4-22-2019

Religious Coping and Christ-Centered Recovery for Women with Substance Use Disorders

Mary Beth Bever
Belmont University

Religious Coping and Christ-Centered Recovery for Women with Substance Use Disorders

Mary Beth Bever

Belmont University

Scholarly Project Advisor: Dr. Elizabeth Morse

Scholarly Project Team Members: Dr. Steve Busby, Dr. Tracy Frame, Emily Kohal, and Dr. David Phillipi,

Date of Submission: April, 22 2019

Abstract

Women have unique risk factors for the development of substance use disorder (SUD), barriers to SUD treatment, and risk factors for SUD relapse that require holistic care models and provide trauma-informed care approaches that address effective coping strategies. The use of religion and spirituality has been commonplace in many SUD programs to inspire the use of positive religious coping; however, negative religious coping may also be drawn on which poses a potential harm for women with SUD. The aim of this project was to assess for a correlation in positive and negative religious coping scores and program completion rates in a sample of women presenting for 30-day residential SUD treatment. This was a retrospective chart review that reviewed 100 charts of women who presented for SUD treatment between August 1st, 2018 and December 17th, 2018. Information gathered was relevant demographic and medical history, program completion status, and religious coping scores via the Brief RCOPE. All women had a history of trauma and approximately half of the woman completed the program. The women used positive religious coping at a higher rate than negative religious coping and there was no significant correlation between Brief RCOPE scores and program completion rates. While this is one of the only studies that have assessed religious coping scores and program completion rates, the other findings describing the sample correlate with relevant studies. More research is needed to deepen the understanding of how women with SUD use religious coping in the course of treatment.

Keywords: women, substance use disorder/addiction, recovery, religious coping, trauma, program completion

Religious Coping and Christ-Centered Recovery for Women with Substance Use Disorders

With rates of substance use disorder (SUD) diagnoses steadily increasing among women in the United States (U.S.), there is a need to improve the quality of evidence supporting recovery models sensitive to the unique needs of women (Kerlin, 2017; Substance Abuse and Mental Health Services Administration [SAMHSA], 2015). Epidemiological surveys of SUD in the U.S. show rates of SUD peak in early adulthood, which for women, overlaps with prime childbearing years, making SUD in women a public health issue that impacts the health of women and children (SAMHSA, 2015). The number of women presenting for labor and delivery with opioid use disorder in the U.S. quadrupled from 1999 to 2014 and has been found to be connected to the five-fold increase in neonatal abstinence syndrome (Haight, Ko, Tong, Bohm, & Callaghan, 2018; Patrick, Davis, Lehman, & Cooper, 2015; Patrick, Schmacher, Bennyworth, Krans, McAllister, & Davis, 2015). Women are prone to a number of risk factors for developing SUD including trauma, stress, motherhood, feelings of shame and guilt, gender expectations, and these same exposures along with a number of unique biological risks go on to both complicate recovery and increase the risk for relapse, overdose, and death (Cheng, Marven, & Anthony, 2016; Melendez, Cortes, & Amaro, 2012; SAMHSA, 2015). Furthermore, the socio-cultural context for women present additional barriers to treatment such as need for reliable childcare, fear of custody, loss of children, undiagnosed or poorly managed mental health issues, chronic stress, insurance coverage, and financial concerns (SAMHSA, 2015).

Trauma, posttraumatic stress disorder (PTSD), shame, and guilt are significant and common risk factors for the development of SUD in women, and they also create barriers to treatment, and increase relapse risk (Bradley, 2011; Dawes, Antelman, Vanyukov, Giancola, &

Susman, 2000; SAMHSA, 2015). Sanders, Harris, Nelson, and McGovern (2014) found women with SUD attribute the feeling of shame with their most rock-bottom experiences. It has been proposed that shame and guilt are particularly complex and toxic for mothers with SUD since many experience role conflict and extreme stress in managing their addiction while also struggling to keep custody and care for their children (Jessup, Humphreys, Brindis, Lee, 2003; Sanders et al., 2014). As compared to male counterparts, women seek and engage in SUD treatment later in the disease process and report shame and guilt as a primary reason for the delay (Sanders et al., 2014; SAMHSA, 2015). Exploring the complex and overlapping relationships between trauma, PTSD, shame, guilt, and the abuse of illicit substances contextualizes the understanding of SUD as a coping disorder and reframes interventions, best practices, and sustainable models of care.

Literature describing the unique needs of women in SUD recovery has contributed to innovative protocols and more sensitive women-centered models of care (Bliss, 2015; Bliss & Ekmark, 2013; Fallot & Heckman, 2005; SAMHSA, 2015). Since SUD affects the physical, mental, social, and spiritual health of the person, a holistic approach to SUD treatment is the preferred route to sustainable recovery (Kerlin, 2017; SAMHSA, 2017). Spiritually influenced care and, more specifically, Christ-centered care is used across many different disciplines and areas of health and health care and is a well-established treatment modality in the SUD recovery community (Ano & Vasconelles, 2005; Asadzandi, 2018; Balboni, 2013; Bliss, 2015; DiReda & Gonsalvez, 2016; Pargament, 1997). Spiritually influenced care addresses spiritual injuries that may trigger substance misuse or exacerbate existing SUD. The premise of this recovery model is that a positive and supportive community and a strong connection with a Higher Being might reverse the disconnection, isolation, and guilt associated with substance abuse, and restore and

individual's sense of worthiness and purpose (DiReda & Gonsalvez, 2016). However, there is limited research on how spiritually influenced recovery models affect treatment outcomes, such as relapse risk, program completion rates, and sustained recovery in women with SUD (Kerlin, 2017; Pargament et al., 1998; SAMHSA, 2015; Walton-Moss, Ray, & Woodruff, 2013). Some authors have suggested that negative religious coping, or the trigger of deep shame and guilt that can accompany spiritual injury, can actually increase relapse risk or compromise treatment engagement for individuals early in recovery. (Puffer, Skalski, & Meada, 2010). It is therefore imperative to understand how spiritually influenced care impacts treatment outcomes for individuals who draw from both positive and negative religious coping, yet assessment of religious coping in connection with treatment outcomes is not routinely assessed or reported in SUD research (Puffer, Skalski, & Meada, 2010; SAMHSA, 2015).

Problem Statement

The established risk factors for relapse unique to women call for careful evaluation of recovery models for their effectiveness (Melendez et al., 2012; SAMHSA, 2015; SAMHSA, 2017). While recovery models that draw from a religious affiliation are common, there is a gap in the literature exploring the experience of women with SUD who relapse or withdraw from treatment after participating in recovery programs that draw from a religious context.

Purpose and Hypotheses

The purpose of this project is to evaluate how baseline religious coping scores correlate with completion of a 30 day residential SUD treatment program in a cohort of women presenting for SUD treatment at a Christ-centered treatment facility. The two hypotheses are that women with high baseline positive religious coping will have high rates of program completion and women with high baseline negative religious coping will have high rates of program withdrawal.

Review of Evidence

Substance Use Disorder as a Coping Disorder

Understanding SUD in women as a coping disorder is vital to a holistic treatment approach that addresses the physical injury of SUD as well as the deep wounding of the mental, social, and spiritual self that both underlies active SUD and worsens in the cycle of addiction, relapse, and recovery. Several studies found women with a history of physical or sexual trauma and associated PTSD reported abusing substances to numb emotional pain, depression, or anxiety, which supports the classification of SUD as a coping disorder (Grayson & Noelen-Hoeksema, 2005; Ullman, Filipas, Townsend, & Starzynski, 2005, Ano & Vasconelles, 2005). The physical symptoms from SUD are highly important to treat since SUD can lead to severe pathological changes and even death; however, addressing the disordered coping associated with SUD is a crucial step toward healing and sustainable recovery (Dayton, 2000).

