JTSP
Journal of Therapeutic Schools & Programs
A Publication of the National Association of Therapeutic Schools and Programs

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THE JOURNAL OF THERAPEUTIC SCHOOLS AND PROGRAMS (JTSP) is published by the National Association of Therapeutic Schools and Programs and publishes articles that assist readers in providing comprehensive care for adolescents, young adults, and families receiving services from residential and wilderness/outdoor behavioral healthcare treatment programs. The editors welcome manuscripts that are the original work of the author(s) and follow APA style as presented in the sixth edition of the Publication Manual of the American Psychological Association. Manuscripts may include, but are not limited to, case studies, topical clinical articles, literature reviews, case studies, and quantitative research. Submissions are encouraged that relate relevant theory to clinical practice or provide original research relating to program or treatment outcomes and processes.

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Danny Recio

Dr. Danny Recio is the co-founder of New Summit Academy Costa Rica, The Bridge ~ Costa Rica, Sibanye South Africa, and the Supportive Immersion Institute. Danny is trained in Clinical Psychology, but his clinical and program development work are highly influenced by other fields, such as Anthropology, Constructivism, Ecology, Neuroscience, Systems Thinking, Complexity Theory and many others. An essential goal of the programs he has co-founded is having their participants invest in a process of change that extends well beyond themselves and their social circle, to encompass those outside of their cultural and socioeconomic world.

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Julia Riddell is a doctoral student in Clinical Developmental Psychology at York University. Her master's thesis examined youths' journey of change through a residential, wilderness and family therapy program, with a particular focus on changes in youths' sense of self in relationships. Most of her research is done in collaboration with interventions for marginalized populations, including Indigenous communities, northern Canadian youth and youth struggling with mental health and addiction. Julia also does clinical work with children and youth and is passionate about using psychology to advance social and environmental justice.

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PREFACE

Young Adulthood

I have been honored to serve as guest editor over the past year for the *Journal for Therapeutic Schools and Programs* (JTSP). This issue highlights work with young adult populations in our industry and would not have come to fruition without the behind the scenes support of Abigail Nash and the leadership of Dr. Ellen Behrens. In addition, NATSAP's commitment to the dissemination of peer-reviewed articles through its support of JTSP reflects a dedication to promoting healthy conversations that leads to better care for our clients and families.

Young adulthood is a tumultuous time of life rich in risk and opportunity. It is a window of time that puts our clients at a higher risk for problematic substance use and mental illness than any other subsection of the population in the United States (Substance Abuse and Mental Health Services Administration, 2013). Young adults burdened with psychiatric disorders also experience more struggle than their peers when faced with the developmental challenges of completing school and transitioning into adult occupational and social roles (Pottick, Bilder, Vander Stoep, Warner, & Alvarez, 2008). Even with these known risks, the majority of young adults with substance use or mental health disorders do not receive treatment (Substance Abuse and Mental Health Services Administration, 2012). There is a void in mental health care for young adults with persistent mental health challenges and each year we see more NATSAP programs responding to this need by extending more and more tailored young adult programming.

The majority of the articles found in this journal are focused on the challenges, constructs, nuances, outcomes, and opportunities in working with the young adult population. Each author attempted to provide concrete suggestions and ideas that can inform our work with clients. The process of selecting articles for publication and working with the authors to bring their ideas to a polished product has been rewarding and informative. The articles vary from research articles to position papers introducing new ideas. My hope is that the reader is able to extract meaningful, practical information from the articles that directly inform their work.

The first article in this edition of the JTSP, "Young Adults in Transition: Factors That Support And Hinder Growth And Change", shares the findings from a comprehensive research project examining the experience of 17 young adults who completed a young adult transitional living program. It highlights the importance of high quality connection and relationships for young adults and disseminates important feedback for NATSAP programs working with adults on topics such as dating, medication management, group therapy, and family work. The second article presented in this edition of JTSP, entitled "Young Adults in Residential and Outdoor Behavioral Health Programs: Preliminary Outcomes

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.01

from the Practice Research Network of the National Association of Therapeutic Schools and Programs", is a first look at the data that have been gathered through the collective efforts of many OBH and residential programs. This article looks at outcomes and also compares the demographic information of the clients who attend OBH and residential programs. This article is exciting as it is a product of the increased collaboration across programs to join efforts to produce more robust studies through shared data.

Longitudinal research is essential to the viability of our industry. The third article, "The Relationship Between Self-Reported Prior Drug Use and Treatment Effectiveness in Substance Use Disorder Residential Wilderness Treatment with Young Adult Males", takes a closer look at the treatment needs and outcomes of young adults with substance abuse disorders in a specific Outdoor Behavioral Healthcare program. An important implication of this research is the need to alter the treatment and steer away from a 'one size fits all' depending on the level of substance abuse the client presents with. This article illustrates the value of research in helping us gather the information we need to tailor treatment to meet the specific, unique needs of each of our clients.

The next article, "A Novel Investigation of Substance Use Outcomes in Substance-Specific Outdoor Behavioral Healthcare Programs" continues looking at substance use outcomes with a novel research design that compares young adult outcomes in substance-specific Outdoor Behavioral Healthcare (OBH) programs with more traditional substance-specific treatment. This article is able to utilize a control group design that has rarely been seen in our field and provides useful data that supports the utilization of OBH for young adults.

While we have greatly increased the amount of research occurring in our field, we have suffered from a lack of instrumental diversity. The article, "An Evaluation of Alaska Crossings: Comparison of the Client Status Review and the Youth Outcome Questionnaire", not only contributes additional, meaningful outcome data but also explores the utilization of a new outcome monitoring system called the Client Status Review.

Moving away from quantitative research the next article, "The Confounding Variable: Working with Shame in Young Adults in a Holistic Treatment Model", dives into a thorough exploration of shame and the nuances of working with shame in the young adult population. It is one of two articles in this edition that explores a concept in working with young adults in an attempt to provide a model that informs our work with clients. It gives pragmatic ideas in how to identify and work with shame relying on emerging neuroscience and the power of the therapeutic relationship.

The article "Coming of Age in Foreign Lands" is the next theoretical article and speaks to the power of cross-cultural immersion experiences to serve as a rite of passage for young adults. It proposes a theory of Supportive Immersion that outlines how these experiences can lead to unique client gains not found within the confines of traditional treatment programming. This article encourages

programs to provide creative, dynamic, and non-traditional experiences that can serve our clients who often have failed to respond to traditional therapeutic approaches.

The last article is not specific to young adults. JTSP is committed to the timely publication of quality articles and so we chose to include the article "Better Relationships, Mental Wellness, and Self Development: What Parents Expect from Residential Treatment for Their Struggling Youth" in this issue. It uses qualitative research to extract common expectations parents have when their child is in residential treatment. Amongst other findings it provides a detailed and very accessible breakdown of what parents hope for within the categories of relationships, mental wellness, and self-development.

It is my belief that you will find each of the articles rich with applicable findings that can inform our work with clients and families. I'm so appreciative of the work and dedication each author put into sharing their work in this format. Enjoy!

Sean Roberts, PhD LPC
Clinical Director
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References

Pottick, K. J., Bilder, S., Vander Stoep, A., Warner, L. A., & Alvarez, M. F. (2008). US patterns of mental health service utilization for transition-age youth and young adults. *The Journal of Behavioral Health Services and Research, 35*(4), 373-389.

Substance Abuse and Mental Health Services Administration. (2012). *Results from the 2010 national survey on drug use and health: Mental health findings* (Vol. 11).

Substance Abuse and Mental Health Services Administration. (2013). Serious mental health challenges among older adolescents and young adults. *National Survey on Drug Use and Health.*

Young Adults in Transition: Factors That Support and Hinder Growth and Change

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Abstract

A therapeutic model referred to as young adult transition programs has emerged to better address the unique developmental challenges found in this age group. This study examined 317 critical incidents that supported or hindered young adults in a therapeutic transition program. The research design used a combination of an instrumental case study and critical incident technique (CIT). Using interviews and the Outcome Questionnaire 45.2, the study explored in-depth the experiences of 17 young adults who were alumni of a young adult transition program. The objective was to better understand the transition experience from a participant perspective and, through the findings, inform program development and evaluation for young adult transition programs. Several significant findings emerged from the data, among them the importance of interpersonal relationships, experiential education and adventure, individualized programming, and community and culture. An understanding of these findings leads to a discussion on transformational mentoring and leadership as well as relational cultural practice and how this can support leaders of transition programs in further research and program development. The limitations of the study are discussed and suggestions for future studies are offered

Keywords: young adults, young adult treatment, critical incident technique, case study, mental illness, relational cultural theory, transformational leadership, transformational mentoring, anxiety, depression, failure to launch, emerging adulthood, transitions, young adult development

AUTHOR NOTE: This paper summarizes a dissertation, written by Dr. Treadway and submitted to the Ph.D. in Leadership and Change Program of Antioch University in fulfillment of the requirements for the degree of Doctor of Philosophy. Dr. Holloway served as the Dissertation Chair. The complete dissertation is available at: http://aura.antioch.edu/etds/336

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.02

We live in an age and in a society that is increasingly difficult for young people to navigate. While many young people seem to move effortlessly from adolescence to young adulthood, some find the transition difficult if not seemingly impossible. Economic and social changes have deferred the responsibilities of adulthood for many and this has led to Arnett's (2000, 2004) theory on emerging adulthood, a developmental period often characterized by fluctuations in life roles and responsibilities. As a result, emerging adults experience heightened identity exploration, exaggerated beliefs about life possibilities, a sense of instability and negativity, self-focused attention, and feelings of being in between.

Young adult transition programs emerged in the late 1990's to support clients as they exited the highly structured therapeutic environment of wilderness treatment or residential care and learned to navigate the adult world. The National Association of Therapeutic Schools and Programs (NATSAP) defines young adult transition programs as being,

> Designed for young people over 18 needing a safe, supportive environment and life skills training as they transition into adulthood. Many offer access to 12-step programs and may have a psychiatric component. Generally they will offer educational programs that are linked to community colleges or universities or provide schooling at their location. Volunteering, employment arrangements, community service and re-integration into the community at large are general components of the programs. Many operate on a small residential model and transition to a community based, independent living apartment model. (National Association of Therapeutic Schools and Programs, n.d.-b, para. 4)

The purpose of this study is to listen to the stories and experiences of alumni from a young adult transition program to understand the critical moments or events that support or hinder growth and change. In a study of mental health utilization for young adults, Pottick, Bilder, Vander Stoep, Warner, & Alvarez (2008) reported that residential care programs are inconsistent in providing appropriate treatment for young adults with mental health disorders and the study states "residential care will likely remain a scarce resource for transition-age individuals until policy, programmatic, and clinical issues are addressed" (p. 385). This research is a step towards understanding directly from young adults what support and services are beneficial during this developmental time period.

Literature Review

Emerging adulthood has been characterized as a developmental stage, between the ages of 18 to 25, with unique social and psychological issues (Arnett, 2000; Irwin, 2010; Park, Mulye, Adams, Brindis, & Irwin, 2006). Nationally, higher rates of depression, substance abuse, and psychiatric issues are reported in this age group (Kessler et al., 2005; Pottick et al., 2008; Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2010; U. S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. Office of Applied Studies, 2007).

YOUNG ADULTS IN TRANSITION

Epidemiological data from the National Comorbidity Survey indicates that almost half of the population (46.4%) aged 18 years and older will experience either a psychiatric or substance abuse disorder in their lifetime and three-fourths of those lifetime cases start by age 24 (Kessler et al., 2005).

As young adults transition to more independent living situations with increased responsibility and less support, the burden of untreated problems may negatively affect adult functioning (Adams, Knopf, & Park, 2014). Mental health disorders and substance abuse can disrupt education, relationships, career development, and positive civic engagement (Eaton et al., 2008). The difficulties that result from these adverse life experiences can lead to increased isolation, profound ambivalence, and hopelessness. If left untreated these young adults are more likely to experience significant and chronic functional impairment (Kessler et al., 2005). In the last two decades, several therapeutic options have emerged to address the unique challenges faced by young adults.

Since the mid-1990s, research has established a high level of poor outcomes for youth who transition into adulthood after being diagnosed with a serious mental illness in childhood (Davis & Vander Stoep, 1997; Pottick et al., 2008). Despite extensive services while these individuals are in their adolescence, the mental health field is only recently recognizing that we may not be serving these young adults adequately and in a developmentally appropriate manner (Pottick et al., 2008). Those with psychiatric problems in young adulthood have significantly more struggles compared to their peers in their attempt to complete school and acquire adult occupational and social roles (Pottick et al., 2008). However, the majority of young adults with substance use or mental health disorders do not receive treatment (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2010). The mental health field needs to better understand how to adapt services and support not only in mental health, but with the unique developmental issues of a young adult.

In the private-pay treatment field there is a particular need to support young adults being discharged from primary treatment such as residential treatment centers, therapeutic wilderness programs, drug and alcohol treatment programs, psychiatric facilities, and therapeutic boarding schools. Primary treatment provides a structured, supportive environment where the individual is often isolated from the temptations and pressure of the real world. The simplified environment and intensive treatment provide individuals with the opportunity to learn new skills and strategies and to increase personal insight into the challenges that necessitated treatment. Research on the process of transition would lead us to believe that therapeutic gains from primary treatment would have increased sustainability if the individual is supported upon discharge to apply what they have learned, and to practice in the real world, yet within a structured and supportive environment (Goodman, Schlossberg, & Anderson, 2006; Mezirow & Associates, 1990; Schreiner, Louis, & Nelson, 2012; Tagg, 2003).

Young Adult Transition Programs—What Are They?

Young adult transition programs have emerged to help address the need for support as the young adult discharges from the highly structured environment of primary care. As new young adult programs develop, there is a need for quality assurance, oversight, and accountability. There is also a need to understand if the services provided are of value and if they actually contribute to the quality of life and the successful transition of young adults moving toward a healthy and independent life. A foundation has already been laid by the adolescent treatment world. Outcomes and best practice is an important issue for young adult transition programs to address, particularly if they want to place themselves within behavioral healthcare as a valuable part of the treatment process.

Young adult transition programs are designed to assist young people to gain independent living skills within a community that supports healthy relationships, personal growth, emotional coping skills and academic achievement. Clients include young adults who have struggled with substance abuse, poor self-esteem, depression, anxiety, mood disorders and attention deficit disorder who need assistance in making the transition to adulthood. In addition to providing therapeutic support, adults assist students in setting goals, navigating community college courses or vocational options, identifying and obtaining part-time work, and learning and practicing life skills associated with finances and independent living. Frequently, students move through several program phases, each with increasing levels of independence. Recreational activities (i.e., backpacking, snowboarding, rock climbing, etc.) and home living activities (cooking, repair work, gardening, etc.) are usually integrated within the treatment model. Further, students participate in individual and group therapy, attend drug and alcohol support groups, and participate in a community that provides support and encourages independence (P. Phelan, personal communication, February 29, 2016).

There are a wide variety of programs ranging from those that are highly structured and clinical to those that are mentor-based and designed primarily to support college or work experience. Some programs are apartment-based and others incorporate a group-living experience. Staffing patterns also vary. Some are staffed 24/7 while others provide structure and support during the day with no supervision overnight. Some programs are located in a town or city while others are located rurally. Most programs create a structured environment to help young adults reduce harm from unproductive or high-risk behaviors. In addition, the structure helps them gain personal insight and direction through therapy, the social milieu, life-skills education, vocational support, recreation, health and wellness, medication management, and education. Many transitional programs also work with parents to educate them around family systems, separation-individuation, and their role in the therapeutic journey. A high percentage of young adults participating in these transition programs have received prior treatment. Some have been in therapy from an early age, while others have gotten off-track later in adolescence; some have been hospitalized while others have been in residential treatment previously, or in a therapeutic wilderness program.

YOUNG ADULTS IN TRANSITION

Transition programs provide an opportunity for young adults to utilize skills learned in a highly structured environment in the "real world."

Currently, there are approximately 27 young adult transition programs that are members of the National Association of Therapeutic Schools and Programs, and the number of transition programs has steadily increased since 2000. It is anticipated that expansion will continue. This belief is supported by the positive response and support of the Young Adult Transition Association (YATA). Some of these programs are licensed or accredited by external bodies, such as the Joint Commission for Accreditation of Healthcare Organizations (JCAHO), the Commission on Accreditation of Rehabilitation Facilities (CARF), the National Independent Private Schools Association (NIPSA), or state agencies. Many young-adult programs do not have accreditation or licensure as states often do not offer licensure and accreditation is not mandatory. Some transition programs have gone the route of being licensed as partial hospitalization programs or outpatient programs for mental health or substance abuse (B. Horigan, personal communication, July 8, 2016). Accreditation and licensing is one way that programs can demonstrate quality of care and commitment to performance improvement (Joint Commission for Accreditation of Healthcare Organizations, n.d.). However, it is not yet standard practice for young-adult transition programs, which creates a potential issue around accountability, risk management, and quality of care.

Emerging Research in Young Adult Programs

As the number of private treatment programs increase, more attention is needed to show evidence-based programming. There is public outcry for increased accountability and oversight (Curry, 1991, 2004; Lieberman & Bellonci, 2007; Young & Gass, 2008).

While there is a growing body of outcome research documenting the impact of treatment on adolescent clients in wilderness therapy and residential treatment, similar data about young adults in treatment are conspicuously absent. At the same time, there is growing momentum among people working with young adults to come together collaboratively to address this situation. For example, YATA currently has a research committee that is developing a common measure to use in research efforts across programs. Several young adult transition programs collect outcome data, but sample size is frequently not large enough to be statistically significant. Individuals in the world of young adult treatment are now, more than ever, looking to address these data collection challenges. Certainly, a collaborative and collegial approach will help address the challenge that practitioners face when trying to convert data into meaningful learning.

There are a number of significant gaps in the literature with respect to our understanding of young adult programs. For example, we know little about specific programmatic elements that contribute to the change process (Zimmerman, 1990). While most transition programs incorporate fairly standard

programmatic elements such as individual, group, family, and milieu therapy, there are no studies that specifically evaluate the efficacy of each of these treatment components. The young adult treatment field would benefit from further research that identifies effective methods that foster growth and change in this pivotal developmental stage. It would be helpful to understand the nuances of effective change methods in order to replicate positive treatment approaches and models. In addition, it is important to understand what clients identify as supporting or hindering their growth. There is no better place to start than with the stories of young adults who have experienced this transitional treatment.

Method

The method of this study included: an exploratory, instrumental case study to frame the context of the alumni perspectives, Critical Incident Technique (CIT) to gather and analyze alumni interviews, and the Outcome Questionnaire 45.2 (Lambert et al., 2004) to gather quantitative data on participant symptom distress and level of function post treatment.

Instrumental Case Study

An instrumental case study provides insight into a particular issue or phenomenon with the expectation that these insights will have utility and transferability to similar situations and be a foundation from which theory develops. Stake (1995) describes a case as instrumental when it is examined to provide insight into an issue or draw a generalization. Case study research provides an in-depth inquiry with the capacity to study complex social phenomena in a holistic and meaningful manner with rich narrative and real-life context (Yin, 2009), while gathering first-hand experience using a variety of data collection methods. Yin asserts that the case study can be an exploratory process to initiate research prior to undertaking a larger and perhaps more quantitative study, or as a tool to provide illustrations in support of quantitative data. In particular, an instrumental case study can help focus future organizational, or programmatic innovation, and can represent a significant contribution to knowledge and theory building. The objective is to understand everyday situations and to use lessons learned from the study to inform the work of other institutions or individuals.

There has been a recent call for an increase in clinical case studies (Behrens, 2015; Carlson, Ross, & Harris Stark, 2012; Ernst, Barhight, Bierenbaum, Piazza-Waggoner, & Carter, 2013; Leary, 2014; Macgowan & Wong, 2014) because they are considered a useful research design for clinical practice across professions including psychology, social work, special education, and counselor education (Bloom, Fischer, & Orme, 2009; Heppner, Kivlighan, & Wampold, 2008; Horner, Carr, Halle, McGee, Odom, & Wolery, 2005; Lundervold & Belwood, 2000). The benefits of case study research explored by Carlson et al. (2012), McLeod (2010) and Yin (2009) support the argument that the instrumental case study is a useful method of research in a field with a dearth of information regarding outcomes and therapeutic factors that support or hinder young adults in treatment.

Critical Incident Technique

It was determined that the Critical Incident Technique (CIT) within the framework of an instrumental case study was the best method to capture the student experience of supportive and hindering incidents. An advantage of CIT is its usefulness in the early stages of understanding a phenomenon (Chell, 2004) and as stated previously in this report there is a paucity of research in the field of young adult treatment. CIT has been used as a means of reflection and enhanced understanding (Chell, 2004) and can help create a better understanding of specific practices and beliefs (Tripp, 1994). Particularly relevant to this study is the use of CIT in the therapeutic field of practice. In the last four decades, CIT has been more often used within a constructivist framework (Butterfield, Borgen, Amundson, & Maglio, 2005), and in a therapeutic context. Examples are found in the following studies: Wark (1994) used the technique to study clients' and therapists' perception of change in therapy. Bedi, Davis, and Williams (2005) used CIT to identify and categorize the variables that clients consider important for forming and strengthening a positive therapeutic alliance. Chouliara, Karatzias and Gullone (2013) researched survivors' experiences of recovering from childhood sexual abuse, while Khandelwal (2009) used CIT to gain students' perspectives on teaching behaviors that differentiate excellent from poor performance of undergraduate college teachers. Plutchik, Conte, and Karasu (1994) used the technique to obtain a list of client behaviors that create difficulty for psychotherapists.

Flanagan's (1954) five phases of a critical incident study guided the procedures of this study and as with other researchers the process was adapted to fit the purpose of the research (for a detailed account of these phases see Cohen & Smith, 1976; Freeman, Weitzenfeld, Klein, Riedl, & Musa, 1991).

CIT organizes the reported incidents around three stages used to understand and make meaning of an event (Butterfield et al., 2005; Holloway & Schwartz, 2014; Schwartz & Holloway, 2014):

1. Antecedents—events or thoughts that precede the critical incident;
2. The critical incident or experience with a detailed description;
3. The outcome, consequence, or impact.

Critical incidents are not "things" which exist independently of an observer and are awaiting discovery like gold nuggets or desert islands, but like all data, critical incidents are created. Incidents happen, but critical incidents are produced by the way we look at a situation: a critical incident is an interpretation of the significance of an event. To take something as a critical incident is a value judgment we make, and the basis of that judgment is the significance we attach to the meaning of the incident. (Tripp, 1994, p. 8)

Young Adult Transition Program

Dragonfly Transitions is a program for young adults discharging from a primary treatment setting such as wilderness therapy or a psychiatric setting. The program is designed with progressive phases and a variety of living environments based on student interest and readiness. The goals include an opportunity for real world experience while providing a stable, supportive environment where students can try new things. Students can attend college, volunteer, work, and engage in a variety of fitness and recreational activities. In 2016, Dragonfly Transitions earned Behavioral Health Care Accreditation through the Joint Commission - the non-profit body that accredits and certifies thousands of U. S. health care organizations (see Joint Commission for Accreditation of Healthcare Organizations, n.d.-a).

Participants

Participants were alumni of Dragonfly Transition between the years of 2010 and 2015. The sample size started with 266 alumni and any student who was enrolled with the program from 2010 to 2015 was considered for the sample. Several alumni did not have current contact information in the electronic health care record and were eliminated from the sample, along with any alumni that were known to be in active psychosis or were currently residing at a treatment program. Any student who was a client of the author while at the program was removed from the list due to ethical considerations. The first author is a co-owner of the program and provides clinical services to some clients in the program. To maintain clinical and research ethics, the first author did not influence and was not involved in the selection or invitation of participants. Alumni were informed that their name and participation would be kept confidential to support credibility, trustworthiness and to manage bias of the participant feeling obligated to respond in any particular manner. The final potential sample included 188 alumni and an invitation was sent out via email with an explanation of the research and the process to participate.

Demographics. The length of stay amongst the sample ranged from 61 days to 618 days. The average length of stay at the program is 274 days, with the average length of stay among those that participated in the study, 329 days. Twenty-one alumni responded to the initial invitation; two declined to participate, and two did not follow up to schedule an interview, making a total of 17 alumni interviewed. The average age of participants in the study was 23.5 with a range from 21 to 26 years of age and a median of 23 years of age.

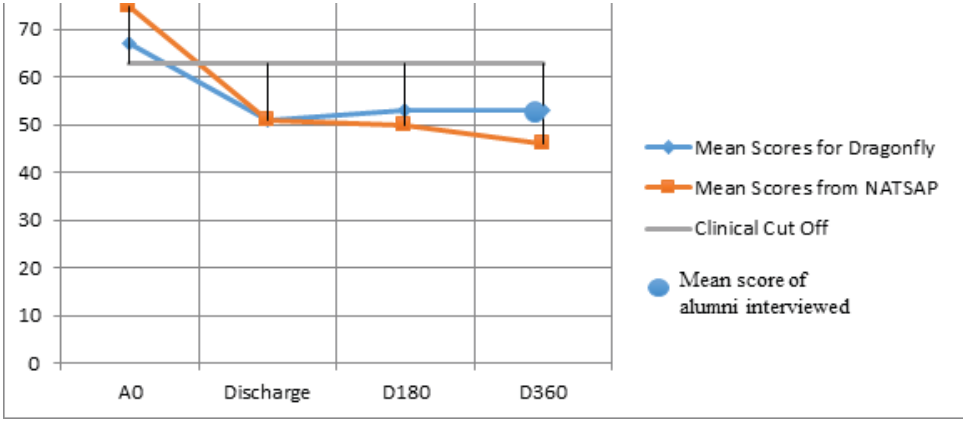
The 17 participants self-identified with a range of clinical diagnoses that is congruent with a typical student. Diagnoses included: obsessive compulsive disorder, co-dependent relationships, post traumatic stress disorder, anxiety, social anxiety, depression, suicidal ideation, substance abuse/addiction, bulimia, bipolar disorder, trauma, mood disorder, and low self-esteem. The most commonly mentioned, as is true for most students, was anxiety and depression.

YOUNG ADULTS IN TRANSITION

Outcome Questionnaire 45.2.

In this study the OQ-45.2 is used to compare the mean OQ-45.2 score of all interviewed participates to NATSAP OQ-45.2 research data, and the Dragonfly Transitions OQ-45.2 research data (Figure 3.1). A score of 45 is representative of a community sample, and a score of 63 is the clinical cut off (Lambert et al, 2004). The mean OQ-45.2 score of study participants is 52.

Figure 3.1. Mean OQ scores from Dragonfly, NATSAP and alumni interviewed for dissertation.



Interviewing Method

Written consent and authorization was obtained prior to the start of the interview process. A trained interviewer conducted the interviews. See Appendix A for the interview protocol. The goal was to gather four supporting incidents and four hindering incidents from each participant (Chell, 2004).

All interviews were recorded and transcribed by an online freelance service with no connection to, or knowledge of the program. The transcriptions of the interviews were then entered into the application, Dedoose, with code identification to protect the confidentiality of the interviewee. Dedoose is an online software system designed to help the researcher organize qualitative data such as interviews (Dedoose, n.d.).

Method of Data Analysis and Interpretation

The transcripts were coded in accordance with CIT structure of coding and the analysis used an emergent coding approach with a constant comparative method of analysis (Holloway & Schwartz, 2014).

Coding. A code is a researcher-generated construct that symbolizes interpreted meaning of the data for the purpose of pattern detection, categorization, theory building, and other analytic processes. The code is intended to capture and represent the data's primary content and essence (Saldana, 2013). Thus, detailed coding, which reflects interviewees' descriptions and meaning of the event is designed to maintain the integrity of their experience and to ensure the confirmability of the coding process. The coding procedure is considered "emergent coding" and does not rely on inter-rater reliability tests for credibility (Boyatzis, 1998) rather a standard method for coding consistency was adopted. Two trained coders worked with the data. One coder coded all 17 transcripts; the second coder, who had significant experience in CIT research and coding, coded 10 of the same transcripts independently, to ensure consistency of coding approach. Any inconsistencies in interpretation of the transcripts were discussed and consensus reached on participant meaning.

Data analysis. The first step of analysis included a reading of the transcripts in which the primary coder determined the types of incidents being reported and created a classification scheme based on the interviews. Next, the second author and the secondary coder reviewed the types of incidents and determined that they were relevant to the purpose of the study and consistent with CIT method.

The next step of analysis utilized the Dedoose software's query and report capability to organize the thematic codes by incident type to determine if there were any thematic connections across incidents (Schwartz & Holloway, 2014). All codes were analyzed and organized along thematic connections and each categorization included a support or hinder sub-category to further separate and identify incidents. Next, the relationships between the themes were examined. In the final phase, the first author interpreted the findings in relation to the supportive and hindering incidents experienced within the program and as described by the participants of the study sample.

The context of qualitative research and the trustworthiness of a study is established when a validation process is built into all aspects of the research design rather than by an evaluation that occurs at the end of a study (Kvale, 1994). Butterfield et al. (2005) recommended incorporating the following nine data-analysis checks into CIT studies:

> 1) Extract the critical incidents using independent coders; 2) cross-check by participants; 3) independent judges place incidents into categories; 4) track the point at which exhaustiveness is reached; 5) elicit expert opinions; 6) calculate participation rates against the 25 percent criteria established by Borgen and Amundson (1984); 7) check theoretical agreement by stating the study's underlying assumptions and by comparing the emerging categories to the relevant scholarly literature; 8) audio-tape interviews to ensure participants' stories are accurately captured; and, 9) check interview fidelity by getting an expert in the CIT method to listen to a sample of interview tapes. (pp. 490–491)

All nine of the credibility checks were used in this study to follow the principles of rigor, with extra diligence given the first author's unique relationship to the case.

Results

Analysis of Interviews

Codes for incident types and themes emerged from the participants' description of incidents. The following section examines the types and frequency of critical incidents, participation rate per incident and the participant perspective, including antecedents and outcomes. The critical incidents are organized into conceptual categories that emerged from the thematic analysis: Interpersonal Interactions, Community and Culture, Experiential Education and Adventure and Program Components.

Types and frequency of critical incidents. From the 17 interviews, 327 unique incidents were isolated and characterized as either supporting or hindering. Research participants identified 248 supporting incidents and 79 hindering incidents. These distinct incidents fell into four categories defined as: Interpersonal Interactions, Community and Culture, Experiential Education and Adventure, and Program Components.

Interpersonal interactions reflect the interaction, exchanges and relationship between a participant and another individual. Interactions with mentors were most frequently reported, followed by interactions with a therapist, and then peers. The Community and Culture speaks to the larger context of the therapeutic milieu and reflects how the participants feel about and experience the environment as a whole. Experiential Education and Adventure demonstrates a program philosophy of hands on learning where students reflect on and practice new skills and ways in which to interact in the world beyond treatment. The Program Components are specific parts of the program that participants referenced and include mention of a wide range of specific structure, rules and activities within the program.

Table 4.1 shows the identified critical incidents and the corresponding number of incidents. Each category has a *support* or *hinder* classification and this is followed by the number of sources, which indicate how many alumni mentioned a specific incident, category or theme. A high number of sources indicates consistency and importance of a category; for example, if 14 of the 17 participants or sources talk about mentor interactions this is an indication that the category is an important area to examine.

Table 4.1

Critical Incidents and Corresponding Number of Incidents and Number of Sources

Critical Incidents		No. Incidents (No. Sources)
Interpersonal Interactions		
Mentor Interactions		
	Support	45(14)
	Hinder	13(6)
Therapist Interactions		
	Support	22(14)
	Hinder	12(6)
Peer Interactions		
	Support	19(12)
	Hinder	1(1)
Program Community & Culture		
	Support	43(13)
	Hinder	7(6)
Experiential Education & Adventures		
	Support	32 (11)
	Hinder	1 (1)
Program Components		
Check Sheet		
	Support	4 (2)
	Hinder	6 (5)
Dating Policy		
	Support	7 (3)
	Hinder	7 (7)
Exercise		
	Support	9 (5)
	Hinder	0 (0)
Family Therapy & Workshop		
	Support	9 (4)
	Hinder	0 (0)

Medication &Medical Management		
	Support	4 (3)
	Hinder	13 (6)
Groups		
	Support	8 (6)
	Hinder	9 (6)
Leap of Taste		
	Support	6 (5)
	Hinder	2 (2)
Life Skills		
	Support	14 (9)
	Hinder	3 (2)
Life Story		
	Support	8 (5)
	Hinder	2 (2)
Phases of the Program		
	Support	7 (5)
	Hinder	(1)
Total Incidents		327
	Support	248 (76%)
	Hinder	79 (24%)

Participation rate per incident. Participation rate is one method for establishing credibility of categories. Participation rate is calculated by determining the number of participants who cited a specific incident that was coded by a particular category or theme. The participation rate is divided by the total number of participants, which in this study is seventeen (Butterfield et al., 2005). Borgen and Amundson (1984) established the rate of 25% participation for a category to be considered valid. Table 4.2 shows the participation rate for each critical incident and the bold indicates categories that met or exceeded 25%, indicating credibility of an incident.

Table 4.2

Participation Rate to Determine Validity

Critical Incidents	Participation Rate %
Interpersonal Interactions	
Mentor Interactions	
Support	82%
Hinder	35%
Therapist Interactions	
Support	82%
Hinder	35%
Peer Interactions	
Support	70%
Hinder	.5%
Program Community & Culture	
Support	76%
Hinder	35%
Adventures/Experiential Education	
Support	65%
Hinder	.5%
Program Components	
Check Sheet	
Support	1%
Hinder	29%
Dating Policy	
Support	17%
Hinder	41%
Exercise	
Support	29%
Hinder	0%
Family Therapy & Workshop	
Support	23%
Hinder	0%
Medication & Medical Management	
Support	17%

	Hinder	35%
Groups		
	Support	35%
	Hinder	35%
Leap of Taste		
	Support	29%
	Hinder	12%
Life Skills		
	Support	52%
	Hinder	12%
Life Story		
	Support	29%
	Hinder	12%
Phases of the Program		
	Support	29%
	Hinder	.5%

The participation rates as shown in Table 4.2 support the highest participation rate which were previously described and are:

- Interpersonal Interactions;
- Community and Culture;
- Experiential Education and Adventure
- Program Components

Table 4.3 presents the original CIT framework and the adaptation applied and used in this research.

Table 4.3
Framework of Antecedents, Incidents, and Outcomes Used in This Dissertation

Original Critical Incident Labels	Adaptation
Antecedent to critical incident	Best understood as how the alumni experienced life prior to treatment.
Critical Incidents Positive and Negative	Critical incidents of participant experience that was significant. How alumni made meaning of and talked about experiences while enrolled with the program. What supported or hindered growth and change?
Outcome to critical incident	How alumni currently experience and describe their life post treatment.

Note: Based on concepts outlined in Butterfield et al. (2005).

Antecedents and Outcomes

The section that follows describes the antecedents that led to treatment and the outcomes experienced by participants one to five years post treatment, depending on the year they were enrolled with the program. Antecedents and outcomes have been combined in this section in order to directly compare and contrast pre and post treatment statements All of the alumni interviewed engaged in therapy or treatment programs prior to the young adult transition program and often from an early age. Often, a wilderness therapy program was the initial catalyst for change and readiness for a transition program. The stories told about life experiences prior to treatment describe anxiety, depression, isolation, multiple diagnoses and mis-diagnoses, trauma, lack of insight, suicidal ideation or attempts, substance abuse, and dis-connection with self, others and community. In contrast, stories about life following treatment describe connection, support, perseverance, and insight regarding life challenges. Alum P13 described the antecedent leading up to treatment and the combination of personal challenges within the dynamics of the family system:

> *I'd been seeing mostly individual therapists since about the age of 12. I've seen counselors and psychologists, psychiatrists for OCD. I think that was really the focus, but there was just a lot of poor communication at home with my parents, a lot of anger management issues, just very little understanding of emotions on my behalf and I think everyone in my family.*

In contrast to the antecedent is the outcome Alum P13 shared what life is like for them in the present moment:

> *I am doing really well now. I live in an apartment-style dorm on campus . . . I have three wonderful roommates. I'm very happy. I'm just enrolling as a full time student. I have had academic success in the past two terms. I've gotten my first real life job and held it for three months now.*

Alum P5 shared how the skills that they learned in treatment are being applied in their current life with the recognition that life still presents challenges. Prior to treatment, Alum P5 "was struggling with bulimia and severe depression, severe anxiety, all the DSMs [Diagnostic and Statistical Manual of Mental Disorders]." Following treatment Alum P5 stated:

> *I am working on my associates for human services and then I'm going to get my DSW, MSW and then I want to become a DBT [Dialectical Behavior Therapy] therapist. I'm struggling a lot right now. I am kind of in my depression and it sucks and I hate it. At the same time prior to treatment I wouldn't fight and I'm fighting right now. I have good resources, I have good friends, I have good support and I'm sure that we'll talk about this later, but Dragonfly helped with that. It really, really did.*

P16 shared that prior to treatment they "had a therapist before going to Wilderness Therapy, but some of it wasn't really helping and so I had a lot of depression and anxiety and I was getting into a lot of trouble." In contrast, P16

describes how the experience at the transition program supported job skills and improved familial relationships: "I've been working for about a year and six months now. Dragonfly instilled in me a lot of confidence in getting a job . . . and having a better relationship with my family."

Alum P9 described the long journey of treatment and showed that it can often take many treatment placements and challenging life lessons before reaching a calmer more stable stage of life. The story of P9 reinforces the fact that treatment is not a linear process and in this case, the treatment journey started before the young adult transition program and continued well beyond.

> *I was in three residential treatments before Dragonfly. They were all focused on mental health. I was there as an adolescent before I turned 18 and then Dragonfly was a follow up program to that. I was extremely depressed and suicidal. I had several suicide attempts. I was on drugs. I was on crystal meth since I was 16. I had a lot of discontent between my family and I. We would fight a lot. I had aggression issues; I had an assault charge when I was younger. I've stolen money from my parents. I was just really bad news when I was a young kid.*

About life following treatment, P9 shared:

I'm doing better. I relapsed about a year ago. I ended up going to rehab about a year ago, followed by two outpatients, which I didn't complete and then another round of rehab in March. I'm currently in sober living and doing well.

The narratives above are contrasted with the OQ-45.2 score of participants, which resulted in a mean score of 52 and a median of 46. These scores reflect that clinical symptoms have remained below the clinical cutoff of 64 for participants in this study. The mean OQ-45.2 score demonstrates sustained benefit beyond treatment for these 17 participants.

Incidents That Support or Hinder Growth and Change

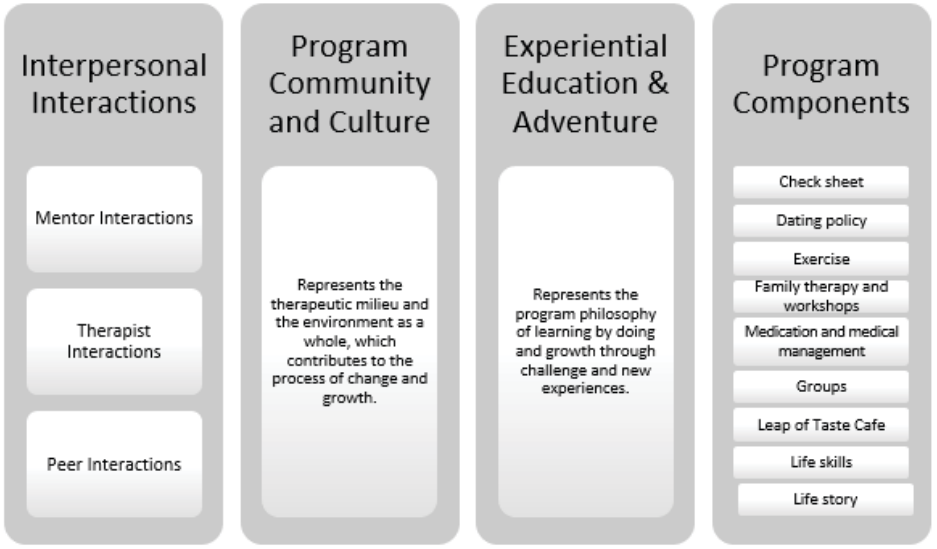
When participants were asked about incidents that supported or hindered the process around growth and change, it was evident that the time following discharge from treatment had allowed for meaning making and insight. It appeared that the alumni had time to reflect upon the experience as a whole as well as on individual incidents, interactions, or significant moments and this allowed for increased awareness and the ability to apply meaning to an expanded and broader perspective. What emerged from the analysis of the data was a pattern of responses that revolved around four main themes and the incidents appeared as intermediary steps between what they described as critical and significant and the resultant outcomes or behaviors as described in their lives beyond treatment. Participants often made statements that fit into several of the categories within the coding structure. There is overlap and symbiosis of the themes within the categories, further supporting the importance of the critical incidents: interpersonal interactions, community and culture, experiential

education and adventure, and individualized program components. Figure 4.3 below provides an overview of the four main categories of critical incidents with subthemes listed below.

Figure 4.3. Critical incidents and subthemes.

Interpersonal interactions. Interpersonal interactions between participants and a mentor, therapist, or peer, account for 34% of the total 327 incidents (110 of the 327 total). Each of these interpersonal categories are described next to uncover the nature and quality of these types of relationships.

Mentor interactions. Within the supporting incidents of mentor interactions, the most frequently reported themes are of connection, support, boundaries, fun, working alongside the student, and being treated equally. Mentors are the direct care or line staff within the program. They have the most direct contact with a student on a daily basis and they are responsible for the daily structure, accountability, and support. Mentors work with the therapists to support the master treatment plan and help the student to apply the treatment plan to their day-to-day life. The collaboration between mentor and therapist is crucial in the success of the program and in its support of the student.



Alum P8 spoke about the confidence developed through the work with Mentor X as they were encouraged to engage outside of the program and look for work.

> *Mentor X would help you with finding a job that would suit you and preparing for the job. He also instilled some confidence in me or helped me find my own confidence for things outside of Dragonfly, and that was very helpful.*

Another alum, P12, talked about how helpful it was to have a mentor do things with her: "she and I went to exercises classes . . . together . . . She would get me moving and that was helpful."

In the interview with Alum P3, one sees the importance of the mentor-student relationship and connection in conjunction with boundaries and genuine care.

> *I felt like a human that's with an authoritative friend . . . She knows when it's appropriate to share personal things. . . . I do know a lot about Mentor B, but she's very good, very good at separating her life from yours . . . from the little I know, she's been through a lot too and just enough so she can empathize, but not enough so that I feel like she's projecting. . . I like her happiness and enthusiasm, and I feel like she genuinely cares about you. And she's smart too.*

Alum P9 spoke about developing relationships through the adventure trips and the type of personality traits within a mentor that they found supportive:

> *She was always very supportive. She was kind of quirky and I really liked that. She was always really upbeat . . . Trips allowed us to connect with the mentors on a more personal level. Because a lot of them were younger like us, so being able to connect with somebody similar to your own age that has maybe had similar experiences to you was really helpful. It helped us like a bonus point like you just don't have a therapist, but you also have somebody who has maybe been through the same things with you, who has a little bit more experience than you but maybe help.*

As with several other participants, Alum P14 talked about how important the support and suspension of judgment is to the relationship: "The mentors, for the most part, they're really great. They were very supportive and the less judgmental they were, it tended to be the better the mentor."

Alum P8 expanded on an incident in which they experienced support from a mentor and shares key elements of that interaction that made it a significant experience:

> *She listened a lot and she wasn't trying to fix me. She wasn't telling me what I needed to do to get fixed. And that's what I needed at the time and I think she saw that. I think if I had gone and asked her what can you give me to help, I'm sure she would have had suggestions, but I think what I needed at that time was somebody who would listen and understand and I think we connected on that because it didn't feel like there was any judgment. She just felt sad for what I was going through and that alone was very supportive. So just the understanding of what somebody is going through without trying to fix them I found was very much what I needed at the time.*

Hindering incidents in mentor and student interactions were also referenced. The most frequently reported were inappropriate public comments, the mentor

being too authoritative, and having lack of trust in the student.

Alum P3 described an incident of feeling embarrassed by the mentor in a public setting. This interaction impacted the level of trust and rapport between student and mentor.

> *We get to the counter and I have my credit card, but she is with me, my mentor. So the woman at the cash register asks, because there are two adults standing in front of her, "are you paying for this or is she?" And she refers to my mentor. And I said, "I am." And mentor goes and says, "She isn't paying for it, her mother is."*

The theme of trust was spoken of again by Alum P4 who did not feel trusted by the mentor; this hindered the relationship. "It feels like the trust piece wasn't there and that like threw me off after that point to where I could not—I don't know, I couldn't take her word for anything really."

Participants highlight the importance of all staff maintaining a balance between structure, accountability, and freedom and supporting students to step into an adult role. This is a skill that not all mentors have found the balance for, as evidenced by Alum P14. This is another example of how students don't like to be told what to do and how the style of communication and engagement is critical. Alum P14 said:

> *It seems like Mentor Y had a very strong idea of how things should be even if it wasn't that way. It was kind of authoritarian . . . she was perfectly nice for the most part, but she was very her way or the highway and that did not work with me at all. Because I'm an adult and I wasn't there to be told what to do, I was there to be guided on what to do.*

Therapist interactions. The therapists at the program work with the student on an individual basis to provide therapy, develop the master treatment plan, and to routinely assess progress and whether the student is engaged and benefiting from the services provided. The therapist is the primary contact and source of communication for a student's family and referring professional. The master treatment plan includes goals around clinical diagnoses as well as goals in the areas of life skills, education, fitness, vocation and recreation. The therapists typically meet with a student once per week, facilitate family therapy every other week and are in the milieu and run a variety of groups.

The most frequently reported themes within supporting incidents of interactions between therapist and student were therapists' ability to challenge or push the student; the student feeling like the therapist was a good fit for them; the therapist being empathetic and compassionate; and the student feeling accepted and not seen as a patient.

The experience, communication style and ability of a therapist to maintain rapport and also challenge the student were discussed by many of the alum in the interviews. A particularly poignant paragraph comes from Alum P6, in which they speak about the long lasting impact of being challenged beyond what they believed they were capable.

> *Therapist X was great. She pushed me. She pushed me hard and I'm glad she did because I'd probably not be in the position I'm in now. I got into some rough areas when I was out there, some patches where I wanted to just give up and it was too hard and I'm glad I had the two people, my mentor and her to push me to try harder.*

Even though some alum disliked the dating policy, several, like Alum P9 were able to see the benefits, particularly as they worked with their therapist on coping strategies and specific areas of challenge in their life.

> *I remember talking to my therapist and I had requested to date this person and he said that I needed to be working on myself and eventually I got that idea through my head. It was months later after I had already left Dragonfly that that stuck with me, the idea that you need to be working on yourself before you can be in any sort of relationship. And that really helped me through several tough relationships that I had afterwards, just the idea of putting yourself first and not letting yourself be bullied or bulldozed over. I did really appreciate working with him on that.*

The willingness of a therapist or mentor to make themselves available and for a student to feel genuine care and concern, not simply a means to a paycheck, were common areas discussed in the interviews. P13 captured the essence of care, feeling heard and that someone would follow up with them:

> *I think all the therapists I've worked with at Dragonfly and all the mentors were always really caring. Even if they were in the middle of doing one thing, they'd find you afterwards. Some understood certain struggles better than others, of course, but I think they all really listened when I spoke to them, which is great. So again, their availability or the way they made themselves available was really helpful.*

Alum P3 nicely summarized the importance and powerful therapeutic impact of positive relationships and connection between therapist and students by stating "I felt accepted as a human and not a patient, and therefore increased my confidence. They made me the functional person who I am today."

The most frequently reported themes within hindering incidents of interactions with a therapist, were most commonly described as the relationship not being a good fit, the student not liking how a situation was handled, or wanting more sessions than were being offered.

Alum P3 articulated the self-awareness, sensitivity, and perhaps shame

experienced by students when faced with talking about consequences for an action. The quote below reflects how communication styles impact the delivery of a consequence.

> *I was there because I was breaking boundaries with guys and just not really getting it. And I think the therapy the way that they approached—or my therapists and mentors approached it—was negative to me. It just made me feel like an outcast I guess. I got punished for it, I don't know why I wouldn't get punished for it, but just the way that they approached it made me feel not very good.*

As seen in the interviews with Alums P3 and P8, communication style and technique and skill that comes with experience is critical to developing therapeutic rapport and effectiveness.

> *I didn't get along with therapist because I think she is like fresh off the boat and she repeats everything you say back to you, with kind of a condescending tone. In a matter that reflects that she is hearing but not listening. I would say, "I feel uncomfortable speaking around you because I don't feel recognized as human." And I'd been using all my proper communication techniques and then she kind of repeat back to you, "I hear you hate me and that you don't want to work with me."*

Alum P8 experienced positive regard for their second program therapist yet found the lack of experience and the therapist's youth to be a hindrance to their therapeutic process.

> *I advocated for myself to go to a different therapist. He seemed much better equipped. He had a much more broad open mind, deeper thinking, connecting more dots that kind of thing, less conventional, by the book way of thinking. But I don't think he had the experience. He's a much younger guy.*

Peer interactions. Interpersonal interactions between student, mentors and therapists have been described as an instrumental component for the process of change. Another area of critical incidents as reported by alumni was the peer-to-peer interaction. In this third category of interpersonal interactions—peer-to-peer interactions—the most frequently reported themes of supporting incidents with peers, were friendship, bonding, and the support received from peers. Of interest was the recognition and appreciation of a shared therapeutic language that included the practice and importance of learning to be in relation with others.

The category of peer-to-peer interactions, as with other categories, has themes that overlap in other areas of critical incidents. This begins to paint the picture of the importance of the larger context of community and environment or culture. The thread found throughout all categories is the importance of being in relationship with self, others, and community. Prior to treatment, alum often describe themselves as isolated and disconnected from community and peers.

Alum P8 expressed the value of the milieu and peer connection and how this helped with social anxiety:

> *I had a lot of social anxiety. I didn't grow up being very social due to my anxieties and other things, so being put in that environment with a lot of my peers; I think that probably is where I gained the most benefit at Dragonfly.*

Alum P1 also shared how living with others increased their social skills and awareness of others:

> *At Dragonfly I had to learn how to cope with living with others and accommodating the feelings of others and learning to be friends with people. That was big for me, and I think I'm now much better at the whole social thing, although I do still like my space.*

There was only one hindering incident reported in the peer-to-peer interaction and this addressed the level of commitment to treatment by other peers and how this impacted the individual. Alum P11 found it challenging and detrimental to their treatment when students arrived that didn't want to engage in what the program offered. "Some students coming in had the attitude of 'I'm going to break every rule in the book and I don't care ".

Often referenced in life post program was the close connection that many alums maintained amongst one another beyond treatment. They spoke of long lasting connections and utilizing these relationships when they are in need of support.

Program community and culture. The overarching therapeutic milieu, or what was most often referenced as the "Dragonfly community and culture," accounts for 16% (50) of the total 317 incidents (50 of the 317 total).

The most frequently reported supportive incidents within the category of community and culture were about flexibility displayed by the program, the importance of group living, and the high level of support through connection and community that was experienced by students.

The following quote may not appear to be a major incident, however it was a salient moment for Alum P1, and reflects both flexibility from the mentor as well as a sense of community and camaraderie:

> *I remember one night when we were watching the season one finale, one of the staff came in and said it was time to turn off the TV and we all turned around on her and went, "Veronica is trapped in a refrigerator with a murderer sitting on top of her." And the staff member just sat down and we all finished the episode together.*

Alum P15 stated: "I liked the whole environment. I liked how we weren't in a big facility." The program is located in a residential neighborhood and

students live in houses without identifying signage that it is a program. Alum P14 remarked on the level of freedom afforded students and how this contributes to a healthy lifestyle:

> *I do think that Dragonfly gave us a fair amount of freedom. Dragonfly was really positive that way. It provided like positive outlets . . . in terms of things to do to have fun rather than build unhealthy activities.*

Alum P6 captured the feeling of being accepted and supported as they gather skills to live independently. This speaks to an environment that enables participants to engage in the therapeutic and maturation process.

> *If I had to say something about that nature I'd say that Dragonfly, they welcome you with open arms, they're more than happy to help you along the way until you feel that you are ready to transition into the new world—or hell of a world.*

Alum P5 addressed the feeling of emotional safety and the support in addressing conflict that inevitably arises:

> *The emotional safety that I felt there—and I guess what I mean by that is, if I felt like I had an issue with one of the girls, I could address it with one of the staff or them and the staff and like the staff was so great. Oh my God, I love the staff. And just knowing I was in an environment where I wouldn't feel judged for something that I felt.*

Alum P5 maintained friendships built within the program beyond treatment and stated: "The key thing—and my friends and I talk about this—the key thing that we loved and still miss about Dragonfly is the community that was built."

On the opposite end, the most frequently reported hindering incident within the program community and culture, was feeling they were being treated as children. For all new students that enroll there is a 50-hour requirement of volunteer work. Some students, like Alum P10, this was internalized in a negative manner; they felt they were "being infantilized by being told that I'm not fit to interact with the community, so I have to spend 50 hours doing meaningless work that helps nobody." Another alum, P8, said "there was something about it that made you feel like almost they expect you to act like a child and they expect you to be immature. I think a lot of people acted up at times because of that."

Experiential education and adventure. Experiential education and adventure had a participation rate of 65%, with all but one incident falling in the supportive category.

The adventure programming was consistently and positively spoken of in the interviews. The most frequently reported supportive incidents were the outdoor and wilderness trips, the ability to explore new areas and have new experiences, the international travel, and the community that was created through adventures.

