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Spiritual Coping and Posttraumatic Growth after Sexual Assault

by

Richelle Amundson

Presented to the Faculty of the
School of Social Work
St. Catherine University and the University of St. Thomas
St. Paul, MN
In Partial fulfillment of the Requirements for the Degree of

Master of Social Work

Committee Members
Jessica E Toft, PhD (Chair)
Eva Solomonson, LICSW
Deborah Organ, LICSW

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present the findings of the study. This project is neither a Master's thesis nor a dissertation.

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Abstract

The interpersonal nature of sexual assault has been theorized to negatively impact recovery. Access to supportive others is critical to positive outcomes and in particular, to posttraumatic growth. Spirituality may provide access to supportive social and spiritual relationships; however, spirituality can also be a source of increased distress when accessed in less adaptive ways. This research sought to understand how spirituality impacts posttraumatic growth after a sexual assault. The research design was an exploratory, non-probability sample. Respondents were primarily Caucasian and of young adult age. Respondents were more likely to access personal spirituality than communal spirituality. Participants were reached through word-of-mouth and online forums. An online survey was completed by respondents which provided information about demographics, spirituality prior to and after the sexual assault, and the resulting psychological change. Quantitative results were analyzed for descriptive statistics, and qualitative results were analyzed using a grounded theory method. Overall, posttraumatic growth was lower than would be expected among those who have experienced trauma. A positive style of spiritual coping was associated with positive relationships and the strongest posttraumatic growth outcomes, whereas a negative style of spiritual coping was associated with difficulty in relationships and the weakest posttraumatic growth outcomes. Clinical social workers need to consider the influence of spirituality when it is used by clients as a coping strategy after sexual assault and, where necessary, provide additional relational support and motivation to remain engaged in the recovery process.

Social workers serving in many different roles are called upon to provide assistance to those who have experienced the trauma of sexual assault or rape. Sexual assault involves unwanted sexual contact short of a rape or attempted rape, whereas rape involves forced sexual intercourse (RAINN: Rape, Abuse, and Incest National Network, 2013). Both of these categories of sexual violation will be referred to as sexual assault within the context of this discussion.

Sexual assault is a significant issue among the vulnerable populations served by social workers. There are estimated to be about a quarter million incidents of sexual assault in the United States each year (Truman, 2011). Ninety percent of people who experience a sexual assault are women, with one out of every six American women experiencing an attempted or completed sexual assault in their lifetime (Catalano, 2004; Tjaden & Thoennes, 1998). The lifetime rate of sexual assault is calculated to be as high as 17% for Caucasian and Latina women, 19% for Black women, and up to 34% among American Indian/Alaskan women (Cuevas & Sabina, 2010; Tjaden & Thoennes, 1998). Eighty percent of people who have experienced sexual assault are under the age of 30, with the ages of 12-34 being the highest risk years (Greenfield, 1997). As can be seen in these statistics, the young women served by social workers are at notable risk for experiencing sexual assault.

Sexual assault has enormous tangible and intangible costs to society. In addition to the immediate care needed, healing the emotional aftermath resulting from this kind of violation takes great time and care (RIANN, 2013). The tangible costs of sexual assault include such things as medical care, mental health services, loss of economic productivity, insurance administration costs, police investigations, criminal prosecutions, and the cost of the correctional system (U.S. Department of Justice, 1996). However, it is the intangible costs of emotional suffering and generalized fear of victimization that usually have the greatest implications

societally (Post, Mezey, Maxwell, & Novales Wilbert, 2002). People who have experienced sexual assault are three to six times more likely to suffer from depression and posttraumatic stress disorder (PTSD); 13-26 times more likely to abuse alcohol or drugs; and, four times more likely to commit suicide (RAINN, 2013). In the year immediately following a sexual assault, almost half of women surveyed needed to leave their jobs due to the severity of their symptoms (Ellis, Atkeson, & Calhoun, 1981). Every non-fatal sexual assault costs \$2,200 in lost productivity and those ending in fatalities can total up to \$1 million (U.S. Department of Justice, 1996). The lost productivity numbers include the loss of wages, fringe benefits, housework, and school days by the victim and their families. These numbers also encompass losses experienced by co-workers and supervisors, insurance company pay-outs, and legal expenses (U.S. Department of Justice, 1996). The total societal cost per victimization has been estimated to approach \$100,000 for each non-fatal sexual assault and almost \$3 million for those ending in fatalities (U.S. Department of Justice, 1996). This societal cost includes lost productivity as well as other expenses such as medical and mental health care, police and legal services, property damage or loss, and social services (U.S. Department of Justice, 1996).