Early research of PTSD focused on male combat Veterans, and only later were the hallmark symptoms of PTSD noted in women survivors of sexual assault (Vogt, 2018). It was found women with a history of sexual assault had similar PTSD signs and symptoms to the men in combat such as flashbacks, anxiety, hypervigilance, loss of concentration along with disordered coping responses, including high risk sexual behavior and substance misuse (Vogt, 2018). From this evidence, it has been suggested that persons with PTSD are at risk for the development of SUD; furthermore, women with PTSD have higher rates of associated mental health co-morbidities such as depression and anxiety that are independently associated with increased risk for substance abuse (Vogt, 2018; SAMHSA, 2015). Approximately 80% of women with SUD report a history of physical abuse, sexual abuse or both, and 30% to 60% also have PTSD (Cohen & Hein, 2006). In 2018, the U.S. Department of Veteran Affairs estimates

around 20% of Veterans with PTSD also have active SUD and when either goes untreated, the symptoms of both get much worse (U.S. Department of Veteran Affairs, 2018). The similar pattern of trauma and PTSD in women with SUD is marked by compounding shame and guilt, which fosters secrecy and isolation and damages healthy coping mechanisms. Women with SUD have reported avoidance and denial along with many other negative coping responses. Kaysen et al. (2007) found women reported using alcohol to cope with painful feelings (SAMHSA, 2015). Shifting the focus of treatment away from abstinence of substances to the development of healthy coping has given rise to innovative treatment approaches that facilitate deeper healing by working to restore and resource healthy coping responses which go on to serve as and protection against future relapse to SUD (Puffer, Skalski, & Meada, 2010).

Positive Coping for Effective SUD Treatment

In 2015 SAMHSA published *Substance abuse treatment: Addressing the specific needs of women* which is a SUD treatment protocol that highlights best practices on how to engage women in treatment for SUD using approaches informed by the most up to date evidence. The protocol highlights the importance of introducing healthy and appropriate coping techniques that address not only SUD but any associated trauma history (SAMHSA, 2015). One treatment approach that has been used to help develop positive coping strategies is spiritually influenced SUD care.

Spiritually influenced care as an asset and positive religious coping in women with SUD. Women have better outcomes in SUD treatment programs that highlight their strengths and assets, increase sense of community, heal injury from shame and guilt, sensitively address trauma, and promote healthy relationships (SAMHSA, 2015). Spiritually influenced SUD care attempts to address these treatment needs by increasing overall wellbeing, mitigating stress, and

providing healthy coping mechanisms (Harrison, Koenig, Hays, Eme- Akwari, & Pargament, 2001; Pargament, 1997; SAMHSA, 2015; Suiter, 2012). In African American, Hispanic, and elderly women with a history of SUD, spiritually influenced care has been an appropriate treatment model since these populations generally view religion and spirituality as a strength in their lives (SAMHSA, 2015). In a sample of African American women in SUD recovery, those who reported high spiritual well being also reported increased self-efficacy, positive attitudes about parenting, positive attitudes toward family relationships, satisfaction in social relationships, and had more active coping than those who reported lower levels of spiritual well being (Brome, Ownes, Allen, & Vevaina, 2000). In a group of 30 women who entered a Christ-based SUD treatment program, all clients had a reduction in mental health signs and symptoms such as depressive thoughts along with a decrease in cravings, and feelings of resentment (Kerlin, 2017). In a systematic review by Walton-Moss, Ray, & Woodruff (2013), the goal of the study was to explore the impact of religion and spirituality on SUD treatment outcomes in 29 articles. The results supported a beneficial and significant relationship between SUD recovery and use of spirituality and religion in SUD treatment with the most common treatment outcome as increased abstinence (Walton-Moss, Ray, and Woodruff, 2013). Sterling et al. (2007) found in a group of 66 participants three months after a four-week treatment for alcohol abuse, that those with sustained abstinence had positively correlated spiritual growth, while those with alcohol relapse had a decrease in spiritual growth. Blakey (2016) interviewed 26 African American women with a history of trauma and SUD and used qualitative measures to asses the role spirituality and religion had on SUD recovery. In this study, all 26 women reported using positive religious coping on their road to maintained sobriety; however, the author noted that 24 of the 26 women reported having been raised in the church and saw spirituality as a source of

strength in their lives (Blakey, 2016). Bradley (2011) researched how women perceived the spiritual practices AA promoted. In this qualitative study, 29 women in AA were interviewed and the results suggested the positive personal relationships found in the context of AA were attributed to maintained sobriety and enhanced spiritual growth. Charzynska (2015) found within the context of spiritually influenced care, women had high levels of positive religious coping techniques such as increased forgiveness and gratitude, which placed them at a lower risk for relapse.

There is reasonably strong evidence in support of spiritually influenced care models as an effective SUD treatment method by which women are provided positive coping mechanisms. When women with SUD use positive religious coping responses the benefits of enhanced relationships, finding personal and significant meaning in their lives, mitigating stress, and increasing self-awareness helps to encourage sustained healing from the known triggers for SUD and act as protective factors against relapse (Bliss, 2015; Bradley, 2011; Kerlin, 2017). Positive religious coping can be an asset to recovery, but there are few studies that capture how negative religious coping may compromise or threaten engagement in spiritually influenced models of care and recovery.

Spiritually influenced care as a risk factor for women with SUD. While the SAMHSA (2015) protocol highlighted the elements of evidence based recovery treatment models for women with SUD, evidence of ineffective or even harmful components of treatment modalities were also reviewed. Treatment models that reinforce role insecurity, shame, and guilt act as a known trigger for women with SUD by delaying treatment, having treatment disengagement and failure, and increasing risk for relapse (SAMHSA, 2015). Also, if a treatment environment promotes further feelings of shame and guilt, in a population where this is already high, there is

the risk of the treatment not only being non-effective but harmful by re-traumatizing the women (Ano & Vasconelles, 2005; Kerlin, 2017; SAMHSA, 2015).

Religious coping. Religious coping is defined as how an individual uses spirituality and religion to deal with life's stressors and can be further defined as positive or negative (Pargament, 1997). Well-known 12-step programs, like Alcoholics Anonymous (AA) and Narcotics Anonymous, are spiritually based and historically Christ-centered programs aimed at teaching positive religious coping tactics to individuals who are recovering from active substance abuse (Bliss, 2015; Robinson, Krentzman, Webb, & Brower, 2011; SAMHSA, 2015; Wunk, 2015). Positive religious coping aims to mitigate stress and provide mental and spiritual healing, which positions it as an appropriate treatment method for women with SUD as evidenced by predispositions to gendered inequalities such as high trauma and stress rates (Bradley, 2011; Bliss, 2015; Cohen & Hein, 2006; SAMHSA, 2015).

Trauma has a salient relationship to one's religious coping patterns and in turn ones' overall well being (Bliss & Ekmark, 2013; Bradley, 2011; U.S. Department of Veteran Affairs, 2016). Trauma often causes spiritual injury, which is highly associated with depression and loneliness and may produce negative religious coping strategies by increasing feelings of shame and guilt (SAMHSA, 2015; U.S. Department of Veteran Affairs, 2016). However, trauma can also produce positive coping strategies by increasing one's belief and reliance on their Higher Being and increasing their purpose and appreciation for life (Ano & Vasconcelles, 2005; U.S. Department of Veteran Affairs, 2016). The outcomes from the relationship of trauma and religious coping are highly dependent on whether the person finds religious coping as an asset or hindrance (Pargament, 1997).

Religious coping has been described as a doubled-edged sword, since there is a positive and negative side (Pargament, 1997; Xu, 2015). Positive religious coping is when a person in stress has a secure relationship with a Higher Being, which promotes an overall sense of safety, security, and wholeness (Bliss, 2015; Pargament, 1997; Xu, 2015). Individuals with positive religious coping view life's stressors such as loss, grief, or change as a means to a greater end, and see themselves in partnership with a Higher Being from whom they may access love and care (Xu, 2015). In contrast, individuals with negative religious coping experience tension between themselves and a Higher Being, and may experience these same stressors as punishments and reasons for abandonment or separation from the Higher Being (Pargament, 1997; Xu, 2015).