YOUNG ADULTS IN TRANSITION

Alum P13 discussed the therapeutic benefit of new experiences and challenging oneself outside their comfort zone:

> *The overarching theme of just new experiences, any sort of new things I did with Dragonfly, whether it was the rafting trips that I went on with them or skiing, even horseback riding, which I hadn't really done. Those were all exciting and overcoming the little challenges that I found helpful, especially with OCD. I've had a lot of fear with trying new things or leaving the comfort zone, which I'm sure a lot of the students do, so those new things were good.*

Since 2010, the program has offered a 25-day trip to Cambodia. This is an earned trip and is service based. Alum P3 shared the value of international travel and of this particular experience:

> *Before I went to Cambodia, I'd always taken education as something I'm required to do and also just because what else am I going to do? But going to Cambodia, working with students at the Kravanh Bright Future Center, I learned that education is really a privilege, and those girls there barely get to do it and so what the fuck am I doing squandering all my opportunities?*

Again, the theme of community, relationships and getting outside of self and personal challenges is seen. This time it is seen within the context of adventures and having the courage to engage in a novel, and unknown experience. Alum P9 summarized the therapeutic gains made through rafting:

> *One of my happiest memories is going on a rafting trip that I went to with Dragonfly, which was absolutely amazing. It really helped me with my team building skills and character building, being able to work with other people. Because before it was all about me, like I was very selfish. I didn't want to work with people. I didn't work in teams. I was lazy and never put the work in. It really helped me with that, being able to be a team player and being able to implement those skills into real life, such as employment, any kind of sports teams I want to be a part of, any type of friendships I have—it's just really helped me in that way. And it was just a wonderful experience.*

Alum P4 spoke to the relational dynamic with mentors and this provides an example of the interpersonal relationships category and the various avenues in which building and developing relationships occur: "And like getting to spend more time with mentors on a different level, like in a different scene was really fun and really helpful. Just because it made our relationships that much stronger."

There was one hindering incident in this category, discussed by Alum P2: it revolved around poor planning and how that impacts the outcome and experience of a trip:

> *We went on a canoeing trip where they rented a whole bunch of canoes. Well it turns out that the canoes were not allowed on the river because it's white*

water. I love whitewater because you can balance over it and you'll be fine, but there's just something different about canoeing and especially over really choppy waters and people were over turning. I remember like three or four canoes just that day overturned. It wasn't well researched or planned.

Program components. A variety of the program components were discussed in the interviews and all combined account for 39% of the total 317 incidents (124 of the 317 total). The following section is broken into each area of the program that was reported upon; each section starts with a table that reflects the critical incidents, number of incidents reported and how often alumni referenced the incident. The program components are not listed in order of importance or number of incidents. The following program components were mentioned: check sheet, dating policy; exercise; family therapy and workshop; medication and medical management, groups; Leap of Taste; life skills; and, the life story. Taken individually, most of the program components do not have a substantial number of incidents, however every program has unique services, systems, and interventions and these all contribute to the overall community and culture of a program. It remains important to include the findings.

Check sheet. Students at the program earn weekly spending money. This is done through a process called the check sheet, which contains the structure and expectations for the day—getting out of bed on time, going to the gym, completing chores, engaging in groups and attending therapy sessions. The most frequently reported supporting incidents were that the check sheet provided structure and accountability. Alum P15 discussed the value of the check sheet: "I liked the structure of it all and how there was a schedule. The check sheet really helped me, just being able to visualize my day beforehand and having to follow through with that."

Alum P5 talked about how the check sheet fostered a sense of personal accountability:

The check sheet was extremely smart. That was very smart because it is technically you holding yourself accountable. It's like an interdependent accountability kind of thing. Because long term it's very difficult for me to hold myself accountable, so to have something like that there in a program that actually works, is really great.

A number of incidents that hindered were raised in the discussion around the check sheet. It was reported that the check sheets seemed childish and created additional stress for students. Alum P14 understood the intent behind the check sheet and also shared how it made them feel: "I understand that some people probably really did need that structure for it; but it made me feel a little bit like a kindergartener, like getting signed off on some things every day."

Alum P13 discussed the additional anxiety check sheet created in juggling the daily routine of getting out the door and having to wait for a mentor to sign off on the sheet:

It did cause me, now that I think about it, some anxiety, but a lot of things do. I do remember just waiting around, getting really angry because a staff member wasn't there to look at chores and I was going to miss the bus to school so I just said, "Whatever . . . screw it."

Dating policy. The program has a dating policy that asks students in Phase I to not date and to focus on themselves and the areas of challenge that brought them into treatment. In Phase II, if a student would like to date, there is a petition process with the therapist in order to support healthy and safe relationships. The most frequently reported supporting incidents were about the acknowledgment that relationships can be distracting and that the participants liked some separation between men and women, such as living in separate houses and having some single sex groups.

Alum P5 spoke about the value of learning to be with women and learning to develop healthy, non-romantic relationships:

I do think it was really important to have the men and women be separated. Because for me one of the things that was good for me was the relationship I formed with women. So being in a house with only women and learning how to be friends with women again that was important for me, without the distraction. I mean, I'm attracted to women too, but I just needed to find that friendship piece and to be away from, say, gendered men, that really helped in redefining who I was as a woman.

Alum P12 referenced the distraction of relationships: "I feel like it's really distracting to have the opposite sex there if you're straight and I still definitely use it as a distraction, unfortunately, but it's helpful. I think it's like a helpful boundary."

Alum P9 shared how they worked with their therapist on relationship challenges: "He helped me work on my boundaries a lot. I had had a girlfriend when I was there and he really helped me working on saying 'no' to people, standing up for myself."

There were equal numbers of incidents reported as supportive and hindering in the dating category; however, there were more sources within the hindering category. There was only one incident in each theme, as seen in Table 4.10. Below are some examples of areas that the participants found to hinder. Alum P13 discussed the detriment of how much time mentors spend managing the supervision of relationships:

A lot of staff energy was spent on trying to make sure that people weren't holding hands or a guy and a girl weren't hanging out together which that did kind of . . . I mean, a lot of relationships issues did take up time . . . there were certain conflicts that I thought didn't really have to be conflicts that time was being spent on, we're calling groups for them.

Alum P12 shared that it felt like if a relationship boundary was broken that the program viewed it as a major regression in their progress through the program:

> *When boundaries were broken, it was like, "oh well, that's a backslide in your progress." That I think is bullshit. I think yes, it's important to focus on yourself, but if you— I mean, honestly I don't think it's great for you to be having sex in a cemetery, that's not cute or whatever. That's what people would do, but I don't necessarily think—unless you have a sex addiction, I don't necessarily think that's a backslide in your progress.*

And Alum P5 felt that there needed to be more consistent and effective consequences given for students that consistently broke the relationship boundary:

> *I don't think that it needs to be made as big of a deal as it was made and if that is the case, then there needs to be different or more consistent consequences. Because there were people who would consistently break those boundaries and it never stopped and it was like a ripple effect. And it was so annoying when they were given so much shit for it and yet they weren't really given concrete consequences to make them stop.*

This research was the catalyst for further evaluation and change in several programmatic areas. The dating policy was one such example.

Exercise. Exercise is built into the program and tracked on the check sheet. The expectation is that students work to find exercise that they enjoy. Daily trips to the gym are offered along with a variety of classes that are run by the fitness and nutrition director. Students are encouraged to access classes in the community, such as yoga, swimming, dance classes, cross-fit and the like. Surprisingly, there were no hindering incidents mentioned in this area. The most frequently discussed supporting incidents were that the daily structure created a habit of exercise and it was good for health and wellness.

Alum P6 shared: "I have definitely carried exercise forward and it's something that I focus on. I definitely don't work out as much as I did at Dragonfly, but it was really nice while I was there." Alum P9 offered that exercise helped regulate sleep and stated that "by going to the gym in the morning and having to get up on time was really helpful, I had to regulate my sleep." And Alum P3 stated, "I learned that vigorous exercise is one of my best coping skills."

Family therapy and workshop. All parents receive individual sessions with parent coach professionals and are asked to participate in family therapy conference calls and a minimum of one family workshop per year. The program offers three family workshops throughout the year.

There were no hindering incidents reported in this category. Of the supporting incidents there were a range of themes that included feeling supported

with difficult family dynamics, improved communication, and the value of the family workshop. Alum P11 stated that the therapist "knew how to set up family phone calls and how to push me in a way in which I would not digress." Alum P6 shared: "The skill building of learning how to talk with your loved ones and everything that we did there, was very helpful to let go of what we had done in the past to hurt any family members." And Alum P4 spoke to the effectiveness and importance of the family workshop: "Family weekends were extremely, extremely helpful, 100%. That goes in the positive column. Everyone got on the same page, was very much on the same page, even if there were a lot of disagreements through my time there."

Medication and medical management. Approximately 90% of program participants arrive on medication. The most frequently reported supportive incidents were in the area of medication reduction and an increased understanding of medication side effects. Alum P1 stated:

> *That was always part of the issue, I couldn't tell the doctors what differences I had noticed because I wasn't paying attention to how my mood was changing or my life. I didn't really care that much about the medications up until Dragonfly. But I did notice when they took me off the one that was actually doing something for me. I got really cranky. I went and yelled at someone, which is very, very unusual for me.*

Alum P14 talked about arriving at the program with a lot of prescription medications and working with the psychiatrist to reduce and find out which medications were actually effective: "While I was at Dragonfly they took me off one at a time until I was down to just one. There was only one that was actually doing anything for me, and I had been on like eight before that."

Medication and medical management had a higher number of hindering incidents than supporting. The themes ran mostly to communication style, not having quick enough access to an MD, and feeling that the MD's had an "old school" approach. Alum P3 shared their frustration about confidentiality and perhaps not feeling heard around a particular topic: " 'No, you just need diet and exercise.' . . . They broke the patient-doctor confidentiality I can't even tell you how many times. They told my parents stuff that was confidential."

Alum P10 felt challenged that the MDs were not addressing a situation with medication management and suggested that a return to wilderness might be more effective:

> *They were completely incompetent. They did not know anything about medications. They had heard of half the medications I've been on. And when I said that I was really depressed, they suggested going to wilderness as a solution, when what I really needed was my meds.*

And Alum P11 felt that the program did not properly acknowledge or

accommodate for an injury and stated: "They acted as if I didn't have a cast on. They just made me do everything, even though we had three pages from the doctor that no you can't do this, this and this."

Groups. Groups range from therapeutic, to life skills, to recreational, and vocational. Students work with the therapist and mentor to choose the most relevant groups based on their particular areas of challenge and to create an individualized weekly schedule. Among supportive incidents, the most frequently reported themes were about the variety of groups offered and the smaller treatment team group. Alum P4 spoke to the importance of interpersonal interactions within the context of groups: "I made really good guy friends and had more of a support system; I found it to be really helpful. Especially when we were in therapeutic groups, that was something that I really enjoyed."

Alum P16 stated: *"Groups really helped me . . . just learning about different things and how I can deal with my emotions and to deal with confrontation and everything."* Alum P10 shared: *"There was one group that we had that was good, it was about shame and resilience, but it was so good that there were like 20 people in the group, which is crazy."*

In this category, the supportive and hindering incidents were almost evenly split. Of the hindering incidents the most frequently reported were around groups being poorly managed, and attending groups that didn't feel relevant for that particular individual. Alum P10 felt that women's group "was basically like a bitch fest where some girls would complain about other girls" while Alum P4 said that the "groups that I didn't think were helpful were run by people that I just didn't have— this sounds really rude—but I didn't have a lot of respect for." Alum P14 spoke about the feeling of redundancy and perhaps being "over therapized":

> *I think sometimes there were so many groups that it got almost a little repetitive, especially when you've been there for a while. It kind of makes sense for many people to go, but I think I got a little therapied out near the end.*

Program Café. By turning in a résumé and applying for a position at the program's café, students work through the basic steps of obtaining a job with the security of knowing their mistakes are preparing them for future jobs. The most frequently reported supporting incidents revolved around increased confidence and this theme is reflected in this quote from Alum P16:

> *Getting to work at A Leap of Taste and being kind of an assistant chef with students, cooking for Leap of Taste, that actually was kind of my first job. It built a lot more confidence in me. And it really helped when I first got the job here . . . I had a lot more confidence.*

Alum P14 shared how they started as a volunteer and then subsequently were hired on as an employee:

I also worked at Leap of Taste. I started out as a volunteer and then they hired me on and I worked there I think for maybe like five, six months, I don't know. But that was really helpful. I got to make some money. I got to have some work experience at probably the hardest, most physically demanding job.

Alum P3 found that the experience contributed to emotional resilience and the ability to follow through on commitments:

It was also an important tool for me gaining like emotional resiliency. One thing for me that I've worked on a lot is following through with the commitments I make . . . I like that Leap of Taste has shorter hours usually shifts of three hours, which is good for people with anxiety because six-hour shifts are kind of overwhelming, especially at first. But the three-hour shift two or three times a week is enough to kind of build your confidence.

The primary theme in the hinder category was around the volunteer aspect of the training and not being financially compensated. Alum P10 shared their frustration in feeling taken advantage of:

I don't know if you guys still have the café. But they had like a program to train people how to run a café but what was happening is they weren't getting paid. You get trained in Starbucks, for example, but you get paid. It's not free labor and Dragonfly took a great advantage of its free labor.

Alum P12 also shared their anger with the volunteer component of Leap of Taste and the ultimate positive benefit:

At first it really pissed me off because I was like—I understand volunteering at a place where you're actually making a difference but volunteering for slave labor, it's like demeaning. But it was actually good for me.

Life skills. Life skills are woven throughout the structure of the program. Abilities within the multi-facetted area of life skills facilitate physical, mental, and emotional well-being for individuals. The most frequently reported supporting incidents in life skills was the social skills and increased independence that came about through a variety of interactions. Alum P3 felt particular accomplishment in the realms of cooking and stated:

I learned a lot of cooking skills. I thought I was a good cook before, but I learned so much about cooking and healthy cooking, and had so much fun participating in cooking and preparing family meals on like Tuesday afternoons. That was an important moment for me.

Alum P13 also commented on the area of cooking and shared that "preparing dinner for a group of people was impactful" and they "liked having that sense of purpose." Alum P1 focused on the independent living skills and the skills that support the transition into being an adult:

Learning to be an adult and take care of myself and wash my own dishes and do my own grocery shopping and clean my apartment and just generally navigate the little parts of adulthood that are part of everyday life. Cooking—I learned a little bit of cooking. That was good. So just transitioning from having lived with my parents and having lived with my stuff done for me to doing it myself, but with the support of people who could teach me how to do it.

While some participants found the component of life skills to foster a feeling of adulthood, other alumni found it to be too much as evidenced by this comment from Alum P10:

We had so much cleaning that they invented chores like sweeping the sidewalk. I mean, you're not supposed to sweep the sidewalk, that's not a thing. It was insane. Like once a week we'd be cleaning the inside of hanging lights. That seems really intense.

Life story. The life story is a therapeutic assignment in which the student writes their life story and shares the narrative with either the smaller treatment team or the community at large. The student works with the therapist as they write their life story and it provides an opportunity to understand the student in more depth and for the therapist to encourage the student to highlight areas of positive experiences along with the areas of challenge. Participants reported positive incidents in the areas of transparency, vulnerability and connection. Alum P17 talked about the process of sharing their life story and how this particular assignment "creates a close-knit community where they want everyone to intermingle." Alum P11 spoke about the vulnerability and opening up more: "It really did help because I was able to admit more, I was able to sort of put more pieces into the puzzle of the big unknown." Alum P3 found this assignment to be a catalyst for change:

But that was definitely a turning point for me because I feel like I had no more secrets and I felt more connected with my fellow people and invested in the community. That was a huge turning point for me. And the positive reactions I saw from my peers were just very empowering. That was definitely kind of a changing moment.

Of the hindering incidents there was one participant, Alum P2, who felt they were not emotionally ready or prepared to share their story:

So basically you had to stand up during one of the family dinners or whatever it was, or a gathering, and read this life story out loud. And there were quite a few things at that point in my life that I was still getting over and dealing with and honestly I felt like it was quite a personal hindrance that I had to talk about it. The first thing they make you do the life story like within the first couple of weeks you're there if not the first week you're there. And I felt like I wasn't ready to open up and it wasn't fair to me that I had to. I don't know these people, I don't trust these people, why should I be telling them all my personal deep dark secrets, you know?

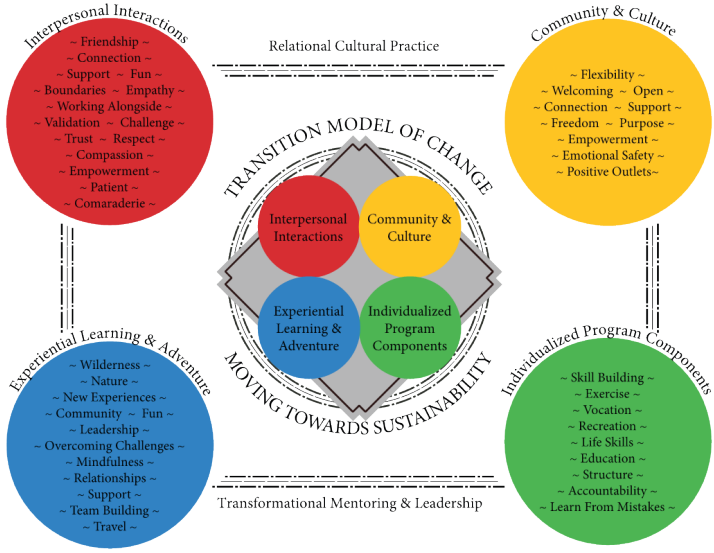
Discussion

Significant Findings

The stories from participants increased understanding of what creates an environment conducive to growth and change, and of the key factors that support emerging adults (Arnett, 2004) through this developmental transition. By analyzing and incorporating both supporting and hindering incidents, one better understands what participants find the most valuable within a therapeutic milieu as they work towards a sustainable lifestyle beyond treatment. The overarching themes that emerged as critical were: interpersonal interactions; community and culture; experiential education and adventure; and, individualized program components

Figure 5.1 below shows the interconnectedness and importance of these four themes.

Figure 5.1. Transition model of change.



The visual model provides an additional means to explain the participants' perspectives and an interpretation of what is critical to include within a transition model for young adults. The words found within the large circles in Figure 5.1 are direct quotes from interviews, for it is from the voices of alumni that meaning emerged.

The following sections describe and examine the four most significant factors that were identified by the participants in this study, and relates these to the existing literature.

Interpersonal interactions. A half-century of psychotherapy research has shown that the quality of the therapeutic alliance is a predictor of treatment success and this finding has been evident across a wide range of treatment modalities (Alexander & Luborsky, 1986; Horvath & Greenberg, 1994; Horvath & Luborsky, 1993; Horvath & Symonds, 1991; Orlinsky, Grawe, & Parks, 1994). A related finding is that poor outcomes show greater evidence of negative interpersonal process—that is, hostile interactions between therapist and participant (Safran & Muran, 2000). These studies, which include both qualitative and quantitative methodologies, corroborate the findings of this study. The interpersonal interactions between participant and therapist, mentors and peers, were referenced the most often in the interviews and directly impacted participants' experiences of the program.

Valuable information is learned from both the supporting and hindering descriptors. The insight offered from alumni reinforces the benefit of continually incorporating participant voice by creating structure for formative and summative feedback regarding therapeutic and mentor relationships. An example of this structure is a form of progress monitoring of therapeutic alliance such as the Session Rating Scales (SRS) developed by Johnson, Miller, and Duncan (2000). Research shows that "clients' ratings of the alliance are far more predictive of improvement than the type of intervention or the therapist's ratings of the alliance" (Duncan & Miller, 2008, p. 60), and this research further reinforces the need to elicit feedback directly from the participant on a routine basis.

In addition, the findings related to the quality of interpersonal interactions support the tenets of Relational-Cultural Therapy and its practice (Jordan, 2000; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991; J. B. Miller, 1976) that views high quality connection and relationship as a primary site of growth. Participants in this study reported that social influences and interpersonal interactions led to new approaches, values, and attitudes about engaging in the world and a better understanding of how to work through conflict within relationship instead of engaging in avoidance. The practice and value of working through the minutia of everyday interactions within an environment of authenticity, respect, and genuine care cannot be underestimated within a treatment milieu. Jordan (2000) suggests, in the context of relational cultural theory, that issues of power imbalance and oppression within a therapeutic context can create division, anger, disempowerment, depression, shame, and disconnection. When a clinician or program explores therapeutic interventions for a student, importance needs to

be placed on mitigating the power differential and creating an environment of collaboration. In this study it was rare for a participant to describe a specific treatment modality that was considered critical to the experience and therapeutic process. Instead, alumni shared stories of personal connection that were empowering or incidents where an interaction hindered and therapeutic repair needed to occur for therapeutic momentum to remain intact.

Participants indicated that interpersonal connection played a substantial role in the healing process, personal growth and development of confidence. Although the significance of these connections is often assumed in therapeutic milieu programs, the students in this case study strongly supported the centrality of relationship in their development. The lives that alumni described prior to treatment reflected high levels of isolation, loneliness, and disconnection from self and others. To be included in a community, and to experience connection and belonging, can create change in profound and meaningful ways. The simple act of being accepted and feeling understood can have an impact on internal cognitive beliefs about oneself and the internal scripts can be shifted from negative dialogue to positive. Western culture emphasizes and celebrates independence, separation, and autonomy. Relational-Cultural Therapy (Jordan, 2000; Jordan et al., 1991; J. B. Miller, 1976) suggests that we need connection to flourish and that isolation is a source of suffering. The role of therapists and mentors becomes supporting development and change through socialization and connection. Participants in this study supported these tenets as they described how the health of these relationships directly impacted their outcomes. Participants gave equal mention to the therapist relationship and the mentor relationship. This is an important area for programs to give increased attention to, as mentors or line staff have the least training and the most direct interaction with program participants. Therapeutic skill has important intuitive and creative aspects that are difficult to teach yet are an imperative component that needs to be incorporated in training (Safran & Muran, 2000). The skill or ability with which any staff member engages a participant has potential for direct impact on treatment outcomes. Body language and nuance of tone and wording, can affect how a message is delivered. In the interviews, participants shared how they appreciated boundaries, being held accountable, and being challenged to dig deeper. The ability to absorb a conversation and engage in the therapeutic process was directly related to the quality of relationship and the way in which a message was delivered. It takes a great deal of skill, practice and self-awareness on the part of the practitioner to balance challenge and confrontation with support and rapport.

Community and culture.

Young adult programs have a challenging task to support the developmental tasks of emerging adulthood and to obtain equilibrium between support, structure, security and accountability while implementing it in a manner that feels empowering and supportive of individuation (Aquilino, 1997). One of the primary tasks for young adults working towards independence is self-governance, affirmed within the context of mutually validating relationships (Josselson, 1988).

The program and the participants do not always find the balance and at times the program feels the need for increased structure and management, yet participants may feel they are treated as children or infantilized. This often comes back to interpersonal interactions and the skill with which a participant is approached. It can also relate to the participant's level of readiness to engage in the therapeutic process.

Experiential education and adventure. This theme rose to the surface as an integral component to the therapeutic and change process. The literature in adventure therapy and experiential education supports the findings in this area (Clem, Smith, & Richards, 2012; Gass, Gillis, & Russell, 2012; Koperski, Tucker, Lung, & Gass, 2015; Norton et al., 2014). Experiential education is defined as "challenge and experience followed by reflection leading to learning and growth (Association for Experiential Education, n.d., para. 1). The entire process of treatment is an example of experiential education. The Association for Experiential Education states:

> Experiential education is a philosophy that informs many methodologies in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills, clarify values, and develop people's capacity to contribute to their communities. (para. 2)

Adventure therapy (AT), on the other hand, is defined as the "prescriptive use of adventure activities by mental health professionals to kinesthetically engage clients on affective, behavioral, and cognitive levels" (Gass et al., 2012, p. 1). The foundation of the AT model includes putting participants in a unique physical and social environment in which they are given problem solving tasks or challenges that lead to a state of adaptive dissonance, where mastery of the task leads to learning and growth (Gass et al., 2012; Koperski et al., 2015).

New and challenging experiences in treatment can create opportunities to develop significant levels of trust (Koperski et al., 2015). In addition, shared experience combined with challenge, fun, and camaraderie, support the therapeutic alliance. If facilitated by an experienced practitioner these experiences can enhance interpersonal growth through building positive social interactions, stretching personal limits, and strengthening group cohesion.

The interpersonal connections and community created through this process is a catalyst for change. It has been shown that the skills learned in adventure therapy and through experiential education can be "useful and effective resources for creating positive affect and coping with stress outside of the therapeutic setting" (Koperski et al., 2015, p. 7).

It compels a more active participation in one's own treatment and increases responsibility for change while engaging the participants' internal motivation (Lung, Stauffer, & Alvarez, 2008). Additionally, adventures engage participants on physical, cognitive, and affective levels while at the same time it can be

viewed as fun (Gass et al., 2012; Koperski et al., 2015; Schoel & Maizell, 2004).

Individualized program components. A variety of the individualized program components discussed by the participants of this study were at or above the 25% participation rate as suggested by Butterfield et al. (2005); these included: the check sheet, dating policy, exercise, medication and medical management, groups, the cafe (A Leap of Taste), and life skills. These components represent the minutia of the day-to-day structure and a means to achieving the larger goal of launching young adults into the world prepared to live a sustainable, healthy lifestyle. As evidenced by the range of services and structure of young adult NATSAP member programs, it is assumed that within each program there will be a variety of programmatic themes represented and unique to the structure of that particular program. However, within the framework of transition models for young adults, there is likely continuity of themes, such as Interpersonal Interactions, Community and Culture, Experiential Education/Adventure and Program Individualization, that exists based on the developmental age range and stage of life. The following section reviews the specific program components represented within Dragonfly Transitions:

The check-sheet. Based on the 29% participation rate within the hindering incidents and only 1% in the supportive, the check-sheet is an area to revisit in order to evaluate the effectiveness of the program's original intention. The intention was to create accountability and structure and a means to earn spending money based on performance, much like a paycheck. The check sheet also provides a means to concretely track how a student engages in the day-to-day schedule of groups and basic daily living. The findings of this study indicated that the check-sheet created additional stress and anxiety in the lives of participants and served to make them feel like children. The feedback from participants raises the importance of examining how the system is being implemented and whether a different system is warranted for young adults in treatment settings due to the unique developmental tasks of emerging adults of moving from dependence to independence (Levy-Warren, 1999).

Dating policy. This is another area where there was a higher percentage (41%) within the hindering incidents than the supportive (17%). The primary concern was the inconsistency of management and consequences when the policy was broken. Within substance abuse treatment programs and 12-step programs, the literature encourages individuals in recovery to not date for a minimum of one year (Smith & Wilson, 1939/2013). Several of the primary reasons cited were that romantic relationships can turn attention outwards and away from the recovery and healing process, and that honest and full participation in groups and therapy can be impacted when energy is being channeled into a new relationship. From a developmental perspective one of the tasks of an emerging adult is the discovery and development of connection with others; from a treatment perspective there is an assumption that romantic relationships are a detriment to growth. Due to the lack of literature on transition programs, there is scant information on how this model might best approach the topic of romantic relationships and the misalignment felt by participants.

Exercise. This is an area where only supporting incidents were reported (29%). A large body of research supports the use of exercise as a treatment for depression and anxiety across a wide range of ages and with special populations. Evidence shows that habitual physical activity is important for both mental and physical well-being (Greer &Trivedi, 2009; Larun, Nordheim, Ekeland, Hagen, & Heian, 2006; Lawlor & Hopker, 2001; Matthews & Moran, 2011; Mead et al., 2009; Sjosten & Kivela, 2006).

Medication and medical management. This is a critical area for programs to evaluate. Youth in residential treatment often present with significant and complex emotional and behavioral disorders (Child Welfare League of America, 2005; Duppong-Hurley et al., 2009) and have often been unsuccessful in previous, less restrictive settings (Pottick et al., 2008). These youth are more likely to have prescriptions for psychotropic medications with up to 55% taking three or more different psychotropic medications (Griffith et al., 2010). Due to the complexity of diagnoses and psychotropic medication use, physicians have the difficult task of sorting through all of the intake information and determining the accuracy of the diagnosis and the effects of prescribed medications (Griffith, Epstein, & Huefner, 2013). The findings in this study suggest that interpersonal interactions and trust with prescribing and treating physicians, is also of importance and attention needs to be paid to how best to involve the participant and family in decision-making.

Another area mentioned by participants in the study was the perception of not being taken to the doctor quickly enough when requested. It can be useful for program personnel to work directly with young adults to educate them on when a doctor's visit is needed versus when it may simply be a cold or a behavioral pattern for the student.

Groups. Therapeutic, recreational and life skill groups are often a component of young adult treatment programs and it has been suggested that group experiences can be a powerful change agent with efficacy demonstrated across a range of approaches including cognitive-behavioral therapy and social skills training (Caruso et al., 2013). However, there is a paucity of research that focuses on the participants' experiences of group sessions. This study showed that it is important for young adults to have ownership and collaboration in choosing groups. It is important that facilitators of groups have received proper training on group facilitation and come prepared with a clear agenda and goal. The skill and ability with which a group is facilitated, and a safe, non-judgmental space, foster the participant's ability to share emotions and engage in self-disclosure that contributes to the quality of relational culture: this is fundamental in promoting change (Dierick & Lietaer, 2008). Leszcz, Yalom, and Norden (1985), suggest that group experiences contribute to greater interpersonal learning and self-understanding and support participants' capacity to understand rules and codes of relationships and unconscious motivations that may underlie a certain behavior. This relates to attachment theory; groups can support a participant to examine insecure or maladaptive coping styles.

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Groups that include an experiential component where a skill is taught, and where there is opportunity to practice and reflect, are often well received by participants. The added component of experiential education has great potential to connect intellect and emotions to everyday tasks and life challenges and this is often done within the context of relational human experience (Sutherland & Jelinek, 2015). Experiential education supports a transformation of experience into new knowing through perception, cognition, and behavior in an adaptive process (Kolb, 1984). This transformation or new level of understanding occurs at the intersection of engaged participation and making connections between that event and one's self. Connections arise through sensemaking, and giving meaning to an experience (Weick, 1995; Weick, Sutcliffe, & Obstfeld, 2008).

The Café (A Leap of Taste). The findings in this area indicated that these young adults benefited from additional support around job skills. Participants have often not held a job or have perhaps been fired from a job. Anxiety and depression often negatively impact the work experience and yet a positive job experience can result in increased confidence, emotional resilience, and follow through on commitments.

Life skills. One of the primary objectives within young adult transition programs is to increase the ability of participants to manage life skills or independent living skills. The more a participant learns and integrates a range of life skills the more likely they are to have successful outcomes as they step into independence. Life skills cover a wide range of areas including: household management, budgeting skills, organizational skills, health and safety, transportation, recreation, hygiene, and social skills. Researchers have recently proposed that parental over-involvement in their children's basic self-care, and frequently intervening and making decisions for them plays a role in the level of anxiety in young adulthood (Cline & Fay, 1990; LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). A transition program can encourage participants to be independent through skill building and encourage them to problem solve and make independent decisions. Often, life skills are interwoven throughout the structure of a program and young adult programs would benefit further by systematically evaluating each participant to see which skills warrants further support and education. It is not uncommon for participants to have great intellect ability, yet not to have developed fundamental life skills in order to care for themselves on a day-to-day basis (Croft, Boyer, & Hett, 2009)

Implications for Practice

The findings that emerged through interviews showed the importance of interpersonal interactions, culture and community, experiential education and individualized program components. It is the entirety of the treatment container with incremental steps taken towards autonomy within a relational cultural model that creates real and meaningful change and it is rarely one incident, interaction, or intervention that is the catalyst for lasting change. These opportunities need to be incorporated into programmatic design both for the participant and the organization. Providing conversational space with neutral parties in the months

after development of programs or the design of groups, would enhance and expand learning. These results highlight the need for more reflexive work to be built into the development of programs. To make the most of the growth opportunities, participants need space, time, and processes for reflexive work during and after learning interventions.

Growth and change requires accepting risk, failure, being vulnerable, as well as trusting oneself, and trusting others. This further substantiates calls in recent research to attend more to issues around building psychological safety and to the importance of the agency of facilitators (Beyes & Michels, 2011; Petriglieri & Petriglieri, 2010; Sutherland & Ladkin, 2013). The study points to the need for deliberate and specific training for mentors, therapists and leadership in facilitating experiential education and the culture of community. This allows for full capitalization on the opportunity for meaningful learning and change and on managing risk and potential harm (Tucker & Norton, 2013).

Furthermore, the study points to the need for increased supervision of mentors in order to support self-awareness on how they engage in interpersonal interactions with participants, which has potential to directly impact participant outcomes in a hindering or supportive manner. This study further emphasized the role that social support plays within a therapeutic community. Building trust-based and authentic relationships both within the program and without is critical to the development of a strong foundation of self and one who can confidently engage in the world. The skills need to be practiced beyond the treatment environment so the young adult has the confidence that they can be replicated in their everyday life. This means that participants benefit from programs with flexibility in individualizing and normalizing what is inherently a messy life as one engages in adulting. The assumption would be that as programs support incremental autonomy for the young adult to experience trial and error within the structure and support scaffolded throughout the program, their process resistance decreases and everyday engagement in life becomes normalized and less anxiety-provoking. The young adult benefits from support within a secure and relational environment to develop a reflexive practice where they examine, learn from, and take ownership of their choices

As seen in Figure 5.1, the transition model of change, and in congruence with much of what is known about milieu treatment, young adult transition models should be holistic and inclusive of a variety of treatment and life skill options, including specific developmental and individualized tasks for this particular age group. In particular, the development of a hands-on vocational program has proven to be a critical program component for young adults in developing confidence and their belief that they are capable of a successful work experience.

Deep and lasting change is complex, time-consuming, and requires intention and interconnectedness across many areas of an individual's life. There is not one particular treatment method or model that will solve all challenges; rather, it is the collective experience of shared community and experience that develops skills and confidence for an individual to engage in the difficult work of change

and transition and to take responsibility for their life as an adult. The work done within a therapeutic environment has to transcend transactional interactions where employees and participants alike are motivated by a "carrot" to meet expectations and "beaten with a stick" for failing in what was supposed to be done and shift into the realm of transformational leadership and interactions which supports an internal process of change for everyone associated (Bass & Bass, 2008). Understanding and fostering transformational leadership within an organization creates a meaningful and engaging change experience for participants and employees alike and the theory encapsulates much of what participants discussed in this study.

Transformational leadership is defined as an approach that supports change in individuals and social systems (Burns, 1978), which in turn supports the emerging adult to meet developmental milestones within a supportive and structured environment, with flexibility and empowerment. In its ideal form, transformational leadership creates valuable and positive change in the participants with the end goal of becoming leaders themselves. Enacted in its authentic form, transformational leadership enhances the motivation, morale and performance of participants through a variety of mechanisms, which include: connecting the participants' sense of identity and self to the task and the collective identity of the organization, or to their personal life plan; being a role model for participants that inspires them; challenging participants to take greater ownership for their work; and understanding the strengths and weaknesses of each individual, so the leader can align them with tasks and a direction that optimize their performance and success (Bass, 1985, Bass & Bass, 2008; Burns, 1978).

Conclusions

This study confirms, through the voices of participants, the need for individualized programming and transformational mentoring and leadership within the entire organizational model. This study supports the importance of programming built on a model of relational cultural practice, which includes sensitivity to and honoring of the individual with collaboration and mutuality. This study also supports continued programmatic evaluation and the importance of including the perspective of the participants and all stakeholders and supports continued research towards evidence-based practice within the young adult transition model.

Limitations of the Study

This study was undertaken in an area with nascent knowledge, but with little documented research on the specific area of what supports or hinders young adults in treatment; however, there was a plethora of literature that informed the study. It was an exploratory, instrumental case study; qualitative research methods, much like any research method, have some limitations. Using Lincoln and Guba's (1985) ideas on achieving trustworthiness, the methodology was designed to reduce limitations by establishing the four criteria of transferability, credibility, confirmability, and dependability. The study was modest in both scale

and scope, which impacts the generalizability of the results to other young adult programs. However, through the nine credibility checks there is increased rigor that enhances the validity of the study and explores a real-life problem relevant to clinical practice (Blustein, 2001; Butterfield et al., 2005; Subich, 2001; Walsh, 2001). In addition to the methodological limitation of a case study, it is important to understand the limitations of the actual study sample. The study sample comes from a private-pay organization and as such may not be transferable to government-funded organizations. Behrens and Satterfield (2006) suggest that private-pay programs are different enough from government-funded programs that separate research is needed to explore effectiveness. Last, the sample group of the program alumni was voluntary, which potentially introduces bias.

Suggested Future Research

Future research could incorporate the voices of the families and employees of an organization and therefore assess congruence with alumni stories. Studies could be designed to understand the experience from the perspective of the whole organization where all stakeholders are incorporated, including families and employees.

A study using a research design that sampled across several young adult transition programs would address the potential challenge of transferability of a single case study. This could begin the process of identifying on a larger scale and with a wider range of participants, what supports or hinders young adults in transition and treatment. Subsequently a quantitative survey could be developed based on the critical themes found within young adult organizations.
Future researchers may also want to consider implementing a similar study of government-funded programs to see if the themes found in this study extend beyond socio-economics, gender, ethnicity, or race, and whether this type of treatment may be helpful to a wider range of participants.

References

Adams, S., Knopf, D., & Park, J. (2014). Prevalence and treatment of mental health and substance use problems in the early emerging adult years in the United States: Findings from the 2010 National Survey on Drug Use and Health. *Emerging Adulthood*, *2*,(2), 163–172. doi:10.1177/2167696813513563

Alexander, L. B., & Luborsky, L. (1986). The Penn helping alliance scales. In L. S. Greenberg & W. M. Pinsof (Eds.), *The psychotherapeutic process: A research handbook* (pp. 325–366). New York, NY: Guildford.

Aquilino, W. S. (1997). From adolescent to young adult: A prospective study of parent-child relations during the transition to adulthood. *Journal of Marriage and Family*, 59(3), 670–686. doi:10.2307/353953

Arnett, J. J. (2000). Emerging adulthood. *American Psychologist*, 55(5), 469–480. doi:10.1037/0003-066X.55.5.469

Arnett, J. J. (2004). Emerging adulthood: *The winding road from the late teens through the twenties.* New York, NY: Oxford University Press.

Association for Experiential Education. (n.d.). *What is experiential education?* Retrieved from http://www.aee.org/what-is-ee

Bass, B. M. (1985). *Leadership and performance*. New York, NY: Free Press.

Bass, B. M., & Bass, R. (2008), *The Bass handbook of leadership: Theory, research, and managerial applications* (4th ed.). New York, NY: Free Press.

Bedi, R. P., Davis, M. D., & Williams, M. (2005). Critical incidents in the formation of the therapeutic alliance from the client's perspective. *Psychotherapy: Theory, Research, Practice, Training*, 42(3), 311–323. doi.org/10.1037/0033-3204.42.3.311.

Behrens, E. (2015). A case for clinical case studies. *Journal of Therapeutic Schools and Programs, 7*, 5–7. Retrieved from https://www.researchgate.net/profile/Ellen_Behrens/publication/295919232_Journal_of_Therapeutic_Schools_Programs_Volume_7/links/56d0906c08ae059e375d4740.pdf#pag5

Behrens, E., & Satterfield, K. (2006, August 12). *Report findings from a multi-center study of youth outcomes in private residential treatment.* Report presented at the 114th annual convention of the American Psychological Association, New Orleans, LA. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.582.881&rep=rep1&type=pdf

Bloom, M., Fischer, J., & Orme, J. G. (2009). Evaluating practice: *Guidelines for the accountable professional* (6th ed.). Boston, MA: Pearson Allyn & Bacon.

Blustein, D. L. (2001). Extending the reach of vocational psychology: Toward an inclusive and integrative psychology of working. *Journal of Vocational Behavior, 59*(2), 171–82. doi:10.1006/jvbe.2001.1823

Borgen, W. A., & Amundson, N. E. (1984). *The experience of unemployment.* Scarborough, CAN: Nelson.

Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.

Butterfield, L. D., Borgen, W. A., Amundson, N. E., & Maglio, A. T. (2005). Fifty years of the critical incident technique: 1954–2004 and beyond. Qualitative Research, 5(4), 475–497. doi:10.1177/1468794105056924

Carlson, C. I., Ross, S. G., & Harris Stark, K. (2012). Bridging systematic research and practice: Evidence-based case study methods in couple and family psychology. *Couple and Family Psychology: Research and Practice, 1*(1), 48–60. doi:10.1037/a0027511

Caruso, R., Biancosino, B., Marmai, L., Bonatti, L., Moscara, M., Rigatellis, M., Preibe, S. (2013). Exploration of experiences in therapeutic groups for patients with severe mental illness: Development of the Ferrara group experiences scale. *BMC Psychiatry, 13*(1), 242. doi:10.1186/1471-244X-13-242

Chell, E. (2004). Critical incident technique. In C. Cassell & G. Symon (Eds.), *Qualitative methods and analysis in organizational research: A practical guide* (pp. 45–60). London, UK: Sage.

Child Welfare League of America. (2005). CWLA's position on residential care. *Residential Group Care Quarterly, 6*(2), 1–3. Retrieved from http://files.eric.ed.gov/fulltext/ED486228.pdf

Chouliara, Z., Karatzias, T., & Gullone, A. (2013). Recovering from childhood sexual abuse: A theoretical framework for practice and research. *Journal of Psychiatric and Mental Health Nursing, 21*(1), 69–78. doi:10.1111/jpm.12048

Clem, J. M., Smith, T. E., & Richards, K. V. (2012). Effects of a low-element challenge course on abstinence self-efficacy and group cohesion. *Research on Social Work Practice, 22*(2), 151–158. doi:10.1177/1049731511423672

Cline, F. W., & Fay, J. (1990). Parenting with love and logic. *Teaching children responsibility.* Colorado Springs, CO: Pinon Press.

Cohen, A. M., & Smith, R. D. (1976). *The critical incident in growth groups. Theory and technique.* La Jolla, CA: University Associates.

Croft, G., Boyer, W., & Hett, G. (2009). Self-actualization: The heart and soul of a potential-based life skills program for a child with multiple disabilities. *Early Childhood Education Journal, 37*(1), 43–49. doi:10.1007/s10643-009-0328-x

Curry, J. F. (1991). Outcome research on residential treatment: Implications and suggested directions. *American Journal on Orthopsychiatry, 61*(3), 348–357. doi:10.1037/h0079272

Curry J. F. (2004). Future directions in residential treatment outcome research. *Child Adolescent Psychiatric Clinics of North America, 13*(2), 429–440. doi:10.1016/S1056-4993(03)00127-5

Davis, M., & Vander Stoep, A. (1997). The transition to adulthood for youth who have serious emotional disturbance: Developmental transition and young adult outcomes. *Journal of Mental Health Administration, 24*(4), 400–427. doi:10.1007/BF02790503

Dedoose. (n.d.). *What makes Dedoose different?* Retrieved from: http://www.dedoose.com

Dierick, P., & Lietaer, G. (2008). Client perception of therapeutic factors in group psychotherapy and growth groups: an empirically-based hierarchical model international journal of group psychotherapy. *International Journal of Group Psychotherapy, 58*(2), 203–230. doi:10.1521/ijgp.2008.58.2.203

Duncan, B., & Miller, S. D. (2008). 'When I'm good, I'm very good, but when I'm bad I'm better': A new mantra for psychotherapists. *Psychotherapy in Australia, 15*(1), 60–69.

Duppong-Hurley, K., Trout, A., Chmelka, M. B., Burns, B. J., Epstein, M. H., Thompson, R. W., & Daly, D. W. (2009). The changing mental health needs of youth admitted to residential group home care: Comparing mental health status at admission in 1995 and 2004. *Journal of Emotional and Behavioral Disorders, 17*(3), 164–176. doi:10.1177/1063426608330791.

Eaton, W. W., Martins, S. S., Nestadt, G., Bienvenu, O. J., Clarke, D., & Alexandre, P. (2008). The burden of mental disorders. *Epidemiolgic Reviews, 30*(1), 1–14.

Engelking, J. L. (1986). Teacher job satisfaction and dissatisfaction. *Spectrum, 4*(1), 33–38.

Ernst, M. M., Barhight, L. R., Bierenbaum, M. L., Piazza-Waggoner, C., & Carter, B. D. (2013). Case studies in clinical practice in pediatric psychology: The "why" and "how to." *Clinical Practice in Pediatric Psychology, 1*(2), 108–120. doi:10.1037/cpp0000021

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin, 51*(4), 327–358. doi:10.1037/h0061470

Freeman, J.,Weitzenfeld, J., Klein, G., Riedl, T., & Musa, J. (1991, April 6). *A knowledge elicitation technique for educational development: The critical decision method.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL. Retrieved from http://jaredfreeman.com/jf_pubs/Freeman-Knowledge_Elicitation-1991.pdf

Gass, M. A., Gillis, H. L., & Russell, K. C. (2012). *Adventure therapy: Theory, practice, and research.* New York, NY: Routledge.

Goodman, J., Schlossberg, N., & Anderson, M. (2006). *Counseling adults in transition: Linking practice with theory* (3rd. ed.). New York, NY: Springer.

Greer, T. L., & Trivedi, M. H. (2009). Exercise in the treatment of depression. *Current Psychiatry Reports, 11*(6), 466–472. doi:10.1007/s11920-009-0071-4

Griffith, A. K., Epstein, M., & Huefner, J. (2013). Psychotropic medication management within residential treatment centers: Physician opinions about difficulties and barriers. *Journal of Children and Family Studies, 23*(4), 745–751. doi:10.1007/s10826-013-9790-6

Griffith, A. K., Huscroft-D'Angelo, J., Epstein, M. H., Singh, N. N., Huefner, J. C., & Pick, R. (2010). Psychotropic medication use for youth in residential treatment: A comparison between youth with monopharmacy versus polypharmacy. *Journal of Child and Family Studies, 19*(6), 795–802. doi:10.1007/s10826-010-9372-9

Heppner, P. P., Kivlighan, D. M., & Wampold, B. E. (2008). *Research design in counseling* (3rd ed.). Belmont, CA: Thomson Brooks/Cole.

Holloway, E. L., & Schwartz, H. L. (2014). *Critical incident technique: Exploring meaningful interactions between students and professors.* London, UK: Sage.

Irwin, C. E., Jr. (2010). Young adults are worse off than adolescents. *Journal of Adolescent Health, 46*(5), 405–406. doi:1016/j.jadohealth.2010.03.001

Johnson, L. D., Miller, S. D., & Duncan, B. L. (2000). *The Session Rating Scale 3.0.* Chicago, IL: Lynn D. Johnson, Scott D. Miller & Barry L. Duncan.

Joint Commission for Accreditation of Healthcare Organizations. (n.d.-a). *About the Joint Commission*. Retrieved from http://www.jointcommission.org/about_us/about_the_joint_commission_main.asp

Joint Commission for Accreditation of Healthcare Organizations. (n.d.-b). *What is accreditation?* Retrieved from https://www.jointcommission.org/accreditation/accreditation_main.aspx

Jordan, J. V. (2000). The role of mutual empathy in relational/cultural therapy. *Journal of Clinical Psychology, 56*(8), 1005–1016. doi:10.1002/1097-4679(200008)56:8%3 C1005:AID-JCLP2%3E3.0.CO;2-L

Jordan, J., Kaplan, A., Miller, J. B., Stiver, I., & Surrey, J. (1991). *Women's growth-in-connection.* New York, NY: Guilford.

Josselson, R. (1988). The embedded self: I and thou revisited. In D. K. Lapsley & F. C. Power (Eds.), *Self, ego, and identity: Integrative approaches* (pp. 91–108). New York, NY: Springer.

Kessler, R. C., Demler, O., Frank, R. G., Olfson, M., Pincus, H. A., Walters, E. E., Zaslavsky, A. M. (2005). Prevalence and treatment of mental disorders, 1990 to 2003. *New England Journal of Medicine. 352*(4), 2515–2524. doi:10.1056/NEJMsa043266

Khandelwal, K. A. (2009). Effective teaching behaviors in the college classroom: A critical incident technique from students' perspective. *International Journal of Teaching and Learning in Higher Education, 21*(3), 299–309. Retrieved from http://files.eric.ed.gov/fulltext/EJ909053.pdf

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Upper Saddle River, NJ: Prentice Hall.

Koperski, H., Tucker, A., Lung, D. M., & Gass, M. (2015). The impact of community based adventure therapy programming on stress and coping skills in adults.*The Practitioner Scholar: Journal of Counseling and Professional Psychology, 4*(1), 1–16. Retrieved from http://scholars.unh.edu/cgi/viewcontent.cgi?article=1052&context=socwork_facpub

Kvale, S. (1994). Ten standard objections to qualitative research interviews. *Journal of Phenomenological Psychology, 25*(2), 147–73. doi:10.1163/156916294X00016

Lambert, M. J., Morton, J. J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R. C., & Burlingame, G. M. (2004). *Administration and scoring manual for the OQ-45*. Orem, UT: American Professional Credentialing Services.

Larun, L., Nordheim, L. V., Ekeland, E., Hagen, K. B., & Heian, F. (2006). Exercise in prevention and treatment of anxiety and depression among children and young people (review). *Cochrane Database of Systematic Reviews, 2006*(3). doi:10.1002/14651858.CD004691.pub2

Lawlor D. A., & Hopker, S. W. (2001) The effectiveness of exercise as an intervention in the management of depression: systematic review and meta-regression analysis of randomised controlled trials. *BMJ, 322*(7289), 763–767. doi:10.1136/bmj.322.7289.763

Leary, D. E. (2014). Overcoming blindness: Some historical reflections on qualitative psychology. *Qualitative Psychology, 1*(1), 17–33. doi:10.1037/qup0000003

LeMoyne, T., & Buchanan, T. (2011). Does ‘‘hovering’’ matter? Helicopter parenting and its effect on well-being. *Sociological Spectrum: Mid-South Sociological Association, 31*(4), 399–418. doi:10.1080/02732173.2011.574038

Leszcz, M., Yalom, I. D., & Norden, M. (1985). The value of inpatient group psychotherapy: patients' perceptions. *International Journal of Group Psychotherapy, 35*(3), 411–433.

Levy-Warren, M. H. (1999). I am, you are, and so are we: A current perspective on adolescent separation–individuation theory. In A. H. Esman, L. T. Flaherty, & H. A. Horowitz (Eds.), *Adolescent psychiatry: Developmental and clinical studies* (pp. 3–24). Hillsdale, NJ: Analytic Press.

Lieberman, R.E., & Bellonci, C. (2007). Ensuring the preconditions for transformation through licensing, regulation, accreditation, and standards. *American Journal of Orthopsychiatry, 77*(3), 346–347. doi:10.1037/0002-9432.77.3.346

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Lundervold, D. A., & Belwood, M. F. (2000). The best kept secret in counseling: Single-case (N1) experimental designs. *Journal of Counseling & Development, 78*(1), 92–102. doi:10.1002/j.1556- 6676.2000.tb02565.x

Lung, D. M., Stauffer, G., & Alvarez, A. (2008). *Power of one: Adventure and experiential activities for one on one counseling sessions*. Oklahoma City, OK: Woods N Barnes.

Macgowan, M. J., & Wong, S. E. (2014). Single-case designs in group work: Past applications, future directions. Group Dynamics: *Theory, Research, and Practice, 18*(2), 138–158. doi:10.1037/gdn0000003

Matthews, J., & Moran, A. (2011). Physical activity and self-regulation strategy use in adolescents. *American Journal of Health Behavior, 35*(6), 807–814. doi:10.5993/AJHB.35.6.16

McLeod, J. (2010). *Case study research in counseling and psychotherapy.* Thousand Oaks, CA: Sage.

Mead, G. E., Morley, W., Campbell, P., Greig, C. A., McMurdo, M., & Lawlor, D. A. (2009). Exercise for depression. *Cochrane Database of Systematic Reviews, 2010* (1). doi:10.1002/14651858.cd004366.pub4

Mezirow, J., & Associates. (1990). *Fostering critical reflections in adulthood: A guide to transformative and emancipatory learning*. San Francisco, CA: Jossey-Bass.

Miller, J. B. (1976). *Toward a new psychology of women*. Boston, MA: Beacon Press.

National Association of Therapeutic Schools and Programs. (n.d.-b). *NATSAP principles of good practice*. Retrieved from https://www.natsap.org/Public/About_ Natsap/NATSAP_Principles_of_Good_Practice.aspx

Norton, C. L., Tucker, A., Russell, K. C., Bettmann, J. E., Gass, M. A., & Behrens, E. (2014). Adventure therapy with youth. *Journal of Experiential Education, 37*(1), 46–59. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.938.3995&rep=rep1&type=pdf

Orlinsky, D. A., Grawe, K., & Parks, B. K. (1994). Process and outcome in psychotherapy: Noch einmal. In A. E. Bergin & S. L. Garfield (eds.), *Handbook of psychotherapy and behavior change* (4th ed.) (pp. 270–376). New York, NY: Wiley.

Padilla-Walker, L. M., & Nelson, L. J. (2012). Black hawk down? Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging adulthood. *Journal of Adolescence, 35*(5), 1177–1190. doi:10.1016/j.adolescence.2012.03.007

Park, M., Mulye, T., Adams, S. H., Brindis, C. D., & Irwin, C. E., Jr. (2006). The health status of young adults in the United States. *Journal of Adolescent Health, 39*(3), 305–317. doi:10.1016/j.jadohealth.2006.04.017

Petriglieri, G., & Petriglieri, J. L. (2010). Identity workspaces: The case of business schools. *Academy of Management Learning & Education, 9*(1), 44–60. doi:10.5465/AMLE.2010.48661190

Plutchik, R., Conte, H. R., & Karasu, T. B. (1994). Critical incidents in psychotherapy. *American Journal of Psychotherapy, 48*(1), 75–84. Retrieved from https://archive.org/stream/criticalincident00stan/criticalincident00stan_djvu.txt

Pottick, K. J., Bilder, S., Vander Stoep, A., Warner, L., & Alvarez, M. (2008). US patterns of mental health service utilization for transition-age youth and young adults. *Journal of Behavioral Health Services & Research, 35*(4), 373–389. doi:10.1007/s11414-007-9080-4

Safran, J. D., & Muran, J. C. (2000). *Negotiating the therapeutic alliance*. New York, NY: Guilford.