Therapeutic interventions for those who have experienced sexual assault are typically focused on alleviating the distressing symptoms that initially drive clients to seek help (Zoellner & Maercker, 2006). PTSD is one of the most commonly diagnosed disorders in the aftermath of a sexual assault (RIANN, 2013). Symptoms include re-experiencing of the trauma that interferes with daily living; avoidance of places, events, and objects that remind individuals of the assault; and hyperarousal, which might involve difficulty concentrating or feeling tense and angry (RIANN, 2013).

Traumatic stressors, including sexual assault, are life threatening, physically violating, or terrifying experiences (Ford & Courtois, 2009). Traumatic stressors that are single-event and relatively limited in scope are quite different in impact from more complicated traumas that occur repeatedly over long periods of time (Ford & Courtois, 2009). Outcomes related to complicated trauma impact a person's personality development, their ability to experience trust within primary relationships, as well as involve physical health problems and severe psychosocial difficulties (Ford & Courtois, 2009). As a result, chronic traumatic stress reactions are far more complex to assess and treat (Ford & Courtois, 2009).

However, the potential for positive changes during recovery from traumas such as sexual assault also exists (Zoellner & Maercker, 2006). Calhoun and Tedeschi (2006) describe these positive changes as posttraumatic growth (PTG). Positive changes are commonly identified within the five domains of personal strength, new possibilities, relating to others, appreciation of life, and spirituality (Calhoun & Tedeschi, 2006).

While PTG commonly occurs outside the realm of spirituality, it is not uncommon for people to turn to spirituality as a resource for coping after a sexual assault (Ahrens, Abeling, Ahmad, & Hinman, 2010; Bryant-Davis, Ullman, Tsong, & Gobin, 2011; Zoellner & Maercker, 2006). The meanings people associate with terms such as religion and spirituality vary widely. There is a great deal of literature devoted to providing definition to these unique concepts; however, this discussion is outside the scope of this research. Within this paper, the word spirituality will be used to describe sensitivity or attachment to sacred or transcendent values, as well as the personal and institutionalized systems of religious or spiritual attitudes, beliefs, and practices often turned to for guidance in life (Merriam-Webster's online dictionary, 2013). Other terms associated with spirituality that may hold various meanings include the ideas of worship,

prayer, and a Higher Power. The term Higher Power is intended within this paper to refer to any transcendent force that one perceives to have power or influence within the world and upon which one might rely for support or guidance. The practices of spirituality referred to within this research include the ideas of worship and prayer. The term worship will encompass all forms of communal activities one engages in as part of their spiritual experience, and the term prayer will encompass any individual spiritual activities undertaken. It is clear there exists a broad array of ways one might turn to spirituality for support after a sexual assault and ways people conceptualize that spiritual support. As social workers, identifying the spiritual resources being accessed by clients and how the use of these resources affects their recovery trajectory can be a critical aspect of service.

Social workers' core values include addressing the concerns impacting vulnerable populations, as well as identifying and building on existing client resources (National Association of Social Workers, 2008). Sexual assault is an issue that impacts many of the vulnerable populations that social workers serve (Catalano, 2004; Greenfield, 1997; Tjaden & Thoennes, 1998). Additionally, social workers seek to view their clients from a strengths-based perspective as opposed to a primarily pathology-driven perspective. In fact, the NASW standards for service to clients state we are to elicit, support, and build on the resilience and potential for growth and development inherent in each individual (National Association of Social Workers, 2013). Understanding the role existing spiritual resources play in recovery and growth for someone who has experienced sexual assault is closely aligned with these values and standards.