Negative religious coping has been described as a warning sign of inner turmoil, poor well being, and threatening to self-efficacy (Bradley, 2011; Pargament, 1997; Pargament et al., 1998). In women with SUD, histories of trauma and abuse are related to the development of negative religious coping patterns and further potentiate relapse risks, stress, and mental health symptoms (Ano & Vasconelles, 2005; Arevalo et al., 2008; Blakey, 2016; Bliss, 2015; Bradley, 2011; Fallot & Heckman, 2005). Conners, Whiteside, and Mansell (2006) found women with SUD and negative religious coping had higher levels of PTSD and depressive symptoms. In a study by Greene, Ball, Belcher, and McAlpine (2003) on homeless women with SUD, they found lack of spiritual development and negative religious coping mechanisms played a role in the initiation of the women's SUD and served as a barrier to treatment. In Bradley's (2011) study of women in AA, majority of the women pointed to negative religious coping methods such as guilt, distrust in religion, and feeling of abandonment by their Higher Being as barriers to treatment. Since both positive and negative religious coping can have a strong influence on

women with SUD, baseline and ongoing assessment of religious coping in this population can inform interventions targeting sustainable recovery in the spiritually influenced SUD treatment model (Balboni, 2013; Pargament, 1997). Years of evidence and two meta-analyses show a clear correlation of positive religious coping to positive health outcomes and negative religious coping to negative health outcomes (Ano & Vasconelles, 2005; Harrison et al., 2001; Pargament, 1997). While holding this logic, it is imperative to assess religious coping in women with SUD to inform outcomes of a spiritually influenced treatment approach.

Religious Coping Assessment and Treatment Retention Rates

There is a debate in the literature about the value and merit of attempting to measure something as abstract as spirituality and religion (Bliss, 2015; Pargament, 1997). However, it is also argued spirituality is an inseparable construct of the human being and can greatly impact a person's life and health for better or worse (Bliss, 2015; Borras et al., 2010; Pargament, 1997). In acknowledgement of this strong impact, SAMHSA (2017) has deemed it necessary to assess spiritualty and religion, especially in women with SUD (Borras et al., 2010; Chazynska, 2015). A baseline measurement of religious coping can give treatment teams a better understanding of a client's psyche in SUD treatment and identifies if spiritually influenced care would be appropriate for the patient (Balboni, 2013; Bliss, 2015; Borras et al., 2010). For example, if the baseline religious coping assessment shows a woman with SUD tends to use positive religious coping techniques, the evidence points she would benefit and thrive within a spiritually influenced treatment model (Bliss, 2015; Borras et al., 2010; Pargament, 1997; SAMHSA, 2015). However, if baseline assessment shows use of negative religious coping then it is indicated spiritually influenced care may be damaging, not effective, or possibly re-traumatizing to the client and different or more sensitive approach is warranted (Borras et al., Conners et al.,

2006; 2010; Pargament, 1997). This logic is in line with best practices for women with SUD as identified by the treatment protocol initiated by SAMHSA (2015). A baseline assessment of religious coping promotes treatment environments that are sensitive, respectful, and inclusive of women's specific needs (SAMHSA, 2015).

The type of treatment environment for women in SUD recovery is directly related to program retention rates, which have been identified as one of the most consistent predictors of post-treatment health outcomes in women with SUD (Covington, 2002; SAMHSA, 2015). If a woman completes SUD treatment, she is more likely to maintain sobriety; however, if she leaves treatment early, she has a high risk of relapse (Krentzman, 2017). Treatment environments that are supportive, safe, and nurturing are conducive to recovery for women (Covington, 2002). In contrast, an environment in which the women feels confronted, attacked, and harsh will not be as effective and could lead to program non-completion and in turn increase the risk for relapse (Covington, 2002). Such environments may even re-traumatize the women and diminish an already fragile self-esteem (Bradley, 2011). Since a woman can have positive or negative religious coping responses that are related to treatment outcomes and relapse risk, it is imperative to have a religious coping assessment at the start of treatment in this population, especially in the context of spiritually influenced care.

Pargament's Theory of Religious Coping

Overview of Theory

Pargament's *Theory of Religious Coping* is embedded in the disciplines of social science, medicine, and divinity (Xu, 2015)**.** This theory has informed a standardized instrument assessing religious coping in a diverse array of populations such as African American women, persons with cancer, survivors of terrorism, elderly medical patients, people with SUD, and those with

mental health disorders (Conners et al., 2008; Koenig, 2013; Pargament, Smith, Koenig, & Perez, 1998; Sherman, Simonton, Latif, Sophn, & Tricot, 2005). During the time of Pargament's (1997) theory development, much of the literature about religion and spirituality was biased with the presumption that both religion and spirituality were inherently positive. While Pargament (1997) recognized religion and spirituality could be beneficial to those in distress, he thought an objective and functional view was needed. From this realization, he founded his theory on religious coping.

He noted religious coping was defined by a religious orientation system, which is the operating system informing the spiritual being of each person (Pargament, 1977). Personal religious history, stereotypes, ethnicity, culture, family, and life events compose the religious orientation system (Pargament, 1997). Pargament (1997) saw religion and coping as two separate concepts that together formed the concept of religious coping. While he was not the first to define religious coping, he was one of the first to operationalize religious coping as being positive or negative (Bliss, 2015; Fetzer Institute, 1999; Pargament, 1997; Xu, 2015).

Individuals who draw on positive religious coping use their religion and spirituality to cope with stress, bringing in feelings of love, mercy, grace, and support in relationship to a Higher Being (Pargament, 1997). In contrast, individuals who draw on negative religious coping bring in feelings of shame, punishment, guilt, fear, and abandonment when faced with stress (Pargament, 1997). Pargament (1997) further proposed individuals who drew from positive religious coping would experience positive outcomes and those who defaulted to negative religious coping would have negative outcomes. He defined the outcomes from religious coping as either transformation or conservation (Fetzer Institute, 1999; Pargament, 1997; Xu, 2015). Transformation is correlated with change and growth such as a change in mental health

symptoms or health behaviors and exploring new values and insights (Pargament, 1997). Conservation is defined as preservation, remaining unchanged, or holding on to self-held truths such as maintaining a health status or practice, persisting in the face of tragedy, or remaining in the comfortable (Pargament, 1997). Pargament (1997) developed the RCOPE and Brief RCOPE instruments as standardized measures for religious coping to inform research on how religious coping interacts with the human experience of stress (Pargament et al., 2011).

Application to Proposed Study

This study used Pargament's theoretical constructs and operationalized them for research in a clinical practice. While the religious orientation systems of women were not directly measured, Pargament's understanding of the spiritual person and that the religious orientation system is affected by many factors influenced the review of evidence for this project. It also informed the significance of studying health outcomes from the religion and spirituality viewpoint. Religious coping was assessed with the Brief RCOPE. The client's successful completion of the 30 day program was considered a transformational outcome, whereas program withdrawal was considered a conservation outcome. It is important to note in Pargament's theory, conservation and transformation outcomes are not inherently bad or good; however, in the application of the theory to the current project, the conservation outcome is not ideal and the transformation outcome is preferred. The hypotheses were also drawn from Pargament's theory in that high positive religious coping scores would be correlated with program completion and high negative religious coping scores would be correlated with program withdrawal.

In Figure 1, a model of how the theory is applied to the current project is depicted. The round-a-bout diagram represents the relationship between religious coping and outcomes. The negative religious coping car is stuck on the inner road of the round-a-bout called the

conservation road. The car continues to go around with no change and remains in the cycle of addiction. In contrast, the positive religious coping car is on the outer road, the transformation road. This car has access to change directions and explore different paths away from the addiction cycle.

Project Design

This study was a retrospective chart review designed to explore the correlation of baseline religious coping and program completion rates in women with SUD at a Christ-centered SUD treatment facility in Nashville, Tennessee (TN). Within TN, 400,000 people are addicted to alcohol or drugs and the state is ranked third in the country for non-medical prescription drug use (Brantley, 2018). The majority of Tennesseans with SUD are addicted to opioids and within Nashville opioid abuse is even higher (Brantley, 2018). Women with SUD who gave birth in TN have one of the highest rates for neonatal abstinence syndrome in the country (Brantley, 2018). Nashville has 23 substance abuse treatment facilities, only four of which are designed specifically for women (SAMHSA, 2018). In response to high rates of attrition for the inpatient programs, the facility of study recently added a religious coping assessment, the Brief RCOPE (Pargament, 1997), to the intake assessment of all new clients. The project leader was invited by the facility as an independent evaluator to measure the correlation between religious coping and program completion. The Institutional Review Board at Belmont University approved this study in April 2018.