Saldana, J. (2013). *The coding manual for qualitative researchers.* Thousand Oaks, CA: Sage.

Schoel, J., & Maizell, R., (2004). *Exploring islands of healing: New perspectives on adventure-based counseling*. Beverly, MA: Project Adventure.

Schreiner, L. A., Louis, M. C., & Nelson, D. D. (Eds.). (2012). *Thriving in transitions: A research-based approach to college student success*. Columbia, SC: National Resource Center for the First-Year Experience and Students in Transition.

Schwartz, H. L., & Holloway, E. L. (2014). Critical incident technique: Exploring meaningful interactions between students and professors. *Sage research methods cases*. Retrieved from http://methods.sagepub.com/case/critical-incident-technique-interactions-between-students-professors

Sjosten N., & Kivela, S. L. (2006). The effects of physical exercise on depressive symptoms among the aged: A systematic review. *International Journal of Geriatric Psychiatry 21*(5), 410–418. doi:10.1002/gps.1494

Smith, B., & Wilson, B. (2013). *The big book of alcoholics anonymous*. New York, NY: Createspace. (Original work published 1939)

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Subich, L. M. (2001). Dynamic forces in the growth and change of vocational psychology. *Journal of Vocational Behavior, 59*(2), 235–42. doi:10.1006/jvbe.2001.1829

Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2010). *Treatment Episode Data Set (TEDS). 1998–2008. National admissions to substance abuse treatment services,* DASIS Series: S-50, HHS Publication No. (SMA) 09-4471, Rockville, MD. Retrieved from http://wwwdasis.samhsa.gov/dasis2/teds_pubs/2008_teds_rpt_natl.pdf

Sutherland, I., & Jelinek, J. (2015). From experiential learning to aesthetic knowing the arts in leadership development. *Advances in Developing Human Resources, 17*(3), 289–306. doi:10.1177/1523422315587894

Sutherland, I., & Ladkin, D. (2013). Creating engaged executive learning spaces: The role of aesthetic agency. *Organizational Aesthetics, 2*(1), 105–124. Retrieved from http://digitalcommons.wpi.edu/cgi/viewcontent.cgi?article=1028&context=oa

Tagg, J. (2003). *The learning paradigm college*. Boston, MA: Anker.

Tripp, D. (1994). Teachers' lives, critical incidents, and professional practice. *International Journal of Qualitative Studies in Education, 7*(1): 65–76. doi:10.1080/0951839940070105

Tucker, A. R., & Norton, C. L. (2013). The use of adventure therapy techniques by clinical social workers: Implications for practice and training. *Clinical Social Work Journal, 41*(4), 333–343. doi:10.1007/s10615-012-0411-4

U. S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. Office of Applied Studies. (2007). *National Survey on Drug Use and Health. ICPSR 23782-v5*. Retrieved from http://doi.org/10.3886/ICPSR23782.v5

Walsh, W. B. (2001). The changing nature of the science of vocational psychology. *Journal of Vocational Behavior, 59*(2), 262–274. doi:10.1006/jvbe.2001.1832

Wark, L. (1994). Therapeutic change in couples' therapy: Critical change incidents perceived by therapists and clients. *Contemporary Family Therapy, 16*(1), 39–52. doi:10.1007/BF02197601

Weick, K. E. (1995). *Sensemaking in organizations.* London, UK: Sage.

Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2008). Organizing for high reliability: Processes of collective mindfulness. Crisis management, 3(1), 81–123. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.1382&rep=rep1&type=pdf#page=37

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA: Sage.

Young, M. C., & Gass, M. (2008). Current descriptions of National Association of Therapeutic Schools and Programs (NATSAP). *Journal of Therapeutic Schools and Programs, 3*(1), 161–185. Retrieved from http://natsap.org/pdf_files/journals/JTSP_VOL3.1.pdf

Young Adult Transition Association. (n.d.). *About YATA*. Retrieved from http://www.yataconference.com/about-yata

Zimmerman, D. P. (1990). Notes on the history of adolescent inpatient and residential treatment. *Adolescence, 25*(97), 9–38

Young Adults in Residential and Outdoor Behavioral Health Programs: Preliminary Outcomes from the Practice Research Network of the National Association of Therapeutic Schools and Programs

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Abstract

This study explored the demographic characteristics and self-reported psychosocial and family functioning of young adult clients treated in multiple Outdoor Behavioral Health (OBH) and Residential Treatment Centers (RTC) that are member programs of the National Association of Therapeutic Schools and Programs (NATSAP). Data suggest that the demographics of the young adult population in NATSAP programs are similar to that of adolescent NATSAP programs. Furthermore, results were generally comparable with those previously reported with adolescent data because they showed that, overall, young adults in both OBH and RTC programs endorse statistically and clinically significant change from admit to discharge on the Outcome Questionnaire and the General Functioning scale of the Family Assessment Device. The reported gains made during treatment appear to be maintained at six months post-discharge. These results are considered preliminary given issues with attrition and the lack of a comparison group.

Keywords: Young Adults, Wilderness Therapy, Outdoor Behavioral Health, Residential Therapy, Outcomes, Family Functioning, Outcome Questionnaire 45.2, Family Assessment Device, NATSAP

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.03

YOUNG ADULTS IN RTC AND OBH PROGRAMS

In the United States, at the age of 18, individuals shift in status from "adolescent" to "young adult" (Arnett, 2000). They are classified differently by nearly every system with which they interact, and are given more rights, opportunities, responsibilities, and independence - along with which comes a new-found pressure to succeed. Cultural, societal, and technological changes have required researchers to view young adulthood as its own developmental stage distinct from adolescence and adulthood (Adams, Knopf, & Park, 2014; Arnett, 2000; Neinstein & Irwin, 2013). This transitional period, called "emerging adulthood," typically lasts from ages 18-25, and is characterized by the opportunity for independent exploration, identity formation, and a considerable amount of change and instability (Arnett, 2000).

Emerging adulthood is a life stage during which rates of substance abuse are highest, mental health issues are emerging, and access to health care and services decreases significantly (Adams et al., 2014; Arnett, 2005; Kessler et al., 2005; Neinstein & Irwin, 2013; Park, Mulye, Adams, Brindis, & Irwin, 2006; Pottick, Bilder, Vander Stoep, Warner, & Alvarez, 2008; Substance Abuse and Mental Health Services Administration, 2013). Adams et al. (2014) found that young adults ages 18-25 had a higher prevalence of substance abuse and mental health issues but lower treatment rates when compared to adults ages 26-34, putting this age group at heightened risk during this transitional time. In addition, Arnett (2000) found that the majority of Americans between the ages of 18 and 25 felt that they had not completely entered adulthood. The burden of untreated problems combined with increased independence, high pressure to succeed, and low access to developmentally-attuned services may negatively affect psychosocial functioning (Adams et al., 2014; Kessler et al., 2005; Neinstein & Irwin, 2013; Park et al., 2006; Pottick et al., 2008). Mental health and substance use problems during emerging adulthood may cause isolation, extreme behaviors, hopelessness, and burn-out, disrupting young adults' employment opportunities, education, and social circles (Adams et al., 2014; Eaton et al., 2008; Park et al., 2006; Pottick et al., 2008). There are also disruptions in and reduction of treatment services for emerging adults; once an individual turns 18 they are often required to discharge from adolescent treatment programs. Until recently, comparable young adult programs were relatively difficult to find and limited in access and availability, leaving many vulnerable emerging adults without a clear path toward services (Adams et al., 2014; Neinstein & Irwin, 2013; Park et al., 2006; Pottick et al., 2008).

At first glance, young adult residential treatment centers (RTC) and outdoor behavioral health (OBH) programs seem to be comparable to adolescent RTC and OBH programs. However, further examination reveals that there are salient age-appropriate differences between adolescent and young adult programs. Perhaps the greatest difference between the program types is that young adult programs are populated with individuals that have provided legal consent to receive treatment. For adolescent programs in most states, parents/guardians provide the legal consent to receive treatment. The voluntary nature of young adult programs enables programs to approach the therapeutic process differently. For instance, unlike adolescent programs, some young adult programs are only staffed during

the day. In addition, many of these programs encourage young adults to engage in off-site work or educational endeavors, during which times the young adults are generally operating independently, without supervision. More so than adolescent programs, young adult programs offer job skills training, work opportunities, and access to college courses (Treadway, 2017).

While research on RTC and OBH programs has grown substantially in recent decades, it has primarily focused on adolescent characteristics, programs, and outcomes (Roberts, Stroud, Hoag, & Combs, 2016; Treadway, 2017). The adolescent OBH and RTC research suggests that adolescents and/or their parents report significant improvement from the point of admission to the point of discharge for emotional, behavioral, academic, family, and substance abuse problems in RTC and OBH programs (Behrens, 2006; Behrens, 2011; Behrens, Santa, & Gass, 2010; Behrens & Satterfield, 2007; Bettmann, Tucker, Behrens, & Vanderloo, 2016; Russell, Gillis, & Lewis, 2008; Tucker, Norton, DeMille, & Hobson, 2016a; Tucker, Paul, Hobson, Karoff, & Gass, 2016b). Furthermore, the research suggests that adolescents maintain gains up to one year post-discharge (Behrens, 2011; Tucker et al., 2016a; Tucker, Smith, & Gass, 2014; Tucker, Zelov, & Young, 2011; Zelov, Tucker, & Javorski, 2013).

Recently, young adult RTC and OBH have received research attention (Bettmann et al., 2016; Hoag, Massey, Roberts, & Logan, 2013; Roberts et al., 2016; Roberts, Stroud, Hoag, & Massey, 2017; Russell, Gillis, & Heppner, 2016; Treadway, 2017). Preliminary research with young adults in RTC and OBH programs suggests that the findings are similar to those of adolescents in RTC and OBH programs (Hoag et al., 2013; Roberts et al., 2016; Roberts et al., 2017; Russell et al., 2016; Treadway, 2017).

This preliminary study explored the characteristics and treatment outcomes of young adults in multiple RTC and OBH programs. The research questions for this study were:

1. What are the demographic and clinical characteristics of young adults who are treated in OBH and RTC programs?

2. Do young adults in OBH and RTC programs report change on the Outcome Questionnaire 45.2 (OQ-45.2) and the General Functioning scale of the Family Assessment Device (GF-FAD) from the point of admission to the point of discharge, and across the times of admission, discharge and six months post-discharge?

3. Do young adults' self-reported changes vary among the OQ-45.2 subscales (Symptom Distress, Interpersonal Relationships, Social Role)?

Method

The data for this study were obtained from the National Association of Therapeutic Schools and Programs (NATSAP) Practice Research Network (PRN). The PRN is maintained in partnership with the University of New

Hampshire (Young & Gass, 2008), whose institutional review board approved this study. The NATSAP PRN is an ongoing research initiative in which participating programs track client data at intake, discharge, and post-discharge. The data for this study were obtained from clients at 12 OBH and 10 RTC young adult programs between January of 2009 and February of 2017. The measures included the Outcome Questionnaire 45.2 (Lambert et al., 2004) and the General Functioning scale of the Family Assessment Device (Epstein, Baldwin, & Bishop, 1983). In addition to the standardized instruments, other data were collected through NATSAP PRN background questionnaires completed by program staff (e.g., primary reason for referral, gender) and clients (e.g., drug/alcohol use, sexual orientation, treatment history).

We aggregated the participating treatment programs into either the RTC or OBH group for analyses, because these categories are well established in the research corpus. However, it is important to note that the RTC category included both traditional RTC programs, that is young adult programs that have a campus to which young adults are generally confined, as well as transitional living programs. Transitional living programs are sometimes distinguished from RTC programs because young adult clients are not confined to the program facilities. This distinction if often important to young adults when selecting a program. However, for the purposes of the present study, it seemed appropriate to include transitional living programs in the RTC category because they have a have a considerable number of features that are consistent with RTC programs (e.g., physical facilities, multidisciplinary treatment, educational/vocational training, and milieu-based care).

It is important to note that young adults may attend more than one NATSAP program and, following a continuum of care, often transfer from an OBH program to an RTC program for longer-term care. This study did not track whether participants in this study attended more than one NATSAP program included in the PRN.

Measures

The OQ-45.2 has been established as a valid and reliable measure of adult psychosocial functioning (Beckstead et al., 2003). It is a self-report inventory that has three scales measuring general functioning in interpersonal relationships, social role, and symptom distress. A total OQ-45.2 score of 63 or higher exceeds the clinical cut-off and reflects a problematic number of symptoms, interpersonal difficulties, and dissatisfaction with quality of life (Lambert et al., 1996). The OQ-45.2 uses a Reliable Change Index (RCI), which indicates the number of points needed to indicate a meaningful change in functioning. A change in the total score of 14 points or more is considered clinically reliable (Lambert et al., 1996).

Clinical cut-off and RCI scores are also available for the three subscales of the OQ-45.2. The Symptom Distress scale measures affective disorders, stress, and anxiety, has a clinical cut-off score of 36, and has an RCI of 10 points. The

Interpersonal Relationship scale measures loneliness, conflict, and relationship difficulties, has a clinical cut-off score of 15, and has an RCI of 8 points. The Social Role scale measures difficulties in roles at work, school, and home, has a clinical cut-off score of 12, and has an RCI of 7 points (Lambert et al., 1996).

The GF-FAD is based on the McMaster Model of Family Functioning and measures overall family functioning via 12 self-report items, each of which uses a four-point Likert scale response format (Epstein et al., 1983). Kabacoff, Miller, Bishop, Epstein, and Keitner (1990) studied the GF-FAD and suggested it was an appropriate measure of general family functioning. The total score is calculated by averaging the 12 items, which results in a score range of 0-4. The clinical cut-off score for the scale is 2. Higher scores indicate worse client-reported levels of family functioning (Epstein et al., 1983).

Sample

The participants consisted of 450 young adults enrolled in RTC programs and 760 young adults enrolled in OBH programs who completed assessment measures at admit and discharge. Table 1 contains the number and percentages for each demographic category in both samples. Participants in the RTC sample were drawn from 10 RTC programs. The RTC sample was comprised primarily of White (84.4%) males (59.5%) with the average age of 21.2 years (SD = 2.2). Almost 70% of clients in the RTC programs were identified by program staff as having three or more initial diagnoses or presenting problems. The most common primary reason for referral was alcohol/substance abuse (71.2%).

Participants in the OBH sample were drawn from 12 OBH programs. The OBH sample was comprised primarily of Caucasian (87.8%) males (73.4%) with an average age of 20.3 (SD = 1.95). The primary reason for referral was alcohol/substance abuse (37.3%), depression/mood disorders (23.9%), and anxiety issues (20.9%).

Table 1. Demographic Data

RTC Sample			**OBH Sample**		
	N	%		*N*	%
Age (*M*=21.18; *SD*=2.159)	450		**Age (*M*=20.31; *SD*=1.952)**	760	
17		0%	17		0.50%
18		13.10%	18		20.80%
19		15.10%	19		19.70%
20		12.90%	20		18.00%
21		14.00%	21		14.30%
22		13.80%	22		12.00%
23		13.60%	23		6.30%

24		10.20%	24		4.90%
25		7.30%	25		3.40%
Gender	437		**Gender**	756	
Male		59.50%	Male		73.40%
Female		40.50%	Female		26.50%
			Other		0.10%
Ethnicity	392		**Ethnicity**	735	
African American		1.50%	African American		1.00%
Asian American		1.50%	Asian American		3.10%
Hispanic		6.40%	Hispanic		3.30%
Native American		0.30%	Native American		0.40%
White		84.40%	White		87.80%
Other		5.90%	Other		4.50%
Primary reason for referral	382		**Primary reason for referral**	716	
Alcohol/Substance Abuse		71.20%	Alcohol/Substance Abuse		37.30%
Anxiety Issue		8.10%	Anxiety Issue		20.90%
Attention Issue (ADD/ ADHD etc.)		0.80%	Attention Issue (ADD/ ADHD etc.)		1.70%
Autism/Asperger's		2.10%	Autism/Asperger's		2.90%
Depression/Mood Disorder		13.60%	Depression/Mood Disorder		23.90%
Learning Disability		0.80%	Learning Disability		0.80%
Oppositional Defiance/ Conduct Issues		0%	Oppositional Defiance/ Conduct Issues		1.70%
Trauma Related Issues		1.60%	Trauma Related Issues		4.10%
Other		1.80%	Other		6.70%
3 or more Diagnoses	375		**3 or more Diagnoses**	703	
Yes		69.60%	Yes		67.70%
No		30.40%	No		32.30%

Results

RTC Programs

Client demographics. Due to attrition, the sample size of participants in RTC programs who completed the OQ-45.2 at admit, discharge, and six months post-discharge was much smaller (n = 70) than the total RTC sample described above. The mean age of this smaller sample was 20.5 (SD = 1.84). Similar to the larger sample, the majority of participants were heterosexual (80.4%), male (58.6%), Caucasians (89.3%), and presented with three or more presenting problems (78.2%). The primary referral reason was alcohol/substance abuse (43.6%). Participants in this smaller sample of RTC participants were drawn from seven RTC programs, with the number of participants drawn from a program ranging from 1 to 24.

We conducted independent samples t-tests comparing the data of RTC survey non-completers (participants who completed measures at admit and discharge only) to RTC survey completers (participants who completed testing at admit, discharge, and six months post-discharge) to explore if there were systematic differences in outcomes between those who were included in this sample (survey completers) and those who were excluded from the sample due to attrition (survey non-completers). The t-tests indicated that there was no significant difference between OQ-45.2 admit scores for non-completers (M = 72.69, SD = 25.07) and survey completers (M = 77.76, SD = 24.33) in RTC programs; $t(448) = -1.56$, $p = .711$. T-tests also indicated that there was no significant difference between OQ-45.2 discharge scores between survey completers (M = 55.0, SD = 22.45) and survey non-completers (M = 50.61, SD = 22.59) in RTC programs; $t(448) = -1.496$, $p = .648$. Similarly, t-tests comparing the GF-FAD survey non-completers and survey completers indicated no significant difference at admit, $t(436) = -.658$, $p = .746$; nor upon discharge, $t(436)=1.298$, $p =.374$. Therefore, it appears that this smaller sample, the survey completer group, is similar to the larger sample, the survey non-completer group, at least in terms of their self-reported psychosocial (OQ-45.2) and family (GF-FAD) at admission and discharge. Table 2 contains the number and percentages of each demographic category for the RTC survey completer and non-completer samples.

Table 2. Demographic Data for RTC Completer and Non-Completer Samples

RTC Survey Non-Completers			**RTC Survey Completers**		
	N	%		*N*	%
Age (*M*=21.18; *SD*=2.159)	450		**Age** (*M*=20.50; *SD*=1.84)	70	
18		13.1%	18		18.6%
19		15.1%	19		17.1%
20		12.9%	20		12.9%
21		14.0%	21		20.0%
22		13.8%	22		15.7%

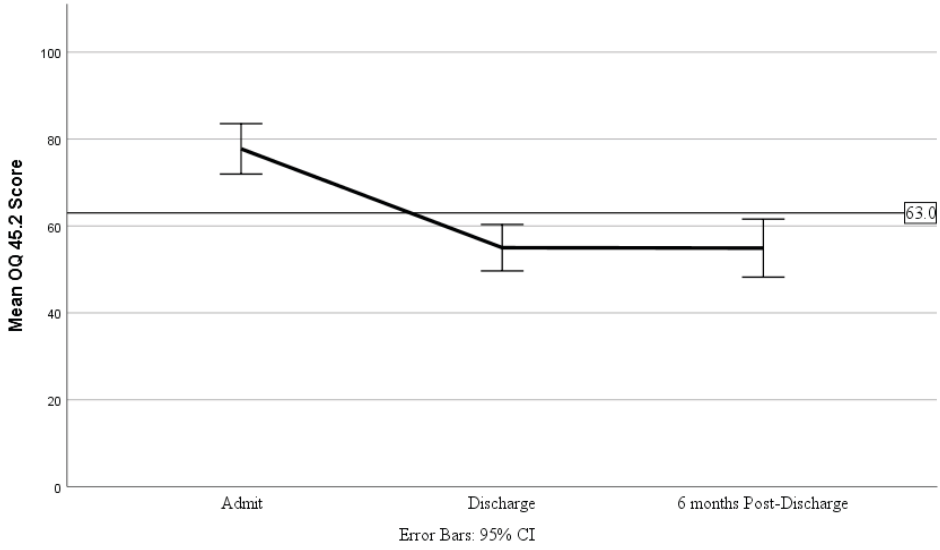
23		13.6%	23		11.4%
24		10.2%	24		2.9%
25		7.3%	25		1.4%
Gender	437		**Gender**	70	
Male		59.5%	Male		41.4%
Female		40.5%	Female		58.6%
Ethnicity	392		**Ethnicity**	56	
African American		1.5%	African American		1.8%
Asian American		1.5%	Asian American		1.8%
Hispanic		6.4%	Hispanic		3.6%
Native American		0.3%	Native American		0.0%
White		84.4%	White		89.3%
Other		5.9%	Other		3.6%
Primary reason for referral	382		**Primary reason for referral**	55	
Alcohol/Substance Abuse		71.2%	Alcohol/Substance Abuse		43.6%
Anxiety Issue		8.1%	Anxiety Issue		21.8%
Attention Issue (ADD/ ADHD etc.)		0.8%	Attention Issue (ADD/ ADHD etc.)		0.0%
Autism/Asperger's		2.1%	Autism/Asperger's		3.6%
Depression/Mood Disorder		13.6%	Depression/Mood Disorder		25.5%
Learning Disability		0.8%	Learning Disability		1.8%
Oppositional Defiance/ Conduct Issues		0.0%	Oppositional Defiance/ Conduct Issues		0.0%
Trauma Related Issues		1.6%	Trauma Related Issues		1.8%
Other		1.8%	Other		1.8%
3 or more Diagnoses	375		**3 or more Diagnoses**	55	
Yes		69.6%	Yes		78.2%
No		30.4%	No		21.8%

Note: Survey completers refers to participants who completed the OQ-45.2 at admit, discharge, and six months post-discharge. Survey non-completers refer to participants who completed the OQ-45.2 only at admit and discharge.

OQ-45.2. A one-way repeated measures ANOVA was conducted to compare the effect of residential treatment on clients' OQ-45.2 scores at admit, discharge, and 6 months post-discharge. A significant effect was found. Table 4 presents *F* scores, partial etas, significant pairwise differences, means, standard deviations, and confidence intervals for the OQ-45.2 Total score at each time period in the RTC sample.

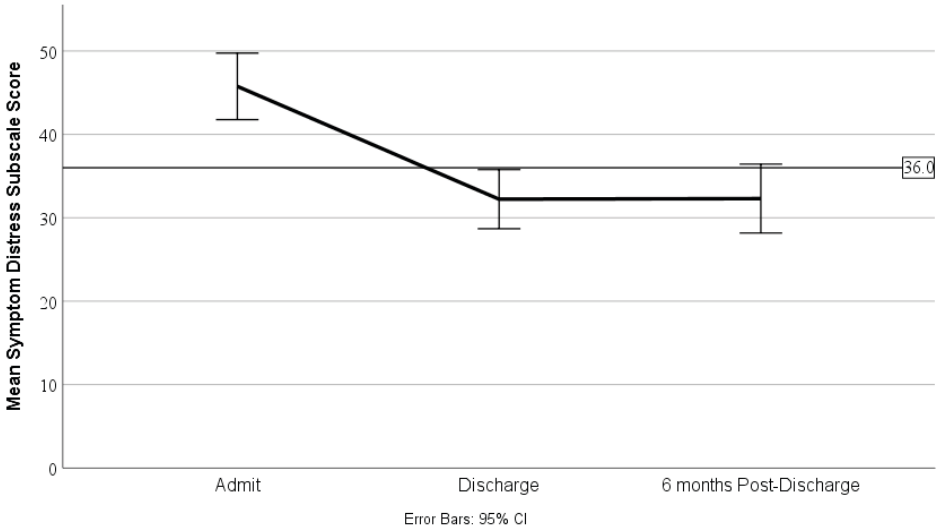
These results suggest that young adults in the RTC programs reported clinically reliable and statistically significant improvement from admit to discharge and that those improvements were maintained at six months post-discharge. At admission, their self-reported functioning was in the clinical range (exceeded the clinical cut-off score of 63), whereas at discharge and six months post-discharge their functioning was in the normal range, below the clinical cut-off score. A graphical representation of the means and 95% confidence intervals for the RTC samples' OQ-45.2 Total Scores at each time period are displayed in Figure 1.

Figure 1. Line chart reflecting mean OQ-45.2 total scores over time for the RTC sample.



OQ-45.2 Subscales. One-way repeated measures ANOVAs were conducted to compare each subscale's scores (Symptom Distress, SD; Interpersonal Relationships, IR; Social Roles, SR) on the OQ-45.2 at admit, discharge, and six months post-discharge for the RTC sample. For each subscale, there was a significant effect found. Figures 2-4 depict means and 95% confidence intervals for the each subscale's scores by time in the RTC sample. In addition, Table 4 presents *F* scores, partial etas, significant pairwise differences, means, standard deviations, and confidence intervals for each of the time periods and for each subscale, in the RTC sample.

Figure 2. Line chart reflecting mean Symptom Distress subscale score of RTC sample over time.



Taken together, the results from the repeated measures ANOVAs and subsequent t-tests for each of the OQ-45.2 subscales suggest that young adults in this RTC sample reported statistically significant improvement from admit to discharge in terms of symptom distress, interpersonal relationships, and social role functioning. Mean scores for each subscale moved from the clinical to the normal range by the point of discharge. The improvement during treatment was to a degree that was considered clinically reliable for the SD subscale (exceeded RCI), but not for the IR and SR subscales (did not exceed RCI).

Figure 3. Line chart reflecting mean Interpersonal Relations subscale score of RTC sample over time.

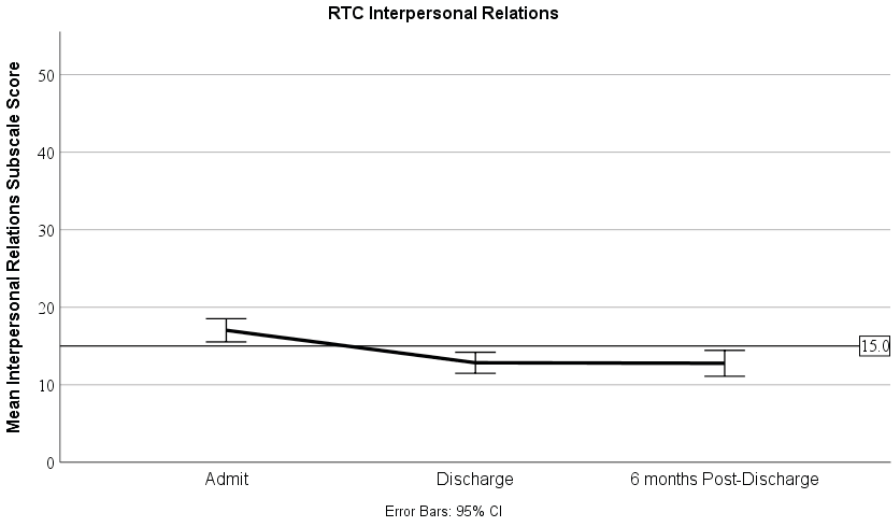
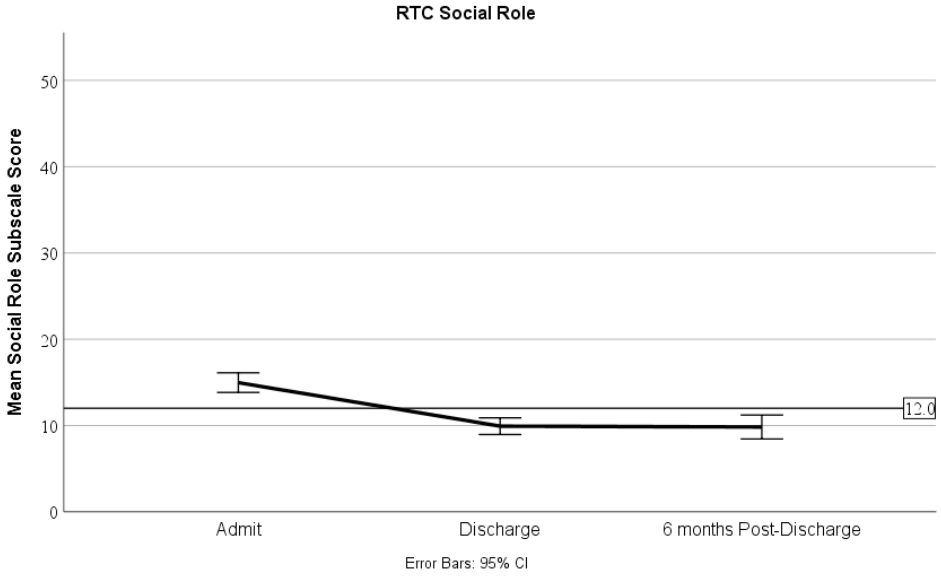


Figure 4. Line chart reflecting mean Social Role subscale score of RTC sample over time.

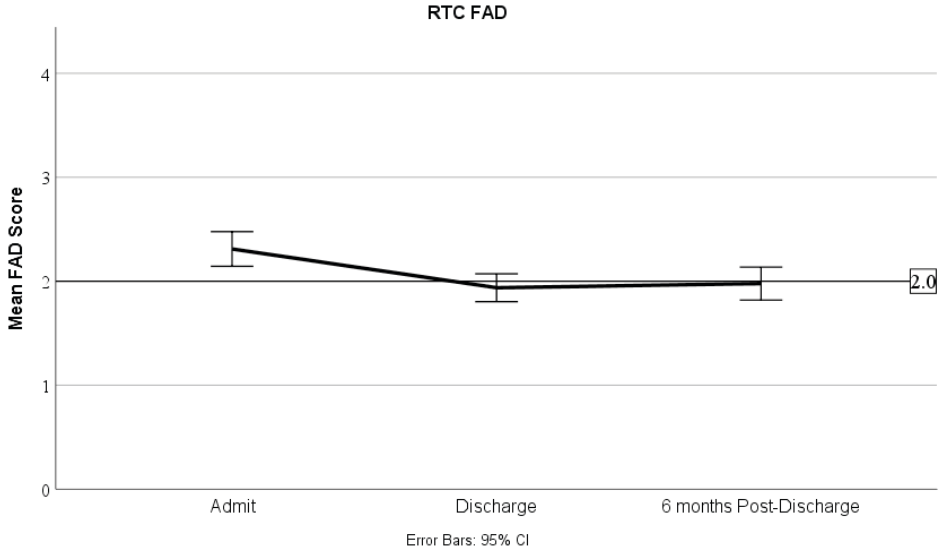


YOUNG ADULTS IN RTC AND OBH PROGRAMS

Of additional interest are the reported changes from discharge to six months post-discharge; that is, changes young adults reported after leaving the program. T-tests data indicate that there was no increase in reported problems between discharge and post-discharge on the subscales. In fact, the scores at discharge and six months post-discharge were nearly identical. Participants' self-reported functioning remained in the normal range, below the clinical cut-off scores, for each of the subscales during the six months after discharge.

General Functioning Scale of the Family Assessment Device. A one-way repeated measures ANOVA was conducted to compare the effect of residential treatment on clients' GF-FAD scores at admit, discharge, and six months post-discharge. A significant effect was found. Figure 5 depicts means and 95% confidence intervals for the GF-FAD subscale scores by time in the RTC Sample. In addition, Table 4 presents F scores, partial etas, significant pairwise differences, means, standard deviations, and confidence intervals for each of the time periods and for the GF-FAD, in the RTC sample.

Figure 5. GF-FAD scores by time for RTC sample.



These results suggest that young adults in residential treatment centers reported that family functioning at admission was within the clinical range (exceeded the clinical cut-off score of 2). In addition, they reported statistically significant improvement between admit and discharge on their family functioning which placed the mean scores below the clinical cut-off at discharge. However, it is noteworthy that the confidence interval extends above the clinical cut-off at discharge. In addition, based on t-tests results, these outcomes are generally maintained at six months post-discharge and mean scores remain below the clinical cut-off. Again however, the confidence interval extends above the clinical cut-off at the time of six months post-discharge.

OBH Programs

Client demographics. There were 217 OBH clients in the sample who completed the OQ-45.2 at admit, discharge, and six months post-discharge; this group was considered the survey completers. The average age of the OBH survey completer sample was 20.4 (*SD* = 1.96). The majority of clients were heterosexual (86.9%) White (89%) males (65.9%) with three or more presenting problems (72.2%). The primary referral reasons were alcohol/substance abuse (36%), depression/mood disorder (25.7%), and anxiety issues (20.6%).
We conducted independent samples t-tests comparing the data of OBH survey non-completers (participants who completed measures at admit and discharge only) to OBH survey completers (participants who completed testing at admit, discharge, and 6-months post-discharge) to explore if there were systematic differences in outcomes between those who were included in this sample (survey completers) and those who were excluded from the sample due to attrition (survey non-completers). The t-tests indicated that there was no significant difference between OQ-45.2 admit scores for non-completers (M = 75.78, SD = 25.78) and survey completers (M = 79.89, SD = 23.95) in OBH programs; $t(758) = -2.024$, $p = .060$, CI [-8.09, -0.12]. T-tests also indicated that there was no significant difference between OQ-45.2 discharge scores between survey completers (M = 45.52, SD = 23.00) and survey non-completers (M = 46.44, SD = 22.44) in OBH programs; $t(758) = -0.509$, $p = .596$. Similarly, t-tests comparing the GF-FAD survey non-completers and survey completers indicated no significant difference at admit; $t(727) = 1.442$, $p = .150$; nor upon discharge; $t(727)=0.80$, $p=.424$. Therefore, it appears that this smaller sample, the survey completer group, is similar to the larger sample, the survey non-completer group, at least in terms of their self-reported psychosocial (OQ-45.2) and family functioning (GF-FAD) at admission and discharge. Table 3 contains the number and percentages of each demographic category for the OBH survey completer and non-completer samples.

Table 3. Demographic Data for OBH Completer and Non-Completer Samples

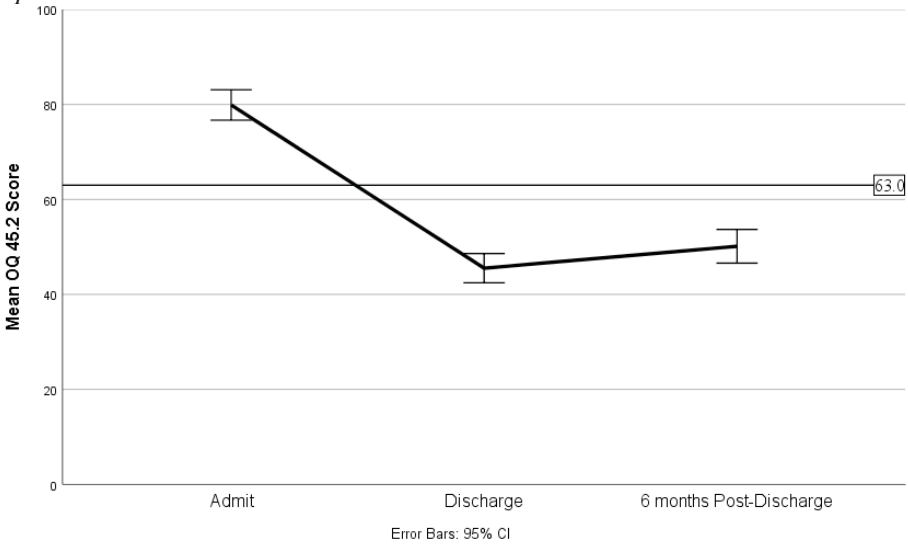
OBH Survey Non-Completers			**OBH Survey Completers**		
	N	%		*N*	%
Age (*M*=20.31; *SD*=1.952)	760		**Age** (*M*=20.39; *SD*=1.96)	217	
17		0.50%	17		0.0%
18		20.80%	18		20.30%
19		19.70%	19		17.10%
20		18.00%	20		20%
21		14.30%	21		16.60%
22		12.00%	22		11%
23		6.30%	23		5.50%
24		4.90%	24		4.60%

YOUNG ADULTS IN RTC AND OBH PROGRAMS

25		3.40%	25		4.60%
Gender	756		**Gender**	217	
Male		73.40%	Male		65.90%
Female		26.50%	Female		34.10%
Other		0.10%	Other		0.00%
Ethnicity	735		**Ethnicity**	209	
African American		1.00%	African American		0.0%
Asian American		3.10%	Asian American		2.40%
Hispanic		3.30%	Hispanic		4.30%
Native American		0.40%	Native American		0.00%
White		87.80%	White		89.00%
Other		4.50%	Other		4.30%
Primary reason for referral	716		**Primary reason for referral**	214	
Alcohol/Substance Abuse		37.30%	Alcohol/Substance Abuse		36.00%
Anxiety Issue		20.90%	Anxiety Issue		20.60%
Attention Issue (ADD/ ADHD etc.)		1.70%	Attention Issue (ADD/ ADHD etc.)		0.50%
Autism/Asperger's		2.90%	Autism/Asperger's		3.70%
Depression/Mood Disorder		23.90%	Depression/Mood Disorder		25.70%
Learning Disability		0.80%	Learning Disability		0.90%
Oppositional Defiance/ Conduct Issues		2%	Oppositional Defiance/ Conduct Issues		0.50%
Trauma Related Issues		4.10%	Trauma Related Issues		4.70%
Other		6.70%	Other		7.50%
3 or more Diagnoses	703		**3 or more Diagnoses**	212	
Yes		67.70%	Yes		72.20%
No		32.30%	No		27.80%

OQ-45.2. A significant effect was found using a one-way repeated measures ANOVA to compare the effect of OBH treatment on client's OQ-45.2 scores at admit, discharge, and six months post-discharge. Figure 6 depicts means and 95% confidence intervals for the OQ-45.2 Total scores by time in the OBH sample. In addition, Table 4 presents *F* scores, partial etas, significant pairwise differences, means, standard deviations, and confidence intervals for the total OQ-45.2 scores at each of the time periods in the OBH sample.

Figure 6. Line chart reflecting mean total OQ-45.2 scores over time for the OBH sample.



These results suggest that young adults in this OBH sample reported clinically reliable and statistically significant psychosocial improvement from admit to discharge. While there was a statistically significant increase in psychosocial symptoms between discharge and post-discharge, the increases were not clinically reliable, because they did not exceed the RCI value of 14. At admission, young adults' self-reported functioning was in the clinical range (clinical cut-off is 63), but at discharge and post-discharge their functioning was in the normal range and well below the clinical cut-off score.

OQ-45.2 Subscales. One-way repeated measures ANOVAs were conducted to compare each subscale scores (SD, IR, SR) on the OQ-45.2 at admit, discharge, and six months post-discharge for the OBH sample. There was a significant effect found for each subscale. Figures 7-9 depict means and 95% confidence intervals for the each subscale's scores by time in the OBH sample. In addition, Table 4 presents *F* scores, partial etas, significant pairwise differences, means, standard deviations, and confidence intervals for each of the time periods and for each subscale in the OBH sample.

Figure 7. Line chart reflecting mean Symptom Distress score over time for the OBH sample.

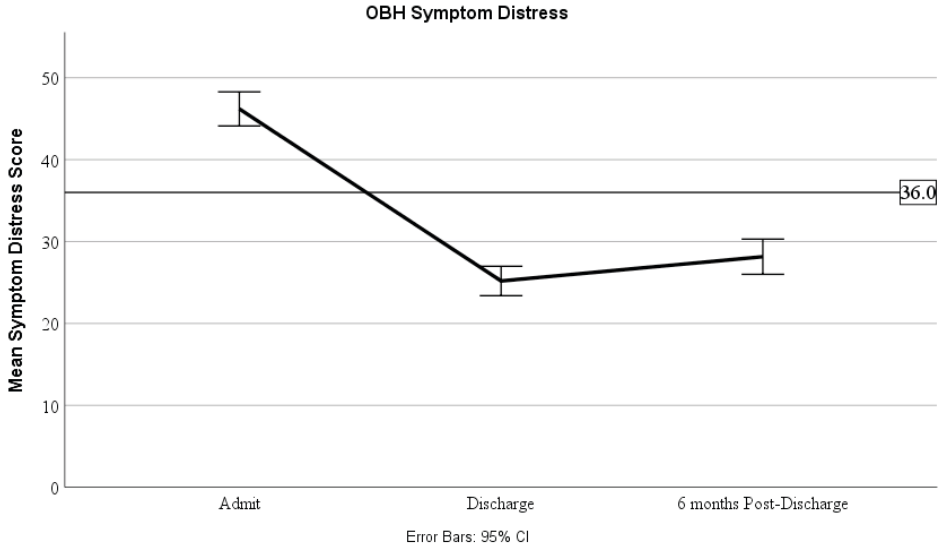


Figure 8. Line chart reflecting mean Interpersonal Relations score over time for the OBH sample.

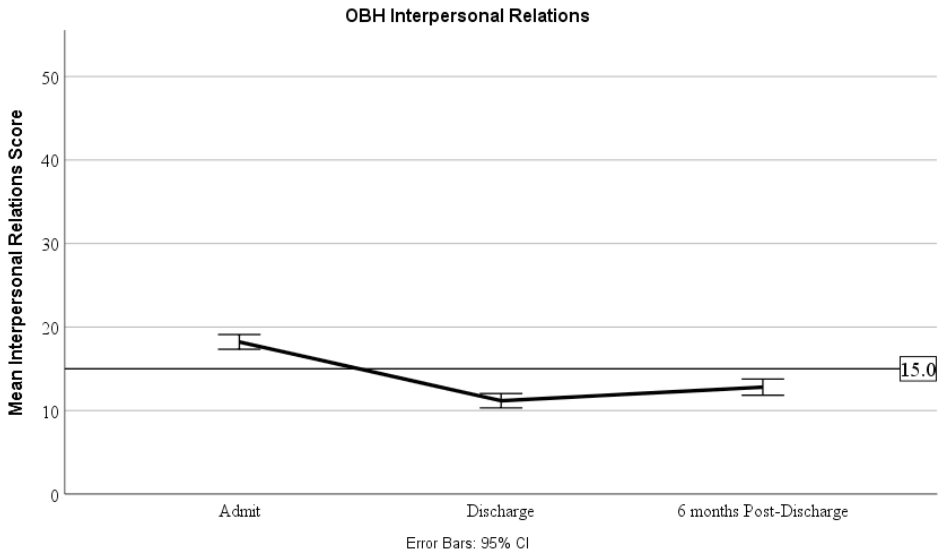
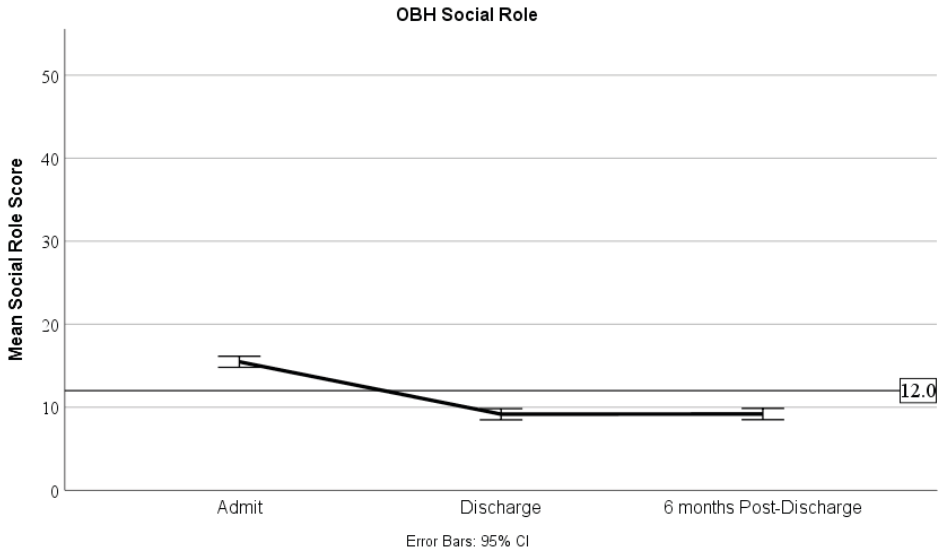


Figure 9. Line chart reflecting mean Social Role score over time for the OBH sample.



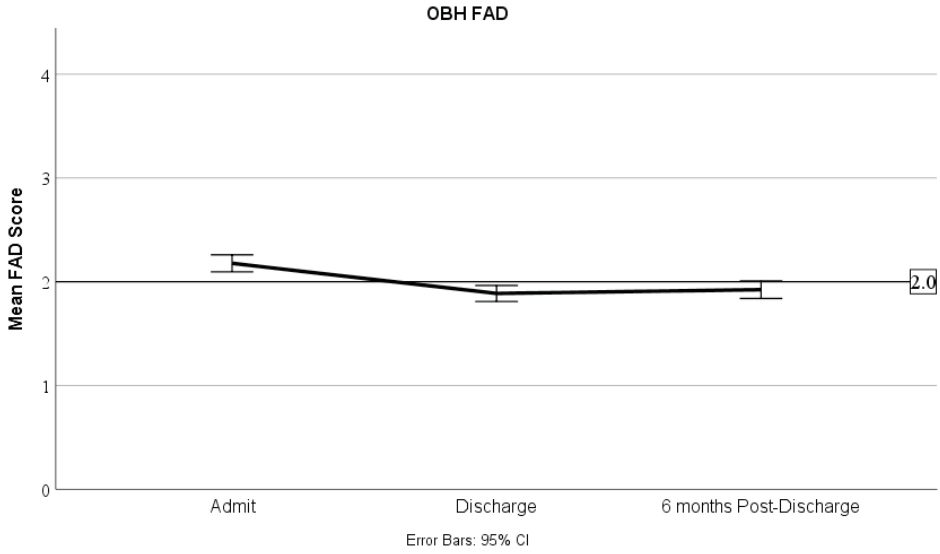
Taken together, the results from the repeated measures ANOVAs and subsequent t-tests for each of the OQ-45.2 subscales suggest that young adults in this OBH sample reported statistically significant improvement from admit to discharge in terms of symptom distress, interpersonal relationships, and social role functioning. Mean scores for each subscale moved from the clinical to the normal range by the point of discharge. The improvement during treatment was to a degree that was considered clinically reliable for the SD subscale (exceeded RCI), but not for the IR and SR subscales (did not exceed RCI).

Of additional interest are the reported changes from discharge to six months post-discharge; that is, changes young adults report after leaving the program. Data indicate that there was an increase in reported symptoms between discharge and post-discharge only on the SD and IR subscales, however those increases were not of a magnitude that would be considered clinically reliable (were below the RCI for each scale and were relatively small). Furthermore, despite this increase in symptom-based and interpersonal problems post-discharge, participants' self-reported functioning remained in the normal range, below the clinical cut-off scores, for each of the subscales during the six months after discharge.

Family Assessment Device. A one-way repeated measures ANOVA was conducted to compare the OBH samples' GF-FAD scores at admit, discharge, and six months post-discharge. There was a significant effect found. Figure 10 depicts means and 95% confidence intervals for the GF-FAD subscale scores by time in

the OBH Sample. Paired samples t-tests were used to make post hoc comparisons between time periods. Table 4 presents those data along with the means, standard deviations, confidence intervals, and *F* scores for the GF-FAD scores over time in the OBH sample.

Figure 10. *GF-FAD scores by time for OBH sample*.



These results suggest that young adults in this OBH sample reported statistically significant improvement in their family functioning between admit and discharge and that the reported improvement results in scores that are below the clinical cut-off at discharge (clinical cut-off = 2). In addition, these outcomes are maintained at six months post-discharge and remain below the clinical cut-off.

Discussion

This study is the first to analyze the NATSAP PRN data for young adult participants. Its primary contribution to the research is derived from the multi-site samples. The data from the demographic portion of the study was based on young adults from 10 RTC and 12 OBH programs and the data from the smaller, outcomes sample was based on young adults from seven RTC and nine OBH programs. The multi-site samples allowed us to apply findings beyond any one program to the broader, RTC and OBH, levels of care for young adults.

Demographic data for young adult samples on the NATSAP PRN were similar with that of adolescent samples from the NATSAP PRN. In fact, most adolescent studies reported similar ratios of males to females, profiles of ethnicity, as well as numbers and rates of presenting problems (Behrens, 2011; Tucker et al., 2011; Tucker et al., 2014; Tucker et al., 2016a; Tucker et al., 2016b;

	M_{Admit} (*SD*) [*CI*]	$M_{Discharge}$ (*SD*) [CI]	$M_{6monthPost}$ (*SD*) [CI]	*F*	*Partial Eta²*
RTC OQ-45.2 (*N*= 70)					
Total [a,c]	**77.76** (24.3) [71.96, 83.56]	55.0 (22.4) [49.65, 60.35]	54.9 (28.0) [48.22, 61.58]	36.00***	0.514
Symptom Distress [a,c]	**45.76** (16.7) [41.77, 49.75]	32.23 (14.9) [28.69, 35.77]	32.3 (17.3) [28.17, 36.43]	29.72***	0.466
Interpersonal Relations [a,c]	**17.03** (6.3) [15.53, 18.52]	12.84 (5.7) [11.48, 14.20]	12.77 (7.0) [11.10, 14.44]	15.5***	0.313
Social Role [a,c]	**14.97** (4.8) [13.83, 16.11]	9.93 (4.1) [8.96, 10.90]	9.83 (5.8) [8.45, 11.21]	45.26***	0.571
RTC FAD (*N*= 57) [a,c]	**2.31** (.62) [2.15, 2.48]	1.94 (.497) [1.81, 2.07]	1.97 (.59) [1.81, 2.13]	12.96***	0.32
OBH OQ-45.2 (*N*= 217)					
Total [a,b,c]	**79.89** (23.95) [76.69, 83.09]	45.52 (23) [42.44, 48.60]	50.13 (26.47) [46.59, 53.68]	204.00***	0.655
Symptom Distress [a,b,c]	**46.19** (15.55) [44.11, 48.27]	25.18 (13.42) [23.39, 26.98]	28.15 (16.1) [25.99, 30.30]	213.13***	0.665
Interpersonal Relations [a,b,c]	**18.22** (6.6) [17.34, 19.10]	11.18 (6.42) [10.32, 12.03]	12.8 (7.25) [11.83, 13.77]	117.45***	0.522
Social Role [a,c]	**15.57** (5.01) [14.80, 16.15]	9.16 (5.02) [8.49, 9.83]	9.18 (5.06) [8.51, 9.86]	131.17***	0.55
OBH FAD (*N*= 179) [a,c]	**2.17** (.53) [2.09, 2.25]	1.88 (.51) [1.80, 1.95]	1.91 (.55) [1.83, 1.99]	34.84***	0.282

***p< .001, [a] significant pairwise mean difference between admit and discharge (p< .05), [b] significant pairwise mean difference between discharge and six months post-discharge (p< .05), [c] significant pairwise mean difference between admit and six months post-discharge (p< .05)

Bold scores represent scores above the clinical cut-off as normed by instrument developers.

Zelov et al., 2013). This finding suggests that, in many ways, the demographic profile of adolescent and young adult clients in NATSAP programs is similar. The finding that young adults in RTC programs have high rates of substance abuse problems suggests that such programs are uniquely positioned to address substance abuse issues. This finding is consistent with other studies of young adults' presenting problems (Bettmann et al., 2016; Hoag et al., 2013; Roberts et al., 2016) which likewise found high rates of substance abuse problems in their samples of young adults. Few studies have explored substance abuse outcomes in young adult OBH and RTC programs; this is an area that needs to be further researched for this population.

The study's results suggest that young adults' self-reported outcomes in both RTC and OBH programs reflect positive trends. Young adults report statistically and clinically significant improvements in psychosocial functioning between the point of admission and the point of discharge. Specifically, young adults in both types of programs begin treatment with problems that reportedly exceed clinical cut-off scores and, by the point of discharge, those problems reportedly decrease significantly and in clinically reliable ways, to levels within the normal range. In addition, gains made during treatment seem to be generally maintained up to six months post-discharge. One finding is of interest: during the six months after discharge, young adults in OBH programs may see a significant, but not clinically substantial, increase in psychosocial problems, whereas young adults in RTC programs show virtually no increase in problems at all. It is possible that participants in OBH programs, because they tend to have shorter lengths of stay than participants in RTC programs, might see a slight increase in psychosocial problems after discharge. However, that change is likely to be subtle, at least at the point of six months after discharge. It is important to bear in mind that participants' scores remain in the normal range of functioning at six months post-discharge for both the OBH and RTC programs. Other than the slight difference found between the OBH and RTC samples post-discharge, the trends in this study are consistent with those found in other OBH young adult samples (Hoag et al., 2013; Roberts et al., 2016; Roberts et al., 2017) as well as in samples of OBH and RTC adolescents (Behrens, 2011; Tucker et al., 2011; Zelov et al., 2013).