The role of spirituality as a resource for both coping with trauma and the development of PTG has been widely researched in recent years; however, little research has been done to understand the impact of spirituality-based coping on PTG among people who have experienced

sexual assault (Ahrens et al., 2010; Calhoun & Tedeschi, 2006; Pargament, 1997). The interpersonal dynamics of sexual trauma uniquely influence a person's worldviews as well as relationships with others, both critical elements to the process of PTG (Ahrens et al., 2010; Frazier, Conlon, & Glaser, 2001; Harris et al., 2010). Therefore, the pathway to PTG among people who have experienced sexual assault may also be unique (Frazier, Tashiro, Berman, Steger, & Long, 2004; Harris et al., 2010; Prati & Pietrantonio, 2009). The purpose of this research is to explore how spirituality-based coping resources impact PTG among those who are age 18 or older and who experienced a first sexual assault within the last five years.

Literature Review

Sexual Assault

Social support. By its very nature, sexual assault is an interpersonal experience, albeit a violent one. As a result of the interpersonal nature of the trauma, restoration of positive social connection becomes an integral part of the recovery process (Bryant-Davis et al., 2011). Most people who experience sexual assault report significant initial distress with gradually declining symptoms (Frazier et al., 2001; Steenkamp, Dickstein, Salters-Pedneault, Hofmann & Litz, 2012). This contrasts with the resiliency most commonly experienced by those dealing with less personal and intentional types of trauma such as a car accident (Steenkamp et al., 2012).

Research suggests that when those recovering from a sexual assault have more support, they tend to believe the recovery process is under their control and that they have the resources needed to deal with the assault (Frazier et al., 2004). The nature of that support is critical to the recovery trajectory. Negative responses are most likely to be received from formal service providers such as police or medical providers; however, a negative response from intimate, informal social supports such as the friends and family likely to be sought out by someone who

has experienced a sexual assault can lead to the most damaging mental health symptoms (Borja, Callahan, & Long, 2006; Ullman & Filipas, 2001).

Shame, self-blame, and an overwhelming feeling of fear are common among those who have survived a sexual assault (Ahrens et al., 2010; Harris et al., 2010). Making sense of the trauma in a way that provides distance from self-blame is an important part of the recovery (Ahrens et al., 2010). Positive social connection can diminish shame and affirm the worth and value of someone who has experienced sexual assault (Bryant-Davis et al., 2011). Connection to a supportive social community may also help re-establish a person's sense of security (Bryant-Davis et al., 2011). However, the ability to access and make effective use of social supports after a sexual assault may be inhibited by the shame, blame, and fear this type of interpersonal trauma engenders (Harris et al., 2010).

Disclosure. A study among people who have experienced sexual assault indicates that disclosure to others who are supportive is associated with an increase in adaptive coping and decrease in maladaptive coping; a sense of control over the recovery process; and the taking of precautions to avoid future assault (Frazier et al., 2004). However, many people who have experienced sexual assault do not disclose their experience. While disclosure to informal supports such as family, friends, and romantic partners is far more common than disclosure to formal supports, one study found that out of 144 people who had experienced sexual assault, only one woman reported the event to law enforcement authorities (Ahrens, Stansell, & Jennings, 2010; Miller, Canales, Amacker, Backstrom, & Gidycz, 2011). Those who experience more stereotypical assaults involving a high degree of force are most likely to define their experience as rape and disclose it (Ahrens et al., 2010). Approximately one-third to three-quarters of experiences that meet the definition of rape will never be disclosed (Ahrens et al., 2010).

Reactions to past disclosures may impact whether those who experience sexual assaults will disclose in the future. Many African American women fail to disclose because of unsupportive responses to an initial disclosure (Tillman, Bryant-Davis, Smith, & Marks, 2010). When negative reactions have been received, people often stop disclosing altogether (Ahrens et al., 2010).

Revictimization. Subsequent assaults are a significant risk among individuals who have experienced sexual assault. One study found that 28% of a university student sample was re-victimized during one academic calendar year (Miller et al., 2011). Among women who said they chose not to disclose their original sexual assault because of a fear of being stigmatized, the risk of re-victimization was nearly five times greater than for those who did not report having this fear (Miller et al., 2011). Not disclosing sexual assault to others as a result of fear of being stigmatized may predict a poor overall recovery trajectory (Miller et al., 2011). Therefore, disclosure to others who are supportive represents a critical element in successful recovery after sexual assault.