Clinical Setting

Women who are over the age of 18 and have an active SUD are eligible for admission to the facility (The Next Door [TND], 2018b). Clients in the program are either court ordered, ordered by Department of Children's Services, or voluntarily admitted (T. Frame, personal

communication, October 3, 2018). The program accepts women with any type of substance use disorder; however, the majority of women are addicted to opioids (E. Kohal, personal communication, January 18, 2018). Regular programming includes medically-monitored detoxification, inpatient and outpatient services, individual, group, and family therapy, educational classes, psychiatric evaluation, medication management, case management, relapse prevention, life skills groups, trauma recovery, and long-term aftercare programs (TND, 2018a). Inpatient care includes a medical detoxification unit and residential care unit. A client in medical detoxification will go to residential care post detoxification; however, a client in residential may or may not have had medical detoxification prior to admission. A nurse practitioner (NP) decides at admission whether medical detoxification is warranted prior to the residential program. In medical detoxification, clients stay until detoxification is complete, which is an average of three to five days (TND, 2018a). The medical detoxification unit has 12 beds and while subutex tapers are done for those in opioid detoxification, there was not a suboxone program in place at the time of study (E. Kohal, personal communication, August 28, 2018).

The residential program lasts 30 days and the facility has 82 beds for this treatment route (E. Kohal, personal communication, August 28, 2018). Clients are required to participate in all activities during treatment including 12-step meetings, therapy sessions, meditation, and devotional times (E. Kohal, personal communication, January 18, 2018). Women have limited outside contact and their care teams are comprised of NPs, physicians, nurses, social workers, a Chaplin, and case managers (TND, 2018b). Treatment is paid for by private or public insurance, the state of TN, or through a scholarship program from the facility (TND, 2018b) Clients are able to leave treatment whenever they wish, even if treatment has not been completed; when this occurs a NP and case manager will encourage the client to stay. Many times when a client leaves

prior to program completion it is filed as against medical advice (AMA); however there are rare times clients may be asked to leave based on behavioral issues or sent to an emergency room or hospital for medical issues (E. Kohal, personal communication, September 3, 2018).

Population

The charts of women who completed the intake Brief RCOPE questionnaire for religious coping and were admitted into the 30-day residential program during August 1st, 2018 to December 17th, 2018 were included in the sample for analysis.

Methods

Collection of data. Information collected included level of care in the facility, court order status, age, race, education level, marital status, pregnancy status, number of children, custody of children, religious affiliation, chronic medical conditions, mental health conditions, trauma history, and SUD history (Appendix 1). A NP, admissions nurse, and admission case manager gathered demographic data at routine intake during admission history and physical.

Program completion rates were operationally defined as completing residential treatment for the full 30 days and completing medical detoxification prior to residential admission, if indicated. This variable was dichotomous as yes, the program was completed or no, the program was not completed. If the program was not completed, whether the client left AMA or left for another reason, such as behavioral or medical issues, were also collected.

The Brief RCOPE (Appendix 2) provided the measure of baseline religious coping at intake. It is one of the most widely used tools for assessment of religious coping (Fetzer Institute, 1999; Pargament et al., 2011). The 14-item scale is comprised of two subscales called the Positive Religious Coping Scale (PRCS) and Negative Religious Coping Scale (NRCS) with each subscale having seven items (Pargament et al., 2011). Each item is answered with a four

item Likert scale where 1=not at all, 2=somewhat, 3=quite a bit, and 4=a great deal (Pargament et al., 2011). High scores on the PRCS reflect a person's acceptance of the love and grace of a higher power and their use of that relationship to help mediate their stress. Conversely, high scores on the NRCS reflect a person's feelings of shame, guilt, and abandonment by a higher power. While the subscales can be used together or separately, this study used the PRCS and NRCS together (Pargament et al., 2011). Psychometric testing has been performed on the tool with results suggesting it is both valid and reliable (Pargament et al., 2011). The mean Cronbach's alpha for the PRCS is 0.92, NRCS is 0.81, and the overall Brief RCOPE level is 0.80 (Pargament et al., 2011). The Brief RCOPE was derived from a more in-depth religious coping assessment called the RCOPE and is scored by summing the scores of the scale to get a positive RCOPE score and negative RCOPE score with 7 being the smallest score possible and 28 being the highest score possible for each subscale (Pargament, 2011; K. Pargament, personal communication, March 19, 2018). The scores are not summed together since the subscales are not highly correlated (Pargament, et al., 2011). Since the Brief RCOPE was given to clients to read and answer, the reading level was assessed. According to Flesch Reading Ease Score, the Brief RCOPE is very easy to read and at a second grade reading level (Readability Formulas, 2018).

Implementation. The facility implemented the Brief RCOPE for routine screening of new clients' religious coping starting on August 1st, 2018. The project leader came to facility once a week or once every two weeks to complete chart reviews, extracting Brief RCOPE scores along with demographic data and past medical history from an electronic medical record (EMR). Prior to data collection, the project leader completed HIPAA training at the facility of study and a user name and password was given by the facility for EMR access. Using a data collection

sheet, the project leader took clients' Brief RCOPE sheet and assigned a unique code in which only the project leader held the key for. Data was then placed into SPSS. Another project team member did random spot-checks of hard copy data collection sheets to the corresponding data in SPSS for accuracy in transcription of data.

Results

The SPSS version 24 was used for statistical analyses with descriptive statistics to characterize the sample and with logistic regressions to test the hypotheses. Staff at the facility of study added the Brief RCOPE to the intake process of all women entering the 30-day residential SUD recovery program. Between August 1st 2018 to December 17th 2018, 114 women presented at intake and had complete the Brief RCOPE assessments done. There were 14 women not included for analysis related to partial completion or incorrectly completed Brief RCOPE assessments, which left a size of 100.

Demographics of clients (Table 1). The mean age was 33.82 (SD 8.87, N=100) with age ranging from 19 to 58 years, the sample was predominately Caucasian (84%), and 63 % reported they were single. Eighty-eight percent of women in the sample had children and 8% of women were pregnant during treatment. The mean number of children per woman was 2.23 (SD 1.57, N=100) with a range of zero to 8, and of those with children, 50% did not have custody and an additional 5% had partial custody. Eighteen percent of the women were either ordered by a court or required by the Department of Children's Services (DCS) to enter SUD treatment. For highest level of education, 50% of women had earned a high school diploma or passed the general education development (GED) test and 26% had earned a college degree or completed post-secondary training. Sixty-four percent reported a religious preference or belief in a higher power.

Clinical characteristics of clients (Table 2). Seventy-two percent of the women entered directly into the 30-day residential program and 28% of the group entered the detoxification unit prior to the 30-day residential program. Forty-five percent had one or more chronic medical condition and 94 percent of the sample had a co-occurring mental health condition. Seventy-nine percent had more than one mental health condition with the most occurring mental health conditions being depression (73%), anxiety (52%), bipolar disorder (43%), and PTSD (41%). Seventy-nine percent had a history of SUD treatment with the average time in treatment being 1.94 times (SD 1.77, N=100). 100 percent of the women had a history of trauma with 72% reporting physical trauma, 82% reporting emotional trauma, and 59% reporting sexual trauma. Twenty-seven percent had a SUD with an alcohol addiction and 93% had a drug addiction with 20% having SUD with both an alcohol and drug addiction. Of those with a drug addiction, 45% of the women had a singular drug of choice and 48% had multiple drugs of choices with the most commonly reported drug of choice being opioids (73%).

Program Completion and Religious Coping (Table 3, Table 4, Table 5). The rates of completion against non-completion at the 30-day SUD treatment program at the facility of study was almost equal with 54% completing the 30-day program and 46% withdrawing from the program prior to completion. Of the 46% that did not complete, 6% were asked to leave for violation of rules or out of medical necessity. The mean score for the positive Brief RCOPE was 21.45 (SD 6.08, N=100) and the mean score for the negative Brief RCOPE was 14.34 (SD 6.08, N=100) with a range for scoring of seven to 28. For the PRCS, 16% of scores fell in the seven to 14 range, 31% fell in 15 to 21 range, and 53% fell in the 22 to 28 range. For the NRSC, 61% fell in the seven to 14 range, 23% fell in 15 to 21 range, and 16% fell in the 22 to 28 range.