The relationship between psychosocial functioning and treatment was present across all three subtypes of psychosocial outcomes: Symptom Distress, Interpersonal Relationships, and Social Roles. However, among the subscales, OBH and RTC treatment seemed to have the strongest relationship with decreased symptomatic distress (i.e., depression, anxiety, stress). While each subscale of the OQ-45.2 indicated statistically significant decreases between admit and discharge in both program types, the Symptom Distress subscale was the only one to show clinically reliable change during that time frame. Though there is a significant reduction in problems with interpersonal relationships and social roles in both program types during treatment, the change in those areas, while placing young adults in the normal range, did not meet the required threshold to be considered clinically significant (Lambert et al., 2004). This finding is comparable to other young adult studies conducted at OBH programs (Bettmann et al., 2016; Roberts et al., 2017). Roberts and colleagues (2017)

theorized that young adults' symptoms of anxiety and/or depression may improve more than social roles and interpersonal relationships, because OBH programs systematically incorporate physical activity, healthy diet, structured schedules, and a supportive environment (Roberts et al., 2017), which are associated in the literature with improved symptomatology (Lopresti, Hood, & Drummond, 2013). It has been noted that RTC young adult programs have similar features (Treadway, 2017), so it seems reasonable to theorize the same for those programs. Furthermore, it is likely that reliable improvements with social roles (e.g., difficulties at work, school, and home environments) and interpersonal relationships (e.g., loneliness, conflict, and romantic/family relationships) require more time and treatment for reliable change to occur than do diagnostic symptoms. Compared to symptom distress, social roles and interpersonal relationships are complex constructs that are dependent upon interpersonal changes that may not be as amenable to change during RTC or OBH treatment. That said, some studies have found that improvements in close interpersonal relationships, such as those with parents and romantic partners, are positively correlated and contemporaneous with improvements in mental health symptoms (Bettmann et al., 2016; Frey, Beesley, & Miller, 2006; Lapsley & Edgerton, 2002; Mallinckrodt & Wei, 2005). The connections among young adults' symptomatic, social role, and relationship changes, while in OBH and RTC programs, needs to be clarified in future research.

The GF-FAD results were also noteworthy. In both RTC and OBH programs, clients reported statistically significant improvement in family functioning, with mean scores moving from above to below the clinical cut-off from admission to discharge. Furthermore, reported treatment gains were maintained for both RTC and OBH programs up to six months post-discharge. The GF-FAD results suggest that clients acknowledged improved functioning in their family unit during the course of treatment and that those gains were maintained after treatment. An important caveat is that in the RTC group, the upper limit of the confidence interval exceeded the clinical cut-off at discharge and post-discharge, suggesting that though, on average, there was improvement in family functioning at discharge and post-discharge, some in the RTC group reported family functioning that was slightly in the clinical range at those times. Overall, these changes in clients' reports of family functioning are comparable to those found by Tucker and colleagues (2016b), based on NATSAP PRN adolescent OBH and RTC sample, as well as Bettmann and colleagues (2016), based on a young adult OBH sample.

It is important to draw attention to the large standard deviation scores for the group means on each measure and at each time period. Large variances in scores suggest that there is wide variability on the outcomes among the participants in the group. Therefore, though the data suggest that the OBH and RTC groups have favorable outcomes, such outcomes were not achieved for all of the participants. Indeed, future studies might consider exploring outcome variability within samples of young adults in RTC and OBH programs, an issue that has received scant research attention and is certainly worth continuing given the clinical implications (Roberts et al., 2017).

YOUNG ADULTS IN RTC AND OBH PROGRAMS

As noted above, a widely accepted notion is that many adolescents and young adults attend more than one NATSAP program and that, in particular, clients frequently transfer from an OBH program to an RTC program for longer-term care. Unfortunately, at present, it is not possible to track the outcomes of clients who attend more than one program in the NATSAP PRN database. Because we are unable to track individuals who move either from adolescent to young adult treatment or from OBH to RTC treatment, the degree to which the outcomes vary for groups that transfer across programs is not known. The Outdoor Behavioral Health Center's research scientists and the NATSAP research committee are exploring protocols that will enable researchers to follow the "Golden Thread" of treatment, that is, to link data when participants attend more than one OBH and/or RTC program (Personal communication, M. Gass, January 27, 2017). A Golden Thread that facilitates tracking of participants throughtout the NATSAP PRN would enable researchers to answer questions about outcome changes within individuals as they move through multiple programs and may give us insight into NATSAP programs conceptualized as a continuum of care.

This study is the first to explore young adult treatment outcomes using the data in the NATSAP PRN, data that includes clients from about half of NATSAP-affiliated young adult programs. Given that its results are generally consistent with the studies published using data from individual OBH programs (Bettmann et al., 2016; Hoag et al., 2013; Roberts et al., 2016; Roberts et al., 2017; Russell et al., 2016), it lends increased support to the notion that outcomes for young adults in OBH and RTC programs tend to be favorable and tend to persist. Certainly, this research can be further strengthened with more robust experimental designs, such as those provided by the use of comparison groups. In addition, future studies would do well to explore demographic and process factors that predict outcomes in young adult treatment. Some studies have explored this with adolescent samples (e.g., Tucker et al., 2014), and others have explored this with young adult samples (e.g., Hoag et al., 2013; Roberts et al., 2016). Although Roberts and colleagues (2016), in their study of young adult OBH outcomes, did not find a relationship between select demographic variables (i.e., age, gender, diagnosis) and treatment outcome, nor between select process factors (i.e., length of stay, therapist assignment) and treatment outcome, they concluded that additional research is needed to improve our understanding of the type of clients and aspects of treatment that may best predict healthy outcomes. A more systematic study of demographic and process factors would certainly enrich our understanding of which types of clients and treatment approaches predict outcomes for young adults in NATSAP programs.

Limitations

As is common in long-term clinical outcome studies, this study saw a sharp decline in responses at the point of post-discharge (Behrens, 2011; Russell, 2003; Zelov et al., 2013). Attrition is one of the major methodological problems in longitudinal research (Combs, 2016; Estrada, Woodcock, & Schultz, 2014). It can limit the generalizability of findings, especially when participants who stay in a study differ from those who drop out. The present study began with 1,210

young adults, but ended at six months post-discharge with only 287 individuals who responded to all measures at admit, discharge, and post-discharge. Though t-tests suggested that our smaller sample was comparable to the larger sample, at least in terms of functioning at the point of admission and discharge, we are not clear on how attrition may have influenced the study results. Attrition is particularly salient for the young adult population which may be harder to retain in long-term studies because they are more likely than their adolescent counterparts to be mobile and to live away from their parents after discharge. Combs (2016) provided some suggestions for obtaining higher response rates with this population, including contacting participants multiple times for post-discharge measures and tracking participants who are admitted to other programs after discharge.

This study is limited by its racially homogenous sample. It is likely that the predominantly White sample is reflective of the larger population of young adults in NATSAP programs, because this racial/ethnic make-up has been repeatedly found in the body of research related to NATSAP programs (e.g., Behrens, 2011; Bettmann et al., 2016; Russell, 2005; Tucker et al., 2016a; Tucker et al., 2016b). Therefore, it is important to bear in mind that these findings (as well as the population of clients served in NATSAP programs) apply primarily to white young adult clients. Future studies would do well to systematically study ethnic minority participants' outcomes in NATSAP programs.

This study used only self-report data from the young adult clients. It would be beneficial to collect reports from individuals close to the participants, such as parents or significant others, as well as clinical staff. Additional sources of data would benefit the research by giving an alternate view of outcomes in young adult RTC and OBH treatment.

References

Adams, S. H., Knopf, D. K., & Park, M. J. (2014). Prevalence and treatment of mental health and substance use problems in the early emerging adult years in the United States: Findings from the 2010 national survey on drug use and health. *Emerging Adulthood, 2*(3), 163–172. https://doi.org/10.1177/2167696813513563

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037//0003-066X.55.5.469

Arnett, J. J. (2005). The developmental context of substance use in emerging adulthood. *Journal of Drug Issues, 35*(2), 235–254.

Beckstead, D. J., Hatch, A. L., Lambert, M. J., Eggett, D. L., Goates, M. K., & Vermeersch, D. A. (2003). Clinical significance of the Outcome Questionnaire (OQ-45.2). *The Behavior Analyst Today, 4*(1), 86-97.

Behrens, E. (2006). *Report of findings from a multi-center, longitudinal study of youth outcomes in residential treatment.* Paper presented at the American Psychological Association Annual Convention, New Orleans, LA.

Behrens, E. (2011). A multi-center study of private residential treatment outcomes. *Journal of Therapeutic Schools and Programs, 5*(1), 29–45.

Behrens, E., Santa, J., & Gass, M. (2010). The evidence base for private therapeutic schools, residential programs, and wilderness therapy programs. *Journal of Therapeutic Schools and Programs, 4*(1), 106–117.

Behrens, E., & Satterfield, K. (2007). Longitudinal family and academic outcomes in residential schools: How students function in two important areas of their lives. *Journal of Therapeutic Schools and Programs, 2*(1), 81–94.

Bettmann, J. E., Tucker, A., Behrens, E., & Vanderloo, M. (2016). Changes in late adolescents and young adults' attachment, separation, and mental health during wilderness therapy. *Journal of Child and Family Studies, 26*(2), 511–522.

Combs, K. M. (2016). What does it take to get post-discharge data? *Journal of Therapeutic Schools and Programs, 18*, 16-20.

Eaton, W. W., Martins, S. S., Nestadt, G., Bienvenu, O. J., Clarke, D., & Alexandre, P. (2008). The burden of mental disorders. *Epidemiologic Reviews, 30*(1), 1–14. https://doi.org/10.1093/epirev/mxn011

Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster family assessment device. *Journal of Marital and Family Therapy, 9*(2), 171–180. https://doi.org/10.1111/j.1752-0606.1983.tb01497.x

Estrada, M., Woodcock, A., & Schultz, P. W. (2014). Tailored panel management: A theory-based approach to building and maintaining participant commitment to longitudinal study. *Evaluation Review, 38*(1), 3-28. https://doi.org/10.1177/0193841X14524956

Frey, L. L., Beesley, D., & Miller, M. R. (2006). Relational health, attachment, and psychological distress in college women and men. *Psychology of Women Quarterly, 30*, 303–311.

Hoag, M. J., Massey, K. E., Roberts, S. D., & Logan, P. (2013). Efficacy of wilderness therapy for young adults: A first look. *Residential Treatment for Children & Youth, 30*(4), 294–305.

Kabacoff, R. I., Miller, I. W., Bishop, D. S., Epstein, N. B., & Keitner, G. I. (1990). A psychometric study of the McMaster Family Assessment Device in psychiatric, medical, and nonclinical samples. *Journal of Family Psychology, 3*(4), 431.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry, 62*(6), 593–602. https://doi.org/10.1001/archpsyc.62.6.593

Lambert, M. J., Hansen, N. B., Umpress, V., Lunnen, K., Okiishi, J., Burlingame, G. M., & Reisinger, C. W. (1996). *Administration and scoring manual for the OQ-45.2*. Stevenson, MD: American Professional Credentialing Services.

Lambert, M. J., Morton, J. J., Hatfield, D., Harmon, C., Hamilton, S., Reid, R. C., … Burlingame, G. B. (2004). *Administration and scoring manual for the OQ-45.* Orem, UT: American Professional Credentialing Services.

Lapsley, D. K., & Edgerton, J. (2002). Separation-individuation, adult attachment style, and college adjustment. *Journal of Counseling & Development, 80*(4), 484-492.

Lopresti, A. L., Hood, S. D., & Drummond, P. D. (2013). A review of lifestyle factors that contribute to important pathways associated with major depression: Diet, sleep and exercise. *Journal of Affective Disorders, 148*, 12–27. doi:10.1016/j. jad.2013.01.014

Mallinckrodt, B., & Wei, M. (2005). Attachment, social competencies, social support, and psychological distress. *Journal of Counseling Psychology, 52*, 358–367.

Neinstein, L. S., & Irwin, C. E. (2013). Young adults remain worse off than adolescents. *Journal of Adolescent Health, 53*(5), 559–561. https://doi.org/10.1016/j.jadohealth.2013.08.014

Park, M. J., Mulye, T. P., Adams, S. H., Brindis, C. D., & Irwin, C. E. (2006). The health status of young adults in the United States. *Journal of Adolescent Health, 39*(3), 305–317.

Pottick, K. J., Bilder, S., Vander Stoep, A., Warner, L. A., & Alvarez, M. F. (2008). US patterns of mental health service utilization for transition-age youth and young adults. *The Journal of Behavioral Health Services & Research, 35*(4), 373–389. https://doi.org/10.1007/s11414-007-9080-4

Roberts, S. D., Stroud, D., Hoag, M. J., & Combs, K. M. (2016). Outdoor behavioral health care: Client and treatment characteristics effects on young adult outcomes. *Journal of Experiential Education, 39*(3), 288–302.

Roberts, S. D., Stroud, D., Hoag, M. J., & Massey, K. E. (2017). Outdoor behavioral health care: A longitudinal assessment of young adult outcomes. *Journal of Counseling & Development, 95*(1), 45–55.

Russell, K. C. (2003). An assessment of outcomes in outdoor behavioral healthcare treatment. *Child & Youth Care Forum, 32*(6), 355-381.

Russell, K. C. (2005). Two years later: A qualitative assessment of youth well-being and the role of aftercare in outdoor behavioral healthcare treatment. *Child & Youth Care Forum, 34*(3), 209–239. doi:10.1007/s10566-005-3470-7

Russell, K. C., Gillis, H. L., & Heppner, W. (2016). An examination of mindfulness-based experiences through adventure in substance use disorder treatment for young adult males: A pilot study. *Mindfulness, 7*(2), 320–328.

Russell, K. C., Gillis, H. L., & Lewis, T. G. (2008). A five-year follow-up of a survey of North American outdoor behavioral healthcare programs. *Journal of Experiential Education, 31*(1), 55–77.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2013). Results from the 2013 national survey on drug use and health (NSDUH): Mental health detailed tables. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Treadway, M. (2017). Young adults in transition: Factors that support and hinder growth and change. *Journal of Therapeutic Schools and Programs, 10.*

Tucker, A., Norton, C. L., Demille, S. M., & Hobson, J. (2016a). The impact of wilderness therapy: Utilizing an integrated care approach. *Journal of Experiential Education, 39*(1), 15–30.

Tucker, A. R., Paul, M., Hobson, J., Karoff, M., & Gass, M. (2016b). Outdoor behavioral healthcare: Its impact on family functioning. *Journal of Therapeutic Schools and Programs, 8*(1), 21–40.

Tucker, A. R., Smith, A., & Gass, M. A. (2014). How presenting problems and individual characteristics impact successful treatment outcomes in residential and wilderness treatment programs. *Residential Treatment for Children & Youth, 31*(2), 135–153.

Tucker, A. R., Zelov, R., & Young, M. (2011). Four years along: Emerging traits of programs in the NATSAP Practice Research Network (PRN). *Journal of Therapeutic Schools and Programs, 5*(1), 10–28.

Young, M., & Gass, M.A. (2008). Current descriptions of National Association of Therapeutic Schools and Programs (NATSAP) members. *Journal of Therapeutic Schools and Programs, 3*, 161-185.

Zelov, R., Tucker, A. R., & Javorski, S. E. (2013). A new phase for the NATSAP PRN: Post-discharge reporting and transition to network wide utilization of the Y-OQ 2.0. *Journal of Therapeutic Schools and Programs, 6*(1), 7–19

The Relationship Between Self-Reported Prior Drug Use and Treatment Effectiveness in Substance Use Disorder during Outdoor Behavioral Healthcare Treatment for Young Adult Males

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Abstract

Substance Use Disorder (SUD) is an increasingly common disorder in North America; however, there is little research on substance use disorder treatment for young adults with SUD (Zhou, et al., 2015). Enviros Shunda Creek is a ten-bed, 90-day program located in Alberta, Canada for males ages 18-24 who are diagnosed with SUD. This outdoor behavioral healthcare (OBH) program treats SUD using mindfulness-based outdoor experiences in addition to more traditional individual and group therapy. This study examined the relationship between self-reported frequency of prior drug use, measured by the Personal Involvement with Chemicals Scales (PICS), and change in treatment outcomes, measured by the Outcome Questionnaire 45.2 (OQ-45.2) and Five Facet Mindfulness Questionnaire (FFMQ). Results demonstrated clients' PICS scores at intake to be significantly positively correlated with OQ-45.2 total scores and OQ total change scores (discharge - intake). The OQ-45.2 Symptom Distress subscale was also positively correlated with PICS intake scores as was the Symptom Distress change score. In addition, PICS scores were found to be negatively correlated with the FFMQ total score and subscale intake scores on the Act with Awareness subscale. These findings suggest that clients with higher self-reported drug use at intake enter with higher symptom distress, and less awareness of their actions, than those who score lower on the PICS. Pre-treatment drug use assessment is encouraged as is progress monitoring for programs to track clients through treatment. Further research is encouraged to determine if different pre-treatment drug use reveals different treatment trajectories, as preliminary data presented indicates the trajectories are similar.

Keywords: Outdoor Behavioral Healthcare, Substance Use Disorder (SUD), OQ45.2, Personal Involvement with Chemicals Scale (PICS)

ISSN 2469-3030 online DOI: 10.19157/JTSP.issue.10.01.04

SELF-REPORTED PRIOR DRUG USE

Substance Use Disorder (SUD) is an increasingly common disorder in North America; however, there is little research on SUD treatment for young adults (Zhou, et al., 2015). SUD develops when recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home (Substance Abuse and Mental Health Services Administration [SAMHSA], n.d.). There are a number of concurrent factors that influence how an individual develops SUD, including social ties, the developmental course of an individual's life, and demographics. Identifying and incorporating these factors into individualized treatment planning is critical to consider in SUD treatment and has a critical impact on SUD treatment success rates (Mueser et al., 2000).

Within the last decade, non-medical prescription opioid use (NMPO) surpassed the number of deaths due to motor vehicle accidents (Liebling et al., 2016). As far back as the turn of the century, researchers began documenting this rise in opioid-related deaths. Between 1999 and 2004, urban areas in the U.S. saw a 52% increase in prescription opioid-related deaths, while rural areas saw an alarming 371% increase in prescription opioid-related deaths (Paulozzi & Xi, 2008). In 2010, there were over 16,000 deaths from prescription opioid use, and the rate of heroin overdoses steadily increased from 2010 to 2013 (Dart et al., 2015). One explanation for this epidemic is an over-prescription of opioid drugs by physicians. Unick, Rosenblum, Mars, and Ciccarone (2013) found that rates of prescription opioid overdose predicted heroin overdoses in subsequent years. Along with the finding by the National Survey on Drug Use and Health in 2013, 79.5% of new heroin users reported prescription opioids were their first drug of choice (Dart et al., 2015). The current state of opioid use in North America has been described as an "epidemic" and is a central factor in the rise of the need for innovative SUD treatment approaches, especially for young adults (Vashishtha, Mittal, & Werb, 2017).

The purpose of this study is to report factors relating to treatment at an outdoor behavioral healthcare (OBH) program specializing in SUD treatment. Although only one form of treatment will be the focus of this study, there are many different approaches to treating the disorder. One of the most influential of these forms is integrated treatment (Mueser, Noordsy, Drake, Fox, & Barlow, 2003). This form of treatment arose in the 1980s in response to the apparent issues with co-occurring disorders that presented along with SUD (Drake, Mercer-McFadden, Mueser, McHugo, & Bond, 1998). This treatment approach, which has been shown to be effective, integrates SUD treatment with treatment for the co-occurring disorder into one treatment program, instead of the client getting treatment from two separate facilities (Back et al., 2016; Padwa, Larkins, Crevecoeur-MacPhail, & Grella, 2013; Weiss et al., 2007). Assessing drug involvement prior to treatment is key to understanding clients' needs.

Rowe, Liddle, Greenbaum, and Henderson (2004) conducted a review of intake data and treatment response of 182 adolescent drug users. They administered the Personal Involvement with Chemicals Scale (PICS; Winters & Henley, 1989) to assess participant involvement with chemicals when they were

admitted to treatment. They found that comorbid adolescents did not significantly differ from adolescents with only SUD. PICS has been used in a number of SUD treatment studies (Botzet, Winters, & Stinchfield, 2006; Henderson, Dakof, Schwartz, & Liddle, 2006; Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008), and is a focus of this research since it is a well-respected self-report assessment of prior drug use.

The 12-step program is the most commonly used form of SUD treatment in the U.S. and has been shown to be associated with abstinence (Bøg, Filges, Brännström, Jørgensen, & Fredriksson, 2017). This form of treatment views addiction as an illness, and through acceptance and abstinence individuals are able to overcome their illness. Psychotherapy has also been shown to be effective, and has been incorporated into various drug and alcohol rehabilitation programs (Najavits & Weiss, 1994). Cognitive-behavioral therapy views addiction as a maladaptive behavior; the aim of this therapy is to change distorted thinking and increase adaptive coping mechanisms within the client. A newer form of treatment is the assertive community treatment model. This model of treatment was created for individuals who, for one reason or another, have difficulties with stable community living. This form of treatment involves individualized care in a controlled community setting in order to affirm treatment effectiveness and maintain necessary community consistency (Boust, Kuhns, & Studer, 2005). Other psychosocial methods such as group counseling, contingency management, and residential dual diagnosis treatment have demonstrated promise as well (Drake, O'Neal, & Wallach, 2008). Psychopharmacological treatments have also been shown to be successful (Nathan & Gorman, 2015), especially in the treatment of opioid addiction.

Mindfulness-based relapse prevention is another effective form of treatment in outpatient settings (Bowen et al., 2009). This form of therapy integrates principles of mindfulness-based stress reduction and mindfulness-based cognitive therapy with core aspects of relapse prevention to encourage situational awareness and high-risk situation identification to help reduce drug use. This is achieved by training clients to accept and tolerate both positive and negative emotions, and urges such as cravings. This can be thought of using a framework of SUD treatment proposed by Garland et al. (2014a). These authors offer the idea that those with SUD are unable to control cognitive and emotional responses to stress and cues that elicit cravings and substance use. Additional research by Garland et al. (2014b) examined how nonreactivity as a treatment mechanism reduces pain severity and interference. This research concluded that mindfulness-based treatment is effective at alleviating pain in those with chronic pain issues. Understanding the cognitive-emotional effects of mindfulness as demonstrated with these studies, follows that mindfulness-based treatment is potentially able to curb cravings and substance use in those with SUD.

SUD in OBH is the prime focus of this research paper. Russell, Gillis, and Lewis (2008) state that two defining components of OBH, in comparison to other residential treatment programs, are the application of a clinical treatment model by licensed professionals and the primary use of wilderness as a treatment

environment. In combining these two factors, OBH programs seek to treat problems with addiction and other maladaptive behaviors.

Roberts, Stroud, Hoag, and Massey (2017) used the Outcome Questionnaire 45.2 (OQ- 45.2) to evaluate changes in young adult participants' psychosocial well-being and functioning in an OBH treatment program from intake to 18 months posttreatment. They used 186 participants, ages 18-23, from the southwestern U.S. The OQ-45.2 demonstrated statistically significant reductions across all scales from intake to discharge. Findings suggest that OBH can be an effective intervention for young adults. In addition, participants showed statistically and clinically significant change during their time in the wilderness, and maintained gains up to 18 months after discharge.

Gillis, Kivlighan, and Russell (2016) used the components of engagement (MacKenzie, 1983) to predict how OQ-45.2 scores changed over time. Findings were drawn from 68 young adult males who were enrolled in the same residential OBH treatment program that is the subject of this article. Results suggest that there was a relationship between within-member engagement and between-member engagement. Within-member engagement identified how a group member's weekly engagement score varied from their average engagement score. Between-member engagement was the member's average engagement score. Clients who viewed the group as more engaged and consistent with how their peers saw engagement, showed statistically significant improvement in their OQ-45.2 scores.

Russell, Gillis, and Heppner (2015) utilized data from the same treatment program to examine the impact of mindful-based experiences (MBE) on SUD. Results were based on 32 adolescent males. These MBEs in the wilderness were hypothesized to enhance the development of mindfulness skills. Five Facet Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer, & Toney, 2006) scores were significantly correlated with total change OQ-45.2 scores. Specifically, clients showed improvement on the non-judging and nonreactivity facets of the FFMQ. The non-judging and non-reactivity difference scores showed a significant relationship with a reduction in subjective distress, as indicated by the OQ-45.2 subscale. Overall, OBH treatment programs have a statistically significant influence on SUD, through the reduction of OQ-45.2 total scores during time in treatment. Specifically, the research illustrates significant reduction of symptomatology measured by the symptom distress subscale on the OQ-45.2 (Roberts et al., 2017; Gillis et al., 2016; Russell et al., 2015).

The purpose of this study is to examine relationships between variables related to treatment outcomes in an OBH program that focuses on SUD. Factors related to treatment include: 1) severity of substance use prior to entering treatment (PICS), 2) data from self-reported measures of treatment effectiveness (OQ-45.2), and 3) self-reported mindfulness at intake and discharge (FFMQ). Our hypothesis is that clients who score higher on the PICS at intake will show a decline in OQ-45.2 scores compared to those who score lower on the PICS at intake.

SELF-REPORTED PRIOR DRUG USE

Method

Treatment Program

Enviros Shunda Creek is a ten-bed, 90-day OBH program located in Alberta, Canada. The program is for males, ages 18-24, diagnosed with SUD. In efforts to increase self-awareness of substance use history, Shunda Creek employs MBE through adventure in nature (Russell et al., 2015). These experiences consist of one to five day trips known as "mindfulness in action" due to the treatment intentions set prior to participating in adventure activities, and the reflection on those intentions with their cohort group once clients return to base camp. MBEs are initiated by the client, and centered around treatment objectives and themes. For example, clients partake in rock climbing in the Northern Rockies. Shunda Creek emphasizes the intentional formation of relationships between the client and therapeutic staff. Through the establishment of these relationships, clients are able to relate their experiences to their treatment process and goals. For instance, fears that are felt while rock climbing may be associated with the fears of post-treatment social situations that could trigger a relapse. Clients reflect on their experiences in the moment and in post-trip reflection with their cohort group in hopes of solidifying the relevance of the experience. On average, clients participate in one trip per week of the 90-day program.

Participants

Clients at Enviros Shunda Creek were young adult males diagnosed with SUD. The population (N = 177) consisted of 42.1% who identify as white, 15.8 % whose ethnicity was grouped as other, and 11.6% who identified as indigenous. Race and ethnicity was not reported by 30.5% of clients in their intake information as this was an optional variable. The average age of Shunda Creek clients was 21.5 years, and the average length of stay averaged 79.6 days. Clients were not mandated to receive treatment. For the most part, they are voluntarily in treatment and may leave at any time. Across all clients, the top three drugs that clients reported on the PICS using prior to treatment were 1) smoking tobacco, 2) alcohol, and 3) marijuana. Of note is that when examining a subset of Shunda Creek alumni clients (n = 69), on whether opioid use was also acknowledged in their PICS assessment, 40.6% acknowledged use of an opioid while 59.4% did not.

Measures

Personal Involvement with Chemicals (PICS). The Personal Experience Inventory (PEI) was developed by Winters and Henley (1989). The Personal Involvement with Chemicals (PICS) is a subscale of the PEI. It is a 29-item assessment that asks participants to identify how frequently they used for various reasons but only for the 90 days leading up to assessment. The reasons they used could be affective (e.g. "I use when I feel lonely, I use to feel happy") or social (e.g. "I use before going out", "I use to feel more comfortable talking about how I feel"). The assessment also briefly asks participants to disclose lengths they

have gone to pay for drugs or alcohol. This assessment is typically used as an intake assessment of the intensity of an individual's drug and/or alcohol use. PICS uses a 4-point response set (1 = never, 2 = once or twice, 3 = sometimes, 4 = often). The instrument has excellent psychometric properties and normative data.

Outcome Questionnaire. The Outcome Questionnaire 45.2 (OQ-45.2; Lambert et al., 1996) is a 45-question, Likert-scale outcome measure, that is designed to repeatedly assess client progress at the beginning, during, and conclusion of treatment. Using progress monitoring, the OQ-45.2 is given every two weeks at Shunda Creek. It assesses three areas of psychosocial functioning: 1) Subjective distress (e.g. "I feel no interest in things."), 2) Interpersonal relations (e.g. "I am concerned about family troubles"), and 3) Social role performance (e.g. "I work/study too much"). The OQ-45.2 is a Likert-scale instrument that contains 45 items that computes a total score, which can range from 0 to180; with lower scores indicating high levels of psycho-social functioning and higher scores indicating lower levels. Lambert et al. (1996) found the OQ-45.2 to have test–retest reliability estimated at $r = .84$, strong overall internal consistency ($\alpha = .93$), and concurrent validity estimates ranging from $r = .60$ to $r = .88$ across several measures of psychosocial functioning.

Five Facet Mindfulness Questionnaire (FFMQ). The Five Facet Mindfulness Questionnaire (FFMQ; Baer et al., 2006) is a survey of trait mindfulness composed of 39 items, that is given to Shunda Creek clients at admission to and discharge from the program. It is used to measure changes in mindfulness as a result of treatment in the program. There are five different areas assessed: 1) Observing (e.g. "I pay attention to sensations, such as the wind in my hair or sun on my face"), 2) Describing (e.g. "I can easily put my beliefs, opinions, and expectations into words"), 3) Acts with Awareness (e.g. "I rush through activities without being really attentive to them"), 4) Non-judging (e.g. "I think some of my emotions are bad or inappropriate and I shouldn't feel them"), and 5) Non-reactivity (e.g. "In difficult situations, I can pause without immediately reacting"). The questions are rated on a 5-point scale that ranges from 1 (never or very rarely true) to 5 (very often or always true). When items were negatively worded, they were reverse-scored so that for each subscale, higher scores indicated greater mindfulness. In past research with nonclinical (Baer et al., 2006) and clinical (Bohlmeijer et al., 2011) samples, the FFMQ was found to be a reliable and valid measure of mindfulness.

Procedure

Clients of Enviros Shunda Creek were evaluated at intake to record their drug use during the 90 days prior to enrollment. The assessment used was the PICS subscale of the Personal Experience Inventory (PEI; Winters & Henley, 1989) to assess the severity of drug use through self-report. During treatment, clients were assessed on their progress with the Outcome Questionnaire (OQ-45.2; Lambert & Finch, 1999) every 2 weeks. Additionally, clients were evaluated on their mindfulness skills with the Five Facet Mindfulness Questionnaire (Baer et al.,

2006) at intake and at discharge. The data collection method for this study was approved by the Institutional Review Board (IRB) at Georgia College & State University.

Results

Table 1 presents clients' PICS scores at intake that were found to be significantly positively correlated with OQ-45.2 total scores at intake (r (116) = 0.247, p = 0.007). The OQ-45.2 Total change score (discharge - intake) was also positively correlated with PICS (r (108) = 0.281, p = 0.003). The OQ-45.2 Symptom Distress subscale at intake was also statistically significant (r (117) = 0.249, p = 0.006) as was the change subscale score (discharge - intake) (r (109) = 0.309, p = 0.001). There were no other statistically significant relationships between PICS and OQ-45.2 intake scores, nor were there any statistically significant correlations with any OQ-45.2 discharge scores. This indicates that clients with higher self-reported involvement with chemicals reported higher psychological distress when they first arrived at Shunda Creek; and this is attributed to scores on the Symptom Distress intake subscale accounting for the significant relationship and not the scores on the Interpersonal Relations or Social Roles subscales. The lack of statistical significance at discharge on any OQ-45.2 scores indicates that high acknowledgement of drug use at intake did not impact discharge scores, and that those with higher PICS scores had a more rapid decline of OQ-45.2 total scores, driven by the drop in Symptom Distress subscale.

Table 1

Statistically Significant Correlations, Number of Clients, Means and Standard Deviations of Data Relevant to These Analyses

Measure	PICS	*p*	*N*	*Mean*	*SD*
PICS	-		121	66.36	12.44
OQ Total Intake	0.247	0.007	117	80.60	21.72
OQ Total Change (Discharge – Intake)	0.281	0.003	109	35.83	30.03
OQ Symptom Distress Intake	0.249	0.006	118	44.82	13.64
OQ Symptom Distress Change (Discharge – Intake)	0.309	0.001	110	20.81	18.29
FFMQ Intake Total	-0.189	0.046	112	94.15	20.02
FFMQ Intake Acts with Awareness	-0.230	0.015	112	18.53	5.94

As can also be seen in Table 1, Pearson-r correlations were conducted between PICS and FFMQ total and subscale scores at intake and discharge. PICS scores were only found to be negatively correlated with FFMQ total score (r (112) = -0.189, p = 0.046) and one of the five subscale intake scores: Act with Awareness (r (111) = -.230, p = 0.015). However, no other significant correlations were found between PICS scores and intake, discharge, and change FFMQ scores.

Table 2

Predictors of PIC Scores at Intake

	PIC Scores		
		Model 2	
Variable	Model 1 ß	ß	95 % CI
Constant	60.21**	70.95**	[61.52, 80.38]
OQ Symptom Distress Change	0.24**	0.22*	[0.07, 0.356]
FFMQ Acts with Awareness Subscale		-0.57*	[-1.03, -0.11]
R^2	0.10	0.15	
F	11.08**	8.89**	
ΔR^2		0.05	
ΔF		6.14	

Note. N=101. CI = Confidence Interval
*p < .01 ** p < .001

Furthermore, as seen in the stepwise regression reported in Table 2, Model 1 showed that the OQ-45.2 subscale Symptom Distress change predicted PICS scores b = 2.36, F(99) = 11.08, p < .001. When adding the FFMQ subscale intake scores Act with Awareness, R^2 increases from 0.10 in Model 1 to 0.15 in Model 2 (R^2 = .0.154, F(1, 98) = 8.89, p < .001.

Discussion

Results indicate a statistically significant relationship between PICS scores at intake and OQ-45.2 total and symptom distress subscale scores. Additionally, the total change score and the Symptom Distress subscale change scores (discharge minus intake) were also significantly correlated with PICS scores. There were

no statistically significant correlations between PICS scores and OQ-45 intake scores on Interpersonal Relations or Social Roles nor were any of the discharge scores significantly correlated. Results also indicate a negative relationship between PICS and the Total score and the Acts with Awareness subscale of the FFMQ. These findings suggest that clients with higher self-reported drug use at intake enter with higher symptom distress and less awareness of their actions than those who score lower on the PICS. That no statistically significant differences exist at discharge suggests that the Shunda Creek treatment model is equally effective for all clients despite prior self-reported drug use.

A subset of the total sample made up of Shunda Creek alumni clients (*n* = 69) whom had acknowledged use of an opioid prior to in their intake PICS assessment (40.6%), did not differ in their treatment trajectories while at Shunda Creek *or* in follow-up from those who did not report prior opioid use. This is preliminary data and should be viewed with caution, but is encouraging that 1) self-report survey data from alumni clients were not considered to be a biased sample since clients who had and had not relapsed responded to inquiries. Had only those who had not relapsed responded, we might suspect it to be a biased sample and 2) the preliminary data indicates that Shunda Creeks treatment program is equally effective for opioid and non-opioid users. Further study of the alumni clients is ongoing.

One strength of this study is the fact that it is an exploratory study of components of a modern crisis (Vashishtha et al., 2017). This study was able to examine how self-reported drug use and treatment effectiveness interact. The importance of this finding, if subsequent alumni data results support these preliminary findings, is that OBH is a viable, evidenced based treatment option for SUD.

These findings support the need for programs that treat SUD, either directly or indirectly, to assess prior usage at intake, and use it in planning, treatment and tracking changes in clients through progress monitoring. This study found statistically significant correlations between high prior drug use and high OQ scores as well as a lack of awareness (mindfulness). We strongly advocate the use of the PICS or a similar prior drug use assessment instrument at intake. This data can be correlated with recognized outcome measures like the YOQ 2.0 or OQ-45.2 at various points in treatment to determine if OBH is equally effective with clients who report higher prior use of drugs to those who report less use.

This study also supports the use of OBH as a treatment program with a growing evidence base (Bettmann, Russell, & Parry, 2013; Bettmann, Tucker, Tracy, & Parry, 2014; Norton et al, 2014; Russell, 2001; Russell, Gillis, & Lewis, 2008). The field of OBH is a viable treatment option for SUD. Where research needs to focus now is how OBH treats and works with SUD. OBH programs historically have done a poor job of tracking prior drug use though clients enter OBH programs do have active drug use histories (Russell, 2008). This study adds to the growing body of knowledge that OBH will continue to be seen as effective, ethical, and empowering to clients.

Limitations

One limitation of this study is that it is a one sample study with no comparison group. There was also missing data, some of which may be from absences due to home passes, while other missing data may a result of program dropouts. There is no way of knowing how these missing individuals would have scored had they completed all the surveys.

Future study

Further research could be conducted to examine the relationships between specific drugs of choice for clients and treatment outcomes, or whether OBH is equally effective for those with high, medium, or low prior self-reported drug use. For instance, clients with similar PICS scores but different drugs of choice may show differences in OQ-45.2 and FFMQ scores throughout treatment. These differences were not found in the alumni subsample, but may exist in the larger sample. Future studies will examine if in fact OBH is equally effective. On a more immediate and practical level, such a study will help programs like Shunda Creek assess their clients more accurately at intake and tailor treatment programs to each individual based on drug of choice, if the evidence points in that direction.

Implications

Data indicates that treatment programs such as Shunda Creek are effective for a variety of substance use severities. Clients who begin the program with varying degrees of involvement with chemicals end the program in relatively the same condition as one another. This is supported by high PICS scores and high OQ-45.2 scores at intake that are positively correlated, as well as the lack of awareness clients with high PICS scores exhibit at intake. With the understanding that programs similar to Shunda Creek are able to provide effective treatment regardless of the severity of SUD, more programs can implement these mindfulness-based experiences to create more awareness in their clients. More so, utilizing progress monitoring will allow practitioners to tailor the treatment based on clients' needs at that particular time in treatment, no matter what initial diagnoses are found. Further research is encouraged to determine if different pre-treatment self-reported drug use reveals different treatment trajectories. Preliminary data presented indicates the trajectories are similar.

References

Back, S. E., Killeen, T., Badour, C., Flanagan, J., Korte, K., & Brady, K. T. (2016, November). Integrated treatment of PTSD and addiction in Veterans using prolonged exposure. In Annual Convention of the International Society for Traumatic Stress Studies, Dallas, TX, USA (pp. 10-12).

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, *13*(1), 27-45.

Bettmann, J. E., Russell, K. C., & Parry, K. J. (2013). How substance abuse recovery skills, readiness to change and symptom reduction impact change processes in wilderness therapy participants. *Journal of Child and Family Studies, 22*(8), 1039-1050.

Bettmann, J. E., Tucker, A. R., Tracy, J., & Parry, K. J. (2014). An exploration of gender, client history, and functioning in wilderness therapy participants. *Residential Treatment for Children & Youth, 31*(3), 155-170.

Bøg, M., Filges, T., Brännström, L., Jørgensen, A. K., & Maja Kärrman Fredriksson. (2017). 12-step programs for reducing illicit drug use. *Campbell Systematic Reviews, 13*.

Botzet, A. M., Winters, K. C., & Stinchfield, R. (2006). Gender differences in measuring adolescent drug abuse and related psychosocial factors. *Journal of Child & Adolescent Substance Abuse, 16*(1), 91-108.

Boust, S. J., Kuhns, M. C., & Studer, L. (2005). Assertive community treatment. *The evidence-based practice: Methods, models and tools for mental health professionals*, 31-55.

Bowen, S., Chawla, N., Collins, S. E., Witkiewitz, K., Hsu, S., Grow, J., Clifasef, S., Garner, M, Douglass, A., Larimer, M. E., & Marlatt, A. (2009). Mindfulness-based relapse prevention for substance use disorders: A pilot efficacy trial. *Substance Abuse, 30*(4), 295-305. doi:10.1080/08897070903250084

Dart, R. C., Surratt, H. L., Cicero, T. J., Parrino, M. W., Severtson, S. G., Bucher-Bartelson, B., & Green, J. L. (2015). Trends in opioid analgesic abuse and mortality in the United States. *New England Journal of Medicine, 372*(16), 1573-1574.

Drake, R. E., Mercer-McFadden, C., Mueser, K. T., McHugo, G. J., & Bond, G. R. (1998). Review of integrated mental health and substance abuse treatment for patients with dual disorders. *Schizophrenia Bulletin, 24*(4), 589-608.

Drake, R. E., O'Neal, E. L., & Wallach, M. A. (2008). A systematic review of psychosocial research on psychosocial interventions for people with co-occurring severe mental and substance use disorders. *Journal of Substance Abuse Treatment, 34*(1), 123-138.

Garland, E. L., Froeliger, B., & Howard, M. O. (2014a). Effects of mindfulness-oriented recovery enhancement on reward responsiveness and opioid cue-reactivity. *Psychopharmacology, 231*(16), 3229-3238. http://dx.doi.org/10.1007/s00213-014-3504-7

Garland, E. L., Manusov, E. G., Froeliger, B., Kelly, A., Williams, J. M., & Howard, M. O. (2014b). Mindfulness-oriented recovery enhancement for chronic pain and prescription opioid misuse: Results from an early-stage randomized controlled trial. *Journal of Consulting and Clinical Psychology, 82*(3), 448-459. http://dx.doi.org/10.1037/a0035798

Gillis Jr., H. L. L., Kivlighan Jr., D. M., & Russell, K. C. (2016). Between-client and within-client engagement and outcome in a residential wilderness treatment group: An actor partner interdependence analysis. *Psychotherapy, 53*(4), 413.

Henderson, C. E., Dakof, G. A., Schwartz, S. J., & Liddle, H. A. (2006). Family functioning, self-concept, and severity of adolescent externalizing problems. *Journal of Child and Family Studies, 15*(6), 719.

Lambert, M. J., & Finch, A. E. (1999). The Outcome Questionnaire. In M. E. Maruish (Ed.), *The use of psychological testing for treatment planning and outcomes assessment* (pp. 831-869). Mahwah, NJ: Lawrence Erlbaum Associates.

Lambert, M. J., Burlingame, G. M., Umphress, V., Hansen, N. B., Vermeersch, D. A., Clouse, G. C., & Yanchar, S. C. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical & Psychological Psychotherapy, 3,w* 249–258.

Liddle, H. A., Dakof, G. A., Turner, R. M., Henderson, C. E., & Greenbaum, P. E. (2008). Treating adolescent drug abuse: A randomized trial comparing multidimensional family therapy and cognitive behavior therapy. *Addiction, 103*(10), 1660-1670.

Liebling, E. J., Yedinak, J. L., Green, T. C., Hadland, S. E., Clark, M. A., & Marshall, B. D. (2016). Access to substance use treatment among young adults who use prescription opioids non-medically. *Substance Abuse Treatment, Prevention, and Policy, 11*(1), 38.

MacKenzie, K. R. (1983). The clinical application of a group climate measure. In R. R. Dies (Ed.). *Advances in group psychotherapy: Integrating research and practice* (pp. 159–170). Madison, CT: International Universities Press.

Mueser, K. T., Noordsy, D. L., Drake, R. E., Fox, L., & Barlow, D. H. (2003). *Integrated treatment for dual disorders: A guide to effective practice*. New York, NY: Guilford Press.

Mueser, K. T., Yarnold, P. R., Rosenberg, S. D., Swett, C. J., Miles, K. M., & Hill, D. (2000). Substance use disorder in hospitalized severely mentally ill psychiatric patients: Prevalence, correlates, and subgroups. *Schizophrenia Bulletin, 26*(1), 179-192. doi:10.1093/oxfordjournals.schbul.a033438

Najavits, L. M., & Weiss, R. D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction, 89*(6), 679- 688.

Nathan, P. E., & Gorman, J. M. (2015). *A guide to treatments that work, 4th ed.* New York, NY: Oxford University Press.

Norton, C., Tucker, A., Russell, K. C., Bettmann, J. E., Gass, M. A., Gillis, H., & Behrens, E. (2014). Adventure therapy with youth. *Journal of Experiential Education, 37*(1), 46-59. doi:10.1177/1053825913518895

OBH Council (n.d.). *About us*. Retrieved from https://obhcouncil.com/about/

Padwa, H., Larkins, S., Crevecoeur-MacPhail, D. A., & Grella, C. E. (2013). Dual diagnosis capability in mental health and substance use disorder treatment programs. *Journal of Dual Diagnosis, 9*(2), 179-186.

Paulozzi, L. J., & Xi, Y. (2008). Recent changes in drug poisoning mortality in the United States by urban–rural status and by drug type. *Pharmacoepidemiology and Drug Safety, 17*(10), 997-1005.

Roberts, S. D., Stroud, D., Hoag, M. J., & Massey, K. E. (2017). Outdoor behavioral health care: A longitudinal assessment of young adult outcomes. *Journal of Counseling and Development, 95*(1), 45-55. doi:10.1002/jcad.12116

Rowe, C. L., Liddle, H. A., Greenbaum, P. E., & Henderson, C. E. (2004). Impact of psychiatric comorbidity on treatment of adolescent drug abusers. *Journal of Substance Abuse Treatment, 26*(2), 129-140.

Russell, K. C. (2001). What is wilderness therapy? *Journal of Experiential Education, 24*(2), 70-79.

Russell, K. C. (2008). Adolescent substance-use treatment: Service delivery, research on effectiveness, and emerging treatment alternatives. *Journal of Groups in Addiction & Recovery, 2*(2-4), 68-96.

Russell, K. C., Gillis, H. L., & Heppner, W. (2015). An examination of mindfulness-based experiences through adventure in substance use disorder treatment for young adult males: A pilot study. *Mindfulness, 7*(2), 320-328.

Russell, K., Gillis, H. L., & Lewis, T. G. (2008). A five-year follow-up of a survey of North American outdoor behavioral healthcare programs. *Journal of Experiential Education, 31*(1), 55-77.

Substance Abuse and Mental Health Administration (n.d.). *Mental and Substance Use Disorders*. Retrieved from https://www.samhsa.gov/disorders

Unick, G. J., Rosenblum, D., Mars, S., & Ciccarone, D. (2013). Intertwined epidemics: National demographic trends in hospitalizations for heroin-and opioid-related overdoses, 1993–2009. *PloS One, 8*(2), e54496.

Vashishtha, D., Mittal, M. L., & Werb, D. (2017). The North American opioid epidemic: current challenges and a call for treatment as prevention. *Harm Reduction Journal, 14*(1), 7.

Weiss, R. D., Griffin, M. L., Kolodziej, M. E., Greenfield, S. F., Najavits, L. M., Daley, D. C., Doreau, H.R. & Hennen, J. A. (2007). A randomized trial of integrated group therapy versus group drug counseling for patients with bipolar disorder and substance dependence. *American Journal of Psychiatry, 164*(1), 100-107.

Winters, K. C., & Henley, G. A. (1989). *Personal experience inventory and manual*. Los Angeles, CA: Western Psychological Services.

Zhou, X., Qin, B., Giovane, C. D., Pan, J., Gentile, S., Liu, Y., ... & Xie, P. (2015). Efficacy and tolerability of antidepressants in the treatment of adolescents and young adults with depression and substance use disorders: A systematic review and meta-analysis. *Addiction, 110*(1), 38-48.

A Novel Investigation of Substance Use Outcomes in Substance-Specific Outdoor Behavioral Healthcare Programs

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Abstract

Substance Use Disorders (SUDs) are one of the greatest public health burdens to date. Available evidence suggests that despite the availability of evidence-based therapeutic interventions, successful recovery from alcohol and drug dependence is hard to achieve and much harder to maintain over time. Further, young adults present with unique risk factors and tend to have a less optimal response to treatment. Consequently, a novel treatment has been developed in an effort to improve outcomes for young adults with SUDs. Substance-specific outdoor behavioral healthcare (S-OBH; term developed by the author for clarity herein) may be more appealing to young adults who have resisted or responded poorly to inpatient drug and alcohol treatment, which is identified as the standard of care. The current study sought to investigate whether S-OBH interventions are equivalent to the standard of care, using a non-inferiority design. The sample was 256 young adults (Mage = 25.8) presenting for treatment at one of two experimental treatment sites or the active comparison site, residential treatment for SUDs. Primary study hypotheses were that S-OBH treatment would be associated with similar symptomatic improvements, relative to the comparison condition, particularly relevant to symptoms of SUDs and overall quality of life. Secondly, S-OBH would be associated with the maintenance of the hypothesized treatment gains during the 12-month follow-up period. Findings were consistent with hypotheses, suggesting that participants evidenced significant symptomatic reductions and maintained these improvements over a 12-month follow-up period, regardless of treatment condition. Results are discussed in terms of better understanding factors associated with a positive response to SUD interventions.

Keywords: substance use disorders, novel treatment, outdoor behavioral healthcare, non-inferiority design

AUTHOR NOTE: The author would like to thank the study participants and several key research collaborators and personnel, including scientific consultants and graduate students at the Intervention Sciences Laboratory at the University of Arkansas, Dr. Sheneen Daniels, Alex Pena, Jack Kline, and Gil Hollows, without whom this study could not have been completed.

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.05

SUBSTANCE USE OUTCOMES

Substance abuse and dependence, newly characterized as Substance Use Disorders (SUDs) in the Diagnostic and Statistical Manual of Mental Disorders (DSM 5) (American Psychiatric Association, 2013), are widespread. While some data suggests that progress has been made in reducing the prevalence of SUDs in the United States, the recreational abuse of drugs and alcohol remains one of the greatest public health problems to date (Office of Applied Studies, 2008). In fact, SUDs cause greater mortality, morbidity, and disability than any other preventable health condition (Institute for Health Policy, 2001). Estimates of the total overall costs of substance abuse in the United States, including lost productivity and health and crime-related costs, exceed $600 billion annually. This represents a greater economic burden than smoking, diabetes, and obesity combined (National Institute on Drug Abuse, 2011a; National Institutes of Health, 2011b; SAMHSA, 2010).

The sequelae associated with SUDs involve a variety of poor outcomes. SUDs are strongly correlated with interpersonal violence, child maltreatment, motor vehicle accidents, suicide, homicide, and criminal activity in general (National Institute on Drug Abuse, 2011a). Moreover, negative health-related consequences include greater risk of cardiovascular conditions, pregnancy complications, teenage pregnancy, human immunodeficiency virus/acquired immunodeficiency syndrome, and sexually transmitted diseases (National Institute on Drug Abuse, National Institutes of Health, 2011). More specifically, alcohol is the third leading cause of death in the US (Mokdad, Marks, Stroup, & Gerberding, 2000) and SUDs confer increased risk of psychiatric conditions, including but not limited to anxiety and depression (Grant et al., 2004), and maladjustment following trauma (Jacobsen, Southwick, & Kosten, 2001).

Young adults, individuals between the ages of 18-25, appear to have increased sensitivity to the deleterious impact of substance use and abuse. They have historically evidenced higher rates of alcohol and illicit drug use, compared with other age groups. Recent estimates indicate that rates of illicit drug abuse continue to rise in the young adult population (SAMHSA, 2010). In 2009, one-fifth of young adults met diagnostic criteria for an SUD (i.e., 21.2%; Center for Disease Control and Prevention, 2011). Further, young adults are the most vulnerable to comorbid psychiatric syndromes (Chan, Dennis, & Funk, 2008), as compared to other age groups. They report less commitment to their recovery and tend to have an earlier onset of use and abuse (Sinha, Easton, & Kemp, 2003). Given that early onset of drug use is strongly associated with progression from substance use to abuse and, ultimately, to long-term dependence (Chassin, Pitts, & Prost, 2002; Clark, Kirisci, & Tarter, 1998), the increasing rates of substance use among young people are of critical import.

Given the significant impact and the extensive public health burden of SUDs, evidence-based treatments (EBTs) have been developed to specifically target substance-related pathology (Manuel, Hagedorn, & Finney, 2011; Moos, 2007). The extant literature indicates that there is consensus for the labeling of select SUD psychosocial interventions as “evidence-based” (McGovern & Carroll, 2003). While a thorough review of treatments is beyond the scope of this article,

evidence-based SUD treatments include behavioral couples therapy, cognitive behavioral therapy (including relapse prevention), contingency management, motivational enhancement/motivational interviewing, and 12-step facilitation treatment (McGovern & Carroll, 2003; National Quality Forum, 2007).

In spite of the development of specialized and empirically supported SUD interventions, the available evidence suggests that sustained recovery from addiction is very difficult to achieve (Connors & Maisto, 2006). Published relapse rates vary considerably, depending on the operational definition utilized, time since treatment, and class of drug. For example, estimates suggest that at three months post-treatment, 40–60% of individuals in treatment for alcohol problems relapse to a first drink, whereas by 12 months, this rate increases to 70–80% (Lowman, et al., 1996). For illicit drug users, the three-month rate of relapse to first use is about 60% and the 12-month rate is approximately 75% (Connors, Maisto, & Zywiak, 1996). For individuals with comorbid psychiatric conditions, relapse rates tend to be higher. Glenn and Parson (1991) found that depressive symptoms were the single best predictor of alcohol relapse, following treatment. Moreover, adults with dual diagnoses of SUDs and Post-Traumatic Stress Disorder (PTSD) relapse significantly more quickly than adults without trauma-relevant sequelae (Bradizza, Stasiewicz, & Paas, 2006). Given the high rates of relapse following specialized substance abuse treatment, alternative treatment modalities are being developed in an effort to improve therapeutic outcomes for individuals with SUDs.

Outdoor Behavioral Healthcare (OBH) is one such example. OBH is an intensive, residentially-based therapeutic approach, offering an alternative for individuals who historically have refused, resisted, or prematurely terminated traditional forms of mental health interventions (Gass, Gillis, & Russell, 2012). The label "OBH" describes programs that utilize a multimodal treatment approach and deliver services in a wilderness setting (via exposition, backcountry travel, etc.; Russell, 2003). While programs are heterogeneous at this time, they contain select core components (Russell, 2001, 2006a). Group process, experiential learning, peak experiences, unfamiliar environments, and natural consequences are postulated as some of the primary mechanisms of action (Bandoroff & Scherer, 1994; Newes & Bandoroff, 2004; Russell, 2001). Further, Russell and Gillis (2017) developed and validated the Adventure Therapy Experiences Scale (ATES). The ATES identified unique factors believed to promote therapeutic gains, as well as distinguish OBH from more traditional forms of therapy. Findings were that group adventure, reflection, nature, and challenge, as experienced within a wilderness therapy context are theorized as active components of OBH. Research investigating the effectiveness of wilderness programming has grown exponentially over the past two decades (Norton et al., 2014) and the convergence of literature suggests that participants evidence marked symptom remission (Russell, 2003, 2005) and maintain symptomatic improvements throughout follow-up assessment periods (Lewis, 2013; Russell, 2005).