Use of Spiritual Resources in Coping with Trauma

Spirituality may be an important resource for many people after a trauma, including those without an identified spiritual or religious affiliation. Greater than 90% of Americans believe in a Higher Power (Newport, 2011; Yangarber-Hicks, 2004). Among those without an identified spiritual affiliation, 68% still hold this Higher Power belief. Ninety-one percent of those with an identified affiliation indicate their spirituality is important. However, among the unaffiliated, only a third identify their spirituality as an important resource (Pew Research Center, 2012). This is valuable to note because it points to whether one's belief is likely to be called upon during a time of crisis.

When it comes to the practice of spirituality, almost 80% of the American population engage in regular prayer, whereas the majority of those without affiliation do not (Pew Research Center, 2012). However, among the unaffiliated, those who describe their religion as “nothing in particular” (71%) are far more likely to pray than the remaining unaffiliated (29%) who describe themselves as atheists or agnostics (Pew Research Center, 2012). As it concerns worship attendance, Americans are evenly split between frequent, irregular, and rare attendance (Pew Research Center, 2012).

Relational struggles may predict challenges in utilizing spiritual resources after trauma among those who not have regular spiritual practices, but who still occasionally turn to their spirituality as a resource for coping. Practical difficulties or personal preferences are most commonly cited as the reason for lack of worship service attendance among those who identify with a spiritual affiliation. Those without affiliation most commonly provide reasons such as disagreements with religion or dislike for church leaders (Pew Research Center, 2012).

For those with limited resources and restricted options, spirituality is frequently an accessible resource for coping after trauma (Gall & Cornblat, 2002; Harris, Allen, Dunn, & Parmelee, 2013; Pargament, 1997). Racial minorities tend to have less societal power and fewer resources, and research does indicate that they may be more likely than other groups to turn to spiritual resources when in distress (Trevino, Archambault, Schuster, Richardson, & Moye, 2012). Additionally, though women now have greater equality than in the past, they also continue to be marginalized in many ways (Gerber, Boals, & Schuettler, 2011). For both women and racial minorities their limited available resources may increase their likelihood of turning to spiritual resources when in crisis.

Slightly more women than men believe in a Higher Power (Newport, 2011). Men are significantly more likely than women to identify as spiritually unaffiliated. Less than half of the unaffiliated identify their spirituality as important (Pew Research Center, 2012). As a result, men may be less likely than women to turn to spirituality as a resource after trauma. This difference could be explained by men's limited vulnerability within society (Trevino et al., 2012). Research indicates that women and ethnic minorities do endorse higher levels of personal spirituality, tend to integrate spirituality into their worldview, and are among those most likely to use spiritual resources to cope (Ahrens et al., 2010; Burke, Neimeyer, McDevitt-Murphy, Ippolito, & Roberts, 2011; Gerber et al., 2011; Trevino et al., 2012). Therefore, it appears spirituality may be one of the most efficiently accessed resources for coping with trauma among these populations still experiencing significant vulnerabilities within current society, namely women and persons of color.

Those who have experienced a traumatic event are likely to access spiritual resources for coping (Ahrens et al., 2010; Watlington & Murphy, 2006). For example, among those who have experienced domestic violence, participation in spiritual activities is prominent, with over half reporting very high levels of participation (Watlington & Murphy, 2006). Those who actively participate in a spiritual life may be more likely to access their spiritual resources after a traumatic event; however, even those without an active spiritual life may find themselves turning to spiritual resources to cope after a trauma (Chan & Rhodes, 2013).

Benefits of Spiritual Coping

Vulnerable populations may be most likely to make use of spiritual resources; however, there appears to be other factors contributing to whether the use of these resources is of significant benefit. Though ethnic minorities are more likely than other groups to use their

spirituality for coping, they report no better psychological adjustment than other groups as a result of this coping (Ahrens et al., 2010). However, coping by means of spirituality appears to be beneficial for women in terms of mental health outcomes (Ahrens et al., 2010; Prati & Pietrantoni, 2009).