Two binary logistic regressions were run to determine the odds ratio of positive Brief RCOPE scores to program completion and negative Brief RCOPE scores to program withdrawal. The tests were run with a 95% confidence interval and the Hosmer and Lemeshow tests for goodness-of-fit of both logistic regressions indicated the model fits the data. Program completion was found to not be significantly related to the positive ($p=.239$; $p<0.5$) or negative ($p=.512$; $p<0.5$) Brief RCOPE scores.

Discussion

The findings from this study did not support the hypotheses that high positive religious coping scores predict program completion or that high negative religious coping scores predict program withdrawal; however, meaningful information was still gleaned from the characteristics of sample, attrition rate, and the use of religious coping by the women.

Trauma

All of the women in the study sample had a history of trauma with 72% reporting physical trauma, 82% reporting emotional trauma, and 59% sexual trauma which is higher than the reported rates in other studies (Cohen & Hein, 2006). The high prevalence of trauma among women with SUD is well documented, as is the relationship of trauma and SUD progression, high attrition rates in SUD programs, and increased relapse risk (Cohen & Hein, 2006; SAMHSA, 2015). While the relationship of trauma, SUD, and women is complex, trauma is thought to lead to a predisposition of disordered coping techniques, which is why use of positive religious coping has been used in many SUD recovery programs (Harrison et al., 2001; Pargament, 1997; SAMHSA, 2015). However, the complexities surrounding women with SUD are vast and in a population with such high trauma rates, programs that emphasize religious coping techniques without a broader context of trauma informed care may explain why women

withdraw from care or relapse to SUD after completing detoxification (SAMHSA, 2015). The presence of spiritually influenced care in the absence of trauma-informed care is not only evidenced based practice but may perpetuate feelings of shame and guilt if the women draw on negative religious coping. A SUD recovery program for women need to not only use assets and strengths of the women, which may or may not include religion and spiritually, but treatment should also sensitively address disordered coping strategies and comorbid trauma (SAMHSA, 2015).

Trauma-informed care is defined as care that focuses on current and past victimization and violence, addresses safety concerns, helps in the development of effective coping, and provides a space to recover from effects of trauma and violence while helping to increase a sense of control in the woman (SAMHSA, 2015). Morrissey et al. (2005) found in a SUD treatment program with women with trauma-informed care there was positive mental health and substance use outcomes. While this is a well-evidenced and supported approach to SUD treatment in women, there are still barriers implementing trauma-informed care such as the integration of this type of care and health professionals feeling ill-prepared to foster such care (SAMHSA, 2015).

Use of Religious Coping

While religious coping was not correlated to program completion or withdrawal in the sample studied, this study did highlight that many women in the sample were drawing from their faith and spirituality as they learned to cope with stress without using drugs and alcohol. Identifying use of religious coping as an asset or a strength that could be leveraged in SUD treatment reflects current and best practices (SAMHSA, 2015). However, the results of this study suggest that religious coping alone was not enough to predict successful program completion for women who have a history of trauma and for whom SUD has been a disordered coping response.

Of critical importance was the finding that of the 100 women in the sample, all had a history of trauma and 40% of women reported moderate or high levels of negative religious coping. This suggests that in the absence of a trauma-informed model of care, a Christ-centered recovery model may trigger or compound existing feelings of shame and guilt, leaving some of the most vulnerable women at risk for relapse (Balboni, 2013; Fallot & Heckman, 2005; Pargament, 1997). Continued assessment of how women integrate their spiritual selves into their recovery may aid in identifying and triaging women for whom religious coping may be an asset to be leveraged or a trigger to be avoided. Either approach should be nested within a larger trauma-informed framework aimed at healing and recovering women's physical, mental, and spiritual health (Fallot & Heckman, 2005; SAMHSA, 2015; Pargament, 1997).

Attrition and 30-day Residential Programs

The attrition rate of the sample was almost 50%, with 54% completing the program and 46% not completing the program. The authors acknowledge that program intensity and duration are stronger predictors of treatment effectiveness than the use of a faith-based recovery model. While the attrition rate is likely related to a host of factors, 30-day residential SUD programs are effective for detoxification but, without use of medication-assisted treatment (MAT), detoxification alone has not been shown to predict long term recovery. A 2006 systematic review of 35 studies found that while residential care was more effective than outpatient care, those programs that were less than two months had higher attrition rates than those greater than two months (Sun, 2006). Likewise, Proctor and Hershman (2014) reviewed literature that supported a minimum of three to six months of residential or intensive outpatient programs for best long-term results for in SUD treatment. Mediation assisted treatment is now considered by the majority of mental health community as a first line treatment for opioid use disorder (OUD) and

methadone maintenance treatment is considered the only acceptable treatment for pregnant women with OUD (SAMHSA, 2015). Use of MAT and MMT has improved SUD program completion, reduced relapse, and reduced mortality (Saxon, Hser, Woody, & Ling, 2013).

Implications for Practice

This study highlights the extremely high rates of trauma history in women with SUD, and supports the understanding of SUD as a form of disordered coping, which reflects the associated literature (SAMHSA, 2015). Trauma informed care is imperative when caring for this population and protocols reflecting trauma informed care should be implemented in any SUD program with and for women (SAMHSA, 2015).

While findings from the study suggest that women's use of religious coping cannot predict successful completion of a Christ-centered 30 day residential treatment program for SUD, the authors advocate for routine assessment of religious coping in women with SUD prior to entering a treatment that emphasizes the Christ-centered recovery model. Recognizing that religious coping could be leveraged as an asset or encountered as a risk for harm could inform the patient-centered, trauma-informed approach to care that this population needs for best outcomes (Charzynska, 2015; Fallot & Heckman, 2005). This study did show high use of positive religious coping, but treatment completion was the only outcome measure. Future studies could investigate how religious coping informs more proximal treatment outcomes in the cognitive domain, such as change in awareness of trauma as a trigger for SUD, treatment self-efficacy, motivation to change, as well as change in mental health symptoms such as craving, anxiety, or depression (Bliss, 2015; Charzynska, 2015; Kerlin, 2017; Pargament, 1997).

At the time of this research, the facility did not use MAT or MMT, although plans to implement MAT are under consideration. Repeating this study in a cohort of patients that are

stable and enrolled in MAT might provide additional insight into the longer-term influence of religious coping on women's quality of life in recovery (Saxon et al., 2013).

Strengths and Limitations

A strength of the study was the ability to gather comprehensive data and variables on the women for robust sample characteristics. A limitation of the study was lack of standardization of the religious coping assessment at intake for new process. The Brief RCOPE was added to the intake assessment process prior to this researcher collecting the data; however, different people and roles at intake administered the assessment, which threatens the reliability and validity of the women's responses. While a sample of 100 was an appropriate sample to test feasibility of the RCOPE assessment, a larger sample could have offered the opportunity to control for variables known to influence attrition in order to more carefully asses the relationship between religious coping and treatment outcomes.

Conclusion

There are multiple complex factors that increase risk for development of SUD, serve as barriers to SUD treatment, and increase relapse risk for women. Unrecognized or untreated trauma is a strong risk factor for SUD progression and treatment failure in this population (SAMHSA, 2015). The disordered coping that is a root cause of SUD can be addressed with trauma-informed and with teaching women how to use effective coping techniques that align with their strengths (SAMHSA, 2015; Pargament, 1997). Use of positive religious coping has long been a foundation for teaching healthy coping strategies to women, yet the high prevalence of trauma among women with SUD make the shame and guilt that come with negative religious a risk for re-traumatization and relapse (U.S. Department of Veteran Affairs, 2016). This study did not find a significant association with religious coping and program completion, but it did

reconfirm and reinforce the need for trauma-informed care for this vulnerable population. Within a trauma informed model of care, a faith-based or Christ-centered model of care could leverage positive religious coping as an asset to recovery. For women who default to negative religious coping, innovative strategies to address spiritual injuries of trauma are needed to protect women from the shame and guilt that characterize this coping response.