SUBSTANCE USE OUTCOMES

Given the popularity of OBH programs, in select economic markets, in addition to the ubiquitous and negative effects of SUDs, a novel treatment modality has emerged. Substance-specific OBH programming (S-OBH; term developed by the author for clarity herein) integrates traditional, residential substance abuse treatment with the wilderness-based model of intervention. Further, this novel approach is focused on delivering therapeutic services to a high-risk population, young adults with SUDs. While some studies of wilderness therapy have explored reductions in substance abuse and dependence as an outcome of treatment (Bettmann, Russell, & Parry, 2014; Russell, 2007), this author is unaware of any prior investigation of therapeutic effectiveness of S-OBH specifically, in which participants with primary SUDs engage in treatment which includes components of both OBH and residential substance abuse treatment (i.e., drug and alcohol rehabilitation programming) and when recovery from substance dependence is the primary outcome of interest.

The objective of the current investigation was to examine the effectiveness of S-OBH programming, as compared to the standard of care, defined as residential substance abuse treatment. Substance-specific OBH (S-OBH) programs represent a novel and alternative treatment modality for young adults with SUDs. Prior research found that treatment satisfaction was strong, following OBH treatment (Russell, 2006b) and OBH programs provide services that may be more appealing to young adults for a variety of reasons (i.e., adventure activities, self-esteem enhancement, physical rigor, fewer distractions, etc.). Thus, a non-inferiority design was utilized (Greene, Morland, Durkalski, & Freuh, 2008). A non-inferiority design allows a novel experimental treatment to be contrasted with the standard of care in medicine (D'Agostino, Massaro, & Sullivan, 2003). Non-inferiority designs are appropriate when a placebo control condition is unethical and/or when a novel treatment may offer important advantages over currently available standard treatments, in terms of improved safety, convenience, better compliance, or cost (International Conference on Harmonization, 2001).

Study hypotheses were that the experimental treatment (S-OBH) would not be inferior to the comparison treatment, which is the standard of care and includes evidence-based treatment for SUDs. Specifically, participants would evidence improvements in symptoms of SUDs, from baseline to post-treatment and from post-treatment to the 12-month follow up assessment. Second, in an effort to uniquely extend prior work in the area (related to OBH effectiveness), additional hypotheses were that participants would evidence improvements in their overall quality of life from baseline to post-treatment and therapeutic improvements would be maintained over a 12-month follow-up period.

SUBSTANCE USE OUTCOMES

Method

Participants

Participants were seeking substance-specific treatment at one of two S-OBH programs (located in Utah and North Carolina) or at an active comparison treatment program (located in North Carolina). To be eligible for study inclusion, participants had to: a) be between the ages of 18 and 33 years old, b) evidence adequate cognitive functioning to allow completion of the self-report instruments, c) present without psychotic symptoms, d) not need in-patient detoxification at the time of admission for treatment, and e) volunteer for participation and provide informed consent for study procedures. Participants were screened for eligibility and matriculated into the study without regard to gender, race, or ethnicity (rates of young adult participation and retention, by treatment program, are described below).

Experimental treatment (S -OBH Site #1). A total of 144 young adults were eligible to participate. Of those, 89 people completed the baseline assessment (62%). Reasons for non-participation include disinterest, refusal, staff error, and/or incomplete responses within the requisite time period following admission. Seventy-four participants completed the graduation assessment. Of the 74 people who completed the graduation assessment, 62 completed the three-month (84%) and 51 completed the 12-month follow-up (69%).

Experimental treatment (S-OBH Site #2). A total of 158 young adults were eligible to participate. Of those, 109 people completed the baseline assessment (69%). Reasons for non-participation include disinterest, refusal, staff error, and/or incomplete responses within the requisite time period following admission. Seventy-eight people completed the graduation assessment. Of those who completed the graduation assessment, approximately 61 people and 56 people completed the three-month (78%) and 12-month (72%) follow-up assessments, respectively.

Standard Treatment (Comparison Site). A total of 105 young adults were eligible to participate. Of those, a total of 78 people completed the baseline assessment (74%) and 58 people completed the graduation assessment. Of those who completed the graduation assessment, approximately 49 people and 44 people completed the three-month (84%) and 12-month (76%) follow-up assessments, respectively.

Procedures

Recruitment. Participants were recruited for study participation by on-site personnel upon admission. Program staff, trained to matriculate participants into the study, provided information regarding study procedures, the risks and benefits of taking part in the study, and the voluntary nature of their participation (i.e., they could withdraw at any time without penalty or prejudice). Following, written informed consent for study participation was obtained. A standardized continuous

enrollment protocol, in which each young adult who met inclusionary criteria was offered the opportunity to participate, was utilized to collect data between the dates of 2008-2012.

Study design and data collection. A quasi-experimental repeated measures design, with a naturalistic follow-up, was employed. A non-inferiority methodological design was employed (International Conference on Harmonization, 2001). A non-inferiority design (described elsewhere) (D'Agostino, Massaro, & Sullivan, 2003) allows the researcher to contrast outcomes from a novel experimental treatment with the standard of care. Pre-treatment data was collected at baseline (i.e., within 48 hours of admission) and post-treatment data was collected at graduation (within 48 hours of completing the treatment program). The protocol also included longitudinal assessments, at three and 12-months post-treatment. Following study matriculation, baseline and graduation data was collected via self-report in a quiet, private space with a trained researcher on hand to answer any questions. During the longitudinal phase of the study, trained research personnel administered the assessment battery over the telephone. Participants were compensated using a lottery system as well as a weighted compensation schedule across assessments and were fully debriefed upon study completion.

Extensive training was provided to program staff assisting with recruitment, tracking, and data collection at the three programs. Training of recruitment staff included procedures for sampling, delivery of study scripts, exclusion criteria, and protection of human subjects (e.g., informed consent, withdrawal, right to refuse, etc.). The principal investigator provided training and oversight to all staff having contact with participants throughout the duration of the study. Systematic training included direct instruction on administering the assessment battery, including observations of data collection administration, repeated site visits to monitor for assessor drift, and training in procedures for maintaining participant involvement. Research personnel involved in telephone interviews for the longitudinal phase of the study were trained to mastery on administration of clinical interviews, procedures for managing suicidal or homicidal ideation, and subject debriefing. Training and ongoing oversight was provided by the principal investigator.

Treatment Conditions.

Standard treatment. The standard treatment, utilized as an active control for the experimental condition, was a residential drug and alcohol rehabilitation program, located in North Carolina. The program is privately owned, not-for-profit, and offers similarly intensive (i.e., clinical profile of clients, length of stay, severity of SUDs) substance abuse rehabilitation services as the experimental treatment under investigation. Further, the program is located in a naturalistic setting, on 160 acres and serves a young adult population with similar census and staff: client ratios as the experimental treatment condition. Participants in the standard treatment condition received interventions with empirical support in treating SUDs (i.e., individualized treatment plan, availability of a continuum

of care, gender-specific programming, family education and involvement, alumnae support and follow up, etc.). The program also provided evidenced-based interventions for SUDs, in varying treatment modalities (i.e., individual, group, etc.), including cognitive-behavior therapy, relapse prevention, recovery management, contingency management, motivational enhancement/motivational interviewing, and 12-step facilitation treatment.

Experimental Treatment. The two S-OBH treatment programs provided similar specialty substance abuse services as the standard treatment (described above) with the adjunction of OBH-specific programming (also referred to as adventure-based programming in the literature). The OBH model asserts that a contextual shift away from the home environment, where problems are being maintained, provides an important backdrop for individuals to change behavior. The OBH therapeutic modality has been presented extensively elsewhere (Gass, Gillis, & Russell, 2012; Newes, & Bandoroff, 2004; Russell, 2001) and an exhaustive review is beyond the scope of this article; thus, only the essentials will be provided. Importantly, individuals are fully disengaged from their previous environments, including contact with individuals outside treatment, either face-to-face or through telecommunication devices. Clients are immersed in a simple wilderness-based environment, with distractions greatly minimized. This new context allows participants to develop critical skills that can then be employed to manage their recovery, rather than trying to develop such skill repertoires under the contextual control of the home (and substance using) environment. Further, juxtaposed against a change in environment is a set of developmentally appropriate and progressive challenges, designed to enhance self-efficacy. Behavioral symptoms targeted in treatment include challenging problematic cognitions and changing behavior patterns associated with functional impairment, particularly as they are related to SUDs. Treatment also addresses interpersonal relationship skills, improving communication with family and important loved ones, and learning adaptive emotion regulatory strategies.

Program curricula are designed to prepare clients for outdoor activities, while also assessing and conceptualizing their clinical needs, developing individualized treatment and relapse prevention plans, and providing weekly group and individual therapy. Multiple behavior management strategies are employed to teach, reward, and elicit adaptive behavior. Contingency management is used to reinforce target behaviors. Towards this end, clients progress through a series of levels that are cumulative and build upon demonstrated progress at the prior stage. Each level includes behaviorally-defined objectives, which are comprised of developmental tasks such as skill acquisition, social-cognitive growth, community involvement, generalizing learned skills to the natural environment, and expanding adaptive coping. Additional behavioral techniques include the use of metaphor, vicarious and instrumental conditioning, goal setting, and adoption of wellness behaviors, including but not limited to healthy nutritional habits, consistent exercise, instrumental and social support, and sleep hygiene skills.

Measures.

Treatment Outcome Package (TOP). The Treatment Outcome Package, including the supplemental Drug and Alcohol Scale (TOP) (Kraus, Seligman, & Jordan, 2005) measure a broad array of theoretically relevant psychological outcome variables and was used as the primary index of treatment outcomes. The TOP has a number of advantages over other treatment outcome measures. The TOP was developed by administering more than 200,000 longer versions to the full continuum of patient populations and levels of care. Consequently, the TOP has demonstrated excellent construct, external, convergent, and divergent validity as well as reliability (Kraus, Seligman, & Jordan, 2005; Kraus, Wolfe, & Castonguay, 2006). Further, the TOP has stable factor structures, which is a limitation of a number of other outcome assessment methods (Mueller, Lambert & Burlingame, 1998). The TOP has no ceiling effects and measures the full range of pathology. Consequently, the TOP is highly sensitive to change across short spans of time.

The TOP measures subjective distress, symptomatic states, and overall functioning; these psychological areas are recommended as critical indicators of therapeutic effectiveness by the Society for Psychotherapy Research's core Battery Conference (Horowitz, Lambert & Strupp, 1997). For each of 58 phrases in the adult version (e.g., "had trouble falling asleep"), participants are asked to rate the frequency of the described experience on a one (all the time) to six (none of the time) scale, which yields scores on 11 subscales. The following factors were examined in the current evaluation a) Substance Abuse: symptoms of substance abuse and dependence and b) Quality of life: how well someone perceives his/her life in general. The TOP supplemental Drug and Alcohol Scale measures an individual's use of 16 disparate classes of substances, plus alcohol. It also assesses past-month and historical use of drugs and alcohol. The Drug and Alcohol Scale measures negative consequences, secondary to substance use, as well as various theoretically relevant issues, such as commitment to recovery, affiliation with substance-using peers, and severity of cravings/desires to use.

The TOP was administered at every assessment. Raw scores are converted into standardized z-scores, with a mean of zero, which is the general population average and a standard deviation of 1. Higher scores represent more severe symptoms or poorer functioning while negative scores indicate fewer symptoms or healthier functioning. The supplemental Drug and Alcohol Scale also was administered at every assessment and yielded data about the frequency and severity of past-month drug and alcohol use.

Results

Participants in the OBH programs were slightly younger in age (M_{age} = 24.3; SD = 2.8, range 19-33 years old) than participants in the comparison condition (M_{age} = 27.1; SD = 3.3, range 21-33 years old; t = 63.50, $p < .001$). Also, there were fewer females in the OBH programs (19.9%) than in the standard treatment program (45.7%; χ^2 = 19.51. $p < .001$). There was not a significant difference in

treatment duration by program ($p > 1.0$), with participants in the OBH programs receiving, on average, 49 days of treatment and participants in the standard treatment program receiving, on average, 43 days of treatment.

Baseline Descriptive Data

First, a series of analyses were conducted to examine substance use rates at baseline.

S-OBH Site #1. Alcohol and marijuana were the most frequently used drugs at baseline assessment, with an average of approximately 10 days of drinking (8 days drinking until drunk) and 11 days of using marijuana/hashish in the past 30 days. All participants reported substance use problems at baseline, and (93%) reported clinically significant substance use problems.

S-OBH Site #2. Alcohol and marijuana were the most frequently used drugs at baseline, with an average of approximately 7 days of drinking (slightly over 5 days drinking until drunk) and 13 days of using marijuana/hashish in the past 30 days. Approximately 97% participants of reported substance use problems at baseline, and 95% reported clinically significant substance use problems.

Comparison Site. Alcohol and marijuana were the most frequently used drugs at baseline, with an average of approximately 11.5 days of drinking (over 7.5 days drinking until drunk) and over 6 days of using marijuana/hashish in the past 30 days. Approximately 96% participants reported substance use problems at baseline, and 91% reported clinically significant substance use problems.

Treatment Descriptive Data

Next, analyses were conducted to describe changes in symptoms of substance use occurring during the course of the study.

S-OBH Site #1. At three months after treatment, the average number of days drinking in the past 30 days was under two (just over one until drunk) and one day (on average) of using marijuana/hashish. At 12 months after treatment, the average number of days of drinking in the past 30 days was under five (under four until drunk) and under five (on average) of using marijuana/hashish. More generally, on average participants reported lower levels of substance use problems from baseline to graduation, and at the three and 12-month follow-up. Over 93% of participants reported reductions in substance use problems from baseline to treatment termination/graduation. Over 87% of participants reported reductions in substance use problems from baseline to three months post-treatment. Finally, 92% of participants reported reductions in substance use problems from baseline to 12 months post-treatment.

S-OBH Site #2. At three months after treatment, the average number of days of drinking in the past 30 days was under two (just under one until drunk) and one day (on average) of using marijuana/hashish. At 12 months after treatment,

the average number of days of drinking in the past 30 days was less than three (less than one until drunk) and just over four (on average) of using marijuana/hashish. Over 92% of participants reported reductions in substance use problems from baseline to treatment termination. Over 98% of participants reported reductions in substance use problems from baseline to three months post-treatment. Finally, over 90% of participants reported reductions in substance use problems from baseline to 12 months post-treatment.

Comparison Site. At three months after treatment, the average number of days of drinking in the past 30 days was under one (under one until drunk) and less than one day using marijuana. At 12 months after treatment, the average number of days of drinking in the past 30 days was 2.3 (less than one drinking until drunk) and just over one (on average) of using marijuana. Over 93% of participants reported reductions in substance use problems from baseline to treatment termination (graduation). Over 91% of participants reported reductions in substance use problems from baseline to three months post-treatment. Over 93% of participants reported reductions in substance use problems from baseline to 12 months post-treatment.

Relapse

Relapse from post-treatment to the three and 12-month follow-up assessments were then examined. Statistically significant changes in scores on the substance abuse factor of the TOP were used to measure a return to using substances. The substance abuse factor has excellent sensitivity and specificity for substance abuse and dependency issues (Krause, Seligman, & Jordan, 2005) and measures both consumption of alcohol and/or drugs, negative consequences related to use, and the cognitive aspects of SUDs, including preoccupation with substance use, time spent planning to use, etc. Measuring relapse is a point of considerable contention in the substance abuse literature (Maisto, Pollock, Cornelius, Lynch, & Martin, 2003) and, to date, there is not one acceptable definition of "relapse" (McKay, Franklin, Patapis, & Lynch, 2006). In the current study, relapse was defined as a statistically significant increase on the SA score of 1.0 or more, as this suggests a marked increase in symptoms of SUDs. Thus, it was determined to be an appropriate gauge to assess return to substance use, following a period of treatment and abstinence.

S-OBH Site #1. Approximately 11% of participants reported increases in substance use problems from treatment termination to three months post-treatment that fell in the sub-clinical range. An additional 18% of participants reported a clinically significant increase from treatment termination to the three-month follow-up (i.e., a relapse). This suggests that 71% of participants are maintaining therapeutic improvements at the three-month follow-up assessment. Approximately 13% of participants reported increases in substance use problems from treatment termination to the 12-month follow-up that fell in the sub-clinical range. An additional 25% of participants reported a clinically significant increase from treatment termination to the 12-month follow-up (i.e., a relapse). This suggests that approximately 62% of participants are maintaining therapeutic

improvements at the 12-month follow-up assessment.

SA-OBH Site #2. Approximately 4% of participants reported increases in substance use problems from treatment termination to three months post-treatment that fell in the sub-clinical range. An additional 12% of participants reported a clinically significant increase from treatment termination to the three-month follow-up. This suggests that 84% of participants are maintaining therapeutic improvements at the three-month follow-up assessment. Approximately 2% of participants reported increases in substance use problems from treatment termination to the 12-month follow-up that fell in the sub-clinical range. An additional 22% of participants reported a clinically significant increase from treatment termination to the 12-month follow-up (i.e., a relapse). This suggests that approximately 76% of participants are maintaining therapeutic improvements at the 12-month follow-up assessment.

Comparison Site. Approximately 8% of participants reported increases in substance use problems from treatment termination to three months post-treatment that fell in the sub-clinical range. An additional 16% of participants reported a clinically significant increase from treatment termination to the three-month follow-up. This suggests that 76% of participants are maintaining therapeutic improvements at the three-month follow-up assessment. Approximately 8.6% of participants reported increases in substance use problems from treatment termination to the 12-month follow-up that fell in the sub-clinical range. An additional 8.6% of participants reported a clinically significant increase from treatment termination to the 12-month follow-up (i.e., a relapse). This suggests that approximately 83% of participants are maintaining therapeutic improvements at the 12-month follow-up assessment.

Quality of Life

A global index of quality of life also was examined (Kraus, Seligman, & Jordan, 2005). This factor measures an individual's perception of how various aspects of his or her life are going. The items on this factor ask about satisfaction with life in general, general mood and feelings, relationships with others, and daily responsibilities. Consistent with other factors, a high score on this factor indicates more problems in overall quality of life.

S-OBH Site #1. On average, participants reported improvements in quality of life from baseline to graduation and at three and 12-month follow-up assessments. Over 78% of participants reported improvements in quality of life from baseline to treatment termination. Approximately 51% of the sample maintained (or further improved) quality of life gains from graduation to the three-month follow-up. Finally, 64% of the sample maintained (or further improved) quality of life gains from graduation to the 12-month follow-up.

S-OBH Site #2. On average participants reported improvements in quality of life from baseline to graduation and at three and 12-month follow-up assessments. Over 81% of participants reported improvements in quality of life

from baseline to treatment termination. Over 53% of the sample maintained (or further improved) quality of life gains from graduation to the three-month follow-up. Finally, 58% of the sample maintained (or further improved) quality of life gains from graduation to the 12-month follow-up.

Comparison Site. On average, participants reported improvements in quality of life from baseline to graduation and at three and 12-month follow-up assessments. Approximately 91% of participants reported improvements in quality of life from baseline to treatment termination/graduation. Over 70% of the sample maintained (or further improved) quality of life gains from graduation to the three-month follow-up. Over 77% of the sample maintained (or further improved) quality of life gains from graduation to the 12-month follow-up.

Primary Analyses

All participants, across the three sites reported significant symptoms of substance abuse and dependence upon admission to treatment. At each site, participants' scores were highly elevated, more than 10 standard deviations above the mean, suggesting marked symptoms of SUDs and related problems. Across both the experimental and standard treatment conditions, participants reported similar types and patterns of substance abuse. Alcohol and marijuana were endorsed as the most frequently used substances, regardless of program enrollment. This is consistent with existing data, indicating that marijuana is the most commonly used illicit drug in the US, particularly among adolescents and young adults. In fact, over 35% of self-reported marijuana users meet criteria for an SUD (SAMHSA, 2011).

Intent-to-treat analyses were conducted with a last observation carried forward method to address the potential influence of participant attrition. The first repeated measures analysis of variance (ANOVA) was conducted with the overall substance use problems scale from the TOP as the dependent variable. This variable was selected as it captures symptoms of substance abuse and dependence across sites (see Table 1 for means and standard deviations as a function of assessment point and group). The overall multivariate test of an interaction between group and repeated assessment was not significant [Wilks' Lambda (3, 282) = 0.97, $F = 2.30$, $p = 0.077$, partial eta squared = .024]. Therefore within subject and between group effects were examined separately. In terms of within-subject effects (adopting a Greenhouse-Geisser correction for violations of sphericity), there was a significant effect of repeated assessment [F (1.77, 504.776) =186.854, $p < .001$, partial eta squared = 0.39]. This effect suggests a significant decrease in substance use problems across sites. In terms of group effects, there was not a significant difference across sites when substance use problems scores were collapsed across repeated measures [F (1, 284) = 1.19, p = .275, partial eta squared = .004].

Table 1

Means and Standard Deviations of Substance Use Problems reported on the TOP as a Function of Assessment Point and Group

	0 = comparison, 1 = OBH	*Mean*	*Std. Deviation*
Baseline	.00	10.5440	5.25835
	1.00	10.7006	5.18590
	Total	10.6527	5.18148
Grad	.00	2.2860	3.13773
	1.00	3.0982	3.03213
	Total	2.8496	3.07171
3-MOS	.00	.9157	1.90844
	1.00	.7969	1.79000
	Total	.8333	1.81798
12-MOS	.00	1.0690	3.39899
	1.00	1.9091	2.80250
	Total	1.6519	3.00507

Table 2

Means and Standard Deviations for Frequency of Past-Month Alcohol Use as a function of Assessment Point and Group

	0 = comparison, 1 = OBH	*Mean*	*Std. Deviation*
Baseline	.00	6.94	6.952
	1.00	9.05	8.548
	Total	8.62	8.248
Graduation	.00	.00	.000
	1.00	.10	.762
	Total	.08	.679
3-mos	.00	.31	1.014
	1.00	1.74	4.939
	Total	1.45	4.457
12-mos	.00	2.63	5.005
	1.00	3.27	6.727
	Total	3.14	6.387

The second repeated measures ANOVA was conducted on number of days drinking during the past 30 days. These analyses were conducted as exploratory follow-up analyses to the primary analysis above in order to determine if the pattern of data varied when alcohol use was examined separately as opposed to the broader substance use problems index used in the primary analysis. Results from the analyses mirrored those of the primary analysis with significant ($p < .05$) reductions in alcohol use across sites, but no between-group differences ($p > .05$). See Table 2 for means, standard deviations, and graphic representation of these data.

Discussion

Following treatment and throughout the follow-up assessment period, participants reported significant improvements in symptoms of SUDs across all three sites. Participants reported marked and significant symptom remission, regardless of site; thus, the primary study hypothesis was confirmed (see Table 1). The novel, substance-specific OBH (S-OBH) treatment was not inferior to the standard treatment for SUDs. More specifically, the current investigation yielded effectiveness data that are comparable to that of the standard, state-of-the-art treatment for SUDs. Substance-specific OBH treatment may be more appealing to prospective clients, particularly young adults who appreciate a naturalistic treatment environment, rigorous physical activities, adventure-based programming, and cooperative group living, rather than an institutional or hospital setting. Taken together, results from the current study indicate that substance-specific OBH treatment may be a robust alternative to the standard residential programming for SUDs (which served as a comparison condition for the current study).

It is important to note that at treatment termination, participants across programs reported symptoms of SUDs that remained in the elevated range, although much improved from baseline. This is consistent with a wealth of data indicating the importance of sustained recovery. More specifically, abstinence duration is associated with improved outcomes. Thus, the longer an individual is sober or drug-free, the more likely he or she is to remain sober, drug-free, and committed to recovery (McKay, 1999). Given that treatment termination occurred fairly early in the recovery process (i.e., approximately 50 days), some participants remained symptomatic. However, by the three-month follow-up assessment, participants' symptoms were subthreshold. By the 12-month follow-up assessment, participants (regardless of site) reported mild symptoms of SUDs. This is highly consistent with the extant literature, which documents the treatment refractory nature of SUD symptoms in young adult populations.

Relapse remains one of the most difficult issues facing practitioners and researchers in the field of substance abuse. In fact, most individuals who seek treatment for SUDs tend not to maintain continuous abstinence following treatment termination (Witkiewitz & Marlatt, 2004). In the current study, estimates of relapse rates within and across sites are much improved, compared

to relapse rates in the overall treatment-seeking population. Depending on the substance studied and the methodological approach to defining relapse in various studies, rates of relapse generally are between 60-75% for alcohol and 70-80% for illicit drugs in the first 12 months after treatment (Chung & Maisto, 2006; Project Match Research Group, 1997; Tims, Leukefeld, & Platt, 2001). Current study findings indicate rates of relapse ranging from 16-29% at the three-month assessment and 17-38% at the 12-month assessment interval.

In the current study, relapse was measured by a significant increase in symptoms of SUDs. This method of assessment, based on retrospective recall, may not yield the most accurate rates of relapse. Further, differing definitions of relapse greatly impact data interpretation. For example, rates of relapse are highly variable depending on whether the operational definition considers any substance use, only heavy substance use, or a combination of use and negative consequences. Additionally, findings from studies with follow-up durations of two years or more have indicated that the majority of participants move back and forth between abstinence and heavy use (McKay et al., 2006) and may experience multiple relapses between treatment episodes (Dennis, Scott, & Funk, 2003). As a result, interpretation of data is complicated.

A primary limitation of the current research is the lack of random assignment. Young adults self selected to participate in experimental or standard treatment programming. Thus, there were differences in select demographic sample characteristics, including age and gender. Given the difficulties inherent in attempting to statistically control for real group differences (Miller & Chapman, 2001), the author did not "correct" sample differences with covariate analyses. Thus, including matched samples is a priority and should be a focus of future work in the area. Further, the current study methodology included an active comparison group, thus allowing conclusions about non-inferiority to be made and study hypotheses to be supported or rejected. However, the absence of an inert condition does not allow threats to internal validity to be addressed as effectively. This is an ongoing complication in psychosocial research, as random assignment that involves withholding active treatments poses an ethical problem. Given the severity of participants' SUDs and the imperative for prompt and effective services, it presents a complex issue to deny potentially effective treatment from individuals, in order to study therapeutic effectiveness. The current methodological approach is comparable to the convention established by the literature in the area (Greene et al., 2008); however, the effects of repeated assessment and participant maturation could not be ruled out as alternative explanations for the observed results. Consequently, future research should utilize randomization and an inert comparison group, which would allow stronger causal conclusions to be drawn. Data collection was deemed appropriate in the current study given the relatively under-developed state of the literature. However, this will nonetheless be an important issue to address in subsequent research as the field moves towards more sophisticated measurement.

Additional limitations of the current study include restrictions on sample generalizability and the lack of non-obtrusive measures. Consequently, issues

such as demand characteristics and expectancy effects may have influenced participants' responses. Finally, these data are self-report and were collected using retrospective recall. It would be ideal to triangulate data with that from other respondents, such as therapists, to provide a more comprehensive understanding of therapeutic effects. Moreover, data collection in the substance abuse field is increasingly moving towards the inclusion of biological variables, as well as "real time" data collection procedures, to address biases (McKay et al., 2006).

These limitations notwithstanding, the current study represents an important contribution to the extant literature in that it suggests that substance-specific OBH treatment effectively reduces symptoms of SUDs in a young adult population; thus, it appears to be a viable alternative to the standard of care. These particular findings are unique, representing an important step in better understanding the scope of treatment for SUDs, in expanding effective treatment modalities, and in gaining critical knowledge about what types of treatment work best and for whom.

References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (5th ed.)*. Washington, DC: American Psychiatric Association.

Bandoroff, S., & Scherer, D. (1994). Wilderness family therapy: An innovative treatment approach for problem youth. *Journal of Child & Family Studies, 3*, 175-191.

Bettmann, J., Russell, K., & Parry, K. (2014). How substance abuse recovery skills, readiness to change and symptom reduction impact change processes in wilderness therapy participants. *Journal of Child and Family Studies, 22*, 1039-1050.

Bradizza, C., Stasiewicz, P., & Paas, N. (2006). Relapse to alcohol and drug use among individuals diagnosed with co-occurring mental health and substance use disorders: A review. *Clinical Psychology Review, 26*, 162– 178.

Centers for Disease Control and Prevention. (2011). *CDC health disparities and inequalities report: United States, 2011*. Retrieved from http://www.cdc.gov/mmwr/pdf/other/su6001.pdf [PDF - 3MB]

Chan, Y., Dennis, M., & Funk, R. (2008). Prevalence and comorbidity of major internalizing and externalizing problems among adolescents and adults presenting to substance abuse treatment. *Journal of Substance Abuse Treatment, 34*, 14-24.

Chassin, L., Pitts, S., & Prost, J. (2002). Binge drinking trajectories from adolescence to emerging young adulthood in a high-risk sample: Predictors and substance abuse outcomes. *Journal of Consulting and Clinical Psychology, 70*, 67–78.

Chung, T., & Maisto, M. (2006). Relapse to alcohol and other drug use in treated adolescents: Review and reconsideration of relapse as a change point in clinical course. *Clinical Psychology Review, 26*, 149– 161.

Clark, D., Kirisci, L., & Tarter, R. (1998). Adolescent versus adult onset and the development of substance use disorders in males. *Drug and Alcohol Dependence, 49*, 115–121.

Connors, G., Maisto, S., & Zywiak, W. (1996). Understanding relapse in the broader context of post-treatment functioning. *Addiction, 91* (Supplement), S173– S189.

Connors, G., & Maisto, S. (2006). Relapse in the addictive behaviors. *Clinical Psychology Review, 26*, 107-108.

D'Agostino, R., Massaro, J., & Sullivan, L. (2003). Non-inferiority trials: Design concepts and issues – the encounters of academic consultants in statistics. *Statistics in Medicine, 22*, 169–186.

Dennis, M., Scott, C., & Funk, R. (2003). An experimental evaluation of Recovery Management Checkups (RMC) for people with chronic substance use disorders. *Evaluation and Program Planning, 26*, 339–352.

Gass, M., Gillis, H., Russell, K (Eds.). (2012). *Adventure therapy: Theory, research, and practice*. New York, NY: Routledge.

Grant, B., Stinson, F., Dawson, D., Chou, P., Dufour, M., Compton, W…Kaplan, K. (2004). Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders. *Archives of General Psychiatry, 61*, 807–816.

Greene, C., Morland, L., Durkalski, V., & Frueh, C. (2008). Noninferiority and nonequivalence designs: Issues and implications for mental health research. *Journal of Traumatic Stress, 21*, 433-439.

Horowitz, L., Lambert, M., & Strupp, H. (Eds.) (1997). *Measuring patient change in mood, anxiety, and personality disorders: Toward a core battery*. Washington, DC: American Psychological Association Press.

Institute for Health Policy, US Department of Justice. (2001). *Substance abuse: The nation's number one health problem.* Washington, DC; 2001.

International Conference on Harmonization. (2001). ICH Topic E10: *Choice of control group and related issues in clinical trials*.

Jacobsen, L., Southwick, S., & Kosten, T. (2001). Substance use disorders in patients with posttraumatic stress disorder: A review of the literature. *American Journal of Psychiatry, 158*, 1184–1190.

Kraus, D., Seligman, D. A., & Jordan, J. R. (2005). Validation of a behavioral health treatment outcome and assessment tool designed for naturalistic settings: The treatment outcome package. *Journal of Clinical Psychology, 61*, 285-314.

Kraus, D., Wolfe, A., & Castonguay, L. G. (2006). The outcome assistant: A kinder philosophy to the management of outcome. *Psychotherapy Bulletin, 41*, 23-31.

Lewis, S. (2013). Examining changes in substance use and conduct problems among treatment seeking adolescents. *Child and Adolescent Mental Health, 18*, 33–38.

Lowman, C., Allen, J., Stout, R. (1996). Section II. Marlatt's taxonomy of high-risk situations for relapse: Replication and extension. *Addiction, 91*(Supplement), S51– S71.

Maisto, S., Pollock, N., Cornelius, J., Lynch, K., & Martin, C. (2003). Alcohol relapse as a function of relapse definition in a clinical sample of adolescents. *Addictive Behaviors, 28*, 449– 459.

Manuel, J., Hagedorn, H., & Finney, J. (2011). Implementing evidence-based psychosocial treatment in specialty substance use disorder care. *Psychology of Addictive Behavior, 25*, 225–237.

McGovern, M. P., & Carroll, K. M. (2003). Evidence-based practices for substance use disorders. *Psychiatric Clinics of North America, 26*, 991–1010.

McKay, J., Franklin, T., Patapis, N., & Lynch, K. (2006). Conceptual, methodological, and analytical issues in the study of relapse. *Clinical Psychology Review, 26*, 109– 127.

McKay, J. R. (1999). Studies of factors in relapse to alcohol and drug use: A critical review of methodologies and findings. *Journal of Studies on Alcohol, 60*, 566– 576.

Miller, G., & Chapman, J. (2001). Misunderstanding Analysis of Covariance. *Journal of Abnormal Psychology, 110*, 40-48.

Mokdad, A., Marks, J., Stroup, D., & Gerberding, J. (2000). Actual causes of death in the United States. *Journal of the American Medical Association, 291*, 1238-1245.

Moos, R. (2007). Theory-based active ingredients of effective treatment for substance use disorders. *Drug and Alcohol Dependence, 88*, 109-121.

National Institute on Drug Abuse, National Institutes of Health (2011a). *Understanding drug abuse and addiction*. Retrieved from http://www.drugabuse.gov/publications/drugfacts/understanding-drug-abuse-addiction.

National Institute on Drug Abuse, National Institutes of Health (2011b). *Drug abuse and the link to HIV/AIDS and other infectious diseases*. Retrieved from http://www.drugabuse.gov/publications/drugfacts/hivaids-drug-abuse-intertwined-epidemics.

National Quality Forum (2007). *National voluntary consensus standards for the treatment of substance use conditions. Evidence-based treatment practices.* Retrieved from http://www.rwjf.org/pr/product.jsp?

Newes, S., & Bandoroff, S. (2004). What is adventure therapy? In S. Bandoroff & S. Newes (Eds.). *Coming of Age: The Evolving Field of Adventure Therapy* (pp. 1-30). Boulder, CO: Association for Experiential Education.

Norton, C., Tucker, A., Russell, K., Bettmann, J., Gass, M., Gillis, H., & Behrens, E. (2014). Adventure therapy in youth. *Journal of Experiential Education, 37*, 46-59.

Office of Applied Studies (2008). *Results from the 2007 national survey on drug use and health: National findings* (DHHS Publication No. SMA 08-4343, NSDUH Series H-34). Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from http://oas.samhsa.gov.

Project Match Research Group (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH post-treatment drinking outcomes. *Journal of Studies on Alcoholism, 58*, 7– 29.

Russell, K. (2001). What is wilderness therapy? *Journal of Experiential Education, 24*, 70-79.

Russell, K. (2003). An assessment of outcomes in outdoor behavioral healthcare treatment. *Child & Youth Care Forum, 32*, 355 – 381.

Russell, K. (2005). Two years later: A qualitative assessment of youth well-being and the role of aftercare in outdoor behavioral healthcare treatment. *Child & Youth Care Forum, 34*, 209-239.

Russell, K. (2006a). Brat camps, boot camps, or…?: Exploring wilderness therapy program theory. *Journal of Experiential Education, 6*, 51-68.

Russell, K. (2006b). *Examining substance use frequency and depressive symptom outcomes in a sample of outdoor behavioral healthcare participants*. Minneapolis, MN: Outdoor Behavioral Healthcare Research Cooperative.

Russell, K. (2007). Adolescent substance-treatment: Service delivery, research on effectiveness, and emerging treatment alternatives. *Journal of Groups in Addiction & Recovery, 2*, 68-96.

Russell, K., & Gillis, H. (2017). The Adventure Therapy Experience Scale: The psychometric properties of a scale to measure the unique factors moderating an adventure therapy experience. *Journal of Experiential Education, 40*, 135-152.

Sinha, R., Easton, C., & Kemp, K. (2003). Substance abuse treatment characteristics of probation-referred young adults in a community-based outpatient program. The American *Journal of Drug and Alcohol Abuse, 29*, 585-597.

SUBSTANCE USE OUTCOMES

Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services (2010). *Results from the 2009 National Survey on Drug Use and Health: Volume I. Summary of National Findings*. Rockville, MD. Retrieved from http://oas.samhsa.gov/nsduh/2k9nsduh/2k9resultsp.pdf [PDF - 2MB]

Substance Abuse and Mental Health Services Administration, Office of Applied Studies (2011). *Results from the 2010 national survey on drug use and health: Summary of national findings*. HHS Pub. No. (SMA) 11–4658, Rockville, MD: SAMHSA.

Tims, F. M., Leukefeld, C. G., & Platt, J. J. (2001). Relapse and recovery. In F. M. Tims, C. G. Leukefeld, & J. J. Platt (Eds.), *Relapse and recovery in addictions*. New Haven, CT: Yale University Press.

Witkiewitz, K., & Marlatt, G. (2004). Relapse prevention for alcohol and drug problems: That was Zen, this is Tao. *American Psychologist, 59*, 224–235.

An Evaluation of Alaska Crossings: Comparison of the Client Status Review and the Youth Outcome Questionnaire

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Abstract

Alaska Crossings (Crossings) is a 63-day open enrollment wilderness treatment program with a solid client base in predominantly Alaskan communities. The goal of this study was to provide quality, useful, and reliable evaluation data of the Crossings Program using the Youth-Outcome Questionnaire (Y-OQ), an alternative outcome monitoring system which is compared to the performance management system developed by the Alaska Division of Human and Social Service's Behavioral Health Division called the Client Status Review (CSR). Several objectives guided this evaluation project, including: a) analyze existing outcome data and other records from current monitoring or outcome evaluations to inform future outcome monitoring efforts; b) use the findings of this analysis to inform key stakeholders and provide recommendations for future outcome monitoring efforts; and c) make recommendations to key stakeholders as to the relative advantages and disadvantages of their utilization of the Client Status Review (CSR) and the Youth Outcome Questionnaire (30.2), including instrument sensitivity to change, outcome relevance given client needs and treatment protocol, and other identified goals. The results showed that when clients entered treatment, their scores averaged 28.76, which was statistically similar to juvenile justice samples reported by Burlingame et al. (2005) and to scores reported by Beckstead et al. (2015) on a sample of Native American/ Native Alaskan youth in residential treatment. As time progressed, average scores dropped to 14.97 at discharge, which indicated statistically significant ($t(64) = -8.847$, $p < .001$) and clinically significant improvement during this time period (a drop of greater than 10 points in scores). It was concluded that the CSR is a useful tool for assessment purposes and to assess treatment satisfaction, but the Y-OQ was best for tracking treatment outcomes.

Keywords: Outdoor Behavioral Healthcare, Youth-Outcome Questionnaire, Native Alaskan Youth.

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.06

AN EVALUATION OF ALASKA CROSSINGS

Alaska Crossings (Crossings) is a 63-day open enrollment wilderness treatment program with a solid client base in predominantly Alaskan communities. Clients are referred to the program by a variety of sources which include: parents, school officials, mental health agencies, judicial systems including parole officers and judges, and word-of-mouth. Crossings works with adolescents (ages 12-17) who represent at least 17 different traditional Alaskan cultures. Expedition staff attend at least 30 days of annual training and must possess the necessary skills to serve the youth with whom they work. The wilderness tripping is conducted in rugged wilderness that presents formidable challenges in logistics and operations including ocean and river based canoe trips in very remote settings.

Crossings works with high-risk youth, focusing on social and emotional learning utilizing intermittent therapy delivered by masters level behavioral health clinicians in the field. The model utilizes psycho-educational groups and a "point-system" that rewards exceptional behavior tied to wilderness living that is tracked throughout the 63-day experience. Alaska Crossings is unique in that staff form a cohesive unit with clientele and work with the same group for 21-day blocks of time during the 63-day experience. The experience is broken into three parts, each staffed by a different guide team. With new guides, the client group is resupplied and typically delivered to a different field setting (e.g., open-ocean to river paddling). There are two types of concurrent groups at Crossings: 1) open programs, where clients rotate in and out of the group as they enter treatment, and 2) closed programs, where the peer group begins the experience and ends the experience together as a cohesive unit. Staff and leaders switch in and out of either type of group on a rotational basis.

This facilitates significant relationship building between the peer group and the staff, and provides the environment for social and emotional learning to occur. Daily groups are held that ask clients to be mindful of their behaviors and feelings, and to reflect on their contributions to the group and wilderness community living. Much of the treatment model reflects a learner-centered, skill building, sensitive approach to working with Native Alaskan youth, who are prone to certain stigmatized perceptions of clinical treatment approaches (Beckstead, Lambert, DuBose, & Linehan, 2015). That said, each client has an individual treatment plan developed by masters level clinicians, that addresses treatment designed to affect oppositional defiant disorder, conduct disorder, and other disorders associated with severely emotionally disturbed youth. Clinical staff also work with field staff throughout the experience and expend significant energy and resources communicating with families about the well-being of clients. The clinical staff is also responsible for communication with youth-care advocates to ensure smooth transitions to post-treatment environments and the development of aftercare plans.

This study had three specific aims: 1) to provide quality, useful, and reliable evaluation data of the Crossings Program using the Youth-Outcome Questionnaire (Y-OQ), 2) determine if Routine Outcome Monitoring (ROM), or the periodic assessment of a client's progress while the client is in treatment,

could be implemented in a wilderness treatment setting, and 3) to compare these results to the performance management system developed by the Alaska Division of Human and Social Service's Behavioral Health Division called the Client Status Review (CSR) (http://dhss.alaska.gov/dbh/Pages/Performance%20Measures/Default.aspx). The results were used to provide recommendations to Crossings' about the relative advantages and disadvantages of each instrument. A brief review of the literature on wilderness treatment programs like Crossings, especially as they relate to ROM, situates these findings in its broader context.

Literature Review

Wilderness treatment (WT) programs for adolescents are being increasingly utilized in the United States to treat a variety of disorders, and is gaining acceptance in the medical community as evidenced by increasing insurance coverage (Willie, 2017). Recent estimates suggest that more than 5,000 adolescents attend wilderness therapy programs in the U.S every year (Gass, Gillis, & Russell, 2012). Wilderness expedition models like Crossings use continuous backcountry travel in groups of 8-10 clients for up to 60-days (Bettman & Tucker, 2011). In a recent and comprehensive meta-analysis of WT outcomes, Bettman, Gillis, Speelman, Parry and Case (2016) found differences in the effect sizes regarding studies that reported the use of mental health practitioners when compared to studies that indicated the programs were run by what they termed "therapeutic staff" (not licensed therapists or counselors). The results showed stronger effect sizes relating to locus of control, behavioral measures, and interpersonal skills when a mental health practitioner was present, and when field staff were present, only self-esteem was found to have stronger effects. This is important in the context of Crossings, which only recently shifted from employing therapeutic staff to using licensed clinicians in the field in conjunction with therapeutic staff. The study also highlighted that the training, experience, and roles that masters or doctoral-level trained clinicians play in WT is rarely reported in published studies. It was concluded that WT research needs to more clearly articulate exactly what the therapists' roles are in each program, including how often visits are made to the field, how they are structured, and what types of psychotherapeutic models are being employed. In this study, licensed clinicians check in routinely with the therapeutic staff, work with families, and conduct weekly visits to groups for individual and group-based therapy. At each 21-day interval, a staff exchange takes place that is also facilitated by the clinician. It was decided that at this juncture, the clinician would facilitate a routine outcome monitoring process to assess client progress and to use the information for the individual and group sessions, and in communication with the in-coming and out-going staff groups. Though regarded as an evidence-based practice that shows promising results regardless of treatment model or type, few if any wilderness WT programs are utilizing the process.

AN EVALUATION OF ALASKA CROSSINGS

Routine Outcome Monitoring

Evidenced Based Practice in Psychology (EBPP) as outlined by the American Psychological Association (APA) is a core component of mental health care (Levant et al., 2006). Currently there is increasing call for the use of EBPP from various stake holders in mental health care services ranging from clients, to practitioners, through administrators and regulating boards (Lambert, 2007; Levant et al., 2006). The APA supports several research approaches, including the use of client reported outcomes to examine questions of treatment efficacy, effectiveness and clinical utilization (Levant et al., 2006). During the last 20 years the development of Routine Outcome Monitoring (ROM) has emerged as a method to assess all three of these levels of interest (Anker, Duncan, & Sparks, 2009; Boswell, Kraus, Miller, & Lambert, 2015; Howard, Moras, Brill, Martinovich, & Lutz, 1996).

ROM uses session-to-session or pre-determined periodic assessment of a client's progress to track outcomes and inform treatment decisions in a responsive and timely manner while the client is engaged in the treatment process (Boswell et al., 2015; Howard et al., 1996). ROM is especially attractive because it can be used to support psychotherapeutic practice across a range of treatment populations (Anker et al., 2009; Lambert, 2007). Studies are demonstrating its effectiveness in the context of several DSM-5 disorders and child and adolescent mental health care (ex. Anker et al., 2009; Carlier et al., 2012; Shimokawa, Lambert, & Smart, 2010; Sundet, 2012; Timimi, Tetley, Burgoine, & Walker, 2012). The application of ROM to child and adolescent populations is in its infancy; however, preliminary findings are replicating the benefits found in adult populations (Bickman, Kelley, Breda, Regina de Andrade, & Riemer, 2011; Timimi et al., 2012).

Routine outcome monitoring utilizes client reports of distress, collected on standardized measures, as feedback for clinicians detailing behavioral or symptomatic change (Carlier et al., 2012; Shimokawa et al., 2010). A further specification, resulting from the maturation of ROM, includes discussing self-report data with clients in the context of therapy sessions (Hawkins, Lambert, Vermeersch, Slade, & Tuttle, 2004; Lambert, 2007; Shimokawa et al., 2010; Sundet, 2010). Also, in the case of ROM with child and adolescent populations, reports may come from, and be discussed with, a host of stake holders including parents, caregivers, case workers, teachers, clinicians, and young people themselves (Timimi et al., 2012). In 2005, the APA appointed the Presidential Task Force on Evidence-Based Practice in response to expanding need and expectation for effective integration of research into psychology practice (Levant et al., 2006). The aims of EBPP are to improve quality and cost-effectiveness of psychological services, while also increasing the accountability of providers (Lambert, 2007; Levant et al., 2006). The Task Force defined EPBB as "…the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences…" (Levant et al., 2006, p. 273). This definition parallels ROM; it is a synthesis of current research, clinical

practice and patient values. This significant alignment emphasizes ROM's relevance to contemporary practice.

Lambert and colleagues have published extensively on ROM. While several ROM systems and approaches exist, their development of the OQ-45 and the Y-OQ and their associated algorism are widely used in the field (Anker et al., 2009; Duncan & Shaw, 2012; Lambert & Shimokawa, 2011). Their work clearly outlines early ROM efforts where client outcomes were simply returned to clinicians and their evolution to using these client outcomes as conversation starters with clients. More recently, they have developed intervention supports based on ROM called Clinical Support Tools (CST) that serve as an automated warning system and decision making framework that can assist therapists in identifying clients that are at risk of treatment failure (Lambert, 2007; Shimokawa et al., 2010). Implementation of ROM in other contexts and alternative methods has strived to further validate its use and improve implementation methods, but has also uncovered significant barriers to its use and implementation (Boswell et al., 2015). These include financial and time burdens, administrative misuse resulting in therapist competition, clients completing assessments that are unreliable due to trying to please the therapist, as well as privacy considerations and ethics of data use (Boswell et al., 2015; Lambert, 2007; Sundet, 2013).

ROM systems are now standard practice in mental healthcare settings and have been shown to increase client outcomes and build strong therapeutic alliances with clinicians. Barriers exist to their implementation, but can be overcome with clinician and staff buy-in and strong administrative support, including automated systems like the Y-OQ from OQ Systems that allow clinicians to provide real-time feedback to clients and staff with automated systems. This instrument was adopted by Crossings in the summer of 2015 and is currently in use. This study provides initial results from the analysis of data that was collected between April and November 2015. Crossings Y-OQ data, and the subsequent ability to compare it to several other wilderness treatment studies that utilize the Y-OQ, make it a desirable system for Crossings to implement. This will be compared with the data that the CSR produces, which is limited to a pre-post design, and may not be as sensitive to change or relate directly to the treatment process and culture of Crossings.

Methods

Crossing participants enter the program from rural and urban Alaskan communities and are a population, based on demographic and other information, that would be considered at extreme risk due to socio-economic situations and the lack of appropriate external assets. These include a lack of family support, positive family communication, caring and supportive neighborhoods, parent involvement in schooling, and other community resources (see www.search-institute.org for list of external assets that support youth development, which is also corroborated with CSR data presented below). Clients consented to participation of the data gathering in their admissions process to the program.

All data were collected between April 2015 and November 2015. Clients entering treatment were asked to complete the Y-OQ and the CSR. All data were collected by clinicians and staff at Crossings. The data were then stripped of any identifying information and sent, via a secured link, to the evaluator with no identifiers other than a randomly assigned code to ensure confidentiality and anonymity. Y-OQ data was gathered at intake, at three-week intervals during the course of the program, and at discharge from the program. Clients completed the CSR as part of their intake and discharge processes. Demographic data were collected via the CSR. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). The first set of analyses focused on the demographic characteristics of the adolescent clients and included frequency distributions of age, gender, and other demographic variables of interest. The second set of data analyses focused on an assessment of outcomes from a client self-report rating, where admission and discharge scores were calculated and paired sample t-tests were conducted to examine statistical change.

The CSR was analyzed based on the broad domains reported above. Descriptive statistics were first run, and then where possible, paired sampled t-tests were used to examine change in the domain from pre- to post-treatment. Domains that were reasoned to reflect various dimensions of the Y-OQ were then compared to assess the consistency and relative usefulness of the data. Demographic information of the study participants was collected, including age, gender, and ethnicity. Items related to participants' overall perceptions of quality of life are addressed below when examining the descriptive statistics generated from the analysis of the CSR. A brief review of the development and validity of each instrument is warranted to orient the reader to the constructs and domains assessed.

The Youth-Outcome Questionnaire

The YOQ-30 was developed as a brief measure of severity of disturbance in mental health patients under 18 that can be used repeatedly and is sensitive to change (Wells et al., 1996). It provides a total score or global index of behavioral and emotional distress in a child/adolescent's life. The reliability of the YOQ-30 was tested using Cronbach's alpha. The YOQ-30 has a remarkably high internal consistency estimate of .96 across the three samples. Reliability was also high within community and patient samples. Critical items alert clinicians to potential high-risk behaviors (e.g. suicide, substance abuse) and other item analysis provides easy-to-use interpretive indices. A cut off score discriminates between the normal and dysfunctional range and a Reliable Change Index (RCI) is used to determine if the change during treatment is clinically significant. The sensitivity and specificity analysis for the YOQ-30 is based on the cut-off score of 29. ***A score of 29 or higher is in the clinical range; a score below 29 is in the non-clinical or normal range***. This higher score reflects the tendency of adolescents to under-report their symptomatology as compared to parents and the finding that parents are better sources of data regarding objective behaviors, e.g. oppositional attitude, externalizing behaviors, school failures, etc. Adolescents are considered

to be more accurate informants regarding their subjective states, e.g. moods, feelings, etc.

The RCI was derived to determine clinically significant change (Jacobson & Truax, 1991). In order for an individual's score to be considered to have changed reliably for either version of the Y-OQ, the RCI value must be 10 points or greater. The cutoff score and the RCI values enable clinicians to interpret the clinical significance of patient change in treatment. Thus, if a client's score has decreased by ten points or more over the course of treatment, then the change may be characterized as "clinically significant improvement." If the score has decreased by ten or more points and the client's total score is in the "normal range," then the client is considered to have "recovered," in addition to having improved. If a child's score increases by ten or more points, then the child's progress may be characterized as "deteriorated." Normative data on the YOQ-30.2 were drawn from several large-scale samples across the United States (Burlingame et al., 2005) (see Table 1).

Table 1

Self-report normative groups for the YOQ-30.2 total score

Variable Pairs	***N***	***M***	***SE***
Inpatient Treatment	435	68.1	.96
Outpatient	2,297	43.3	.46
Juvenile Justice	719	32.6	.76
Community	1,091	17.3	.43

Client Status Review

The CSR is a self-report instrument that collects information on a persons' quality of life (DBH, 2011). The CSR was first developed in 2001 when the Division of Substance Abuse and the Division of Mental Health were being integrated. A broad group of stakeholders recommended performance measures for the new service system, including the Alaska Screening Tool, the Client Status Review of Life Domains, and the Mental Health Statistics Improvement Program (MHSIP) Consumer Survey. The structure and logic of the CSR were, at the time, consistent with emerging national policy and planning, including the Center for Substance Abuse Treatment (CSAT) and the Center for Mental Health Services (CMHS). The goal was to have the CSR represent several required national outcome measures and federal agencies, like the Substance Abuse Mental Health Services Agency (SAMHSA), which included "quality of life" in their working definition of recovery for mental health and substance abuse populations.

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In 2011, the CSR was revised to improve the ability to assess change over time. Focus was placed on the scoring methodology and the language used to ask questions, the number (volume) of questions necessary in order to measure change, and alignment with national data requirements. Specific to the scales used to measure change, the original CSR lacked the sensitivity and range to measure change over time. Findings from the initial CSR had most respondents at a level that could be described as "functioning well," resulting in a lack of sensitivity for the instrument to measure improvement at a later point in time. Analysis of the pilot study demonstrated that the modified scales were successful in resolving this deficiency. The current version of the CSR examines various domains that are reasoned to be reflective of quality of life. The four broad domains are: 1) health (physical, mental, substance use, harm and access to emergency services), 2) safety (legal involvement, domestic violence, and general safety), 3) productive activity (employment/school, other productive activities), and 4) living with dignity. Some researchers have questioned the validity of self-report assessment and the challenge of assessing one's subjective quality of life. For example, Awad and Voruganti (2000) stated that "by definition, quality of life is a subjective construct that needs to include patients' self-reports and their subjective judgment. As such, it requires a degree of cognitive ability. Traditionally, clinicians have been suspicious of subjective assessment by patients of treatment outcomes" (p. 178). Despite the concerns regarding the reliability of self-report measures, it is now widely agreed-upon that self-report measures for persons with serious behavioral health conditions are useful both clinically and in performance measurement (e.g. Carlier et al., 2012).