Looking more specifically at the ways in which people engage with spirituality appears to better predict psychological adjustment than general variables such as spiritual affiliation, frequency of worship attendance, or demographics such as ethnicity, age, and gender (Trevino et al., 2012; Ross, Handal, Clark, & Vander Wal, 2009; Yangarber-Hicks, 2004). When individuals feel a secure connection with a Higher Power, have a sense of spiritual connectedness with others, and hold benevolent worldviews, their attempts to engage spiritual resources for coping are associated with less distress and more positive outcomes (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013; Pargament, 2011). In contrast, research indicates that when engagement with spiritual resources is characterized by underlying tensions, as well as struggles with self, others, and a Higher Power, significant psychological distress is more likely (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013; Pargament, 2011).

Research suggests that those who experience a traumatic event commonly access spiritual resources in order to manage distress in the early stages of recovery from trauma (Bryant-Davis et al., 2011; Chan & Rhodes, 2013; Gall, Kristjansson, Charbonneau, & Florack, 2009). Distress may prompt an individual to look for resources to help cope after a trauma, which may lead to the activation of their spiritual resources. Distress then diminishes as coping is adaptively implemented. Therefore, a trajectory of early distress, activation of spiritual resources, and then diminishment of distress is possible when these resources are effectively utilized.

Understanding those who might turn to spiritual resources in order to cope with trauma as well as the ways engagement with spiritual resources may influence recovery trajectories can be useful when working with a client who has identified spirituality as important. It is valuable to understand not only if the client believes in a Higher Power and holds spirituality as important in their life, but also whether they are likely to access their spirituality as a resource during times of stress, and how they engage with that spirituality in order to cope (Ross et al., 2009). Because of the different ways spirituality can be utilized in coping, understanding the difference between that which strengthens adaptive spiritual coping and that which is likely to lead to spiritual struggles in coping after a trauma is critical (Burke et al., 2011).

Risks of utilizing spirituality to cope. It is possible some of the ways spiritual resources are engaged with may exacerbate distress and have a negative effect on mental health outcomes (Bryant-Davis et al., 2011). When engaged in a maladaptive manner, spiritual coping has been associated with higher levels of depression, anxiety, and overall psychological distress (Ano & Vasconcelles, 2005; Ross et al., 2009; Trevino et al., 2012). Styles of engagement with spirituality that tend to be less adaptive includes postures toward a Higher Power such as passivity without any collaboration or desperate pleading for help (Pargament, 1997).

Spiritual disillusionment. It is not uncommon for individuals to have a negative view of a Higher Power. One quarter of Americans view their Higher Power as present, but disengaged, which mirrors a neglectful parent (Burke, Neimeyer, McDevitt-Murphy, Ippolito, & Roberts, 2011). When someone holds this view of a Higher Power and then mobilizes spiritual resources to cope with their trauma, it may set the stage for them to become disillusioned about the power of their spirituality to support them when they are distressed (Burke et al., 2011; Gall, Charbonneau, & Florack, 2011; Gerber et al., 2011).

If spiritual resources fail to provide a way to make sense of the trauma, then spiritual disillusionment may exacerbate a person's distress beyond the direct effects of trauma (Gerber et al., 2011). These individuals may experience a deepening spiritual crisis over time in addition to traumatic stress (Burke et al., 2011). However, successful recovery from a trauma does not require the individual to remain faithful to spiritual beliefs engaged with at the outset of their coping effort. Positive outcomes can still occur as long the individual finds more fulfilling convictions and life philosophies as a result of their spiritual struggle, even if that means modifying or abandoning previous spiritual beliefs (Gall et al., 2011; Gerber et al., 2011; Vigna Bosson, Kelley, & Jones, 2012).

Degree of spiritual integration. Individuals who encounter conflict or confusion within their spiritual belief systems after accessing them to cope face unique challenges in recovery (Trevino et al., 2012). For example, those with highly integrated spirituality may have difficulty coping initially because of expectations about a Higher Power's influence. These individuals may experience significant disruption to their views about the world and others, views that may be strongly influenced by their spiritual values, leading to a belief that expectations for protection, miraculous healing, or easing of suffering have been violated by the Higher Power (Gall & Cornblat, 2002; Park, 2005; Ross et al., 2009). They may feel abandoned and experience religious doubt, contributing to greater initial emotional distress (Gall et al., 2011; Gall et al., 2009). However, research indicates that among those with highly integrated spirituality, spiritual resources for coping also facilitate fairly rapid dissipation of distress (Chan & Rhodes, 2013; Park, 2005). Studies indicate spirituality is associated with more distress at the beginning of the aftermath of a trauma, involving higher levels of intrusive thoughts, avoidance, and depressed mood; however, the effects disappear or even reverse over time among this population (Park,