References

Ano, G. G. and Vasconelles, E. B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology, 61*(4), 461-480. doi: 10.1002/jclp.20049

Arévalo, S., Prado, G., & Amaro, H. (2008). Spirituality, sense of coherence, and coping responses in women receiving treatment for alcohol and drug addiction. *Evaluation and Program Planning, 31*(1), 113-123. doi:10.1016/j.evalprogplan.2007.05.009zandi, M. (2018). Spiritual health consulting model for health promotion in clients. *Health, Spiritually, & Medical Ethics Journal, 5*(2), 9-15. doi: 12995770

Balboni, M. (2013). A theological assessment of spiritual assessments. *Christian Bioethics: Non-ecumenical Stuides in Medical Mortality, 19*(3), 313-331. doi: 92875209

Blakey, J. M. (2016). The role of spiritually in helping African American women with histories of trauma and substance abuse heal and recover. *Social work & Christianity, 43*(1), 40-59. doi: 113172170

Bliss, D.L. (2015). Spiritually enhanced addiction treatment: conceptual and operational development. *Alcoholism Treatment Quarterly, 33*(4), 385-394. doi: 10.1080/07347324.2015.1077640.

Bliss, D. L., & Ekmark, S. S. (2013). Gender differences in spirituality in persons in alcohol and drug dependence treatment. *Alcoholism Treatment Quarterly, 31*(1), 25-37. doi:10.1080/07347324.2013.746625

Bradley, C. A. (2011). Women in AA: 'Sharing experience, strength and hope' the relational nature of spirituality. *Journal of Religion & Spirituality in Social Work, 30*(2), 89-112. doi:10.1080/15426432.2011.567111

Brantley, A. (2018). *Health Brief: Addiction.* Retrieved from https://bettertennessee.com/health-brief-addiction/

Brome, D.R., Ownes, M.D., Allen, K., and Vevaina. (2000). An examination of spirituality among African American women in recovery from substance abuse. *Journal of Black Psychology, 26*(4), 470-486.

Borras, L., Khazaal, Y., Khan, R., Mohr, S., Kaufmann, Y., Zullino, D., and Phillippe, H. (2010). The relationship between addiction and religion and its possible implications for care. *Substance Use & Misuse, 45*(14), 2357-2410. doi: 10.3109/1082608100347611.

Charzyńska, E. (2015). Sex differences in spiritual coping, forgiveness, and gratitude before and after a basic alcohol addiction treatment program. *Journal of Religion & Health, 54*(5), 1931-1949. doi:10.1007/s10943-015-0002-0

Cheng, H. G., Marven, C. D., AA, and Anthony, J. C. (2016). Taking the first full drink: Epidemiological evidence on male-female difference in the United States. *Alcohol Clin Exp Res, 40*(4), 816-825. doi: 10.1111/acer.13028

Cohen, L. R. and Hien, D. A. (2006). Treatment outcomes for women with substance abuse and PTSD who have experience complex trauma. *Psychiatric Services, 57*(1), 100-106.

Conners, N. A., Whiteside-Mansell, L., and Sherman, A. C. (2006). Dimensions of religious involvement and mental health outcomes among alcohol- and drug-dependent women. *Alcoholism Treatment Quarterly, 24*(2), 89-108. doi:10.1300/J020v24n01-06

Covington, S. S., (2002). Helping women recover: Creating gender-responsive treatment. In: Straussner and Brown (Eds.), *Handbook of women's addiction treatment: Theory and practice,* pp 52-72. San Francisco, California: Jossey-Bass.

Dawes, M.A., Antelman, S.M., Vanyukov, M.M., Giancola, P., Tarter, R.E., Susman, E.J. (2000).

Developmental sources of variation in liability to adolescent substance use disorders. *Drug and Alcohol Dependence, 61*(1), 3-14.

Dayton, T. (2000). *Trauma and Addiction: Ending the Cycle of Pain Through Emotional Literacy.* Deerfield Beach, FL: Health Communications.

DiReda and Gonsalvez. (2016). The role of spirituality in treating substance use disorders. *Journal of Psychology and Clinical Psychiatry, 6(*4), 1-5. doi: 10.15406/jpcpy.2016.06.00365

Fallot, R. D., Heckman, J. P. (2005). Religious/spiritual coping among women trauma survivors with mental health and substance use disorders. *The Journal of Behavioral Health Sciences & Research, 32*(3), 215-266. doi: 10.1007/BF02287268

Fetzer Institute. (1999). *Multidimensional measurement of religions/spirituality for use in health research* [PDF file]. Retrieved from http://fetzer.org/resources/multidimensional-measurement-religiousnessspirituality-use-health-research

Grayson, C.E. and Nolen-Hoeksen, S. (2005). Motives to drink as mediators between childhood sexual assau and alcohol problems in adult women. *Journal of Traumatic Stress, 18*(2), 137-145.

Greene, J. A., Ball, K., Belcher, J. R., & McAlpine, C. (2003). Substance abuse, homelessness, developmental decision-making and spirituality: A women's health issue. *Journal of Social Work Practice in the Addictions, 3*(1), 39-56.

Haight, S. C., Ko, J. Y., Tong, V. T., Bohm, M.K., and Callaghan. (2018). Opioid use disorder documented at delivery hospitalization –United States 1999-2014. *Morbidity and Morality Weekly Report, 67*(31), 845-849. Retrieved from https://www.cdc.gov/mmwr/volumes/67/wr/mm6731a1.htm?s_cid=mm6731a1_w

Harrison, M. O., Koenig, H. G., Hays, J. C., Eme- Akwari, A. G., and Pargament, K. I. (2001). The epidemiology of religious coping: a review of recent literature. *International Review of Psychiatry, 13*, 86-93. doi: 10.1080/0954026012007317

Jessup, M., Humphreys, J., Brindis, C., and Lee, K. (2003). Extrinstic barriers to substance abuse treatment amoung pregnant drug dependent women. *Journal of Drug Issues, 23*(2), 285-304.

Kaysen, D., Dillworth, T.M., Simpson, T., Waldrop, A., Larimer, M.E., and Resick, P.A. (2007). Domestic violence and alcohol use: Trauma related symptoms and motives for drinking. *Addictive Behaviors, 32*(6), 1272-1238.

Koenig, H. (2013). Is religion good for your health? The effects of religion on physical and mental health. New York, NY: Routledge.

Kerlin, A. M. (2017). Therapeutic change in a Christian SUD program: mental health, attachment, and attachment to God. *Alcoholism Treatment Quarterly, 35*(4), 395-411.doi: 10.1080/07347324.2017.1355218

Krentzman, A. R. (2017). Longitudinal differences in spirituality and religiousness between men and women in treatment for alcohol use disorders. *Psychology of Religion and Spirituality, 9*(1), 11-21. doi:10.1037/rel0000096

Lipari, R. N. and Van Horn, S. L. (2017). Trends in substance use disorders among adults aged 18 or older. *The CBHSQ Report.* Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK447253/

Meléndez, M., Cortés, D. E., & Amaro, H. (2012). Acceptability and cultural fit of spiritual self-schema therapy for Puerto Rican women with addiction disorders: Qualitative findings. *Women & Therapy, 35*(1-2), 106-119. doi:10.1080/02703149.2012.634733

Morrissey, Ellis, Gatz, Amaro, Reed, Savage, Finkelstein, Mazelis, Brown, Jackson, and Banks. (2005). Outcomes for women with co-occuring disorders and trauma: Program and person-level effects. *Journal of Substance Abuse Treatment, 28*(2), 121-133.

Pargament, K. I. (1997). *The psychology of religion and coping.* New York: NY; Guilford Press.

Pargament, K. I., Feuille, M., and Burdzy, D. (2011). The Brief RCOPE: current psychometric status of a short measure of religious coping. *Religions, 2,* 51-76. doi: 10.3390/rel2010051

Pargament, K.I., Smith, B.W., Koenig, H.G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal of the Scientific Study of Religion*, *37*, 711-725.