It is reported that the information from the CSR can be used in two ways: 1) as a supplemental screening device to be coupled with the information obtained in the Alaska Screening Tool (AST) to inform the assessment, and 2) as a baseline measure of a persons' quality of life prior to an assessment and entry into services. This initial CSR can be compared with subsequent CSR's to monitor change over time. The CSR becomes an outcome instrument that links the result of treatment with the treatment intervention. Examining this claim forms the central focus of this project and supports the rationale to compare the CSR as an outcome and monitoring tool for clients in the Crossings program with the Y-OQ.

Results

A total of 79 clients were included in the study, with an average age of 15.6 years. Clients averaged 58.3 days in treatment, with a minimum of 20 and a maximum of 77 days. It is unknown why some clients were discharged from treatment. Typical reasons identified in the literature from previous studies suggest that treatment was not a good fit for the client or the client became a risk to themselves or others (e.g., see Russell, 2008). The closed programs averaged 61.2 days in treatment (n = 48; 60.8%) and the open programs averaged 53.9 days (n = 31; 39.2%). The majority of clients were male (male = 70.9%; female = 20.1%) and identified as Native Alaskan, including Haida, Tlingit, Yupik, Inupiat,

and Athabascan (48.1%). Other ethnicities identified were Caucasian (38%), Mixed/other (10.1%) or American Indian (3.8%). Demographic information is displayed in Table 2.

Table 2

Demographic information for clients in the Crossings program.

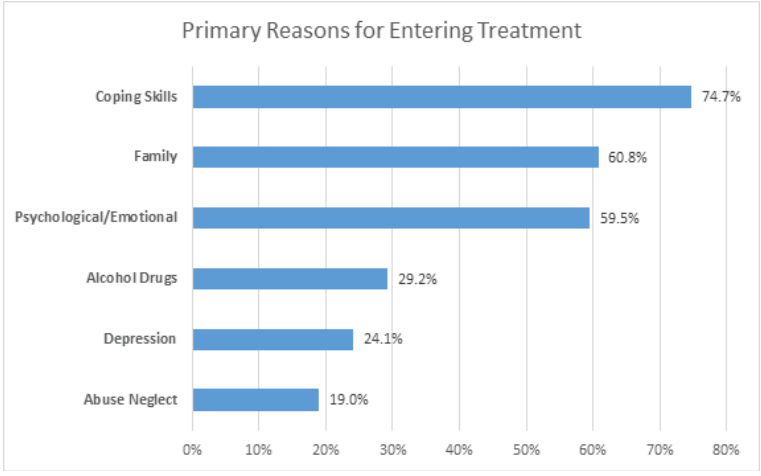
Demographic Information	***N***	***M***	***SD***
Age in years	79	15.61	1.50
Days in Treatment	79	58.34	11.58
Gender	N	%	
Male	56	70.9	
Female	23	29.1	
Total	79	100.0	
Ethnicity	*N*	%	
Caucasian	30	38.0	
Native Alaskan	38	48.1	
American Indian	3	3.8	
Mixed / Other	8	10.1	
Total	79	100.0	

The primary reasons that the youth entered treatment are captured in Figure 1 (below). These primary reasons are from the perspective of the referring clinician, given the fact that each client that is referred to Crossings presented with serious emotional disturbance (SED). Children and youth with SED frequently require and receive services from a variety of agencies that apply different eligibility criteria. Beyond a common SED diagnosis, these young people are quite diverse in terms of their needs and strengths. Almost three-quarters of the clients were referred to Crossings due to troubles coping with daily roles and activities in their lives. This construct would reflect disruptive behavioral disorders, like Attention-Deficit/Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD), and are referred to as such because affected children tend to disrupt people around them, including family members, school staff, and peers. The next most prevalent referring issue was family related (60.8%), stressing the troubled home and community situations in which many of these youth struggle. Their symptoms may cause family or community problems; or their symptoms may be aggravated by family problems. The variety of living situations in the group ranged from living in private residences with family or relatives, youth correctional facilities, or foster care situations. Almost equal (59.5%) were clients presenting with "psychological or emotional" issues, which could include a wide variety of

mental disorders. The next three referral issues were alcohol and drugs (29.2%), depression (24.1%) and histories of physical and sexual abuse (19.0%). When integrated and examined as a whole, this sample reflects youth considered to be at extreme risk.

Figure 1

Primary reasons or issues that were recorded that led to a referral for treatment to the Crossings program



Youth-Outcome Questionnaire

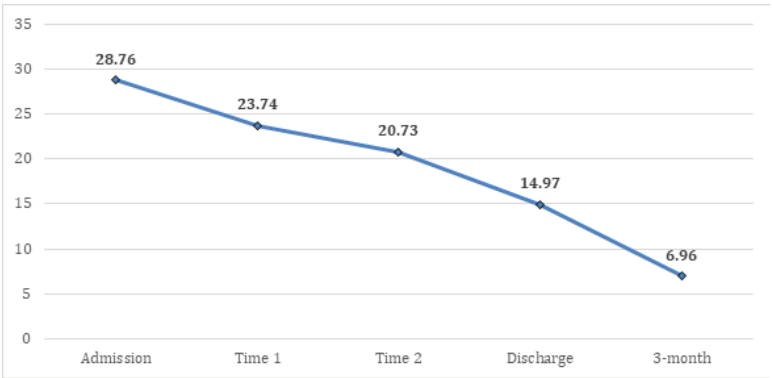
The total score of the Y-OQ is the best index to track global change and has the highest reliability and validity when compared to any of the subscales. According to the manual (Burlingame et al., 2004) the Y-OQ "is meant to be used as a global index or summary score by which a clinician can quickly assess a child's general functioning relative to normative populations as well as his or her progress in treatment" (p. 4). Figure 1 shows that for clients entering treatment, their scores averaged 28.76, which was statistically similar to juvenile justice samples reported by Burlingame et al. (2005) (see Table 1). Average scores dropped to 14.97 at discharge, which indicated statistically significant ($t(64) = -8.847$, $p < .001$) and clinically significant improvement during this time period (a drop of greater than 10 points in scores). At three-months, even amid limitations to the data due to common attrition in longitudinal assessments, the scores continued to trend well below community sample levels (indicated by a score of 17 or lower).

A paucity of data and research exists on Native American and Native Alaskan youth outcomes using the Y-OQ. The most comparable sample would be the study conducted by Beckstead, Lambert, DuBose, and Linehan (2015).

The article examined dialectical behavior therapy (DBT) in a sample of Native American and Native Alaskan youth in a residential treatment setting in Alaska. The study used the Y-OQ SR full 64-item instrument to track changes in outcome (whereas the current study utilized the 30.2 instrument to reduce respondent burden and because of time and resource challenges in a backcountry wilderness environment). The 64-item Y-OQ has a total score of 256, whereas the Y-OQ 30.2 has a total score of 120 (herein referred to as the Y-OQ throughout). Using simple fractional comparisons, the samples can be compared to look for consistency or disparity of intake scores with similar sample populations. The average score at intake reported herein was 28.76, which was 23% of the total score. The effect sizes generated from the clinically and statistically significant change across broad demographics, was for males (d = 1.31), females (d = 1.23), Caucasian (d = 1.25) and Native American/Native Alaskan (d = 1.26) large and significant. These scores and effect sizes are comparable to Beckstead et al.'s (2015) sample, which reported an intake score of 50.78 (19% of the total score of 256) with a clinically and statistically significant effect size (d=1.3). In discussions with one the developers of the Y-OQ (Gary Burlingame, 2016, personal communication), these comparisons are sound and will be used in helping normalize the instrument to this population.

Figure 2

Y-OQ scores at admission, time 1, time 2, discharge, and 6-month follow-up



n = 78 **n = 58** **n = 48** **n = 66** **n = 21**

Table 3 shows the relative frequencies tabulated by using cut-scores as markers to get a better idea of the range of clients entering the Crossings program at admission. These scores indicate that almost half of the sample (40.5%) entered treatment with Y-OQ scores that ranged between juvenile justice and inpatient samples, with an average score of 41.56. Another 41.7% of clients entered treatment with scores that ranged from 17 - 31, in the range between the juvenile justice and outpatient treatment samples with an average score in this

group of 23.58. The remaining 13 clients scored between 2 and 16, below the cut-score for a community sample. This data suggests that over 80% of clients are presenting with significant symptomology and were exhibiting poor functioning in their lives.

Table 3

Y-OQ scores at admission placed into normed categories of Community, Juvenile Justice and Inpatient samples

Groups	***N***	***%***
Scores from 2-16 (Community Sample = 17.3)	13	16.4%
Scores from 17-31 (Juvenile Justice = 32.6)	33	41.8%
Scores from 33-63 (Inpatient Sample = 68)	33	40.5%
Total	79	100%

Table 4 explores the relative differences in Y-OQ scores by gender and ethnicity. Few differences, if any exist between male and female intake scores, and when comparing Caucasian and Native Alaskan participants.

Table 4

Y-OQ score change by gender and ethnicity

	Admission	***Discharge***	***Mean Diff***	***SD***	***t***	***p***	***df***	***d***
Gender								
Male	29.64	14.77	14.86	15.31	6.51	.001	43	1.31
Female	30.62	13.57	17.04	12.18	6.41	.001	21	1.23
Ethnicity								
Caucasian	29.76	14.10	15.65	15.11	5.57	.001	28	1.25
Native Alaskan	30.96	14.92	16.04	15.84	5.16	.001	26	1.26

Subscale analysis offers additional insight into client presenting issues as well as areas where treatment is making impacts on client well-being, especially when compared to other domains inherent in the Y-OQ. There are a total of six subscales that comprise the Y-OQ:

1. ***Somatic (S)***: This scale assesses change in somatic distress that the child or adolescent may be experiencing. Items address symptoms that are typical presentations, including headaches, dizziness, stomachaches, or troubles

related to sleep (score range of 0-12).

2. ***Social Isolation (SI)***: The purpose of this scale is to assess changes in a child's or adolescent's social isolation. Items address whether or not the child or adolescent has friends, can't keep friends long, or feels as if no one likes him or her (score range of 0-8).

3. ***Aggression (A)***: This scale seeks to address changes in the level of aggression displayed by children or adolescents toward others. Although aggressiveness is also assessed in the CP scale below, aggressive content found in this scale is more related to physical violence. Items ask respondents whether or not the child or adolescent threatens others, bites, kicks, scratches, hits, or engages in physical fights with adults or peers (score range of 0-12).

4. ***Conduct Problems (CP)***: This scale assesses change in problematic behaviors that are socially related. Many of the items describe delinquent behaviors that are frequently the cause for bringing a child or adolescent into treatment. Items assess a child's or adolescent's propensity to destroy property, lie, steal, break rules, or disrespect others (score range of 0-24).

5. ***Hyperactivity/Distractibility (HD)***: This scale assesses change in the child's or adolescent's ability to organize tasks, complete assignments, concentrate and includes items measuring inattention, hyperactivity, and impulsivity. Although many of the items on this scale tap features of specific disorders (e.g., Attention Deficit Hyperactivity Disorder) the scale is not intended to be diagnostic but rather to track areas of change suggested by the literature, focus groups, and hospital records (score range of 0-12).

6. ***Depression/Anxiety***: The purpose of this scale is to assess changes in depressive and/or anxiety-related symptoms in children or adolescents. Items assess the degree to which a child or adolescent feels sad, worries they can't get thoughts out of their head, considers suicide, feels withdrawn, can't trust others, or doesn't participate in activities that used to be fun. Since depression and anxiety are frequently correlated in assessment instruments (Burlingame et al., 1995) no attempt was made at differentiating these symptoms (score range of 0-24).

Table 5 highlights the subscales and dimensions, indicated by both the statistical significance (p) and the effect size (Cohen's d) where clients showed the highest symptomology and the most relative improvement as a result of treatment. The greatest gains were made in the Hyperactivity/Distractibility and the Conduct Problem subscales, both with large effect sizes. The subscales with small to medium effect sizes were Social Isolation and Aggression.

Table 5

Pairwise t-tests for each subscale examining differences between pre and post treatment scores for all Crossings clients

Subscale	*Admission*	*Discharge*	*Mean Diff*	*SD*	*t*	*p*	*df*	*d*
Somatic	4.77	2.78	1.98	3.06	5.221	.000	64	.76
Social Isolation	1.42	.78	.631	1.79	2.827	.006	64	.36
Aggression	2.11	.80	1.30	1.73	6.089	.000	64	.37
Conduct Problems	7.98	3.51	4.47	4.86	7.420	.000	64	1.08
Hyperactivity/Distractibility	5.55	2.48	3.07	2.85	8.698	.000	64	1.22
Depression/Anxiety	8.12	4.03	4.09	4.81	6.853	.000	64	.98

Examining Follow-up Y-OQ Scores as an Indicator of Treatment Effectiveness

To examine whether treatment outcomes noted above were maintained by clients after treatment, Y-OQ scores assessed at the three-month follow-up period were analyzed and compared to scores at discharge. Though attrition is always an issue, this sub-sample appears representative of the overall sample, as the scores at admission and discharge were similar for this group when compared to the overall sample scores (see Table 7). The challenges of collecting data at follow-up periods are discussed at length in the literature (see Russell, 2008), but in this sample, the issue is partly due to waiting for data to be returned by clients and their families. Table 7 shows that clients have continued to do well psychologically, emotionally, and behaviorally at the three-month follow-up period, as evidenced by Y-OQ scores.

Table 7

Scores at admissions, discharge and 3-month follow-up for the group that had been assessed at follow-up compared to the group with no assessment at 3-months to date

	N	*Admission*	*Discharge*	*Three-month Follow-up*
Three-month Follow-up Group	21	30.24	16.68	12.68
Remaining Sample	57	28.21	14.11	-

Client Status Review

Examining the claim that the CSR can be used as an outcome tracking instrument forms the central focus of this project and supports the rationale to compare the CSR as an outcome and monitoring tool for clients in the Crossings program with the Y-OQ. The CSR contains four domains that were used to

examine the impact of treatment and program impact: 1) Health (Physical, Mental, Substance Use, Harm, and Access to Emergency Services), 2) Safety (Legal Involvement, Domestic Violence, and General Safety), 3) Productive Activity (Employment/School, Other Productive Activities), and 4) Living with Dignity. An initial issue with the CSR and the focus of questions that are being asked is the reference point that the clients have to use for the assessment device. Crossings is a 63-day residential treatment program. Therefore, if clients are being asked the degree to which they engaged in certain behaviors in the last 30 days, many of the questions seem inappropriate, out of context, or redundant. For example, questions 7-9, assessing the number of times they have used alcoholic beverages and/or marijuana, would appear impertinent to this population at this time. However, at the follow-up period they would be very relevant. Thus, assessing program impact for this construct (substance use) or others (legal involvement) appear problematic. Asking clients to complete these items could cause confusion or respondent burden and could affect reliability of the items and those subscales.

Of note in the interpretation of these findings (at least descriptively) is the reference point for clients when considering these questions. The CSR asks clients how many days in the last 30 days that he/she had felt, did, or acted in a certain manner. This would appear extremely challenging to answer this in a reliable manner. Another issue that was noted is how to interpret the rather vague and subjective meaning of the response options (e.g. "not good"). A third issue is that many of the questions are assessing multiple dimensions within the same question (e.g., Question 2 asks: "How many days during the past 30 days was your mental health (including depression and/or problems with emotions, behavior, or thinking) not good"?). For example, behavior may be fine, as a person may be doing what is asked and functioning well at work or school, but may not be doing well emotionally. How would a respondent reconcile these incongruences within these individual questions? Moreover, how accurate could these assessments be when recall is over the past 30 days? (see Bradburn, Rips, & Shevell, 1987; Hammersley, 1994; Shiffman, Stone, & Hufford, 2008).

CSR: Outcome Dimensions. Table 8 presents the results of a series of t-tests that explored the differences for each of the clients on the outcome dimensions described above. The variables were, in essence, the number of times that a specific construct had occurred over that time period (30 days for most constructs and seven days for healthy eating and exercise). Two constructs showed significant differences from admission to discharge: 1) the number of days a client reported that their mental health was "not good" over the last 30 days ($t(75) = 5.53$, $p < .001$), and 2) the number of days that clients indicated in the past 30 days that their physical health kept them from doing activities they would otherwise not be able to do ($t(75) = 1.98$, $p = .051$). All of the other constructs, which would be considered "outcome indicators" showed no significant change as a result of treatment. The mental health improvement outcome, though promisingly indicating statistically significant change, speaks little to the programmatic and clinical leadership team because of the issues with the construct noted above. For example, the question asks about "mental health,

including depression, and/or problems with emotions, behaviors, or thinking." An obvious question would be: In what area did the client make improvement, as they are in essence separate questions? The physical health question is more clear and illustrative for programs to be more certain that treatment did indeed improve physical health in this area.

Table 8

Pairwise t-test comparisons of health outcome variables contained in the CSR

Pair	***Mean***	***S.D***	***S.E. Mean***	***Lower***	***Upper***	***t***	***df***	***p***
Admission Physical Health – Discharge Physical Health (# past 30 days)	-.750	3.87	.444	-1.635	.135	-1.689	75	.095
Admission Mental Health – Discharge Mental Health (# past 30 days)	7.15	11.67	1.337	4.494	9.82	5.352	75	.001*
Admission Health Not Do– Discharge Physical Health Not Do (# past 30 days)	1.46	6.42	.737	-.007	2.92	1.982	75	.051*
Admission Suicide Thoughts – Discharge Suicide Thoughts (# past 30 days)	.145	2.07	.238	-.330	.619	.608	75	.545
Admission EMS Service Use – Discharge EMS Service Use (# past 30 days)	-.079	.560	.064	-.207	.049	-1.229	75	.223
Admission Exer. Past 7 Days – Discharge Exer. Past 7 Days	-1.90	2.96	.341	-2.58	-1.22	-5.588	75	.341
Admission Fruit Past 7 Days – Discharge Fruit Past 7 Days	-.947	4.05	.465	-1.87	-.021	-2.038	75	.465
Admission Veggies Past 7 Days – Discharge Fruit Past 7 Days	-2.18	4.10	.470	-3.12	-1.24	-4.643	75	.470

*Significantly different at the $p < .05$ level

Italics indicates variables where no change or negative change from admission to discharge indicates a positive outcome.

Table 9 shows outcomes associated with substance use and indicate that two areas showed statistically significant improvement as a result of treatment: 1) the number of days in the last 30 days in which the client consumed four or more drinks ($t(75) = 3.73$, $p < .001$), and 2) the number of days in the last 30 days in which the client used tobacco ($t(75) = .608$, $p < .000$). For the first item,

it would be assumed that the client would have reduced their use of alcohol as a result of treatment because they were in a wilderness-based treatment program where no drugs and/or alcohol were available. In addition, it is curious as to why the other variables assessing alcohol and marijuana use were not consistent with this finding for the same reason. This may be due to measurement error and poor reliability of the items as noted above. Crossings participants are not allowed to use tobacco while in the program, raising additional concerns.

Table 9

CSR substance use indicator change from admission to discharge

Pair	***Mean***	***S.D***	***S.E. Mean***	***Lower***	***Upper***	***t***	***df***	***p***
Admission # of Days Drink Alcohol – Discharge # of Days Alcohol (Last 30 days)	.250	1.93	.222	-.192	.692	1.127	75	.263
Admission # of Days 4+ Drinks Alcohol – Discharge # of Days 4+ Drinks Alcohol (Last 30 days)	3.17	7.416	.851	1.47	4.86	3.728	75	.001
Admission Marijuana or Illegal Drug– Discharge Marijuana or Illegal Drug (Last 30 days)	.105	.531	.061	-.016	.227	1.728	75	.088
Admission Tobacco Use– Discharge Tobacco Use (Last 30 days)	.145	2.07	.238	-.330	.619	.608	75	.001
Admission Smoked 20 Day– Discharge Smoked 20 Day (Last 30 days)	-.079	.560	.064	-.207	.049	-1.229	75	.159

*Significantly different at the $p < .05$ level

CSR: Protective Factors and Treatment Services. Table 10 illustrates client satisfaction at admission and discharge with a variety of protective factors associated with their lives, including their living situation, ability to support their needs, their safety, their family and friends, and spirituality and meaning in life. Only one item was slightly below 5.0 (5.0 = "Satisfied") and that was the item relating to their family situation. This is consistent with the fact that many of them have been referred to Crossings because of "family issues." The highest rated item was for "safety in the home where they sleep," which was 6.42 at admission and 6.26 at discharge (indicating "pleased"). In general, participants in this sample were satisfied or pleased with the various protective factors in their lives at admission and discharge, and the scores were very stable. None of the items were statistically different from admission to discharge indicating their

relative satisfaction with these various protective factors.

Table 10

Client assessment of relative satisfaction with protective factors related to their lives at admission and discharge (based on a scale of 1-Terrible to 7-Delighted)

	Admission			*Discharge*		
Subscale	***N***	***M***	***SD***	***N***	***M***	***SD***
Housing	79	5.66	1.29	76	5.69	1.37
Support basic needs	79	6.15	.988	76	6.11	.873
Safety in home	79	6.42	.886	76	6.25	1.04
Safety outside of home	79	5.72	1.31	76	5.86	1.16
People in life support them	79	5.78	1.47	76	6.00	1.07
Friendships	79	6.00	1.34	76	6.08	1.00
Family situation	79	4.95	1.57	76	5.25	1.39
Spirituality and meaning in life	79	5.29	1.23	76	5.77	1.08
Life in general	79	5.51	1.32	76	5.67	1.19

Table 11 shows the descriptive scores for items that asked the clients at discharge to rate their relative satisfaction with the treatment services they received and the degree to which the services helped them handle daily life, get along with other people, cope with issues in their lives, and their overall quality of life. All items were over 6.0, which indicated that the clients were relatively "pleased" with the services they received and they are better off as a result of the Crossing program and treatment process. The highest rated item was for the overall quality of life item (M = 6.37).

Conclusions and Comparisons of the Y-OQ and the CSR

There are several conclusions that can be made when comparing the Y-OQ and the CSR from the perspective of the assessment of client well-being and when using each instrument in tracking treatment outcome. This comparison should be taken in the context of the written purpose and intent for which each instrument is used. According to Burlingame et al. (2004), the Y-OQ measures the treatment progress for children and adolescents receiving any form of mental health treatment including psychoactive medications. In contrast to traditional diagnostic measures oriented to the measurement of psychopathology, the Y-OQ family of measures was specifically constructed to assess the occurrence of observed behavior or symptom change. The instrument is completed at admission into treatment to establish a baseline level of severity for symptom distress and at later sessions or time periods to track the child's progress. The psychometric calculations from the normative database permit determination of the client's symptom distress similarity at each measurement interval with several normative

populations, including inpatient, outpatient, and community samples. Utilizing cut-scores and a RCI, clinicians, parents, guardians, clients and administrators can determine if and when the client's symptom distress has entered the normal range. The information gleaned from the CSR can be used in two ways: 1) as a supplemental screening device to be coupled with the information obtained in the AST to inform the assessment, and 2) as a baseline measure of a persons' quality of life prior to an assessment and entry into services. This initial CSR can be compared with subsequent CSR's to monitor change over time, thus making the CSR an outcome instrument that links the result of treatment with the treatment intervention. The current version of the CSR examines various domains that are reasoned to be reflective of quality of life. The four broad domains are: 1) Health (Physical, Mental, Substance Use, Harm, and Access to Emergency Services), 2) Safety (Legal Involvement, Domestic Violence, and General Safety), 3) Productive Activity (Employment/School, Other Productive Activities), and 4) Living with Dignity.

Table 11

Client assessment of relative satisfaction with treatment services and the degree to which these services helped them in their lives (Based on a scale of 1-Terrible to 7-Delighted)

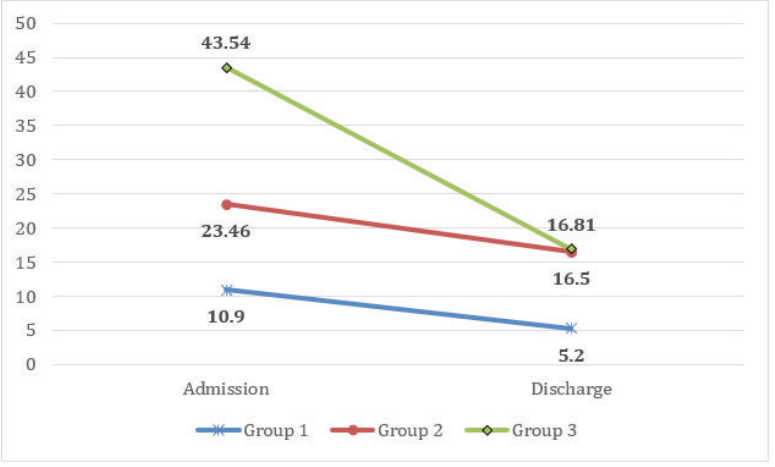
Subscale	***N***	***M***	***SD***
Treated with respect	76	6.20	.817
Provided information about their rights	76	6.30	.766
Helped to choose their treatment goals	76	6.21	1.08
Could ask questions about treatment process	76	6.16	.910
Able to receive services that were needed	79	6.12	.909
Because of services received:			
Better able to handle daily life	76	6.30	.895
Getting along better with other people	76	6.32	.734
Able to cope when things go wrong	76	6.24	.814
Quality of life has improved	76	6.37	.846

The Y-OQ was a useful global index and summary score by which staff and clinicians at Crossings could quickly assess a client's general functioning relative to normative populations as well the client's individual progress in treatment at various points in time throughout treatment. In this manner, staff are conducting ROM which improves clinical outcomes, increases client motivation, and is now considered to be a "best practice" in psychotherapy (Wompold, 2015). The data shows that when clients entered treatment, their scores averaged 28.76, which was statistically similar to juvenile justice samples reported by Burlingame et al. (2005) in Table 1 and similar in pathology to scores reported by Beckstead et al. (2015) on a sample of Native American/Native Alaskan youth in residential treatment. As time progressed, average scores dropped to 14.97 at discharge,

which indicated statistically significant ($t(64) = -8.847$, $p < .001$) and clinically significant improvement during this time period (a drop of greater than 10 points in scores). By taking assessments at various time points during treatment, clinicians and staff can assess the degree to which treatment is having a positive or deleterious effect on the client. In addition, as staff change over from periodic shifts in the field, these assessments can be used to discuss client progress and other clinical notes that would help entering staff become more aware of clients' progress towards treatment goals.

The average Y-OQ score at admission was 28.76, and over 40% of the clients entering treatment had symptomology consistent with inpatient samples, indicated by scores between 33 and 63. This information is useful to communicate with staff in which areas or domains these clients are struggling and highlight the value of critical item indicators (e.g., suicidality and self-harm) and other elements of the Y-OQ that offer information that could be useful for clinicians and staff. When examining treatment progress for these three groups, the group reflecting inpatient sample scores (Group 3; $n = 33$, $m = 43.74$) improved to the same level (a Y-OQ score of ~16 at discharge) as the group indicated by the juvenile justice sample scores (Group 2; $n = 33$, $m = 23.46$). This is an important finding and conclusion in that the treatment process appears to be effective for more seriously symptomatic clients (see Figure 3).

Figure 3



Clients placed into categories of symptom severity based on Y-OQ score at admission illustrated by admission and discharge score change during treatment

There were no apparent differences across male or female clients nor the two ethnicity groups. Similar scores at admission and discharge were noted as well as similar change scores for each demographic. The greatest gains when examining Y-OQ subscales were in Hyperactivity/Distractibility (Effect size *d*

= 1.22), Conduct Problems (Effect size *d* = 1.08), Depression/Anxiety (Effect size *d* = .98), and Somatic Issues (Effect size *d* = .76). These changes correspond to the reasons clients were referred to treatment (see Figure 1) suggesting that the outcomes indicated by the Y-OQ and the treatment process at Crossings are effectuating change in areas important to the clients, their referral sources and their families. The Y-OQ appears to be an effective tool in assessing the subtlety of these changes. Though the data were incomplete, three-month assessments indicated that clients continued to do well at follow-up and outcomes were being maintained from treatment. Follow-up assessment should be continued, with potential demographic information being collected to help interpret outcomes, including use of aftercare, living situation, and other moderators of client well-being post-program.

The CSR appears to be most effective as a pretreatment assessment tool for certain domains and the associated demographic information could be useful to help clinicians and staff better understand a client's history and the amount of protective factors present or not in their lives. For example, the questions asking about housing, safety, etc. can provide important context when considering treatment goals. That said, some of the data generated from this sample didn't seem to connect with the reasons that clients were in treatment. For Question 18: "Family situation," the lowest rated item at admission for this sample was *M* = 4.95, which is "Mixed" according to the reference point. Yet, for this sample, the majority (60.8%) were referred to treatment because of family issues. It would seem logical that the scores at admission would be lower than "Mixed," perhaps "Unhappy" or "Unsatisfied." Given this context, it should also be noted that all other scores at admission and discharge across all of the items in Question 18 were above 5.0, indicating satisfaction, with scores ranging from *M* = 5.29 at admission for "Spiritual and meaning in life" to *M* = 6.42 at admission for "Safety in home." It would be illustrative to compare these scores with other sample populations because at first glance, the descriptive statistics in these domains appear to be relatively standard for an adolescent population in a community sample. These items were not useful for any type of outcome indication, because it would be hard to infer that treatment could have altered these domains, and which was also corroborated by statistical analysis indicating no significant change from admission to discharge on any of the items.

Question 19 (Treatment satisfaction section) is an important and ethically responsible assessment domain, asking clients to assess the treatment services they have received only to be completed at discharge and reflect traditional treatment satisfaction instruments used in addictions and other mental health settings. The clients were, on average, pleased with their services and were treated with respect at Crossings. The items in Question 19 asking clients to assess the degree to which the services had helped them in their daily lives ("better able to handle life," "get along with other people," "cope when things go wrong," and "improved quality of life") correspond to a post-treatment only assessment, which have been shown to be unreliable in the literature due to "post-treatment or experience euphoria."

AN EVALUATION OF ALASKA CROSSINGS

The CSR data offered mixed results across the various domains it portends to assess and in its usefulness as an outcome tool. This conclusion stems from only the data that was generated from this assessment and is not meant to be generalized to other populations and settings. The first issue to note is the reference period that many of the questions were asking clients to consider. Asking an adolescent how many days in the last 30 days that he/she had felt, did, or acted in a certain manner seems to be problematic. It would seem to be extremely challenging for anyone to answer this question accurately. Typical reference periods to assess physical, mental, or emotional health cover seven-day periods at most. Another issue with the CSR as an assessment and outcome device is the rubric used to assess many of the key quality of life items. The respondent is asked to assess whether these items were "not good," across questions related to physical or psychological health. Though all self-report assessments are subjective and open to consideration, having a single reference point of "not good" as opposed to the more reliable and frequently used multiple point (3-, 4-, 5-, 7-point) Likert scaling appears problematic.

Finally, another issue uncovered when examining the CSR is that many of the items or constructs that are being assessed are asking multiple questions within a single item, thus making the referent confusing or misleading. For example, one of the key questions asked the respondent to assess their mental health, described as "emotions, behaviors, or thinking; taking care of yourself, work, or recreation." These are all very different dimensions of how someone may be doing and are typically subdivided to provide more accurate assessment of client well-being (see Y-OQ subscales). How a respondent would address these incongruences within these questions is unclear, lending their accuracy questionable, especially when we consider the issues raised above about "good" and "not good" and the recall period of 30 days.

In making recommendations to Crossings and other programs that utilize instrumentation or assessments that are required by their funders or stakeholders, some important issues could be considered when considering these findings. The CSR was useful in highlighting areas where clients were at risk and determining if treatment was warranted for this highly vulnerable population. The Y-OQ was a useful global index and outcome monitoring tool that is an important component of routine outcome monitoring, which is quickly becoming the standard of care (see Wompold, 2015) and should be continued. Continuing the routine outcome monitoring at Crossings can increase therapeutic communication between clinical and field staff and is a useful tool in helping establish treatment plans and revising and adapting the treatment process to meet client needs. This practice could be adopted by other programs considering implementing ROM. Elements of the CSR that assessed satisfaction of treatment services at discharge should be continued because they appear to be an important and ethically responsible assessment domain. Asking clients to assess the treatment services they have received (perhaps only to be completed at discharge) reflect traditional treatment satisfaction instruments used in addictions and other mental health settings.

Limitations of the study include the relatively small sample size used in analysis, and the fact that no control group was used. Results from this study should not be generalized to other treatment contexts or populations. In addition, though all attempts were made to have data collection efforts be similar for each group and client, there are invariably deviations from this due to unforeseen conditions at admission and discharge, or from scheduling and other field-based anomalies when collecting within program data. Despite these limitations, the following conclusions emerged from this study, which include those developed from analysis of the demographic, Y-OQ and CSR data.

References

Alaska Division of Human and Social Service's Behavioral Health Division (2017). *Client status review*. Retrieved from http://dhss.alaska.gov/dbh/Pages/Performance%MEasures/Default.aspx

Anker, M. G., Duncan, B. L., & Sparks, J. a. (2009). Using client feedback to improve couple therapy outcomes: A randomized clinical trial in a naturalistic setting. *Journal of Consulting and Clinical Psychology, 77*(4), 693–704. doi:10.1037/a0016062

Awad, A. G., & Voruganti, L. N. (2000). Intervention research in psychosis: Issues related to the assessment of quality of life. *Schizophrenia Bulletin, 26*(3), 557-564. doi:10.1093/oxfordjournals.schbul.a033477

Beckstead, D. J., Lambert, M. J., DuBose A. P., & Linehan, M. (2015). Dialectical behavior therapy with American Indian/Alaska Native adolescents diagnosed with substance use disorders: Combining an evidence-based treatment with cultural, traditional, and spiritual beliefs. *Addictive Behaviors, 51*, 84-87. doi:10.1016/j.addbeh.2015.07.018

Bettmann, J. E., Gillis, H. L., Speelman, E. A., Parry, K. J., & Case, J. M. (2016). A meta-analysis of wilderness therapy outcomes for private pay clients. *Journal of Child and Family Studies, 25*(9), 2659-2673. doi:10.1007/s10826-016-0439-0

Bettmann, J. E., & Tucker, A. (2011). Shifts in attachment relationships: A study of adolescents in wilderness treatment. *Child and Youth Care Forum, 40*, 499-519. doi:10.1007/s10566-011-9146-6

Bickman, L., Kelley, S. D., Breda, C., Regina de Andrade, A., & Riemer, M. (2011). Effects of routine feedback to clinicians on mental health outcomes of youths: Results of a randomized trial. *Psychiatric Services, 62*(12), 1423–1429. doi:10.1176/appi.ps.002052011

Boswell, J. F., Kraus, D. R., Miller, S. D., & Lambert, M. J. (2015). Implementing routine outcome monitoring in clinical practice: Benefits, challenges, and solutions. *Psychotherapy Research, 25*(1), 6-19. doi:10.1080/10503307.2013.817696

Bradburn, N. M., Rips, L. J., & Shevell, S. K. (1987). Answering autobiographical questions: The impact of memory and inference on surveys. *Science, 236*, 157–161. doi:10.1126/science.3563494

Burlingame, G. M., Wells, M. G., & Lambert, M. J. (1995). *The Youth Outcome Questionnaire*. Stevenson, MD: American Professional Credentialing Services.

Burlingame, G. M., Wells, G. M., Lambert, M. J., & Cox, J. (2004). The Youth Outcome Questionnaire. In Maruish, M. (Ed). *The use of psychological tests for treatment planning and outcome assessment* (3rd ED.). Lawrence Erlbaum.

Burlingame, G.M., Wells, M.G., Lambert, M.J., Cox, J., Latkowski, M., & Justice, D. (2005). *Administration and scoring manual for the Youth Outcome Questionnaire (YOQ.2.2)*. Salt Lake City, UT: American Professional Credentialing Services.

Carlier, I. V. E., Meuldijk, D., Van Vliet, I. M., Van Fenema, E., Van Der Wee, N. J. a, & Zitman, F. G. (2012). Routine outcome monitoring and feedback on physical or mental health status: Evidence and theory. *Journal of Evaluation in Clinical Practice, 18*(1), 104– 110. doi:10.1111/j.1365-2753.2010.01543.x

Christensen, N. E. (2008). Effects of wilderness therapy on motivation and cognitive, emotional, and behavioral variables in adolescents (Doctoral dissertation). University of Kansas, Lawrence, KS.

Crawford, S. L., Johannes, C. B., & Stellato, R. K. (2002). Assessment of digit preference in self-reported year at menopause: Choice of an appropriate reference distribution. *American Journal of Epidemiology, 156*, 676 – 683. doi:10.1093/aje/kwf059

DeMille, S. M., Comart, C., & Tucker, A. (2014). Body composition changes in an outdoor behavioral healthcare program. *Ecopsychology, 6*(3), 174-182.

Duncan, B. L. (2012). The Partners for Outcome Management System (PCOMS): The heart and soul of change project. *Canadian Psychology/Psychologie Canadienne, 53*(2), 93. doi:10.1037/a0027762

Evidence-based practice in psychology. (2006). *American Psychologist, 61*(4), 271-285. doi:10.1037/0003-066X.61.4.271

Gass, M.A., Gillis, H.L., & Russell, K.C. (2012). *Adventure therapy: Theory, research, & practice*. New York, NY: Routledge.

Hagan, J. D. (2002). An alternative therapy for the behaviorally challenged youth: The efficacy of wilderness therapy programs (Doctoral dissertation). The University of Toledo, OH.

Hammersley, R. (1994). A digest of memory phenomena for addiction research. *Addiction, 89*, 283–293. doi:10.1111/j.1360-0443.1994.tb00890.x

Hawkins, E. J., Lambert, M. J., Vermeersch, D. a., Slade, K. L., & Tuttle, K. C. (2004). The therapeutic effects of providing patient progress information to therapists and patients. *Psychotherapy Research, 14*(3), 308–327. doi:10.1093/ptr/kph027

Hessel, P. A. (1986). Terminal digit preference in blood pressure measurements: Effects on epidemiological associations. *International Journal of Epidemiology, 15*(1), 122–125. doi:10.1093/ije/15.1.122

Hoag, M.J., Massey, K.E., Roberts, S.D., & Logan, P. (2013). Efficacy of wilderness therapy for young adults: A first look. *Residential Treatment for Children & Youth, 30*, 294-305. doi:10.1080/0886571x.2013.852452

Howard, K. I., Moras, K., Brill, P. L., Martinovich, Z., & Lutz, W. (1996). Evaluation of psychotherapy. *American Psychologist, 51*(10), 1059–1064. doi:10.1037/0003-066X.51.10.1059

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*(1), 12. doi:10.1037/0022-006X.59.1.12

Lambert, M. J. (2007). Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. *Psychotherapy Research, 17*(1), 1–14. doi: 10.1080/10503300601032506

Lambert, M. J., & Shimokawa, K. (2011). Collecting client feedback. *Psychotherapy, 48*(1), 72–79. doi:10.1037/a0022238

Levant, R. F., Barlow, D. H., David-, K. W., Hagglund, K. J., Hollon, S. D., Johnson, J. D., … (2006). APA presidential task force on evidence-based practice: Evidence-based practice in psychology. *American Psychologist, 61*(4), 271–285. http://doi.org/10.1037/0003- 066X.61.4.271

McPherson, R.S., Hoelscher, D.M., Alexander, M., Scanlon, K.S., Serdula, M.K. (2000). Dietary assessment methods among school-aged children: Validity and reliability. *Preventive Medicine, 31*(2) S11–S33. doi:10.1006/pmed.2000.0631

Norcross, J.C. (2002). Empirically supported therapy relationships. In J.C. Norcross (Ed.), *Psychotherapy relationships that work: Therapist contributions and responsiveness to patients* (pp. 3-16). New York: Oxford University Press.

Roberts, S. D., Stroud, D., Hoag, M. J. and Combs, K. M. (2016). Outdoor behavioral health care: Client and treatment characteristics effects on young adult outcomes. *Journal of Experiential Education 39*(3), 288-302. doi:10.1177/1053825916655445

Russell, K.C., Gillis, H.L. & Lewis, T.G. (2008). A five-year follow-up of a survey of north American outdoor behavioral healthcare programs. *Journal of Experiential Education, 31*(1), 55-77.

Shiffman, S., Stone, A. A., & Hufford, M. (2008). Ecological momentary assessment. *Annual Review of Clinical Psychology, 4*, 1–32. doi:10.1146/annurev.clinpsy.3.022806.091415

Shimokawa, K., Lambert, M. J., & Smart, D. W. (2010). Enhancing treatment outcome of patients at risk of treatment failure: Meta-analytic and mega-analytic review of a psychotherapy quality assurance system. *Journal of Consulting and Clinical Psychology, 78*(3), 298–311. doi:10.1037/a0019247

Shryock, H. S., & Siegel, J. S. (1976). *Methods and materials of demography*. New York: Academic Press.

State of Alaska Department of Health and Social Services-Division of Behavioral Health (DBH). (2011). *Alaska Screening Tool FY2011 and initial client status review FY2011: Supporting clinical decision making and program performance measurement.* Retrieved from http://dhss.alaska.gov/dbh/Pages/Performance%20Measures/Default.aspx

Substance Abuse and Mental Health Services Administration, Office of Applied Studies. (2008). *Mental health service use among youths aged 12 to 17: 2005 and 2006*. Rockville, MD: Substance Abuse and Mental Health Services Administration, Office of Applied Studies.

Sundet, R. (2010). Therapeutic collaboration and formalized feedback: Using perspectives from Vygotsky and Bakhtin to shed light on practices in a family therapy unit. *Clinical Child Psychology and Psychiatry, 15*(1), 81–95. doi:10.1177/1359104509341449

Sundet, R. (2012). Therapist perspectives on the use of feedback on process and outcome: Patient-focused research in practice. *Canadian Psychology/ Psychologie Canadienne, 53*(2), 122–130. doi:10.1037/a0027776

Sundet, R. (2013). Postmodern-oriented practices and patient-focused research: Possibilities and hazards. *Australian and New Zealand Journal of Family Therapy, 33*(04), 299–308. doi:10.1017/aft.2012.38

Timimi, S., Tetley, D., Burgoine, W., & Walker, G. (2012). Outcome Orientated Child and Adolescent Mental Health Services (OO-CAMHS): A whole service model. *Clinical Child Psychology and Psychiatry, 18*(2), 169–184. doi:10.1177/1359104512444118

Wampold, B. E. (2015). Routine outcome monitoring: Coming of age—With the usual developmental challenges. *Psychotherapy, 52*(4), 458-462.

Wells, M. G., Burlingame, G., Lambert, M. J., Hoag, M., & Hope, C. (1996). Conceptualization and measurement of patient change during psychotherapy: Development of the Outcome Questionnaire and Youth Outcome Questionnaire. *Psychotherapy: Theory, Research, Practice, Training, 33*(2), 275-283. doi:10.1037/0033-3204.33.2.275

Willie, J. (2017). Harvard Pilgrim sued over wilderness therapy coverage. *Pension and Benefits Daily*. Retrieved from https://www.bna.com/harvard-pilgrim-sued-n73014450999/?amp=true.

The Confounding Variable: Working with Shame in Young Adults in a Holistic Treatment Model

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Abstract

This article covers the intersection between shame and young adults in the context of therapeutic schools and programs. Shame is often misunderstood in symptomology of young adult clients because of outdated frameworks of human development and a lack of education in shame-related behaviors. A holistic treatment model is an effective strategy for resolving shame in conjunction with the presenting treatment issue. Shame can be a formidable barrier to treatment and must be addressed intelligently and holistically in individual therapy and programming. This article introduces a framework for understanding the neurological phase of development of young adults and its implications for shame related behaviors and how to address them in an effective way in the program setting. It advocates for the need for clinicians and direct-care program staff to have training in shame-informed treatment to increase the efficacy of therapeutic interventions and limit clients leaving treatment programs early due to shame related behaviors. The article also reviews research about specific shame-behaviors that arise in the therapeutic relationship with clinicians and direct-care staff and how to respond skillfully. Specific programmatic schema that tie together young adult development, shame, program staff, and treatment concerns are explored.

Keywords: Shame, young adulthood, neuroscience, holistic treatment

ISSN 2469-3030 online DOI: 10.19157/JTSP.issue.10.01.07

THE CONFOUNDING VARIABLE

Shame is one of the most ubiquitous emotional and behavioral issues found in residential treatment programs. Clients participating in residential or outpatient treatment are more prone towards shame than the general population and to having shame reactions to clinical interventions (Jones, 2014). It crosses diagnoses and behavioral patterns and is myriad in its presentation in clients. Although shame is a fundamental human emotion (Hahn, 2004), it can often take the form of dysfunction and abnormal behavior in clients. In a treatment setting, this type of shame and resulting reactions can complicate the therapeutic process and lead to misdiagnosis and to clients prematurely discharging from treatment programs. Shame has been shown to be a predictor of pathological symptoms and has been linked to multiple mood disorders including depression, phobias, bipolar, and eating disorders (Cândea & Szentágotai, 2013). Shame is often misunderstood in young adults and, as a result, mistreated, within the context of therapeutic schools and residential treatment settings. This is largely due to program staff not understanding that young adults are going through a complicated phase of emotional and neurodevelopment that intersects with shame in a unique way. Without the appropriate frame of reference shame can trigger countertransference in clinicians, program leaders, and front-line staff, which leads to unskillful action. This misunderstanding creates a trickle-down-effect that begins with a shame behavior from a client and ends with reacting in ways that subvert or sabotage the individual's treatment and even the milieu of clientele. This requires the focus of program staff to accurately assess the interpersonal dynamics and behaviors of clients and turn the focus towards themselves to serve the greater interest of their clients. It is essential that older models of shame (Bradshaw, 1988) and human development (Erikson, 1950, 1964), which hold merit in and of themselves, be integrated into the latest research of holistic treatment, neuroscience, and somatic approaches into the residential treatment setting. These findings provide a more robust and sophisticated understanding of shame in young adult clients and therefore enhance services provided in treatment settings.

Defining the Phase of Young Adult Development

To understand the role and impact of shame in young adults it is paramount to understand their stage of development. Advances in neuroscience have updated the previous standard-bearer theory of human development originated by Erickson (1950, 1964). More recent research has revealed that this theory is incomplete in understanding the developmental phase of young adults. The Eriksonion view of adolescence is that it is largely summarized as the quest for identity and has an age range of 12-18 years old. Young adulthood is postulated as the search for love and intimacy and given the range of 18 – 40 years old. The Eriksonian model of human development has merit as the task for identity development and social connections are core features of this phase but is an insufficient educational understanding for program staff.

The developmental phase of young adults (18-25 years old) is now recognized as late adolescence despite the societal attribution of adult status and decision-making ability (Siegel, 2013). The hallmarks of late adolescence in

terms of neurological development include outwards behaviors such as fluidity in identity, increased risk-taking behaviors, seeking out novel experiences, and social exploration. Siegel (2013) describes a specific feature of this period as "hyper-rational thinking" (p. 69) in which danger is downplayed and excitement is amplified. The dopaminergic system provides more rewarding returns for novelty than the mature adult-brain. The adolescent brain is undergoing a period of pruning existing neuronal structures and establishing myelin sheath in parts of the brain for faster functioning (Siegel, 2014). This process can be accelerated with stress. This stress would then take the form of increasing the propensity towards risk-taking behaviors, the desperation in forming identity and novelty seeking. It is also thought that this pruning process could explain why some major psychiatric disorders do not fully manifest until later stage adolescence (18-25 years old), a phenomenon that is regularly encountered in young adult programs.

Many administrators, clinicians, and direct-care staff members in therapeutic schools and programs likely have had minimal education on this topic and/or attended universities when the Ericksonian model was the predominate understanding of young adult development and shame. A potential consequence is that they could interpret client behaviors inaccurately and provide inappropriate treatment interventions. One example is that if a young adult client makes an impulsive decision to date a same-aged peer, in the old paradigm this could be viewed as entitlement, defance, or risk-taking. This is actually an appropriate behavior developmentally (which is not to say that it should not be addressed therapeutically). If the treatment team administers an inappropriate intervention it could add to the shame, stress, and cortisol level of the client and increase the propensity towards hyper-rational thinking and risk-taking behavior (Sapolsky, 1994). Conversely if a client is overly-compliant during the treatment process it could indicate that they are not meeting necessary developmental milestones such as novelty seeking and identity development. It is convenient for programs to not address this behavior as it is easy to manage in the treatment milieu but it could be argued that it is just as destructive to the long-term health of the client as acting-out behaviors. It is the responsibility of programs to reframe behaviors through an accurate lens and educate their staff members across levels of practice.

It should be noted that culture and societal expectations have a substantial impact on defining young adulthood and a sense of self-worth (Gilbert & Miles, 2000). An anonymous former client at a young adult transitional program stated, "…as we become more self-aware, we question why we don't fit into these molds of who society thinks we should be. This is the breeding ground for shame-'why am I not who I am supposed to be?'" The sentiment here is clear. Cultural messaging and expectations, which are often incongruent with a young adult's experience of self, can result in shame and low self-worth.

THE CONFOUNDING VARIABLE

Working Definition of Shame

Shame is among the first emotions experienced in the human lifespan (Hahn, 2004). It is interpreted through body language that indicates that a person's behavior is not acceptable. Shame is not destructive per se, it is a foundational human emotion and is intelligent in its function. Bradshaw (1988) describes the importance of shame to personal development in his book, *Healing the Shame that Binds You* using the analogy of cholesterol. This analogy suggests that there is a healthy amount of shame beyond which becomes destructive to a person's life. As an infant experiences shame through non-verbal cues of disapproval, they begin to distinguish appropriate from inappropriate behavior. Shame can be understood as the regulator of appropriateness and expression of self-managed by the emotional and physical experience of the individual.

Communicating such messages is vital to social functioning and living within the context of societal structures throughout the life cycle. This experience of shame is integrated into the memory function through a process called implicit or emotional memory (Levine, 2010). Implicit memory is unconscious and is based largely in the body which makes things such as walking, riding a bike, or playing an instrument feel as though they can be picked up easily despite not having been practiced for some time. Implicit memory is often cued through somatic markers that trigger physiological responses; for example, walking activates certain muscle groups and the vestibular system when a person stands up. Shame can be triggered through somatic markers or interpersonal dynamics rooted in previous experiences in which a shame reaction was evoked. At times this can be subtle such as taking a cue that a person forgot a work assignment and they have a flushed response of shame or embarrassment as a somatic marker. In clinical settings, somatic markers often link to larger and more complex past experiences.

This discussion of shame would be incomplete without stating that shame is an efficacious emotion and not having a healthy sense shame can be as destructive to a person as having too much. Brown (2008) stated, "85% of the men and women interviewed remembered a shame experience in school or sports that has had a tremendous impact on them as adults" (Post #5). This exemplifies the positive outcome of healthy amounts of shame in the formation of behavior patterns and identity. Treatment programs that seek to eradicate shame or view it as completely 'bad' would be misinformed. For the purposes of this paper, the focus will remain on the phenomenon of unhealthy shame, as this is the more common and complicating treatment issue.

Shame can be divided into two main categories: shame that is internally derived through negative self-evaluation and shame that is external and manifested through the fear of judgment of others (Cândea et al., 2013). Shame reaches an unhealthy or "toxic" (Bradshaw, 1988, p. 21) level when whole parts of the self are deemed unacceptable. Burton (2015) stated, "shame derives from 'to cover', and is often expressed by a covering gesture over the brow and eyes, downcast gaze, and a slack posture" (p. 38). This description shines light on the somatic marker of a shame experience. People with unhealthy shame, 'cover'

themselves with substances, self-harm, compulsions, relationships, lashing out or any other behavior that distances them from their discomfort. Unhealthy shame can be conceptualized as any amount of shame that becomes too much for a person to experience. As a result, they will use the behaviors listed above (and many more) to avoid this feeling. Unhealthy shame also sends the message to the person that there are parts of them that are defective and will repulse anyone that sees these parts. This can lead to compartmentalization in an attempt to hide these shamed parts from others and from the ego. Furthermore, compartmentalization can also be described as dis-integrating the self emotionally, neuro-biologically, and mentally (Siegel, 2013). Siegel (2014) has asserted that almost every diagnosable form of mental illness can be understood as chaos or rigidity, or a combination of the two. What may be understood to be an existing mental health issue could be entirely shame-based or seriously compounded by shame and shame-reactions throughout the development process.

For the sake of brevity, this paper focuses specifically on attachment theory in the context of human development and the cultivation of shame, although between shame and attachment the overlaps are substantial and clinically significant (Sroufe & Siegel, 2011). This is most applicable in the case of interpersonal neurobiology and implicit memory (Levine, 2010). Mental health professionals should also understand the deeper and more attachment-oriented messaging that is sent through decision-making, verbal and non-verbal interactions, and the impact these have on clients. Although much of the research is geared towards the attachment relationship with therapists this is exceptionally important with the work that direct-care staff members are doing with clients. This is a unique aspect of therapeutic schools and programs that is not accounted for in much of the existing research about the therapeutic relationship. A young adult client will spend the majority of their time with direct-care staff during their stay at treatment programs and will most likely develop the strongest attachment bonds with a select few staff members. These relationships may prove to be some of the most healing and restorative for clients. Shame will undoubtedly be a challenge in developing these healthy attachments.