2005). Overall, it is believed that those with highly integrated spirituality prior to a trauma tend to be able make the most effective use of spiritual coping resources even though they will commonly experience significant distress initially (Gall et al., 2009; Watlington & Murphy, 2006).

Accessing spiritual resources while under stress may be of limited help or may even be harmful among those who previously had less integrated spirituality (Gall et al., 2009). Those with limited spiritual practice may have difficulty accessing their faith and applying their spirituality toward coping with trauma in a productive way and may ultimately enter into a spiritual struggle as a result (Gall et al., 2009). The risk for distress after trauma is increased if the event is interpreted as being due to a Higher Power's wrath or punishment, and if spiritual struggle, questioning, or discontent results (Chan & Rhodes, 2013). In these cases, the use of spiritual resources to cope may become an additional burden rather than a resource (Ano & Vasconcelles, 2005).

Relationship with Higher Power and others. When an individual who is turning to spiritual resources to cope makes attributions such as seeing their Higher Power as powerless or uninterested in offering security during difficult times, they may feel alone or blame themselves for their traumatic experience, seeing it as a punishment (Burke et al., 2011). Questioning how a loving Higher Power could allow the trauma to occur, or believing in a punishing or abandoning Higher Power may lead to more fundamental questions about the existence of a Higher Power (Ahrens et al., 2010; Burke et al., 2011). A distressing period of spiritual struggle and anger with the Higher Power may follow, during a time when the trauma experience is already a strain on an individual's resources (Ahrens et al., 2010; Gall et al., 2009).

For some, the trauma experience may create a sense of interpersonal loss that weakens attachment to their Higher Power or challenges beliefs about a just and benevolent society (Burke et al., 2011). Other individuals may have previous experiences predisposing them to feel abandoned by a Higher Power, to have difficulty effectively utilizing social support provided by faith communities, or to being especially vulnerable to social withdrawal if rejection from others is perceived (Burke et al., 2011; Kirkpatrick, 1995; Shaw, Joseph, & Linley, 2005). It could be that those who struggle in their relationship with a Higher Power are also struggling similarly in other relationships with significant others; as a result, the frustration may be attributed indiscriminately across both spiritual and interpersonal domains (Gall et al., 2009; Kirkpatrick, 1995). For those who seek to utilize spiritual resources but who have difficulty making effective use of them, a parallel process of difficulties may be occurring with both social and spiritual attachments (Gall et al., 2009; Kirkpatrick, 1995).

There is an association among relationship with a Higher Power, a sense of control over the trauma situation, and either positive or poor psychological outcomes (Ai, Hopp, Tice, & Koenig, 2013b). Those who feel confident in their ability to overcome difficulties may be able to relate more securely to the Higher Power they are calling upon for support and may tend to collaborate with their spiritual resources in coping attempts (Ai et al., 2013b; Yangarber-Hicks, 2004). Those who feel helpless may tend to use less collaborative coping techniques and instead plead for help from the Higher Power or try to become entirely self-sufficient in both their social and spiritual worlds, with poor results (Yangarber-Hicks, 2004). Those who view the Higher Power as uninterested, punishing, or not to be trusted may again manifest parallel patterns of avoidance in their daily life, influencing their interpersonal relationships, help-seeking behaviors, and sense of internal control (Ai et al., 2013b; Yangarber-Hicks, 2004). This compromised

relationship with a Higher Power and impaired sense of control can have a significant impact on recovery.