Pargament, K. I., Zinnbauer, B. J., Scott, A. B., Butter, E. M., Zerowin, J., and Stanik, P. (1998). Red flags and religious coping: Identifying some religious warning signs among people in crisis. *Journal of Clinical Psychology, 54*(1), 77-89. doi: 0021-9762/98/010077-13

Patrick, S.W., Davis, M.M., Lehman C.U., and Cooper, W.O. (2015). Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012. *Journal of Perinatology : Official Journal of the California Perinatal Association, 35*(8), 667. doi: 10.1038/jp.2015.63

Patrick, S.W., Schumacher, R.E., Benneyworth B.D., Krans E.E., McAllister J.M., and Davis M.M. (2012). Neonatal abstinence syndrome and associated health care expenditures: United States, 2000–2009. *Jama, 307*(18),1934–40. doi: 10.1001/jama.2012.3951

Proctor and Herschman (2014). The continuing care model of substance use treatment: What works, and when is enough, enough? *Psychiatry Journal*. doi: 10.1155/2014/692423

Puffer, E. S., Skalski, L.M., and Meade, C.S. (2010). Changes in religious coping and relapse to drug use among opioid-dependent patients following inpatient detoxification. *Journal of Religion and Health, 51*, 1226-1238. doi: 10.1007/s10943-101-9418-8.

Readability Formulas. (2018). *Text Readability Consensus Calculator.* Retrieved from http://www.readabilityformulas.com/freetests/six-readability-formulas.php

Robinson, E. A., Krentzman, A. R., Webb, J. R., and Brower, K. J. (2011). Six-month changes in spirituality and religiousness in alcoholics predict drinking outcomes at nine months. *Journal of Studies on Alcohol and Drugs, 72*(4), 660–668.

Sanders, J., Harris, K. W., Nelson, J., White, W. L., and McGovern, T. F. (2014). Gendered members of Alcoholics Anonymous: Varieties of spiritual experiences in recovery. *Alcoholism Treatment Quarterly, 32*(3), 248-270. doi: 10.1080/07347324.2014.907034

Saxton, Hser, Woody, and Ling (2013). Mediation-assisted treatment for opioid addiction: Methadone and buprenorphrine. *Journal of Food and Drug Analysis, 21*(4), 69-72. doi: 10.1016/j.fda.2013.09037

Sherman, A.C., Simonton, S., Latif, U., Spohn, R., & Tricot, G. (2005). Religious struggle and religious comfort in response to illness: Health outcomes among stem cell transplant patients. *Journal of Behavioral Medicine*, *28*, 359-367.

Sterling, R. C., Weinstein, S., Losardo, D., Raively, K., Hill, P., Petrone, A., & Gottheil, E. (2007). A retrospective case control study of alcohol relapse and spiritual growth. *American Journal on Addictions, 16*, 6–56.

Substance Abuse and Mental Health Services Administration. (2015). *Substance abuse treatment: Addressing the specific needs of women.* Retrieved from

www.ncbi.nlm.nih.gov/books/NBK83252/pdf/Bookshelf_NBK83252.pdf

Substance Abuse and Mental Health Services Administration. (2017). Recovery and recovery support. Retrieved from https://www.samhsa.gov/topics/recovery-recovery-support

Substance Abuse and Mental Health Services Administration. (2018). *Locator Map.* Retrieved from https://findtreatment.samhsa.gov/locator?sAddr=Nashville#

Suiter, S. V. (2012). *Magdalene House: A place about mercy.* Nashville, Tennessee: Vanderbilt Printing Press.

Sun. (2006). Program factors related to women's substance abuse treatment retention and other outcomes: A review and critique. *Journal of Substance Abuse Treatment, 30,* 1-20. doi: 10.1015.j.sat.2005.07.002

The Next Door. (2018a). *About Us.* Retrieved from https://thenextdoor.org/about-us/

The Next Door. (2018b). *FAQ.* Retrieved from https://thenextdoor.org/admissions/faq/#toggle-id-12

Ullman, S.E., Filipas, H.H., Townsend, S.M., and Starzynski, L.L. (2005). Trauma exposure, posttraumatic stress disorder and problem drinking in sexual assault survivors. *Journal of Studies on Alcohol, 66*(5), 610-619.

U.S. Department of Veteran Affairs. (2016). *Spirituality and Trauma: Professionals Working Together.* Retrieved from https://www.ptsd.va.gov/professional/treat/care/spirituality_trauma.asp

U.S. Department of Veteran Affairs. (2018). *Substance Abuse in Veterans.* Retrieved from https://www.ptsd.va.gov/understand/related/substance_abuse_vet.asp

Vogt, D. (2018). *Research on Women, Trauma, and PTSD.* Retrieved from https://www.ptsd.va.gov/professional/treat/specific/ptsd_research_women.asp

Wunk, M. (2015). Religious-spiritual source of hope and the meaning of life in alcohol co-dependent subjects receiving support in self-help groups. *Journal of Substance Use, 20*(3), 194-199. doi: 10.3109/14659891.2014.896954

Xu, Jianbin (2016). Pargament's theory of religious coping: Implications for spirituality sensitive social work practice. *British Journal of Social Work, 46*, 1394-1410. doi: 10.1093/bjsw/bev0

Figure 1: Conceptual Model of the Application of Pargament's Theory on Religious Coping in Current Study developed by Mary Beth Bever.