Presentation of Shame in Young Adults

Shame can be varied in the way it presents in clients between their personality structures, family histories, and many other factors. Black, Curran and Dyer (2013) identified four primary shame coping styles (differentiated from types of shame) as attacking oneself, attacking others, withdrawing, and avoiding. Clients that are more likely to attack themselves may take this action internally through critical thought patterns or by outward behaviors that are self-destructive in nature such as self-harm or substance use. The outward manifestation of attacking others includes verbally or physically lashing out and puts the focus on the 'other' as the source of the discomfort. This offensive measure protects the ego from the belief that there could be something wrong with it and can thus be viewed as a form of denial. Although they may appear similar outwardly, withdrawing can be differentiated from avoidance in that withdrawing does not ignore shame. Withdrawing internalizes shame and

involves turning away from others. Avoidance on the other hand involves ignoring feelings of shame and includes behaviors that assist the person in turning away from it.

People are not limited to having one specific type of shame coping style (Black et al., 2013). An individual's shame coping style can vary given different interpersonal dynamics and available resources. These coping styles are also influenced and can be intensified as young adults are going through a period of neuro-biological development as discussed above in Siegel's (2013) work. Young adults in treatment programs are more prone to shame and therefore more likely to have shame reactions in treatment than the general population (James, 2014). This means that their shame coping reactions are going to be intensified and result in bigger behaviors as hyper-rational thinking is increasing the reward for excitement and downplaying danger. This is especially relevant to attacking oneself and attacking others. Shame can also impact a young adults' ability to develop meaningful relationships in their personal lives and with mental health professionals (Boersma, Håkanson, Salomonsson, & Johansson, 2015). This can be seen through shame-prone clients not becoming vulnerable in their relationships, keeping others at an emotional distance, and sabotaging relationships through acting out in different shame coping styles. They are also more likely to have low self-esteem, which becomes reinforced by shame and shame related behaviors (Burton, 2015). Low self-esteem is an interrelated but separate treatment issue and can be a barrier in relationship development in itself.

Hollis (personal communication, January 15, 2016) describes the term, "hamartia", as "seeing the world through a distorted lens and making decisions based on this". Hamartia encapsulates the process of shame in young adults and the resulting maladaptive behavior. This template is left psychologically and in the physiology of the individual (Levine, 2010). This imprint and resulting cognitive distortions, somatic markers, and mood disruptions are linked with diagnosable pathological mental health symptoms and can result in misdiagnosis.

The Relationship Between Trauma and Shame

To add further nuance to the presentation of shame in young adult programs, the relationship between trauma and shame should be mentioned. Trauma can result in shame and rigidity for many reasons (Van der Kolk, 2015). The way a person reacted when in a traumatizing situation can be a source of shame. Physical and sexual abuse can create body-based shame. These two examples lightly touch the surface of the depth of relationship between trauma and shame in young adults. A client could present in a treatment milieu with avoidant behaviors after a therapy group in which another client was making a joke about a physical fight they had with a sibling as a child. Unbeknownst to the rest of the treatment group, the avoidant client experienced sexual abuse from a sibling during childhood. The resulting avoidant behavior could be a shame-response based on an unresolved traumatic memory. Professionals must distinguish shame responses that are intermingled with trauma and respond skillfully or could provoke a further trauma response and possibly re-traumatize the client.

Treating Shame

Siegel (2014) describes integration as, "the linkage of differentiated parts of a system—as the mechanism beneath health. With integration, harmony is created" (para. 9). Integration is the goal that is being sought in young adult treatment. He goes on to say, "Integration creates the possibility of regulation— of attention, mood, emotion, thought, social interactions, and behavior. And much recent research supports this notion that impaired integration in the brain is at the root of many psychiatric disturbances" (Siegel, 2014, para. 10). This raises the question: how do you promote integration in young adults that are mired in treatment-resistant shame?

Treating Shame in Individual Therapy

The way a therapist or program staff assesses and consequently responds to the first presentation of shame in a therapy session is pivotal to the course of treatment and sets the initial conditions for the therapeutic alliance (Johnson, 2006). If handled unskillfully this will prove to be destabilizing to the client. Shame should be spoken about regardless of the content. If it is not, it will often have the effect of sabotaging treatment (Rodgers, 2011). Acknowledging shame and staying present for the emotional experience of the client begins to plant the seeds of cohesion and integration. One of the trademark symptoms of shame is inhibition in most areas of life and in the therapy relationship. Acknowledging shame allows for inhibition to be softened over time and restores a sense of fluidity to the experience of self.

Shame inherently creates compartmentalization and is destructive to movement towards integration in individual therapy in programmatic settings. Clients with deep-rooted shame will make efforts, often unconsciously, to sabotage the therapeutic relationship (Hahn, 2004). This is done as a self-protective mechanism to prevent further emotional suffering and, ironically, it hinders any possibility of healing the wounded parts that result in shame. Withdrawal and attack are the two forms of shame coping styles that are most destructive to the therapeutic alliance (Black et al., 2013). Withdrawal and attack are two ends of the spectrum of self-defense for the client. The damage to the therapeutic relationship is twofold in that it keeps the therapist from probing deeper into uncomfortable material and through the countertransference that is elicited in the therapist or staff member from these responses. Countertransference will be spoken to more directly later in this article.

Hahn (2004) found that clients that presented with withdrawal as their primary shame response should not be confronted directly about this coping strategy as it can result in further shame and withdrawal. This is especially true of young adults as they are in the period of brain development in which myelination is increasing the speed of neurological responses and they are more prone towards self-consciousness in general (Siegel, 2013). It should instead be handled tactfully by calmly staying with the emotional experience of the client and allowing them to self-disclose and indirectly drawing their attention to the

resulting behavior without judgment. The therapist should not avoid the shame since avoidance on the part of the therapist is counter-productive to working with a shame response. The behavioral purpose of attacking the therapist or staff person as a shame coping strategy is to have the helper retreat and avoid the content or part of self that preceded the attack. Again, the phase of neurological development should be considered in that an attack response in young adults could result in more exaggerated behaviors than in the general population not in treatment programs or adults in general. The impulse of the therapist may be to withdraw but this has been identified as the least helpful response of the therapist for clients with shame-related symptoms (Dorahy, Gorgas, Hanna, & Wiingaard, 2015). Clients reported that the most effective response to an attack response was to acknowledge the feelings of shame without confronting too directly and to strategize ways to help the client manage feelings of shame. Confronting an attack too directly in this case means pointing out that the attack stemmed from feelings of shame.

It may come as no surprise that the therapeutic alliance has been shown to be integral in working with shame in individual therapy (Farber, Berano & Capobianco, 2004). Clients self-disclosing feelings of shame and resulting behaviors is paramount in working to resolve shame. Self-disclosure has been shown to be the most impactful way of clients being able to break through the rigidity of shame and access the underlying source of these feelings. Self-disclosure also promotes self-efficacy on the part of the client and fosters a level of trust with the clinician. Clients who are able to develop a secure attachment with the helper and begin to restore a sense of autonomy in their self are more likely to self-disclose. Developing a secure attachment with a client can serve as a tool for subverting unhealthy shame in and of itself (Sherry, 2007).

The relationship creates a template for regulation within the dyad and then is able to be transferred as self-regulation (Badendoch, 2008). At this juncture, clients open themselves up to the possibility of a corrective experience if the clinician is able to provide an accepting and non-judgmental environment through their own meta-communication and choice of language. Cozolino (2014) posits in his discussion of the social synapse that every interaction a therapist has with a client is impacting their biological state and the long-term development and construction of their neuronal system. The relationship per se is regulating and a vehicle towards integration and the diminishment of inhibition. Levine (personal communication, January 7, 2017) stated: “one needs to work with both the relationship and the trauma to heal shame.”

One of the biggest challenges in working with the shame of clients is that subsequent behaviors will trigger shame of those people working with them (Hahn, 2004). There is a clear point of emotional reference for clinicians. Therapists have reported feelings of inadequacy when their clients stagnate in therapy due to shame, inhibition, and shame responses. As it turns out, therapists can also have their own shame responses towards a client from this experience. Clinicians need to have a keen sense of their own feelings and ownership if they are feeling shame or inadequacy in response to a client. If they are not

able to work through their own feelings of shame independently they should bring this to clinical supervision or their own personal therapy. Not addressing the issue of countertransference in relation to shame will likely add to the stagnation in treatment and significantly could compound the issue. The same applies for direct-care staff and program leaders. This becomes increasingly important as direct-care staff often have more individual time with clients and the consequences of unacknowledged countertransference will become more detrimental with a greater number of interactions.

To be impacting the various levels of shame in the human system individual therapy should incorporate some element of somatic psychotherapy that is oriented towards body awareness and expression. Implicit memory, which is emotionally and somatically oriented, is the holder of shame responses and resulting behavioral patterns (Levine, 2010). Working at the level of cognition and traditional talk therapy is uni-faceted and is not able to access the deeper roots of shame, which is to say in the limbic system, brain stem and nervous system. Somatically oriented psychotherapy further increases the possibility of integration and harmony within the human system. The research base is becoming more robust in supporting somatic psychotherapy (Van der Kolk, 2014). In speaking to the perspective of interpersonal neurobiology, Badendoch (2008) uses the term, "body-brain-mind" (p. 21), to describe the nature of the full and dynamic human system. Shame must be approached at the levels of cognition, emotion, somatic, and relationally.

Treating Shame in the Context of Programming

According to Van der Kolk (2015), the most important prompts in trauma therapy are "what are you noticing now" and "what happens next" (p. 210). These questions also apply to working with unhealthy levels of shame as they present issues of rigidity, inhibition, acting out, and an inability to stay present for uncomfortable emotional and physiological experiences. These questions were also developed in the context of the individual therapy relationship. To effectively work with shame at a holistic level, programmatic design should be tailored to work in concert with the therapeutic process and bolster a client's ability to answer these questions. Ideally a client entering a therapeutic program would have a more primitive answer and felt experience to these questions than they would at discharge. This is a long process that takes place over time and with a confluence of factors that exist outside of the therapy office. For a program to be skillful in working with shame it should provide services that promote emotional, relational, cognitive, and somatic health in addition to accurately diagnosing shame and working with countertransference.

It would be unreasonable to believe that young people can heal from trauma, addiction, or symptoms of mental illness if they are unable to feel their emotions and inhabit their body (Moore, 2016). The onus is on therapeutic programs to support young adults to become more embodied and able to withstand the wellspring of emotions that is late adolescence. Hollis (2016) asserts that the emotional experience of an individual is 90% history and 10% reality. This is an

important consideration in understanding and assessing the way a client presents emotionally in a treatment setting.

Using Mindfulness to Treat Shame

Mindfulness practices such as meditation and yoga have been proven to increase interoception, emotional regulation, and reactive behavior patterns such as shame responses (Van der Kolk, 2015). These are examples of what is known as a 'bottom-up' approach to restoring health and wellness to an individual. A bottom-up approach to working with shame means addressing shame in the nervous system, brain stem and limbic system. Mindfulness and body-based practices can take many forms and are not limited to yoga and traditional sitting meditation. Any practice that promotes interoception, body-awareness, and 'sitting with the self' through emotions and physical sensations will support integration within the system. This can be applied to programming in creative ways. Remembering that the young adult phase of development welcomes novelty, it can also be laden with a hyper self-consciousness that can create a simultaneous desire to try new practices and a resistance to embarrassing the self. Not to mention trying new things that the client will find challenging at the novice phase. This resistance is developmentally appropriate and asks for program developers to find approachable of incorporating these practices into program structure that generate client investment.

Another facet of promoting emotional health and communication into a program is accurately assessing shame and recognizing countertransference. Program leaders, clinicians, and direct-care staff members need a general awareness of shame responses, recognizing them and not mis-treating young adults. As previously stated, the initial conditions of a clinician addressing a shame response are crucial to the therapeutic trajectory of the client (Johnson, 2006). It is more likely for a client's first shame response to be outside of the therapy office and with a direct care staff person. If this is not handled appropriately it could escalate the response and result in the client leaving treatment early regardless if they were an appropriate fit for the program or not. Education for program staff members at all levels of the organization about shame will limit reactivity from clients and result in fewer early discharges from programs.

Challenges in Working with Shame within Programs

Programs should make room structurally for shame and this stage of human development. The aspects of late adolescence such as novelty seeking, hyper-rational thinking, identity development and even some level of defiance are all part of a healthy developmental process. Rigidity in program design can prove to be a barrier to healthy development of young adults. Program design and decision-making by staff members should include room for young adults to fail and make mistakes. Being more rigid or rule-focused as a program is more convenient for program staff members than for the growth of clients. Holistic treatment includes individualizing a client's program and being able to recognize

the developmental and emotional needs of the client. This can be a difficult balance to hold as young adults also need enough structure in which they can trust in order to open themselves to their therapeutic work. They are also moving towards individuation and a tightly held program structure can impede the developmental arc. Shame can produce reactivity from the client in acting out against program rules and expectations.

Clients in treatment programs are more prone towards shame and feeling 'shamed' than the general population (Jones, 2014). This is important to consider when making decisions as a program team about a client's treatment or in response to a client's behavior, particularly a shame-based behavior. Programmatic interventions should be filtered through the multiple lenses of attending to the attachment system, confronting the behavior and shame responses in a way that is non-judgmental, and promotes ownership on the part of the client. Examples of these considerations include choosing carefully the person who will be communicating a program decision, where the communication will take place, what language is used, and even the placement of program staff members in the seating arrangement. Confronting a client's behavior can be delivered in a manner that continues to build the therapeutic relationship with program staff members if done tactfully and expressing care for the client.

Although much of the research in the previous section was aimed at treating clinicians in individual therapy, many of the same principles apply to program staff at all levels. Clients are more impacted by the quality and trust in a therapeutic relationship than they are by the level of education of their therapist. The most transformative and healing relationships for clients often are ones developed between the client and direct care staff. Unhealthy shame is directly opposed to the creation of these types of connections. Shame causes emotional suffering to endure and grow, this cycle prevents clients from creating warm and authentic relationships (Boersma et al., 2015). Nurturing the attachment system of the client creates healing and promotes regulation (Badendoch, 2008). Programs should have a cognizance of this process and embed opportunities for connection and relationship with several members of the program staff team. Programming that is designed to have multiple staff members at different levels of the organization attend to the attachment system of the client and provide stability as the client works through shame related symptoms that will disrupt singular therapeutic relationships throughout the course of treatment.

Conclusion

Treating shame in young adults is complex and entails holding multiple perspectives of the person and their behavior. More recent findings in neuro-biological development of late adolescence reveals more about the presentation of shame in young adults and implications for working with shame effectively. Excessive shame creates tenuous treatment conditions for young adults as it is in direct opposition to integration and restoring health. Shame responses will inevitably arise in individual therapy and in the program milieu. These must

be assessed accurately through the intersections of the clinical presentations of shame and the developmental period of young adulthood. Avoidance, withdrawal, or excessive confrontation from clinicians or program staff can exacerbate shame reactivity from clients and promote disengagement from treatment. Rather, taking the approach of staying present with clients through shame presentations and directly addressing behavior in a non-judgmental way will invite self-disclosure and integration.

Shame impacts young adults at every level of their personal experience and holistic treatment needs to meet the client at each of these levels through comprehensive programming. Education about shame and shame responses is needed for clinicians and program staff members to receive these behaviors in a way that promotes integration for the client. Bradshaw (1998) describes shame as the essence of human spirituality. When it is drawn back into balance in young adults it can serve as a tool to aid personal and identity development. Shame in itself has benefit to the individual if it is held in balance. It is imperative that program personnel factor shame into the treatment process with intelligence and skill in service to the individuation of young adult clients.

References

Badendoch, B. (2008). *Being a brain-wise therapist: A practical guide to interpersonal neurobiology*. New York: W.W. Norton & Co.

Black, R. A., Curran, D., & Dyer, K. W. (2013). The impact of shame on the therapeutic alliance and intimate relationships. *Journal of Clinical Psychology, 69*(6), 646-654. doi:10.1002/jclp.21959

Bradshaw, J. (1988). *Healing the shame that binds you*. Deerfield Beach, Florida: Health Communications Inc.

Brown, B. (2008). *Blog series: Understanding shame*. Retrieved from http://brenebrown.com/2008/07/01/200871blog-series-understanding-shame-html/

Boersma, K., Håkanson, A., Salomonsson, E., & Johansson, I. (2015). Compassion focused therapy to counteract shame, self-criticism and isolation. A replicated single case experimental study for individuals with social anxiety. *Journal of Contemporary Psychotherapy, 45*(2), 89-98. doi:10.1007/s10879-014-9286-8

Burton, N. (2015). *Heaven and hell: The psychology of the emotions*. Devon, United Kingdom: Archeron Press.

Cândea, D., & Szentágotai, A. (2013). Shame and psychopathology: From research to clinical practice. *Journal of Cognitive and Behavioral Psychotherapies, 13*(1), 101-113.

Cozolino, L. J. (2014). *The neuroscience of human relationships: Attachment and the developing social brain*. New York: W.W. Norton & Co.

Dorahy, M. J., Gorgas, J., Hanna, D., & Wiingaard, S. U. (2015). Perceptions of therapist responses to shame disclosures by clients: A quasi-experimental investigation with non-clinical participants. *Counseling and Psychotherapy Research, 15*(1), 58-66. doi: 10.1080/14733145.2013.866971

Erikson, E. (1950). *Childhood and Society*. New York: Norton.

Erikson, E. (1964). *Insight and Responsibility*. New York: Norton.

Farber, B. A., Berano, K. C., & Capobianco, J. A. (2004). Clients' Perceptions of the Process and Consequences of Self-Disclosure in Psychotherapy. *Journal of Counseling Psychology, 51*(3), 340-346.

Gilbert, P., & Miles, J. (2000). Sensitivity to social put-down: Its relationship to perceptions of social rank, shame, social anxiety, depression, anger and self-other blame. *Personality and Individual Differences, 29*, 757-774. doi:10.1016/s0191-8869(99)00230-5

Hahn, W. K. (2004). The Role of Shame in Negative Therapeutic Reactions. *Psychotherapy*: *Theory, Research, Practice, Training, 41*(1), 3-12. doi:10.1037/0033-3204.41.1.3

Johnson, A. (2006). Healing shame. *The Humanistic Psychologist, 34*(3), 223-242. doi:10.1207/s15473333thp3403_2

Jones, C. M. (2014). Why persistent offenders cannot be shamed into behaving. *Journal of Offender Rehabilitation, 53*(3), 153-170. doi:10.1080/10509674.2014.887604

Levine, P. A. (2010). *In an unspoken voice: How the body releases trauma and restores goodness*. Berkeley: North Atlantic Books.

Moore, B. (2016). *Finding a new tribe: Helping young men heal from childhood sexual abuse and addiction*. Las Vegas, Nevada: Central Recovery Press.

Rodgers, N. (2011). Intimate boundaries: Therapists' perception and experience of erotic transference within the therapeutic relationship. *Counseling and Psychotherapy Research, 11*(4), 266-274. doi:10.1080/14733145.2011.557437

Sapolsky, R. M. (1994). *Why zebras don't get ulcers: A guide to stress, stress related diseases, and coping.* New York: W.H. Freeman.

Siegel, D. J. (2013). *Brainstorm*: *The power and purpose of the teenage brain*. New York: Penguin Books.

Siegel, D. J. (2014). *Pruning, myelination, and the remodeling of the adolescent brain*. Retrieved from http://www.drdansiegel.com/blog/ 2014/02/18/ pruning-myelination-and-the-remodeling-adolescent-brain/

Sherry, A. (2007). Internalized homophobia and adult attachment: Implications for clinical practice. *Psychotherapy: Theory, Research, Practice, Training, 44*(2), 219-225. doi:10.1037/0033-3204.44.2.219

Sroufe, L. A., & Siegel, D. J. (2011, March 10th) The verdict is in: The case for attachment theory. *Psychotherapy Networker.*

Van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Penguin Books.

Coming of Age in Foreign Lands: Overcoming the Double Hurdle to Adulthood Using the Developmental Benefits of Cross-Cultural Immersions

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Abstract

Transitioning to adulthood in the new millennium involves dealing with a myriad of complexities. Some young adults must deal with those hurdles in addition to challenges specific to their mental health. This creates a complicated situation conceptualized here as the 'double hurdle' to adulthood. This position paper explores the use of supported cross-cultural immersions as a rite of passage that can help young adults overcome this dual adversity and emerge into adulthood. Studies show how cross-cultural immersions can lead to the development of more complex mindsets, increased creativity in problem-solving, as well as integrative complexity. Such findings inform and introduce Supportive Immersion (SUIM), the suggested methodology to guide young adults stuck in the double hurdle to leave behind unhealthy life patterns and adequately prepare for adult life.

Keywords: emerging adulthood, young adulthood, cross-cultural immersion, mental health, rite of passage

ISSN 2469-3030 online DOI: 10.19157/JTSP.issue.10.01.08

COMING OF AGE IN FOREIGN LANDS

Recent changes in the structure of industrialized societies are making youth transition to adulthood different from what it was only a few decades ago (Arnett, 1998). Arnett (2000) has analyzed these changes and concluded that people ages 18 through their mid to late twenties are experiencing a completely new life stage he termed, "emerging adulthood" (Arnett, 1998). He explains some of the characteristics of this stage in the following way (Arnett, Zukauskiene, & Sugimura, 2014):

1. *Identity explorations*: trying out various possibilities.
2. *Instability*: changes are frequent.
3. *Self-focus*: fewer daily social roles and obligations to others than in any other life stage.
4. *Feeling in-between*: in transition, neither adolescent nor adult.
5. *Possibilities and optimism*: nearly all emerging adults believe their future is bright.

It is important to note that emerging adulthood, as a developmental stage, seems to be a phenomenon that is exclusive to industrial societies (Arnett, 2007), where people have higher levels of education and access to more lucrative information-based professions (Arnett, 2000). To these emerging adults, reaching full adulthood mainly entails fulfilling the following three criteria: financial independence, accepting responsibility for oneself, and independent decision-making (Arnett, 1998).

This period of emerging adulthood can provide wonderful opportunities for exploration of the world and the self, which serves as meaningful preparation for full adulthood. At the same time, leaving youth behind and making the transition to adulthood is becoming increasingly challenging and leading to higher incidences of anxiety, depression, substance abuse, and other unhealthy coping mechanisms (Henin & Berman, 2016). According to the Federal Interagency Forum on Child and Family Statistics (2014), young adults today are finding it harder to join the labor force, and fewer of them are working or studying in comparison to 25 years ago. Those that are studying are dealing, on average, with almost double the student debt. Furthermore, one out of four young adult males suffer from substance abuse disorders and one out of ten young adults struggle with major depressive disorder. Contrary to common belief, it is young adults and not adolescents that are more prone to certain risky behavior such as unprotected sex, substance abuse, and reckless driving (Arnett, 2000).

The Double Hurdle to Adulthood

Making the turn from adolescence to adulthood has historically been one of the most challenging life transitions. No other transition requires such a drastic change in mindset, responsibility, and social roles. But as mentioned, growing up in the new millennium adds several complexities. Economic pressures as well as the rapid changes toward a globalized technologically-oriented culture also impact the institutions responsible for youth development. Parents (Lythcott-Haims, 2015) and schools (Azzam, 2009) are struggling to keep up with the

shifts of the new millennium and struggling to equip youth with the necessary competencies for successful entrance to the adult world. The situation then is one of higher demands in an exponentially more complex society with generally more inadequate preparation provided.

This gap between what youth are prepared for and what is demanded of them represents an arduous hurdle all youth must overcome to make the leap to adulthood. However, in this position paper, it is proposed that some young adults must confront a double hurdle. In addition to making the necessary transformations to become independent and responsible adults, they are battling additional challenges such as mental health issues, substance abuse, engagement in risky behaviors, and learning differences. Breaking through this double hurdle can be extremely difficult, as each hurdle makes the other more burdensome. For example, someone struggling with anxiety may avoid searching for a job and the reality of a highly competitive job market may exacerbate anxiety.

Being faced with the double hurdle of coming into adulthood can be a daunting task. As a result, some emerging adults avoid this socially and chronologically expected benchmark of development, thus becoming apathetic and careless of the consequences of their behavior (Currie, 2005).

In order to transcend this seemingly unfathomable conundrum, many emerging adults and their parents seek external support through young adult treatment programs. These programs focus on guiding struggling individuals to find resolution with this double hurdle. They can then work through their psychological issues as well as prepare for adult life.

Venturing to Foreign Lands as a Rite of Passage

Throughout time, cultures have created rituals to help people process significant life changes and prepare them for the perspectives and behaviors needed in a new stage or situation. Campbell (1972) speaks of these rituals in the following way:

> The so called rites of passage, which occupy such a prominent place in the life of a primitive society are distinguished by formal, and usually very severe, exercises of severance, whereby the mind is radically cut away from the attitudes, attachments, and life patterns of the stage being left behind. (p. 10)

Van Gennep (2011) studied rites of passage and proposed three general stages that are common across rituals and cultures: separation, liminality, and reintegration. Campbell (1972) supported these findings through compiling numerous myths, stories, and fables from cultures across history with a storyline similar to the process or stages of these rites of passage. He noted that the hero or protagonist follows a similar path in the transformation "venturing to a region of supernatural wonder" (leaving home or separation), "encountering fabulous forces" (transformation process or liminality), and "coming back from this mysterious adventure with new powers " (p. 30) (consummation of

change or *reintegration*). Campbell (1972) explains that this standard path of mythological adventure is "a magnification of the formula represented in the rites of passage" (p. 30). These stories serve as a type of psychological preparation and encouragement to leave behind the comforts of childhood, venture to foreign lands, and return an adult.

The use of rites of passage experiences to mark the coming of age is found in many cultures (Lindholm, 2007). This transition, in which youth are prepared for adulthood, involves large changes in the person's mindset and behaviors. Nevertheless, the transition from childhood to adulthood in industrialized societies is hardly marked at all, with common rites of passage such as getting a driver's license or graduating from high school (Lindholm, 2007). This vague transition leaves young people devoid of guided opportunities to acquire the behavioral patterns and life skills necessary for successful adulthood.

Some young adults in industrialized societies choose to venture to foreign lands during their emerging adulthood in the form of a study abroad or gap year abroad. Study abroad entails enrolling in another country's educational institution (e.g. high school, university), whereas a gap year is more experiential and open-ended, involving work and volunteering overseas (Haigler & Nelson, 2013).

Whether intentionally or not, these young people are embarking in a coming of age rite of passage that parallels the rites of passage discussed by Van Gennep (2011). They are leaving home and typically venturing to a place that is different from their familiar environment; this is the separation stage or "venturing to a region of supernatural wonder" (Campbell, 1972, p. 30). Exposure to other cultures during this period challenges emerging adults' established worldviews and embedded behavioral patterns. At the same time, these emerging adults are introduced to some life patterns of adulthood. Being away from parents and the comforts of their own culture prompts emerging adults to learn creative ways of taking care of themselves, managing their finances (even if they are still sponsored by parents), and making their own decisions. These experiences represent the liminal stage, and contribute to the process of transformation toward adulthood through "encountering fabulous (cross-cultural and independent living) forces" (Campbell, 1972, p. 30). Afterwards, they go through the reintegration stage, "coming back from this mysterious adventure with new powers" (Campbell, 1972, p. 30) and putting into action at home the new behaviors developed during their time away.

The Development of New Perspectives and Behaviors

Much of an individual's learning process is based on creating cognitive frames, or schemas. Schemas increase predictability, stability, and control (Crisp, 2015) as they allow the brain to "make rapid assessments and carry out efficient information processing to then initiate behaviors that enable the organism to survive" (Siegel, 2007, p. 135). At the social level, this kind of predetermined response is provided by culture which communicates shared schemas from one generation to the next (Matsumoto, 1997).

Similarly, a person's worldview "provides a person with presuppositions of what the world is really like and what constitutes valid and important knowledge about the world" (Cobern, 1994, p.5). While an individual's worldview constitutes a very useful survival tool, it also has inherent limitations. As a worldview creates beliefs in certain truths, it makes other beliefs not true. It reveals certain perceptions while it conceals others and it motivates some behaviors while it forgoes alternative ones. A worldview offers a horizon of possibilities, but it also creates blindspots.

In order to maintain adaptability to life's ever changing challenges and avoid dangerous blindspots, one must find ways to dislodge or expand outdated and unhealthy internalized worldviews. Such mental frameworks are dislodged and updated when incoming stimuli is salient enough or dissonant enough that they are unable to fit into previous schemas. This challenges the brain to either reshape the schema or create a new one entirely. Piaget (1954) termed this type of learning, accommodation, in contrast with the process of assimilation, where schemas remain the same and new information adds to it or confirms it.

Emerging adults must take accommodative leaps to dislodge their schemas, as their existing schemas may not serve them adequately in adult life. Additionally, those struggling with psychological and emotional issues must also replace the unhealthy tendencies that are contributing to these issues and doubling the hurdle to adulthood.

Dissonant experiences allow childhood schemas to be replaced and accommodative learning to take place. This accommodative learning allows an emerging adult to sever youthful life patterns. These experiences can lead to temporary confusion and stress; however, they are also a main component of important human development across the lifespan. Dabrowski (2015) used the term positive disintegrations to describe these experiences, and noted that "the course of development passes through the loosening of rigid structures" (1976, p. 135). He added that true disintegration involves everything from depression, anxiety, and agony, to enthusiasm and even ecstasy. This results in the transcendence of the individual into another level of existence (Dabrowski, 1976).

Accommodative Leaps in Foreign Lands

Ventures to foreign lands and their ensuing cross-cultural encounters have traditionally been portrayed as distressing, and at times even traumatizing, experiences. The tendency to pathologize these experiences, according to Berry (2005), "may be partly due to the history of its study in psychiatry and in clinical psychology" (p. 710). Concepts like culture shock and adjustment (Oberg, 1960; Ward, Bochner, & Furnham, 2001) constitute the bulk of cross-cultural studies. Few studies advocate for the positive contribution of cross-cultural encounters in the development of an individual's more complex mindset, clearer sense of self, perspective taking, self-confidence, or other wellness and growth related concepts.

COMING OF AGE IN FOREIGN LANDS

The evidence is slowly building to demonstrate that cross-cultural immersions don't destroy or diminish people, but instead provide opportunities and help them achieve their goals beyond their initial imaginings (Berry, 2005). There is now abundant subjective evidence from participants' testimonials of their study abroad or gap year experience demonstrating how powerful these journeys can be.

In addition, studies focusing on the benefits of cross-cultural immersions show interesting findings. Fee, Gray, and Lu (2013) found that people living abroad significantly increased their levels of cognitive complexity, especially those who interacted most frequently with host culture nationals. They argue that by interacting with locals, "they experience more frequent 'accommodative (learning) leaps' that stimulate schema creation, resulting in a more complex mindset" (Fee et al., 2013, p. 13).

Several studies support the conclusions reached by Fee et al. (2013), adding to the notion that cross-cultural immersions contribute to developing a complex mindset, increasing levels of integrative complexity or cognitive complexity, (Benet-Martinez, Lee, & Leu, 2006; Crisp, 2015; Tadmor, Galinsky, & Maddux, 2012; Tadmor & Tetlock, 2006; Tadmor, Tetlock, & Peng, 2009) and creativity or divergent thinking (Crisp, 2015; Lee, Therriault, & Linderholm, 2012; Maddux Bivolaru, Hafenbrack, Tadmor, & Galinsky, 2013; Maddux & Galinsky, 2009). Integrative complexity refers to the capacity and willingness to acknowledge the legitimacy of competing perspectives on an issue and to forge conceptual links amongst those perspectives (Crisp, 2015). Divergent thinking looks beyond obvious answers to problems (Crisp, 2015). This suggests that through cross-cultural immersions people can broaden their repertoire of responses to life situations by drawing from different perspectives and creating new and more adaptable schemas.

Hirschorn and Hefferon (2013) found that participants in a cross-cultural gap year underwent impactful personal growth. They explain how the experience presented challenges to their personal narrative and shattered their assumptive world. Through overcoming such adversity the individuals discovered personal authenticity, connected with a sense of true self, recognized the socially constructed aspects of themselves, and found a new faith in intrinsic will that encouraged them to implement meaningful behavior change (Hirschorn & Hefferon, 2013). It appears that what Hirschorn and Hefferon (2013) observed was the process of positive disintegration, as study participants loosened their cognitive structures, and underwent accommodative leaps to develop a more authentic self and make important life changes.

Data from the Institute for the International Education of Students (Dwyer & Peters, 2004) provides evidence of the personal development that can take place through cross-cultural immersions. After surveying more than 3400 alumni, results showed that 97% said studying abroad served as a catalyst for increased maturity, 96% reported increased self-confidence, 89% said it enabled them to tolerate ambiguity, and 95% stated it had a lasting impact on their worldview

(Dwyer & Peters, 2004).

In summary, with cross-cultural immersions, young adults struggling with the double hurdle may have an opportunity to modify and evolve their cognitive structures, enabling them to:

- Face the added complexities of 21st century globalized societies by developing more complex mindsets.
- Become unstuck by loosening rigid structures through the challenge of dissonant stimuli.
- Experience a surge in personal development and resourcefulness, using creativity and the integration of perspectives to implement new responses to life.
- Complete a true coming of age rite of passage which propels them to successfully transition to adulthood.

Implications for Practice with Struggling Emerging Adults

Although cross-cultural immersions have been used by young adults as educational and personal growth rites of passage for years, they have rarely been used with intentional therapeutic purposes. Based on the evidence found in non-therapeutic populations (Benet-Martinez et al., 2006; Fee et al., 2013; Haigler & Nelson, 2013; Lee et al., 2012; Maddux et al., 2013; Maddux & Galinsky, 2009; Tadmor & Tetlock, 2006; Tadmor et al., 2009; Tadmor et al., 2012; Tenser, 2016) it is proposed here that if an intentional intervention is devised employing a structured approach, then participating in cross-cultural experiences may be highly therapeutic for individuals confronted with the double hurdle.

Though cross-cultural experiences may be ideal for emerging adults, these same experiences could be advised against for those with existing psychopathologies. A concern is that cross-cultural experiences may push people out of their comfort zone and create culture shock, which could exacerbate an already existing psychological struggle. Given this, how can a struggling emerging adult safely engage in a coming of age experience in a foreign land in a way that launches him or her toward adult life and away from impairing psychological difficulties? How can emerging adults reap the benefits of cross-cultural immersions while avoiding further despair? Crisp (2015) highlights three essential key conditions for intercultural experiences that activate integrative complexity and divergent thinking: distance, dual engagement, and immersion. These key elements are explained below, adding considerations and suggestions for potential therapeutic benefit for populations with the double hurdle.

Distance. Intercultural contact has to be difficult if it is likely to stimulate advanced cognitive processes; in other words, home and host cultures must be markedly different from each other in order to evoke change. This point is supported by Tadmor and Tetlock (2006) who proposed an inverted U-shape

relationship between the two cultures (home and host) and the amount of cognitive change that can be expected. When cultures are too different from each other, such as between Swedish social democrats and Afghan Islamists, the interaction might be too overwhelming, making integration very difficult (Tadmor & Tetlock, 2006). Alternatively, an American traveling to Canada might find the experience underwhelming and fail to evoke cognitive dissonance.

When working with therapeutic populations, interactions with foreign cultures and subcultures are suggested to be as deliberate as possible, looking at the specific characteristics of the individual and peer group, and matching them with the right host populations. Host cultures and subcultures with strong positive values, open to interacting with foreigners yet proud of their culture, and with very diverse lifestyles are ideal to turn cross-cultural interactions into therapeutic opportunities. Furthermore, facilitators of these intercultural encounters are recommended to be attentive to integrative opportunities, create bridges of understanding between cultures, and aid young adults in stepping out of their current schemas into the world of the other. This may allow new constellations of being to be brought into their personal repertoire.

Dual engagement. Crisp (2015) explains that to achieve higher levels of integrative complexity and divergent thinking the individual must engage with both cultural perspectives (host and home). The individual must then seek to integrate home and host instead of maintaining the home culture or completely assimilating into the hosts' culture. Acculturation strategies theory (Berry, 2005) suggests that when exposed to a new culture people may choose to fully keep their home culture identity (separation) or change their identity to the host culture (assimilation). These strategies will not support adaptation or yield the same cognitive benefits as integration, which entails a creative process of synthetizing both cultures into one's identity.

The process of identity development is inherent to young adulthood, and constitutes a common challenge for struggling young adults. Hence, while dual engagement may be difficult, it may also prove very fruitful from a therapeutic standpoint. Research shows that because young people are uncertain of their place in society and lack the skills necessary to exercise integration strategies, they often endorse assimilation and separation acculturation attitudes (Berry, Phinney, Sam, & Vedder, 2006). Therefore, guidance toward integration is essential as it provides an opportunity to take in different cultural perspectives and help with identity formation and social adjustment.

This synthesizing process encourages the development of cognitive flexibility (Crisp, 2015). This is particularly salient for populations with mental health issues, as inflexibility is a representative characteristic of psychopathology according to various theories and modalities of psychotherapy (Kashdan & Rottenberg, 2010; Malone et al., 1982; May, 1983; Maslow, 1999; Perls, Hefferline, & Goodman, 1969).

Immersion. Crisp (2015) suggests that the more time spent interacting with another culture, the better. A minimum length of time is not specified, but it is indicated that better results come from a year living abroad rather than from a quick trip. Other studies suggest that more interaction with the locals increases the chance of cognitive changes taking place (Fee et al., 2013; Tadmor et al., 2012).

Supportive Immersion

Distance, dual engagement, and immersion alone are unlikely to yield therapeutic growth in young adults struggling with the double hurdle. In fact, they may be recommended against these experiences, or opt out of participating, in fear that it will exacerbate their condition. Thus, a specific clinical methodology is proposed: the Supportive Immersion (SUIM) method. The methodology is proposed and explained below. Quotes from young adult participants in a SUIM program are embedded, to offer insight into the young adults' perspectives on the clinical methodology.

Table 1

Summary of Supportive Immersion

Struggling Young Adult Situation	Intervention	Hypothesized Outcome
Double Hurdle 1. Need to adopt life patterns of adulthood. 2. Need to overcome hindering psychological difficulties.	**Cross Cultural Experience** 1. Invoke Accommodative leaps 2. Challenge Assumptive World + **Supportive Immersion** 1. Empathic Connecting 2. Collaborative Empowerment 3. Experiential Scaffolding	1. Integrative Complexity 2. Creativity + **Integrative Growth** 3. Transferable, Incorporative, and Systemic Problem-Solving 4. Self-Generated Learning 5. Increased Agency

SUIM is a person-centered approach to experiential learning. In SUIM, the use and development of empathetic connecting skills, collaborative empowerment, and process-based scaffolding activities invite non-threatening exposure to integrative growth opportunities. This process intends to lead to increased agency, as well as shifts in participants' ways of being in the world. Table 1 provides a summary of the double hurdle many young adults experience, the proposed intervention using SUIM in cross-cultural contexts, and the hypothesized outcomes.

Integrative growth, the main goal of SUIM, questions mechanistic and fragmented models of development and learning, characteristic of industrial paradigms. In these models, the person learns skills which serve very specific functions, but these skills may not lead to a true understanding of the information acquired. Furthermore, such information might not be extrapolated to other situations or problems, especially if its context is not understood. This may

be because the person has not fully integrated the information or the intended learning and growth are not stable or sustainable. Examples of these kinds of models are traditional test-oriented education in schools and techniques for behavior modification. Integrative growth, on the other hand, aspires for the learning experience to be:

- Transferable: the structures or schemas developed are adaptable; this allows creative problem-solving.
- Incorporative: what is learned is not just something the person does, but instead becomes part of who the person is. Incorporation permits the learner to adjust the learning to his or her own worldview, making it more likely that the new schemas will be sustained over time.
- Systemic: the growth experienced is not isolated, it includes various contexts and perspectives. Thus, the learner grows through openly integrating his or her surroundings, and when the learner grows, those around grow as well.

When SUIM is effective, and integrative growth is elicited, it is expected that the person will be better able to self-regulate and self-generate, likely because they can more easily adjust and problem-solve when challenges arise. Self-generation suggests that the energy for problem-solving and learning intentionally initiates within the individual. This allows a person to ignite and steer his or her own actions, which reduces dependence on external stimuli to energize task initiation, prompt responses, or direct healthy and efficient action.

There are three main pillars of SUIM in which integrative growth is believed to be evoked. While SUIM and its pillars are useful for experiences beyond cross-cultural immersion, and for populations other than young adults stuck in the double hurdle, the pillars will be explained focusing on that context and population.

Empathic connecting. When interacting with someone from a different cultural background, practicing empathy fosters the avoidance of biases and stereotyping, as well as promotes new perspectives. This may be difficult as it entails relinquishing one's schemas and worldview and not only understanding the other, but understanding how they themselves understand their own world. Empathy is hard to teach, as Khan (1991) says, "empathy is not a technique but an attitude" (p. 168). Such an attitude entails open-mindedness, non-judgmental appraisals, true caring for the world of the other, and selflessness.

Empathy is both useful for facilitators as well as participants of SUIM. Facilitators use it to delve into the world of the participants and take on the individual's worldview. They can then base the learning experience on a combination of knowledge and expertise parallel to that of the participants. The participant uses empathy to open up to new perspectives other than his own, which provide alternatives to new horizons of being.

Facilitating intercultural encounters with an empathic attitude is highly beneficial. Such an attitude is likely to dissolve rigid schemas, thus making the exchange of worldviews possible. During a trip to South Africa using SUIM, a participant reminisced on the impact of cross-cultural immersion by saying, "It helped me realize that my way is not always *the way*". Being able to realize that one's truth is not necessarily *the* truth, constitutes an essential step toward personal development, as it signifies willingness to revise and potentially change already established schemas. Another SUIM participant reached an important insight after working side by side with the locals of a rural community in Costa Rica. He noted, "They just work very hard, and they succeed; I can see now that if I work hard, I can succeed". For this young man, the schema of success was attached to getting a university degree, which was paralyzing due to his learning difficulties; but by delving into the worldview of his cross-cultural counterparts, he was able to redefine his concept of success.

Collaborative Empowerment. Collaboration sits very deeply in humans' cultural heritage (Bowles & Gintis, 2011; Crisp, 2015; Harari, 2015; Stix, 2016). It allows for exponential growth and creates a sense of belonging and safety (Buss, 2000; Crisp, 2015; Stix, 2016). With collaborative empowerment, the lines between teacher and student, helper and helped, skilled and unskilled, become blurry. Everyone is involved in a process of giving and receiving and all knowledge is valuable. This mutualistic exchange can be especially rich when people from different cultures connect and realize they can build bonds, alliances, and empower each other.

Collaborating on projects with locals from other cultures, sharing meals, playing games together, and truly delving into a culture's lifestyle by creating meaningful relationships provides the basis for integrative growth. The following testimonial speaks of the rewarding experience of a SUIM participant while immersed in a rural indigenous community: "I felt seen and known by the whole town, and going into each other's houses… the sense of community there is amazing".

SUIM emphasizes creating alliances and friendship between people of different cultures in a way that such collaboration leads to mutualistic benefit. It is well known that community service and volunteering provide psychological benefits (Post, 2005). However, SUIM goes a step further by challenging the notion of service (Clammer, 2012; Watkins & Shulman, 2010) and arguing that emerging adults stuck in the double hurdle feel more satisfied when they empower others, rather than serve them. With this, they empower themselves, thus strengthening their sense of identity and leaving behind potential feelings of helplessness. Regarding empowerment, an indigenous young man who collaborated in a project with SUIM participants said, "It is fun to work with them, as a group, together, to show us that we can do many things in our community".

Process-Based Scaffolding. The brain is highly dependent on environment and experience to develop and change (Costandi, 2016). In order to encourage

emerging adults' positive changes and development, it is believed to be beneficial to provide them with opportunities for enriching and diverse experiences. As Rollo May argued, "There is no such thing as truth or reality for a living human being except as he participates in it" (as cited in Khan, 1991, p. 17). Therapeutic cross-cultural encounters require experiential participation. Participants are involved in the lives of the locals, instead of just observing them from a distance. Another SUIM participant expressed how impactful the process-based experiential component was by saying, "We lived with them, ate their food, worked with them; it's not like we were tourists being led around and shown stuff". People's level of comfort in such experiences may vary from person to person. Facilitators are suggested to accompany the process and carefully design experiences so that participants remain in a zone of optimal engagement and learning. Furthermore, it is recommended that facilitators also provide scaffolding to help participants to continuously reach outside their comfort zone and attain higher levels of growth.

The process toward building new ways of being cannot happen only by imparting information on the host culture or letting the participant go through cross-cultural experiences without processing them. If participants' schemas cannot comprehend and integrate the incoming information, the new information will likely be assimilated into old schemas or soon discarded. When this occurs, emerging adults dealing with the double hurdle tend to have negative cross-cultural experiences and reinforce their unhealthy coping mechanisms. For integrative growth to take place, participants may benefit from "borrowing" others' schemas to serve as temporary containers so they can begin processing new experiences while appropriate schemas develop. This scaffolding process is provided by attuned facilitators, but can also at times be provided by caring hosts in the foreign culture. Thus, the host culture provides not only dissonant experiences, but also offers ways of understanding it.

Conclusion

Emerging adults seeking transition to adulthood in this age of complexity need to become more complex themselves. Leaving home and embarking on a journey to foreign lands can serve as a great coming of age experience. Through this process, young adults are challenged by the dissonant stimuli provided by the cross-cultural encounters, and thus develop skills like creative problem-solving and integrative complexity. Emerging adults stuck in the 'double hurdle' to adulthood require the use of intentional methodology to turn such journeys into therapeutic experiences.

Supportive Immersion has been proposed as a methodology that could help young adults stuck in the double hurdle. SUIM is intended to lead participants step by step in a scaffolded process. In this way, emerging adults learn to understand themselves and the world around them in a myriad of ways. They learn to make connections between viewpoints and develop new perspectives. This empowers them to develop a more complex mindset, and with it the ability to self-regulate, as well as generate their own solutions to life problems. Along

with the updating of schemas and life patterns, these intended outcomes may become the foundation needed to face the challenges of adulthood. With this, young adults complete their coming of age rite of passage, and come back home "from this mysterious adventure with new powers" (Campbell, 1972, p. 30).

Methodologies seeking to help young adults overcome the double hurdle to adulthood may not be sufficient if only teaching specific skills to deal with specific problems. Not a thousand of those "tools" in their "toolbox" will do. The world they are preparing to face is too complex and filled with too much uncertainty. To succeed, young adults must become "toolmakers" themselves. They need experiences that put them in the driver seat and help them learn how to deal with complexity, diversity, and adversity. These experiences should also help them to begin problem-solving creatively and generating novel ways of being, for themselves and those around them. SUIM utilized in a cross-cultural context aims at precisely that.

References

Arnett, J. J. (1998). Learning to stand alone: The contemporary american transition to adulthood in cultural and historical context. *Human Development, 41*, 295-315.

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480. doi:10.1037/0003-066x.55.5.469

Arnett, J. J. (2007). Emerging Adulthood: What Is It, and What Is It Good For? *Child Development Perspectives, 1*(2), 68-73. doi:10.1111/j.1750-8606.2007.00016.x

Arnett, J.J., Zukauskiene, R., & Sugimura, K. (2014). The new life stage of emerging adulthood at ages 18-29 years: Implications for mental health. *The Lancet Psychiatry, 1*(7), 569-576.

Azzam, A.M. (2009). Why creativity now? A conversation with Ken Robinson. *Educational Leadership, 67*(1), 22-26.

Benet-Martinez, V., Lee, F., & Leu, J. (2006). Biculturalism and cognitive complexity: Expertise in cultural representations. *Journal of Cross-Cultural Psychology, 37*(4), 386-407.

Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations, 29*(6), 697-712. doi:10.1016/j.ijintrel.2005.07.013

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology, 55*(3), 303-332. doi:10.1111/j.1464-0597.2006.00256.x

Bowles, S., & Gintis, H. (2011). A cooperative species: *Human reciprocity and its evolution*. New Jersey: Princeton University Press.

Buss, D.M. (2000). The evolution of happiness. *American Psychologist, 55*(1), 15-23.

Campbell, J. (1972). *The hero with a thousand faces*. Princeton, NJ: Princeton University Press.

Clammer, J. (2012). Culture, development, and social theory: *Towards an integrated social development*. London: Zed Books.

Cobern, W.W. (1994). Worldview theory and conceptual change in science education. *Scientific Literacy and Cultural Studies Project*. 15.

Costandi, M. (2016). *Neuroplasticity*. Cambridge: MIT Press.

Crisp, R. J. (2015). *The social brain: How diversity made the modern mind*. London: Robinson.

Currie, E. (2004). The road to whatever: *Middle class culture and the crisis of adolescence*. New York: Henry Holt and Company.

Dąbrowski, K. (1976). On the philosophy of development through positive disintegration and secondary integration. *Dialectics and Humanism, 3*(3), 131-144. doi:10.5840/dialecticshumanism197633/413

Dabrowski, K. (2015). *Personality-shaping through positive disintegration*. California: Red Pill Press.

Dwyer, M. M., & Peters, C. K. (2004, March/April). The benefits of study abroad: New study confirms significant gains. *Transitions Abroad Magazine*. Retrieved from http://www.transitionsabroad.com/publications/magazine/0403/benefits_study_abroad.shtml

Federal Interagency Forum on Child and Family Statistics. (2014). *America's Young Adults: Special Issue, 2014*. Washington, DC: U.S. Government Printing Office.

Fee, A., Gray, S. J., & Lu, S. (2013). Developing cognitive complexity from the expatriate experience: Evidence from a longitudinal field study. *International Journal of Cross Cultural Management, 13*(3), 299-318. doi:10.1177/1470595813484310

Haigler, K. & Nelson, R. (2013) *Gap year, american style: Journeys toward learning, service and self-discovery*. (n.p.)

Harari, Y. N. (2015). *Sapiens: A brief history of humankind*. New York: Harper Collins Publishers.

Henin, A., & Berman, N. (2016). The promise and peril of emerging adulthood: Introduction to the special Issue. *Cognitive and Behavioral Practice, 23*(3), 263-269. doi:10.1016/j.cbpra.2016.05.005

Hirschorn, S., & Hefferon, K. (2013). Leaving it all behind to travel: Venturing uncertainty as a means to personal growth and authenticity. *Journal of Humanistic Psychology, 53*(3), 283-306. doi:10.1177/0022167813483007

Hahn, M. D. (1991). *Between therapist and client: The new relationship*. New York: W.H. Freeman.

Kashdan, T. B., & Rottenberg, J. (2010). Psychological flexibility as a fundamental aspect of health. *Clinical Psychology Review, 30*(7), 865-878. doi:10.1016/j.cpr.2010.03.001

Lee, C.S., Therriault, D.J., & Linderholm, T. (2012). On the cognitive benefits of cultural experience: Exploring the relationship between studying abroad and creative thinking. *Applied Cognitive Psychology, 26*(8), 768-778.

Lindholm, C. (2007). *Culture and identity: The history, theory, and practice of psychological anthropology*. Oxford: Oneworld Publications.

Lythcott-Haims, J. (2015). *How to raise an adult: Break free of the overparenting trap and prepare your kid for success*. New York: Henry Holt and Company.

Maddux, W.W., & Galinsky, A.D. (2009). Cultural borders and mental barriers: The relationship between living abroad and creativity. *Journal of Personality and Social Psychology, 96*(5), 1047-1061.

Maddux, W.W., Bivolaru, E., Hafenbrack, A.C., Tadmor, C.T., & Galinsky, A.D. (2013). Expanding opportunities by opening your mind: Multicultural engagement predicts job market success through longitudinal increases in integrative complexity. *Social Psychological and Personality Science, 5*(5), 608-615

Malone, K., Malone, T., Kuckleburg, R., Cox, R., Barnett, J., & Barstow, D. (1982). Experiential psychotherapy: Basic principles. *Pilgrimage, 10*(1-3), 1-63.

Maslow, A. H. (1999). *Toward a psychology of being*. New York: John Wiley & Sons.

Matsumoto, D. R. (1997). *Culture and modern life*. Pacific Grove: Brooks/Cole.

May, R. (1983). *The discovery of being: Writing in existential psychology*. New York: WW Norton & Company.

Oberg, K. (1960). Cultural shock: Adjustment to new cultural environments. *Practical Anthropology, 7*(4), 177-182.

Perls, F. S., Hefferline, R. F., & Goodman, P. (1969). *Gestalt therapy: Excitement and growth in the human personality*. New York: Julian Press.

Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.

Post, S.G. (2005). Altruism, happiness, and health: It's good to be good. *International Journal of Behavioral Medicine, 12*(2), 66-77.

Siegel, D. J. (2007). *The mindful brain: Reflection and attunement in the cultivation of well-being*. New York: W.W. Norton.

Stix, G. (2016). The "it" factor. *Scientific American, 25*(4), 60-65.

Tadmor, C. T., Galinsky, A. D., & Maddux, W. W. (2012). Getting the most out of living abroad: Biculturalism and integrative complexity as key drivers of creative and professional success. *Journal of Personality and Social Psychology, 103*(3), 520-542. doi:10.1037/a0029360

Tadmor, C. T., & Tetlock, P. E. (2006). Biculturalism: A model of the effects of second-culture exposure on acculturation and integrative complexity. *Journal of Cross-Cultural Psychology, 37*(2), 173-190. doi:10.1177/0022022105284495

Tadmor, C. T., Tetlock, P. E., & Peng, K. (2009). Acculturation strategies and integrative complexity: The cognitive implications of biculturalism. *Journal of Cross-Cultural Psychology, 40*(1), 105-139.

Tenser, L. I. (2016). *Stepping off the conveyor belt: Gap year effects on the first-year college experience* (Doctoral dissertation). Retrieved from http://hdl.handle.net/2345/bc-ir:104364

Van Gennep, A. (2011). *The rites of passage*. Chicago: University of Chicago Press.

Ward, C. A., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. Hove, East Sussex: Routledge.

Watkins, M., & Shulman, H. (2008). *Toward psychologies of liberation*. New York: Palgrave MacMillan.

