  7

FAMILY RELATIONSHIPS
4) I have a positive, healthy relationship with my parent(s). (This includes the making of a
   trusting, the making of an asking, speaking of the heart, having sittings and walking as WE).

   1  2  3  4  5  6  7
completely disagree     completely agree

5) I can disagree with my parent(s) without my heart going to war. (If conflict arises we resolve
   it in a productive way without withdrawing or resorting to anger or sarcasm.)

   1  2  3  4  5  6  7
completely disagree     completely agree

6) I see/feel my parents walking forward.

   1  2  3  4  5  6  7
completely disagree     completely agree
7) I feel I have a belonging place in the hearts of my people—my family. My band (my family) strives to walk as WE. I feel drawn to them because this is my belonging place.

1  2  3  4  5  6  7
completely disagree  completely agree

8) My sibling(s) have a belonging place within my heart. My heart holds a belonging place for my sibling(s) even when their heart is turned away from me.

1  2  3  4  5  6  7
completely disagree  completely agree

9) My walking at ANASAZI has helped me heal and strengthen my relationship with my parents/other family members.

1  2  3  4  5  6  7
completely disagree  completely agree

PROGRAM CONNECTION
10) I continue to share the story of my walking at ANASAZI. (A response of "7" means you are eager to share the story of your walking in your speakings and in your writings and a response of "1" means you never share it even when invited.)

1  2  3  4  5  6  7
never share  always share

11) I have contact with someone from ANASAZI Alumni Services at least once per month. (By phone, text message, social media, pony express, telegraph, etc...)

1  2  3  4  5  6  7
completely disagree  completely agree

12) I continue to read ANASAZI reading material. (The Seven Paths, ANASAZI Path Books, etc)

1  2  3  4  5  6  7
completely disagree  completely agree

13) I connect on a regular basis with other ANASAZI alumni that help me to walk forward.

1  2  3  4  5  6  7
completely disagree  completely agree

AFTERCARE
14) I have followed through on all the elements of my aftercare plan. (individual, group or family therapy, AA/NA, etc...)

1  2  3  4  5  6  7
completely disagree  completely agree
15) I enjoy gathering, learning and sharing my awakenings. (I continue to share awakenings that I gather from Mother Earth and from beyond the clouds)
   1  2  3  4  5  6  7
   completely disagree  completely agree

PHYSICAL HEALTH
16) I maintain the healthy lifestyle that helped me on the trail. (Healthy diet, appropriate amount of sleep, plenty of water, regular exercise)
   1  2  3  4  5  6  7
   completely disagree  completely agree

17) Please share the kind of physical activity/exercise you get as well as its frequency and duration.

SPIRITUAL HEALTH
18) Spiritual beliefs are important to me.
   (I feel connected to a faith or spiritual tradition or higher power.)
   1  2  3  4  5  6  7
   completely disagree  completely agree

FEEDBACK
19) After experiencing and knowing what the ANASAZI trail is like, would you recommend the program to someone, such as a family member or friend?
   Yes
   No

20) Please use the space provided to make a speaking, make an asking, or express your hopes and concerns.

   Complete Later  Submit Now