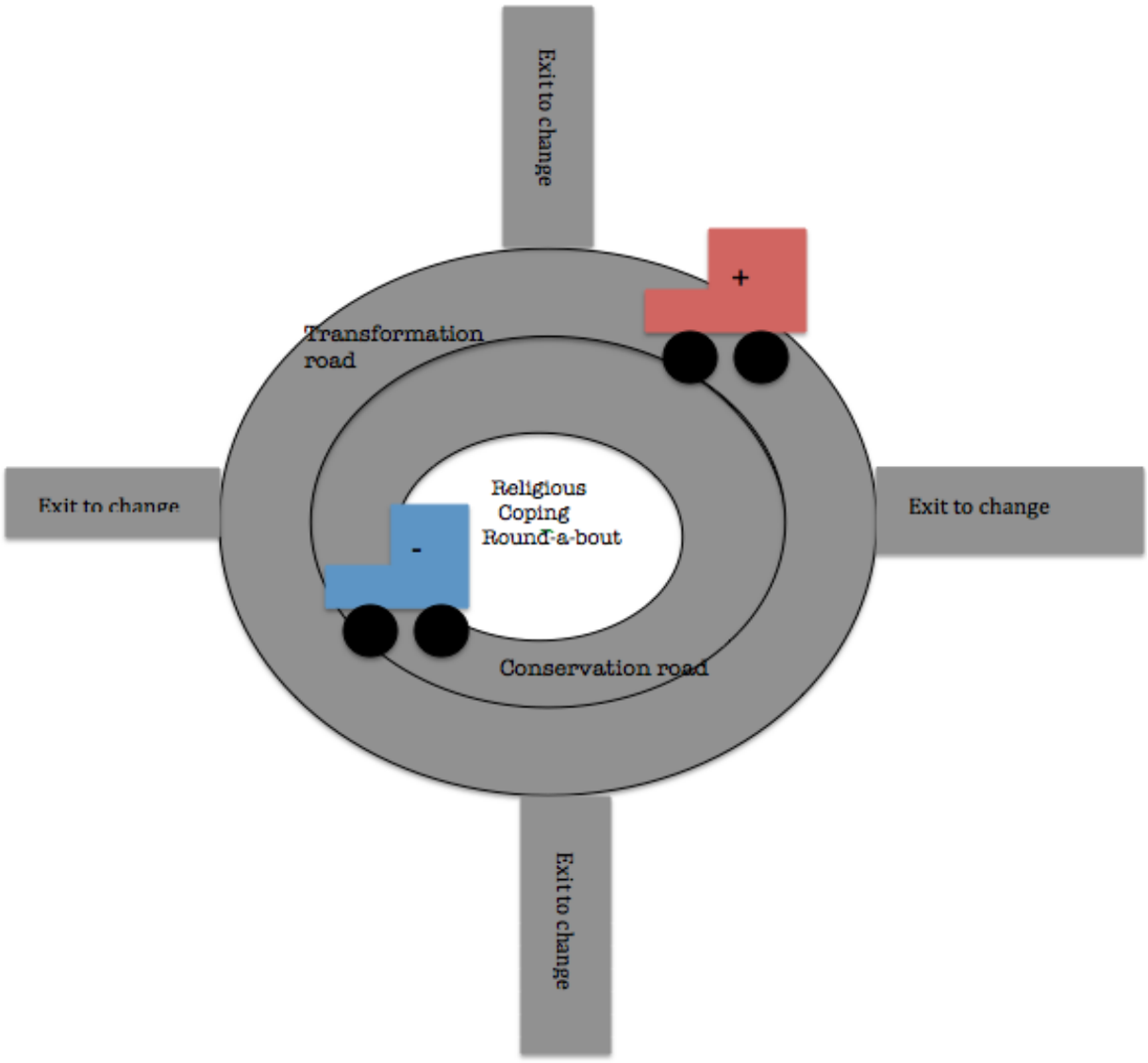

Table 1

Demographics of Sample

Characteristics	Sample (N=100)
Court order or DCS order (%)	
Yes	18.0
No	82.0
Age (years)	
Mean	33.82
SD	8.87
Range	19-58
Education (%)	
Middle school	5.0
Some High school	6.0
High school Diploma	50.0
Some College	8.0
College Degree/Post-secondary	26.0
Vocational School	5.0
Marital Status (%)	
Single	63.0
Married	7.0
Widowed	3.0
Divorced	19.0
Separated	8.0
Religious Preference (%)	
Yes	64.0
No	36.0
Ethnicity (%)	
African American	13.0
Biracial/Multiracial	2.0
Caucasian	84.0
Hispanic/Latino	1.0
Number of Children	
Mean	2.23
SD	1.57
Range	0-8
Mother status (%)	
Yes, a mother	88.0
No, not a mother	12.0
Custody of Children (%)	
N/A	22.0
Yes	23.0
No	50.0
Partial	5.0

Table 2

Clinical Characteristics

Characteristics	Sample (N=100)
Level of care (%)	
Only residential	72.0
Detoxification and Residential	28.0
Pregnant (%)	
Yes	8.0
No	92.0
Medical Conditions (%)	
None	55.0
Hepatitis C	19.0
Hypertension	8.0
Asthma	8.0
Irritable Bowel Syndrome	1.0
Acid Reflux	4.0
Hyperlipidemia	1.0
Chronic back pain	9.0
Interstitial cystitis	1.0
Chron's disease	1.0
Migraines	3.0
Carpal Tunnel	1.0
Arthritis	3.0
Cirrhosis	1.0
Restless leg syndrome	1.0
Chronic obstructive pulmonary disease	6.0
Diabetes Mellitus Type 1	1.0
Endometriosis	1.0
Neuropathy	5.0
Fibromyalgia	3.0
Sleep apnea	1.0
Cervical cancer	1.0
PCOS	1.0
Graves disease	1.0
Hepatitis B	1.0
HIV	1.0
Hyperthyroid	1.0
Ulcerative Colitis	2.0
**Could be more than one per person*	
Mental Health Conditions (%)	
None	6.0
PTSD	41.0
Bipolar disorder	43.0

Personality disorder	1.0
Anxiety	52.0
Depression	73.0
ADHD	7.0
Sleep disorder	3.0
Mood disorder	2.0
OCD	4.0
Schizophrenia	5.0
Panic disorder	1.0
Dissociative identity disorder	2.0
Borderline disorder	1.0
**Could be more than one per person*	
ETOH addiction (%)	
Yes	27.0
No	73.0
Drug addiction (%)	
Yes	93.0
No	7.0
Drugs of choice (%)	
None	7.0
Benzodiazepines	17.0
Methamphetamines	38.0
Opioids	73.0
Cannabis	20.0
Cocaine	21.0
Ecstasy	1.0
**Combo of those with single and poly drug of choice*	
History of SUD treatment (%)	
Yes	79.0
No	21.0
Number of times in SUD treatment	
Mean	1.94
SD	1.77
Range	0-12
History of physical trauma/domestic violence (%)	
Yes	72.0
No	28.0
History of emotional trauma (%)	
Yes	82.0
No	18.0
History of sexual trauma (%)	
Yes	59.0
No	41.0
History of trauma (%)	

Yes	100.0
No	0.0

Table 3

Descriptive statistics on Brief RCOPE and program completion

Variables	Sample (N=100)
Positive Brief RCOPE	
Mean	21.45
SD	6.08
Range	7-28
Negative Brief RCOPE	
Mean	14.34
SD	6.03
Range	7-28
Program Completion (%)	
Yes	54.0
No	46.0
Reasons not completed (%)	
Against medical advice	43.0
Asked to leave	6.0

Table 4

Logistic Regression Analysis of 100 clients program completion status with positive Brief RCOPE scores

Predictor	B	SEB	Wald's *X*2	*df*	*p*	*eB* (odds ratio)
Constant	.686	.746	.845	1	.358	1.9
+Brief RCOPE	-.040	.034	1.386	1	.239	.961
Tests			*X2*	*df*	*p*	
Goodness-of-fit test: Hosmer and Lemeshow test			9.127	2	.332	
Model Summary:						
-2 log likelihood	136.583					
Cox & Snell R	.014					

square Nagelkerke R square	.019					

Table 5

Logistic Regression Analysis of 100 clients program completion status with negative Brief RCOPE scores

Predictor	B	SEB	Wald's *X*2	*df*	*p*	*eB* (odds ratio)
Constant	.157	.522	.090	1	.764	1.170
+Brief RCOPE	-.022	.034	.430	1	.512	.978
Tests			*X2*	*df*	*p*	
Goodness-of-fit test: Hosmer and Lemeshow test			8.723	8	.366	
Model Summary: -2 log likelihood	137.555					
Cox & Snell R square	.004					
Nagelkerke R square	.006					

Appendix 1: Data Collection Sheet

Unique Code #:
Plan of Care

1. Circle one: Only Residential OR Detox and Residential
2. Court ordered: Y/N

Demographic/PMH

1. Age:
2. Highest Level of Education:
3. Marital Status:
4. Religion:
5. Ethnicity:
6. Currently pregnant: Y/N
7. Number of Children (if any): Custody Y/N:
8. Chronic Medical Condition(s):
9. Chronic Mental Health Condition(s):

Substance Abuse History

1. Alcohol Addiction: Y/N
2. Drug Use: Y/N
   Drug of choice:
3. Previous Treatment(s) for ETOH/Drug: Y/N
   If yes, from TND:
   # of times in treatment:

Violence/Abuse Hx

1. History of Domestic/Physical Violence: Y/N
2. History of Sexual Assault/Rape/Incest: Y/N
3. History of Emotional Abuse: Y/N
4. History of Trauma: Y/N

Program Completion

1. Completion of 30-day residential program: Y/N
   If no, how many days completed:
   AMA: Y/N
   Other:

Brief RCOPE Score:

1. Positive Subscale Score:

2. Negative Subscale Score:

Appendix 2: Brief RCOPE

Brief RCOPE

The following items deal with ways you cope with stressful events in your life and ask what you do to cope. Each item says something about a particular way of coping. We want to know to what extent you did what the item says, how much or how frequently. Don't answer on the basis of what worked or not – just whether or not you did it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

1 – not at all
2 – somewhat
3 – quite a bit
4 – a great deal

In times of stress, I have…

l. Looked for a stronger connection with God.	1	2	3	4
2. Sought God's love and care.	1	2	3	4
3. Sought help from God in letting go of my anger.	1	2	3	4
4. Tried to put my plans into action together with God.	1	2	3	4
5. Tried to see how God might be trying to strengthen me in this situation.	1	2	3	4
6. Asked forgiveness for my sins.	1	2	3	4
7. Focused on religion to stop worrying about my problems.	1	2	3	4
8. Wondered whether God had abandoned me.	1	2	3	4
9. Felt punished by God for my lack of devotion.	1	2	3	4
10. Wondered what I did for God to punish me.	1	2	3	4
11. Questioned God's love for me.	1	2	3	4
12. Wondered whether my church had abandoned me.	1	2	3	4
13. Decided the devil made this happen.	1	2	3	4

14. Questioned the power of God. 1 2 3 4