Better Relationships, Mental Wellness, and Self-Development: What Parents Expect from Residential Treatment for Their Struggling Youth

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Abstract

Parents often initiate treatment for their youth with substance use or mental health issues. For this reason, parental expectations of treatment are helpful in considering the nature of parental engagement in the treatment process and possible barriers to treatment. The goal of this study was to better understand the expectations of parents who sought residential treatment for their youth. From 638 potential parent applications, 28 individual applications were randomly selected for in-depth qualitative analysis. The most frequently expressed expectation was for youth to have better relationships with their family and with peers. Implications for treatment program design, effectiveness, and evaluation are discussed.

Keywords: treatment expectations, residential treatment, adolescents, parent involvement, mental health, substance use

Acknowledgements: We gratefully acknowledge the parents who made this paper possible.

ISSN 2469-3030 online © 2018 Journal of Therapeutic Schools and Programs DOI: 10.19157/JTSP.issue.10.01.09

During adolescence, some experimentation with alcohol and drugs is normative. However, a minority of youth struggle with significant substance misuse that impacts their academic and relational functioning. In the United States, 8.3% of adolescents meet criteria for a substance use disorder in any given year (Kessler et al., 2012). Substance addiction during adolescence is associated with a host of negative outcomes, both individual and relational. At an individual level, youth who are addicted to substances are more likely to be involved with criminal behaviour (Harrison & Asche, 2001), more likely to be hospitalized (Griffin, Ramchand, Edelen, McCaffrey, & Morral, 2011), and less likely to be engaged with school (Renna, 2007). Youths' relationships are also strained when they have substance use problems. Their substance use often impacts the entire family, and parents are often those who are concerned about the youths' substance use and initiate inquiries for treatment (Muck et al., 2001). Given that the early effects of substance use problems can lead to life-long problems, effective intervention is critical to divert youth from this harmful pathway. The focus of the present qualitative study is to investigate parents' expectations of treatment for their adolescent who is struggling with substance use and, often co-occurring, mental health problems.

The framework for this research extends Lerner's (1991) Developmental-Contextual model to include a specific focus on close relationships, such as those with parents and peers. Previous research has indicated that youth development occurs in the context of healthy and nurturing relationships with people in their lives, particularly parents (Biglan, Flay, Embry, & Sandler, 2012; Pepler, Craig, & Haner, 2012). Central to Lerner's model is the dynamic, reciprocal, and bidirectional nature of interactions between the youth and the multiple contexts in which the youth is embedded (e.g., family, friends, school, community, culture, etc.). This framework is relevant to understanding why youth experience difficulties and how to intervene to move them back onto a healthy developmental pathway. The framework also guides clinicians and researchers to focus not only on the individual developmental variables, such as mental health symptoms, but also on youths' functioning within their networks and their development within the context of their relationships.

The program within which this research study was embedded is a residential program for youth struggling with the core developmental tasks of adolescence. Before attending the program, individuals are immersed in compromised health (e.g., hospitalizations), impaired development (e.g., school absence and delinquent behaviour), and chaotic relationships with peers and family. The program combines four services: Outdoor Behavioral Healthcare (OBH), residential treatment, parent intervention, and aftercare services. The OBH component occurs during the first two months of the program when youth live in a wilderness environment, camping in tents or yurts and engaging in physical activities such as hiking and canoeing. After the youth graduate from the OBH component, they spend the next eight to ten months at the residential campus completing high school credits, living collectively, and participating in individual, group, and family therapy. The residential treatment approach is an intensive community-milieu that provides a structured, nurturing environment

and fosters a positive peer culture. The program offers youth the opportunity to develop social skills and authentic relationships. It also encourages personal and physical development and allows youth to engage in self-exploration and growth. An important aspect of the program is that parent involvement is required. Parents meet individually with staff and attend parent groups to learn how to respond to their adolescents in developmentally appropriate ways, and both youth and parents engage in family therapy. Results from a previous study indicated that changes in youths' experience of relationships, including the quality of their relationships with parents, shifted significantly due to youths' participation in the program (Riddell, 2014). In the final phase of the program, youth are re-integrated into the community with the support of aftercare services. Given the unique nature of this program, research is necessary to document the types of expectations for change that can be anticipated from a multimodal treatment program. Further, information from this study is relevant to informing programs offering one of these services, as parent expectations are useful in considering expected program outcomes.

Since youth are embedded in family systems and those families often seek treatment for their youth (Muck et al., 2001), parental expectations of treatment are helpful when considering the nature of parental engagement in the treatment process and possible barriers to treatment (Nock & Kazdin, 2001). The goal of this study was to better understand the expectations of parents who sought residential treatment for their youth who was struggling with mental health and substance use issues.

Method

Participants and Data Selection

Ethics approval for this analysis of clinical data was obtained from the York University Ethics Review Board. All data presented are from parents who gave informed consent to have their application to the program included in the ongoing research efforts at this center.

As a part of the admission process at this youth treatment center, parents complete a comprehensive application that includes information about their adolescent's physical and mental health, behavior, academics, and relationships. Applications include several open-ended questions designed to clarify quantitative responses (e.g., if contact with police is indicated, please describe), and to offer in-depth history to clinicians (e.g., describe your child's reaction to authority figures). Among all open-ended questions on the application, the following seven were relevant to parental expectations of treatment for their youth and thus were included in the current study:

- Please tell us what you think would be helpful for us to know about the circumstances that led you to consider enrolling your child in Pine River.
- What are your specific goals for the child while receiving treatment?

- When we get to the point where you are ready to have your son/daughter back home, what will be the signs to you that this time has come? (How will you know when your son/daughter is ready to return home or leave Pine River?)
- In which particular areas do you hope Pine River is able to support the child to make changes or improvements?
- In which particular areas do you hope Pine River is able to support you and your family to make changes or improvements?
- Please describe any fears/concerns you have about enrolling the child at Pine River.
- Please provide us with any additional comments that you would like us to know about your child and your family.

From 638 potential parent applications, 28 individual applications were randomly selected for analysis. These 28 applications were from families who were later admitted to the program as well as those who inquired but were not admitted. A random number generator was used to assign random numbers to all 638 cases. All cases were assigned to five groups that included five or six cases. The number of applications used for the study was chosen as it is divisible by four, and four coders were used; and it was a manageable workload given that the data are qualitative. We chose to have five groups to allow each coder to code their own group (during the initial coding phase described below), as well as for everyone to code the same one group (during the collective coding phase below). All identifying characteristics were deleted (e.g., name, location, etc.) and each application was referred to as a case with a unique numerical identifier.

The coders were four female graduate students. Three were PhD candidates: one who studied qualitative methods and historical/theoretical issues in psychology, another studied clinical psychology, and the third studied quantitative methods (also the Director of Research and Evaluation at the program involved in this study). The fourth analyst was a master's candidate studying clinical-developmental psychology.

Analytic Approach

Since little is known about what parents expect from treatment for their troubled youth, a qualitative approach to this inquiry was appropriate (McLeod, 2001). Charmaz (2004) suggests that qualitative research should be "emergent" (p. 991). That is, researchers should learn from the data and allow it to guide their methods and research strategies. Likewise, Richards (2005) discusses the dynamic and looping process of qualitative research, and encourages modification and amendments to approaches as needed. With this in mind, it was determined that a blended approach combining thematic analysis (Braun & Clarke, 2006) with a consensual qualitative research strategy (Hill, Thompson, & Williams, 1997) would be used.

Thematic analysis is characterized as an inductive method, meaning that the themes and abstract categories derived from the data remain grounded in the language used by participants (Guest, Namey, & Mitchell, 2013; Meier, Boivin, & Meier, 2008). The goal is to develop a thematic structure that characterizes the data and stays true to the voice of respondents, which is accomplished partly through the selection of vivid quotes as exemplars of categories. A consensual qualitative research strategy is characterized by four primary guidelines: dividing the larger data set into domains (i.e., selecting passages relevant to expectations from the parent application), utilizing a team, making decisions by consensus, and using cross analysis to develop categories that are consistent across cases. These guidelines were valuable for collaborating on team decisions.

Procedure

Phase one: Initial coding and model development. Each analyst was assigned one group of five or six cases for independent exploration. Each case included responses to at least six of the seven questions from the parent application. Analysts identified units of meaning within parents' responses that seemed relevant to the domain of parent expectations. These meaning units represented a coherent and distinct thought and were typically phrases or sentences (Rennie, Phillips, & Quartaro, 1988). Analysts parsed meaning units into properties (often referred to as codes), in a process referred to as "open categorization" by Rennie (2006). Each property was labeled with a case identification number and question number. In process, as meaning units were analyzed and properties were listed, categories emerged from clusters of properties. For example, the category "academics" emerged from properties such as finish high school and complete schooling. Analysts were asked to propose and list categories when they became salient. This flexibility encouraged analysts to engage in recursive reevaluation (constant comparison) of preceding cases. For example, while moving through cases, analysts questioned whether the parent responses bore similarity to what had already been encountered in previous cases. As categories common to more than one case were observed, properties could be added or re-sorted and categories could be modified. In addition, analysts kept theoretical memos; for example, speculating about potential themes or categories that may not have been entirely clear based on the responses, but required collaborative discussion to determine their relevance.

At the completion of this phase, analysts engaged in dialogue about shared and unique properties and categories, and discussed theoretical memos. During the first meeting, properties were assigned to categories and a number of subcategories were created to represent important nuances. The first model (Model 1) was comprised of broad, one-word thematic categories and relevant subcategories. Each category and subcategory was associated with a pool of relevant properties; each property was only assigned to one category or sub-category (Braun & Clark, 2006; Hill et al., 1997).

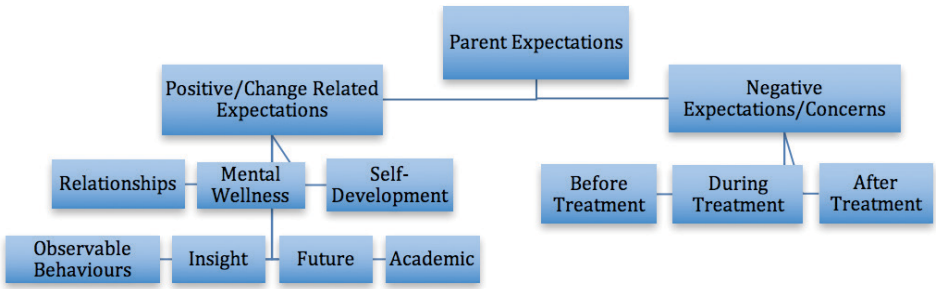
Phase two: Model confirmation. Phase two involved triangulation coding and collective coding. For triangulation coding, each analyst was assigned

another analyst's phase one cases. This was adopted to ensure that important nuances or concepts were not overlooked in phase one, and also to verify that analysts derived sufficiently similar properties and categories when interpreting the same cases. For collective coding, analysts were given the same group of five new cases to code. Cases were reviewed in consideration of the first model while utilizing the same inductive techniques described in phase one. In a second in-person meeting, the results of the collective coding, triangulation, and the model structure were discussed. During this dialogue, the model was reconstructed and analysts reached a consensus on the second stage model (Model 2).

Phase three: Revising and refinement. In this final phase, using Model 2, all analysts coded all 28 cases. During a final meeting, outstanding issues and recommendations were discussed, after which, each analyst submitted a summary of recommendations and frequency counts for all properties and categories. Using these recommendations Model 3 was developed: main and subcategories were removed, renamed, or collated; no new main categories were created and new data was coded; and, a list of revisions was circulated. The final model can be seen in Figure 1.

Figure 1

Model of Parent Expectation Main Categories



Results

Demographics & Participant Characteristics

The demographic profile of youth in the selected sample was similar to youth from the pool of applicants from which they were drawn across age (M = 17.0), gender (68% male), year of contact (range: 2007-2012), and parent marital status (57% together). Further, characteristics of youth in the sample were similar to the pool of applicants in terms of parent-reported diagnosis of learning disability (27%) and other mental health diagnoses including ADHD (45%), recent running away (19%), and contact with police (18%). The modal number of diagnoses was one. Finally, family functioning scores were below the North American norm

of 3.0 (M = 2.34) on the General Family Functioning subscale of the Family Assessment Device (Epstein, Baldwin, & Bishop, 1983). Differences between the study sample and the responses from the pool of all parent applications were analysed with ANOVA and Chi-Square; all p-values were greater than .05, indicating that there were no significant differences between this sample and the program population in these areas.

Content of Parent Expectations

Qualitative analyses revealed two general domains of parent expectations – positive expectations (comprising seven main categories) and negative expectations/concerns (comprising three main categories). The seven main categories of positive expectations included: relationships, mental wellness, self-development, observable behaviours, insight, future, and academics. The three main categories of negative expectations were further categorized into concerns before treatment, during treatment, and after treatment. Each category had two to six subcategories. One exemplar in each subcategory was selected to clarify its context. For all exemplars, all names were replaced with "X" and references to gender have been changed to he/she. For example, the main category of *Future* included the subcategory "setting goals" with an exemplar of "X needs to set some goals for the future and plan for how those could be achieved." Frequency counts were derived from the total number of statements made, as opposed to the number of participants who made the statement. Frequency counts were included as a way to organize categories by their prevalence; this is a useful tool for consensual qualitative research (Guest & MacQueen, 2008).

Domain 1 - Positive or Change-Oriented Expectations

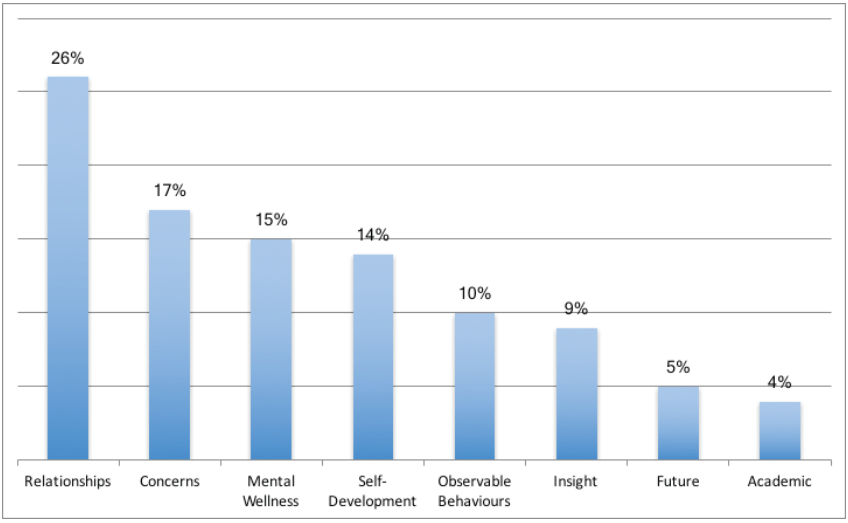
All main categories, subcategories, and an exemplar for each subcategory for Domain 1 – Positive or change-oriented expectations – can be found in Table 1. Figure 2 represents the proportion of responses belonging to each main category of positive parent expectations.

Relationships. The most prevalent theme that emerged from parent responses was relationships; in fact, 26% of all statements were relationship-oriented. Relationships included both family and peer relationships. Family relationship expectations involved four main components: a supportive family environment, respect, rebuilding and repairing relationships, and open and honest communication.

Parents articulated a desire to create a more supportive family environment for their youth. Further, parents expressed an understanding that the entire family needs to heal and work towards healthy relationships in order for their youth to make changes. In other words, many parents expressed an expectation that they would be a part of the change process. Parents expressed expectations of a supportive family environment with statements such as, "I hope they could teach us how to best react to conflict with X," and "help us give X what [he/she] needs from a home."

Figure 2

Proportion of Responses Belonging to Each Main Category of Positive Parent Expectations



Secondly, parents expressed hope that damaged family relationships could be repaired and trust re-established. Parents expressed this expectation in a number of ways, including wanting their youth to "work out a way of getting back into the family," and "'make up' some of the things that [he/she] has done."

As part of "relationships," it was important to parents that youth showed greater respect, followed family rules, and contributed to the family. As articulated by one parent,

> "X must willingly work with us to talk about expectations and responsibilities.
>
> X can't just come home and plop on the couch. It's all about attitude and a willingness to move forward. . . . But most importantly, X needs to treat us with respect and kindness."

The final aspect of family relationships was an expectation of more open and honest communication, including the youth showing a willingness to communicate and share his/her feelings. One parent expected the program to "help in establishing open communication with my [son/daughter]." Another parent viewed "helping [him/her] to express [his/her] feelings" as an important part of the process of change.

PARENT EXPECTATIONS OF YOUTH TREATMENT

Expectations about improved peer relationships comprised only 6.5% of the overall model and were defined by two aspects. The first involved the parental expectation that treatment would provide an opportunity for youth to be removed from or break ties with negative influences by being away from drug culture and deviant social circles. Secondly, parents expressed an expectation that their son or daughter might reengage in healthy peer groups during and after treatment.

Table 1.

Positive or change-orientated expectations (Domain 1)

Subcategories	Exemplars	Average Frequency
Main Category 1: Relationships		
Family		
Supportive family environment	I hope PRI can help me/our family understand how we contribute to the problems X is having. I hope we can have the opportunity to hear what changes we need to make to support the changes we hope X can make. I hope we can explore parenting practices that may be better suited for X.	17.0
Respect	We ([his/her] father/me/step father) can help [him/her] face the future but in exchange we all need respect and kindness, participation and cooperation.	16.5
Rebuilding and repairing relationship	Be able to reconnect with the family in a positive way and rebuild [his/her] relationship with [his/her] sister.	13.5
Open and honest communication	I would love to be able to talk to my [son/daughter] and work together to help [him/her].	9.5
Peers		
Re-engagement	I would love for X to become more at ease with having appropriately honest, face-to-face social interactions with peers.	4.0
Removal from negative influences	Being away from X, the “not so good” friends	2.5

Main Category 2: Mental Wellness		
Coping strategies/skills/tool	For X to get the coping tools [he/she] needs so [he/she] doesn't continue to turn to drugs and alcohol...	14.5
Emotion regulation/self-control	We hope that [he/she] will find ways to express [his/her] feelings without resorting to anger and breaking things.	8.5
Joy/happiness	X will be welcome to come home when the "old X" returns; the [guy/gal] who finds joy in things again, pleasure in being with people, liking most people and laughing again	5.0
Healing/letting go past	Therapy - get [him/her] to the root of [his/her] issues, allow him to vent [his/her] pain and see [him/her] thru that process.	3.5
Balance/stability	We would like [him/her] to become the well balanced person we all know and love.	3.5
Main Category 3: Self-Development		
Improved self-esteem/self-worth	Help [him/her] improve [his/her] self-esteem and see [himself/herself] as a person of value.	13.5
Personal and social responsibility	We want our [son/daughter] to become the person we raised [him/her] to be, respectful, self-disciplined and socially responsible.	12.0
Identity	To help X find [himself/herself].	4.5
Autonomy	Having [him/her] gain skills and independence	4.0

Main Category 4: Observable Behaviours		
Absence of substance use	Of course I hope Pine River is able to help [him/her] end drug usage, ...	20.0
Spending time in a normative/ socially acceptable way	I will know that [he/she] will be ready to return home when [he/she] is able to act on [his/her] wishes to deal with day to day life. By this I mean that [he/she] wants to go to school and get an education and a job, get a [boyfriend/girlfriend] and play [his/her] guitar/join a band but [his/her] problems hold [him/her] back.	4.0

Main Category 5: Insight		
Impact of drug use/externalizing behaviour on family	When [he/she] is able to recognize the extent to which drugs have adversely affected [his/her] life. Also when [he/she] demonstrates some remorse for [his/her] reckless behaviour which I believe would be reflective of conscientiousness.	12.5
Insight in general (different forms of "realization")	Once [he/she] has realized [he/she] doesn't need drugs to feel good.	6.0
Understanding motivations for behaviour (e.g., insight into drug use)	An understanding of why [he/she] uses and how [he/she] has learned to cope when stressed.	2.5

Main Category 6: Future		
Setting goals/making plans	[He/She] needs to set some goals for the future and a plan for how those could be achieved	7.5
Reaching potential	We hope PRI can teach [him/her] strategies to help [him/her] cope so that [he/she] can reach [his/her] potential.	3.5
Purpose in life/desire to move forward/hope/ looking towards future	[He/She] will have an idea of what [he/she] wants for [himself/herself] and [his/her] life, a sense of purpose.	3.0
Main Category 7: Academic		
Academic attainment or progression	[He/She] is very eager to complete [his/her] high-school credits and...	6.5
Academics as a means to vocation	We hope [he/she] will realize that [he/she] is capable of doing [his/her] school work ... and that [he/she] will realize that there are ways he/she will be able to learn and eventually get a job.	4.0

Mental wellness. Parental expectations related to mental wellness were focused on the desire for the youth to have positive emotional experiences (i.e., joy/happiness) and be able to cope with negative emotional experiences (i.e., developing coping strategies, healing, emotion regulation). Parent expectations about mental wellness contributed 15% to the overall model.

The most prevalent aspect of mental wellness was parental expectations that their son or daughter would develop skills to handle life stressors and cope with mental health problems. For example, one parent expressed, “We hope X will develop new strategies for dealing with everyday situations that can cause stress at school, home, [and] work.” Similarly, parents hoped their youth would develop a greater capacity to self-regulate and control their emotional and behavioural reactions. Parents also hoped treatment would help their youth achieve greater mental wellness by supporting them in healing and letting go of previous negative experiences.

PARENT EXPECTATIONS OF YOUTH TREATMENT

Self-development. Parents' articulations about self-development included four components: improved self-esteem/self-worth, personal and social responsibility, identity, and autonomy. Expectancies that focused on self-development accounted for 14% of the model.

A prevalent expectation of parents was for their youth to improve their self-esteem or self-worth. For example, one parent hoped that treatment would result in their son/daughter "feeling good about [himself/herself], trusting in [himself/herself], believing [he/she] can work to reach [his/her] dreams and goals." Another predominant theme that characterized self-development was the expectation that the program would help the troubled youth along a path towards becoming a more responsible young adult. This included taking more personal responsibility (i.e., for their own self-care and life decisions), as well as behaving in more socially responsible ways (e.g., not breaking the law). One parent hoped that the program would help guide his or her youth "toward becoming a socially and personally responsible and conscientious individual." Related to personal responsibility was the expectation that youth would become more autonomous, or as one parent stated, "support X to become more self-reliant."

Parents also mentioned the hope that their youth would experience development in their identity or sense of self. One parent expressed a desire that their youth would be able to "get a better sense of [his/her] strengths and who [he/she] is." Parents hoped that the program would provide opportunities for identity exploration and the development of greater self-awareness.

Observable behaviour. Parents expected intervention to lead to improvements in observable behaviours, primarily the reduction of or abstinence from substance use. Parents also anticipated that after treatment, their son/daughter would spend time in more socially acceptable and normative ways. These normative and socially acceptable activities included a variety of hobbies and interests (e.g., music, sports, theatre arts), all of which conveyed the overall message that their son/daughter would resume past activities and/or take up new interests. In other words, parents wanted a clear indication that their youth was putting their energy in the right direction. As articulated by one parent, "X is smart but has not applied [himself/herself] in positive pursuits. X is entrepreneurial and could do quite well if [he/she] were to focus [his/her] efforts on legal/ healthy activities." Observable behaviours accounted for 10% of the model.

Insight. Insight involved three main components: insight into the impact of past behaviours, insight in general, and insight into motivations for past behaviours. The first expectation of increased insight included gaining perspective on the impact that their previous drug use and behaviours had on their family and expressing remorse for these behaviours. One parent stated, "I feel that X needs support with respect to understanding the impact of [his/her] drug using lifestyle (i.e. socially, physically, emotionally, legally, etc.) as well as the impact that [his/her] mental health issues are having on our family."

Secondly, the term "realization" occurred in parent responses, which was coded as insight in general, as it covered a range of topics (e.g., realize they can cope with mental health issues, realize they can succeed in school, etc.). Finally, parents hoped treatment would help the youth understand the underlying reasons for their previous behaviours and substance use. For example, one parent stated that they hoped the program would help their youth "find the reason X needs to take the drugs."

Future. Parents expected treatment to be associated with increased goal setting behaviour, greater ability for youth to reach their potential, and a greater sense of purpose in life. Goal setting included the youth making concrete goals for the future and a plan to achieve these goals. For example, one parent expected that "hope and goals for [his/her] future will be more clear and structured" after the program. Parents also expected changes in their youths' future orientation, including feeling that they have a purpose in life and a sense that they can reach their potential. Parents expressed these thoughts in statements such as "I would like [him/her] to see a future for [himself/herself]," and "help X clean [himself/herself] up, finish high school and achieve [his/her] potential." The future category accounted for 6% of the total model.

Academics. Expectations about academics were a small element in the overall model of parent expectations, contributing 4% of the responses. Specifically, some parents hoped that treatment would help their youth attain or progress in academics, such as receiving high school credits, as a goal in and of itself. Other parents saw academics as means for their youth to attain a meaningful (i.e., vocationally oriented) future.

Domain 2 - Negative Expectations or Concerns

Although the majority of parents expressed positive expectations about their youth's progress through treatment, 17% of parent statements expressed worry or concern about their youth engaging with treatment. These were grouped into three temporal periods: concerns before treatment, concerns during treatment, and concerns after treatment. All main categories, subcategories, and an exemplar for each subcategory for Domain 2 – Negative expectations or concerns can be found in Table 2. Regarding concerns before treatment, parents feared that their youth might not actually attend treatment, which included worrying that their youth would behave in a way that would prohibit their admission.

Parents also stated concerns about what might happen to their son or daughter during treatment, either as a result of the youth's behaviour or interactions with other youth. These concerns included: that he or she would not stay for the full duration of treatment, would not engage with treatment, would be lonely or miss family, or would feel abandoned. Some parents were concerned that their youth would behave in such a way as to get expelled, would run away, or would simply disengage from the program, as expressed in one parent's statement "that [he/she] won't stay the course . . . or even give it a chance." Other parents worried that their son or daughter would feel that their parents were trying to get "rid of them"

as captured by the statement of one parent, “I worry that X will view this more as me giving up on [him/her] or me trying to get rid of ‘the problem.’”

There was also a fear of contagion, that is, for their son or daughter to learn new destructive behaviours from other youth in treatment. Parents expressed concerns that their youth would “make friends with troubled teens,” effectively transporting their youth from one circle of negative peers to another. One parent worried that “[he/she] will be exposed to new negative influences. We have a great fear that [he/she] will graduate to harder drugs.”

Parents also expressed concern about the quality of treatment and the logistics of themselves being engaged with therapy. When considering treatment quality, some parents wondered if treatment staff would recognize the needs of their youth, as articulated by one parent, “I worry about whether or not [he/she] will be treated with compassion, I mean I’m sure [he/she] will but compassion with a true and insightful understanding of [his/her] life experience.” In terms of treatment logistics, some parents worried about the distance between the treatment facility and their home and the costs incurred for therapy.

When expressing expectations of treatment, concerns about what would happen after treatment arose. These included concerns about the youth not experiencing improvements and not having access to aftercare services following residential treatment.

Table 2.

Negative Expectations or Concerns (Domain 2)

Subcategories	Exemplars	Average Frequency
Main Category 1: Before Treatment		
Won't go	Concerned [he'll/she'll] just say no...	6.5
Main Category 2: During Treatment		
Won't stay	I fear [he/she] will try to leave	7.5
Quality of care and treatment logistics	The location is far from where we live so we maybe not be as involved as we would like to be.	6.0
Contagion	I am afraid that [he/she] might be around people that have much worse problems than [he/she] does and that [he/she] will learn from them.	4.0
Not present during treatment/low engagement	That [he/she] is just going to say what [he/she] thinks you want to hear and not open up about the real things that are troubling [him/her].	3.5
Abandonment/anger/ resentment	My major concern is that [he/she] will view this as my pushing [him/her] away or rejecting [him/her].	3.5
Loneliness/missing friends & family	I am worried that [he/she] will miss us and [his/her] friends and want to leave before [he/she] is ready.	2.0
Main Category 3: After Treatment		
Access to support and treatment after program	I would hope that the individuals with whom [he/she] will have established trustful relationships would check in with [him/her] from time to time and that X and the rest of us would have access to the therapeutic counsellor for guidance when needed.	5.0
No improvement	I also worry about what I will do if this does not work	2.0

Discussion

The goal of this study was to investigate parents' expectations for change in their youth during a residential treatment program for youth with mental health concerns and substance use. Data were derived from the seven questions on the program's application form that related to what parents hoped or expected might change over the course of treatment for their troubled youth, as well as concerns about enrolling their youth in the program. Results indicated a wide range of positive expectations including relationships, mental wellness, self-development, observable behaviours, insight, future, and academics, as well as concerns or negative expectations.

Relationships

The ability for youth to have healthy relationships was paramount to parents. Over a quarter (26%) of all statements related to aspects of healthy relationships, such as relationship repair, respect, communication, and creating a supportive family environment. Before entering residential treatment, youths' relationships with their families are often characterized by patterns of frequent out-of-home placements and difficult family relationships including acute and chronic conflicts (Frensch & Cameron, 2002). Despite this finding, residential treatment programs for youth do not always focus on improving family functioning or facilitating the repair of family relationships. In fact, there has been a call within the field of residential treatment to increase family involvement in treatment and develop program components to facilitate healthier family functioning (Affronti, 2009; Clarahan & Christenson, 2017; Geurts, Boddy, Noom, & Knorth, 2012; McLendon, McLendon, & Hatch, 2012; Merritts, 2016; Smith, & Issenmann, 2017). Instead of viewing the youth as the client, the program involved in this study sees the family as the client and they engage families through an annual parent retreat, parent workshops, a weekly parent support group, and monthly family therapy sessions.

Parents expected changes in their youth's peer relationships, including removal from negative influences and re-engagement with positive peer relationships. Previous research has highlighted the link between peer relationships and substance use in adolescents (Allen, Chango, Szwedo, Schad, & Marston, 2012), as well as the negative impact of deviant peer processes on youths' future problem behaviour (Dishion, Spracklen, Andrews, & Patterson, 1996). Conversely, positive peer relationships are important contexts for youths' development, particularly in terms of the opportunities they provide for youth to learn social skills and social competence (Collins & Steinberg, 2006). The program, which is the focus of the current study, creates a positive peer culture by ensuring staff model healthy relationships for youth and by facilitating process groups in which youth openly work through any issues within their peer relationships. The staff in this program are intentionally mindful of the peer culture at all times and consider how various decisions may impact the peer culture, including deciding which incoming youth are placed on each team.

Mental Wellness

Youth who seek treatment for addiction are likely to struggle with mental health problems, as the co-occurrence rate is between 64% and 88% (Brewer, Godley, & Hulvershorn, 2017). It was interesting that parents did not expect a reduction in symptoms; rather, they expressed hope that their youth would be better equipped to cope with their mental health problems and would develop positive aspects of wellness, such as balance, happiness, and emotion regulation. Emotional dysregulation has been linked to greater substance use among adolescents (Kirisci, Tarter, Mezzich, & Vanyukov, 2007), making emotion regulation an important skill for youth to develop during residential treatment. In order to support the development of emotion regulation skills, the program in the current study uses Dialectical Behaviour Therapy (DBT) as the primary therapeutic modality (Linehan, 1993). They offer a weekly DBT skills group for youth and ensure that youth have a space to work through strong emotions in the process group that occurs three times a week. Within the peer culture, value is placed on someone managing their emotions, and someone managing well is recognized and praised by other youth and staff.

Self-Development

Parents expressed an expectation that youths' sense of self would develop during the treatment process, which included developing better self-esteem and exploring their identity. Theories and research from the field of developmental psychology suggest that developing a secure and authentic sense of self is one of the core tasks of adolescence (Erikson, 1968; Plotkin, 2008) and that struggling with identity issues is linked with a number of negative outcomes for youth (Hernandez, Montgomery, & Kurtines, 2006). For example, girls with identity distress experience significantly more externalizing symptoms (e.g., anti-social behaviour), whereas boys with identity issues experience significantly more internalizing symptoms (e.g., anxiety, depression, peer problems, and social withdrawal; Hernandez et al., 2006). Thus, youth requiring mental health services may also need a supportive social environment where they are able to explore their identity. In the program discussed in this study, youth participate in individual therapy for one or two hours a week depending on the needs of the youth at that time. Youth are also placed in a group based on their stage in the program. As part of these stage groups, they receive therapeutic assignments, which include questions about who they want to be, what they admire, and the self that they present to others.

Parents expected youth to become more autonomous and take more responsibility after attending residential treatment. Establishing autonomy is a central task in adolescence, with healthy development defined by youth establishing independence from parents and other adults (Karabanovaa & Poskrebyshevaa, 2013), while still remaining connected to important people in their lives (Collins & Steinberg, 2006; Oudekerk, Allen, Hessel, & Molloy, 2015). Using longitudinal data, Allen and colleagues (1994) discovered that difficulties establishing autonomy and relatedness with parents were associated

with depression and externalizing behaviours in adolescents. In the program discussed in this study, the development of autonomy is intentionally supported during the last phase of treatment when youth prepare to transition back into their home. Staff support youth in developing an individual transition plan based on where they want to be and how they plan to practice the skills they have learned with their family and friends at home.

Observable Behaviour

Behaviours such as substance use and criminality are often the impetus for parents to seek treatment for their youth, which was reflected in parental expectations of behavioural change. For example, substance use, theft/stealing, and legal trouble were all in the top 10 reasons parents decided to send their youth to a residential treatment program in one study of 473 client files in the United States (Bettmann, Lundahl, Wright, Jasperson, & McRoberts, 2011). Previous research with residential treatment programs has focused heavily on behavioural changes such as substance use change (Godley, Godley, Funk, Dennis, & Loveland, 2001; Henderson, Dakof, Greenbaum, & Liddle, 2010), missing social events (Shane, Jasiukaitis, & Green, 2003), academics and criminality (Balsa, Homer, French, & Weisner, 2009), risky sexual behaviour (Spooner, Mattick, & Noffs, 2001), and/or recidivism (Edelen, Slaughter, McCaffrey, Becker, & Morral, 2009). In this study, however, expectations for changes in these types of behaviours only accounted for 10% of the model. Indeed, expectations of behavioural change were far less evident in the parent applications than expectations of youth's capacity to develop and maintain healthy family relationships and to achieve mental wellness. This suggests that residential treatment programs should focus on, and measure changes in, relationships, sense of self, and mental wellness, in addition to expecting and measuring changes in observable behaviour.

Insight

Parents expected that their youth would gain insight into the consequences that their substance use and behavioural problems had on the family. Parents also articulated an expectation that youth would gain insight into the motivations underlying their behaviours, including their substance use. Rogers (1944) defined insight as the perception of new meaning in the individual's own experience and saw insight as a necessary condition for positive behavioural change. Russell and Gillis (2010) discuss using experiential therapy in various therapeutic contexts (e.g., therapeutic boarding schools, wilderness therapy) to help youth examine past and current behaviours and gain insight into the motivations behind them. Curtin (2010) detailed specific practices to create a therapeutic community that may facilitate youth gaining insight into their behaviours, including holding community meetings and facilitating peer feedback. The program discussed in this study helps youth develop greater insight during individual therapy, process groups, and stage groups by asking youth about the obstacles that got in the way of their development. They also create novel opportunities for reflection on their interpersonal patterns as they unfold during the OBH and equestrian therapy

components of the program. For example, as part of the equestrian therapy program one youth exclaimed, "Wow, I really let that horse walk all over me." Integrating these practices may be useful for other residential programs wishing to target the parental expectation of helping youth develop greater insight.

Future

Parental expectations in the future category included youth setting goals, developing a greater sense of their purpose in life, and reaching their potential. Adolescence is a crucial period for the formulation of personal goals, decisions about educational opportunities, the consolidation of social values, and the construction of future plans (Carroll, Durkin, Hattie, & Houghton, 1997). Individuals with high levels of future orientation are less likely to use drugs and alcohol as adolescents and over the course of their lives (Peters et al., 2005; Robbins & Bryan, 2004). Research on resilient youth has identified optimistic future expectations, personal goals, and a strong sense of purpose as key components of well-being (Seligman, 1990; Smokowski, Reynolds, & Bezruczko, 2000), indicating the need for residential treatment programs to help youth develop skills such as goal setting. The program discussed in this study does this mostly through the use of the stage system. In order for youth to progress to the next stage of the program, they have specific interpersonal and behavioural goals that must be reached. Youth learn that their behaviour today will impact their future and are supported in making choices that will move them towards their goals, including their goal of graduating from the program.

Academic

In the final positive expectation category, parents indicated a desire for their youth to reach their academic potential, as well as continue their education in order to pursue a vocation. Before beginning residential programs, many youth are not regularly attending, have been expelled from, or have dropped out of school. Indeed, Bettmann and colleagues (2011) found that school problems were the third most prevalent reason for parents sending their youth to a residential treatment program. Not completing their high school education places youth at-risk for future social and financial difficulties. For example, adults with less than a high school education are twice as likely to experience unemployment compared to high school graduates, three to four times more likely to experience unemployment compared to college/university graduates, and are at greater risk for social exclusion and a host of additional risk factors (Hango & De Broucker, 2007; Jackson, 2003). It is important for residential treatment programs to implement a system that enables youth to work towards academic goals such as gaining credits towards their high school diploma or post-secondary degree. The program discussed in this study does this by providing individualized educational programming and creating a community of learning in which the goal of getting a job or getting into a college and university is celebrated by peers and staff.

PARENT EXPECTATIONS OF YOUTH TREATMENT

Concerns

Many families who seek residential treatment have tried other methods of therapy such as individual counselling, outpatient, or day therapy (Bettmann et al., 2011) and are uncertain as to whether residential treatment will be more effective. Parents also expressed concerns that their youth would act in ways that would prohibit admission or ongoing treatment, or simply refuse to go. These concerns make sense given the current policy governing treatment centers in Ontario, which specify that adolescents must willingly consent to participate in treatment (e.g., Child and Family Services Act, 1990). Before attending the program, the admissions director meets with families, often to help address their concerns before starting treatment. In the first phase of treatment, the OBH therapist has phone calls with families for two hours a week to help work through any concerns they have at the beginning of treatment. Parents also have the opportunity to attend a parent support group in person or over the phone that is facilitated by a staff member.

Parents' concerns about contagion warrant consideration, as youth may indeed find deviant peers while attending programs for youth who struggle with similar problems (Dodge, Dishion, & Lansford, 2006). High-risk adolescents are particularly vulnerable to the effects of contagion and these aggregations with deviant peers may inadvertently reinforce problem behaviour (Dishion, McCord, & Poulin, 1999). As discussed above, the program discussed in this study mitigates the possibility for contagion by modeling of healthy relationships and creating a positive peer culture.

Based on the results of this study, discussing parental concerns as a part of the admissions process is recommended. Specifically, this dialogue should address how youths are retained and under what circumstances they may be discharged (e.g., fire-setting), what to expect in terms of peers at the treatment centre (e.g., the promotion of positive peer culture), and how financial and logistical concerns may be addressed (e.g., through foundation bursaries or insurance).

Limitations

The goal of this study was to study an under-explored area of inquiry related to youth mental health and substance use treatment. Making use of pre-existing data was advantageous, as it avoided the need for parents to contribute information while they were in a state of crisis and stress. This approach also has limitations, namely, the questions were not constructed to be specific to the research question of this study. Instead, they were created as part of an application process to inform admissions and treatment planning. Although the selective analysis of parent expectations from the larger admission application developed a more focal understanding of parental expectations, it reduced the amount of information on which this understanding was based (as would be accomplished in an in-depth interview). Moreover, the small sample size (28 individuals or approximately 4.5% of the study population) and the fact that all

applications were to a single treatment program were both limitations. For these reasons, this study should be considered preliminary and a first step toward future research into parental expectations of youth treatment.

Implications for Clinical Practice and Treatment Evaluation

The findings in this study suggest that the parents' expectations of treatment for their youth extend beyond the primary reason for applying (e.g., substance use) and are complex and comprehensive. Parents have clear, specific, and well-developed expectations for change across family relationships, mental wellness, self-development, insight, future-orientation, and academics. Treatment centres could consider these findings when planning programs, communicating with parents, and developing plans for program evaluation. Based on the results of this study, recommendations for treatment programming include:

- Employing formal individual and family therapy to facilitate healing and facilitate the repair of the parent-adolescent relationship
- Focusing on creating a positive peer culture to limit any potential negative influences of deviant peers and encourage growth through positive peer relationships.
- Focusing on developmental tasks such as developing a secure sense of self and establishing autonomy to help move youth onto a healthier developmental path.
- Helping youth develop skills such as career planning and goal setting, and implementing a system that enables youth to work towards academic goals such as gaining credits towards their high school diploma or post-secondary degree.
- Discussing parental concerns as a part of the admissions process, including concerns parents may have before, during, and after treatment.
- Considering parental expectations when designing evaluation tools to ensure that core parental expectations are measured as program success indicators.

The results of this study have deepened the understanding of what parents expect from residential treatment for their troubled adolescent. The next step in this line of inquiry is a validation of the findings using a quantitative confirmatory approach, preferably from multiple treatment centres that offer various treatment modalities.

References

Affronti, M. L. (2009). The future of family engagement in residential care settings. *Residential Treatment for Children & Youth, 26*(4), 357-304.

Allen, J. P., Chango, J., Szwedo, D., Schad, M., & Marston, E. (2012). Predictors of susceptibility to peer influence regarding substance use in adolescence. *Child Development, 83*(1), 337–350.

Allen, J., Hauser, S., Eickholt, C., Bell, K., & O'Connor, T. (1994). Autonomy and relatedness in family interactions as predictors of expressions of negative adolescent affect. *Journal of Research on Adolescence, 4*, 535–552.

Balsa, A. I., Homer, J. F., French, M. T., & Weisner, C. M. (2009). Substance use, education, employment, and criminal activity outcomes of adolescents in outpatient chemical dependency programs. *Journal of Behavioural Health Services & Research, 36*, 75–95.

Bettmann, J.E., Lundahl, B.W., Wright, R., Jasperson, R.A., & McRoberts, C.H. (2011). Who are they? A descriptive study of adolescents in wilderness and residential programs. *Residential Treatment for Children & Youth, 28*, 192–210.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101.

Brewer, S., Godley, M. D., & Hulvershorn, L. A. (2017). Treating mental health and substance use disorders in adolescents: What is on the menu? *Current Psychiatry Reports, 19*(1), 5. doi: 10.1007/s11920-017-0755-0.

Carroll, A., Durkin, K., Hattie, J., & Houghton, S. (1997). Goal setting among adolescents: A comparison of delinquent, at-risk, and not-at-risk youth. *Journal of Educational Psychology, 89*(3), 441.

Charmaz, K. (2004). Premises, principles, and practices in qualitative research: Revisiting the foundations. *Qualitative Health Research, 14*, 976–993.

Child and Family Services Act, R.S.O. 1990, CHAPTER C.11 (1990). Retrieved from http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90c11_e.htm#

Clarahan, W., & Christenson, J. D. (2017). Family involvement in the treatment of adolescent substance abuse. In R. D. Crane (Series Ed.), J. D. Christenson, & A. N. Merritts (Eds.), *Family therapy with adolescents in residential treatment: Intervention and research* (pp. 231-243). Cham, Switzerland: Springer International Publishing AG. doi:10.1007 /978-3-319-51747-6.

Collins, W. A., & Steinberg, L. (2006). Adolescent development in interpersonal context. In W. Damon Child & R. Lerner (Eds.), Adolescent development: An advanced course (pp. 551-590). Hoboken, NJ: John Wiley & Sons.

Curtin, K.A. (2010). Developing a therapeutic community for students with emotional disturbance: Guidelines for practice. *Journal of Therapeutic Schools & Programs, 4*(1), 134–146.

Dishion, T. J., McCord, J., & Poulin, F. (1999). When interventions harm: Peer groups and problem behavior. *American psychologist, 54*(9), 755.

Dishion, T. J., Spracklen, K. M., Andrews, D. W., & Patterson, G. R. (1996). Deviancy training in male adolescent friendships. *Behavior Therapy, 27*(3), 373–390.

Dodge, K. A., Dishion, T. J., & Lansford, J. E. (2006). Deviant Peer Influences in Intervention and Public Policy for Youth. Social Policy Report. Volume 20, Number 1. *Society for Research in Child Development.*

Edelen, M. O., Slaughter, M. E., McCaffrey, D. F., Becker, K., & Morral, A. (2009). Long-term effect of community-based treatment: Evidence from the adolescent outcomes project. *Drug and Alcohol Dependence, 107*, 62–68.

Epstein, N. B., Baldwin, L. M., & Bishop, D. S. (1983). The McMaster Family Assessment Device. *Journal of Marital and Family Therapy, 9*, 171-180.

Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: W.W. Norton.

Frensch, K. M., & Cameron, G. (2002). Treatment of choice or a last resort? A review of residential mental health placements for children and youth. *Child and Youth Care Forum, 31*(5), 307-339.

Geurts, E. M., Boddy, J., Noom, M. J., & Knorth, E. J. (2012). Family-centred residential care: The new reality? *Child & Family Social Work, 17*(2), 170–179.

Godley, M. D., Godley, S. H., Funk, R. R., Dennis, M. L., & Loveland, D. (2001). Discharge status as a performance indicator: Can it predict adolescent substance abuse treatment outcome? *Journal of Child & Adolescent Substance Abuse, 11*, 91–109.

Griffin, B. A., Ramchand, R., Edelen, M. O., McCaffrey, D. F., & Morral, A. R. (2011). Associations between abstinence and economic and educational outcomes seven years later among high-risk youth. *Drug and Alcohol Dependence, 113*, 118–124.

Guest, G., & MacQueen, K. K. (Eds.) (2008). *Handbook for team-based qualitative research*. Lanham, MD: Rowman & Littlefield/AltaMira Press.

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). Collecting qualitative data: A field manual for applied research. Thousand Oaks, CA: Sage.

Hango, D. W., & De Broucker, P. (2007). *Education-to-labour market pathways of Canadian youth: Findings from the Youth in Transition Survey* (Vol. 5). Ottawa, Ontario: Culture, Tourism and the Center for Education Statistics, Statistics Canada.

Harrison, P. A. & Ashe, S. E. (2001). Adolescent treatment for substance use disorders: Outcomes and outcome predictors. *Journal of Child and Adolescent Substance Abuse, 11*, 1–17.

Henderson, C. E., Dakof, G. A., Greenbaum, P. E., & Liddle, H. A. (2010). Effectiveness of multidimensional family therapy with higher severity substance-abusing adolescents: Report from two randomized controlled trials. *Journal of Consulting and Clinical Psychology, 78*, 885–897.

Hernandez, L., Montgomery, M. J., & Kurtines, W. M. (2006). Identity distress and adjustment problems in at-risk adolescents. *Identity, 6*(1), 27–33.

Hill, C. E., Thompson, B. J., & Williams, E. N. (1997). A guide to conducting consensual qualitative research. *The Counseling Psychologist, 25*, 517–572.

Jackson, A. (2003). *"Good jobs in good workplaces": Reflections on medium-term labour market challenges*. Ottawa: Caledon Institute of Social Policy.

Karabanovaa., O. A., & Poskrebyshevaa, N. N. (2013). Adolescent autonomy in parent-child relations. *Procedia: Social and Behavioral Sciences, 86*, 621–628. doi: 10.1016/j.sbspro.2013.08.624

Kessler, R. C., Avenevoli, S., Costello, E. J., Georgiades, K., Green, J. G., Gruber, M. J., . . . Merikangas, K. R. (2012). Prevalence, persistence, and sociodemographic correlates of DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. *Archives of General Psychiatry, 69*(4), 372-380.

Kirisci, L., Tarter, R., Mezzich, A., & Vanyukov, M. (2007). Developmental trajectory classes in substance use disorder etiology. *Psychology of Addictive Behaviors, 21*(3), 287.

Lerner, R. M. (1991). Changing organism-context relations as the basic process of development: A developmental contextual perspective. *Developmental Psychology, 27*(1), 27-32.

Linehan, M. M. (1993). *Cognitive behavioral treatment of borderline personality*. New York: Guilford Press.

McLendon, T., McLendon, D., & Hatch, L. (2012). Engaging families in the residential treatment process utilizing family-directed structural therapy. *Residential Treatment for Children & Youth, 29*(1), 66–77.

McLeod, J. (2001). *Qualitative research in counselling and psychotherapy*. Sage.

Meier, A., Boivin, M., & Meier, M. (2008). Theme-analysis: Procedures and application for psychotherapy research. *Qualitative Research in Psychology, 5*, 289–310.

Merritts, A. (2016). A review of family therapy in residential settings. *Contemporary Family Therapy, 38*(1), 75-85. doi:10.1007/s10591-016-9378-6.

Muck, R., Zempolich, K. A., Titus, J. C., Fishman, M., Godley, M. D., & Schwebel, R. (2001). An overview of the effectiveness of adolescent substance abuse treatment models. *Youth & Society, 33*, 143–168.

Nock, M. K., & Kazdin, A. E. (2001). Parent expectancies for child therapy: Assessment and relation to participation in treatment. *Journal of Child and Family Studies, 10*, 155–180.

Oudekerk, B. A., Allen, J. P., Hessel, E. T., & Molloy, L. E. (2015). The cascading development of autonomy and relatedness from adolescence to adulthood. *Child Development, 86*, 472–485. doi:10.1111/cdev.12313

Pepler, D., Craig, W., & Haner, D. (2012). Healthy development depends on healthy relationships. *Division of Childhood and Adolescence, Centre for Health Promotion, Public Health Agency of Canada. (November 2012)*, 9.

Peters, R. J., Tortolero, S. R., Johnson, R. J., Addy, R. C., Markham, C. M., Escobar-Chaves, S. L., . . . Yacoubian, G. S. (2005). The relationship between future orientation and street substance use among Texas alternative school students. *The American Journal on Addictions, 14*(5), 478-485.

Plotkin, B. (2008). *Nature and the human soul*. California: New World Library.

Renna, F. (2007). The economic cost of teen drinking: Late graduation and lowered earnings. *Health Economics, 16*, 407–419.

Rennie, D. L. (2006). The grounded theory method: Application of a variant of its procedure of constant comparative analysis to psychotherapy research. In C. T. Fischer (Ed.), *Qualitative research: Instructional empirical studies* (pp. 59–78). New York, NY: Elsevier.

Rennie, D. L., Phillips, J. R., & Quartaro, G. K. (1988). Grounded theory: A promising approach to conceptualization in psychology. *Canadian Psychology, 29*(2), 139-150.

Riddell, J.K. (2014). The Development of Self in Relationships: Youths' Narratives of Change Through a Residential, Wilderness and Family Therapy Intervention (Master's Thesis, York University).

Richards, L. (2005). *Handling qualitative data: A practical guide*. Sage.

Robbins, R. N., & Bryan, A. (2004). Relationships between future orientation, impulsive sensation seeking, and risk behavior among adjudicated adolescents. *Journal of Adolescent Research, 19*(4), 428-445.

Rogers, C. R. (1944). The development of insight in a counseling relationship. *Journal of Consulting Psychology, 8*(6), 331.

Russell, K. C, & Gillis, H. L. (2010). Experiential therapy in the mental health treatment of adolescents. *Journal of Therapeutic Schools & Programs, 4*(1), 47–79.

Seligman, M. E. (1990). *Learned optimism*. New York: Alfred A. Knopf.

Shane, P. A., Jasiukaitis, P., & Green, R. S. (2003). Treatment outcomes among adolescents with substance abuse problems: The relationship between comorbidities and post-treatment substance involvement. *Evaluation and Program Planning, 26*, 393–402.

Smith, K., & Issenmann, T. (2017). Expediting growth: A call to measure the impact of family involvement during wilderness therapy. In R. D. Crane (Series Ed.), J. D. Christenson, & A. N. Merritts (Eds.), *Family therapy with adolescents in residential treatment: Intervention and research* (pp. 231-243). Cham, Switzerland: Springer International Publishing AG. doi:10.1007 /978-3-319-51747-6.

Smokowski, P. R., Reynolds, A. J., & Bezruczko, N. (2000). Resilience and protective factors in adolescence: An autobiographical perspective from disadvantaged youth. *Journal of School Psychology, 37*(4), 425-448.

Spooner, C., Mattick, R. P., & Noffs, W. (2001). Outcomes of a comprehensive treatment program for adolescents with a substance use disorder. *Journal of Substance Abuse Treatment, 20*, 205–213.

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The National Association of Therapeutic Schools and Programs Ethical Principles

Members of the National Association of Therapeutic Schools and Programs (NATSAP) provide residential, therapeutic, and/or education services to children, adolescents and young adults entrusted to them by parents and guardians. The common mission of NATSAP members is to promote the healthy growth, learning, motivation and personal well-being of program participants. The objective of member therapeutic and educational programs is to provide excellent treatment for program participants, treatment that is rooted in good-hearted concern for their well-being and growth, respect for them as human beings and sensitivity to their individual needs and integrity.

Therefore, all NATSAP member programs strive to:

1. Be conscious of, and responsive to, the dignity, welfare and worth of our program participants.

2. Honestly and accurately represent ownership, competence, experience, and scope of activities related to our program and to not exploit potential clients' fears and vulnerabilities.

3. Respect the privacy, confidentiality and autonomy of program participants within the context of our facilities and programs.

4. Be aware and respectful of cultural, familial and societal backgrounds of our program participants.

5. Avoid dual or multiple relationships that may impair professional judgment, increase the risk of harm to program participants or lead to exploitation.

6. Take reasonable steps to ensure a safe environment that addresses the emotional, spiritual, educational and physical needs of our program participants.

7. Maintain high standards of competence in our areas of expertise and to be mindful of our limitations.

8. Value continuous professional development, research and scholarship.

9. Place primary emphasis on the welfare of our program participants in the development and implementation of our business practices.

10. Manage our finances to ensure that there are adequate resources to accomplish our mission.

11. Fully disclose to prospective candidates the nature of services, benefits, risks and costs.

12. Provide informed, professional referrals when appropriate or if we are unable to continue service.

13. NATSAP members agree to not facilitate or practice reparative therapy.

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