Spiritually-based coping outcomes. It appears that among people utilizing their spiritual resources for coping, active engagement in the recovery process, a sense of control over the process, and taking a positive perspective all tend to lead to positive results in the aftermath of a trauma. Among the spiritual resources turned to for coping, active engagement in spiritual activities has been linked to a greater sense of empowerment, stronger adherence to recovery-promoting activities, life satisfaction, and reduced distress. Actively collaborating with a Higher Power has been found to facilitate the greatest levels of these results (Ross et al., 2009; Yangarber-Hicks, 2004). When people believe they have some control over their recovery process, they are most likely to perceive positive experiences as spiritually supportive (Ai et al., 2013b). In fact, the association between spirituality and positive outcomes may be mediated by positive reappraisal coping, which involves taking a positive view of the traumatic situation (Park, 2005).

Engagement. The individual or communal spiritual activities commonly referred to as worship or prayer may increase the perception of spiritual support. Prayer activates adaptive psychological mechanisms such as positive expectations and relaxation (Ai et al., 2013b; Gall & Cornblat, 2002). The use of prayer for coping has been shown to increase feelings of existential relatedness and spiritual support (Ai et al., 2013b). Those with limited access to social support may find prayer especially useful (Harris et al., 2010). People who actively engage in dialogue with a Higher Power and who perceive spiritual support from these actions report lower depression, anxiety, and PTSD (Ai et al., 2013b; Gall & Cornblat, 2002). As a form of active spiritual engagement, prayer helps people remain focused on decision-making and problem-

solving (Gall & Cornblat, 2002). Those forms of prayer that focus on providing calm and focus are associated with the most positive mental health outcomes (Harris et al., 2013).

Whereas prayer as a means of spiritual coping tends to lead to positive outcomes, coping through desperate pleading with a Higher Power has been associated with lower levels of empowerment and greater symptom distress (Yangarber-Hicks, 2004). Additionally, deferral to a Higher Power's wisdom has been tied to life satisfaction; however, it has also been tied to a more passive stance toward recovery (Yangarber-Hicks, 2004). Deferral to a Higher Power may indicate a dynamic process where it represents a first step toward building a more collaborative relationship with a Higher Power.

Those with highly integrated spirituality generally cope collaboratively, seeking support from others or a Higher Power. However, if they engage a less collaborative and self-directed style of coping, the outcomes tend to be poor, with fewer recovery-related activities, lower life satisfaction, and higher levels of distress (Ross et al., 2009). It is possible that a self-directed style of coping among those with highly integrated spirituality represents conflict within core belief systems (Ross et al., 2009; Yangarber-Hicks, 2004).

Control. The level of control people realistically have over their situation may also influence the degree to which a self-directing coping style is effective. When utilized in the context of mostly controllable problems, the self-directing coping style is associated with increased levels of psychosocial competence; however, in the context of uncontrollable problems, higher levels of distress occurred (Yangarber-Hicks, 2004). The varied results may reflect differences in what can legitimately be controlled by individuals within different life experiences (Yangarber-Hicks, 2004). For example, deferral coping may be positive to the extent it acknowledges and accepts what is outside of one's control, but negative when it is utilized as

an avoidance coping mechanism. The limitations of self-directing coping taken into consideration with the positive results associated with active and collaborative coping indicate that overall, exclusive reliance on individual coping may limit recovery (Ross et al., 2009; Yangarber-Hicks, 2004).

Perception. Perceptions regarding a Higher Power and the resulting styles of spiritual coping utilized can lead to varying outcomes in the aftermath of trauma (Watlington & Murphy, 2006). Struggles with spirituality affect individuals differently depending on how the struggle is perceived (Ahrens et al., 2010). For some, struggling with spirituality in the aftermath of trauma may lead to depression, hopelessness, and meaninglessness; for others, it may provide an opportunity for growth and renewal (Ahrens et al., 2010). Therefore, it is necessary to consider the many pathways, both positive and negative, that can exist between spirituality and mental health outcomes (Harris et al., 2010).

Spirituality as a resource after trauma. When a trauma so violates existing assumptions about how the world works that people cannot make sense or meaning out of what has happened, spirituality may play an important part in the process of recovery (Burke et al., 2011; Janoff-Bulman, 2006). An individual's sense of self and existential beliefs, very commonly informed by spiritual values, are vital areas for examination as one tries to rebuild a workable meaning of the event after the devastating disruption of trauma (Frazier et al., 2001). The worldviews provided by spiritual beliefs serve an important role in meaning-making for people across many different social classes and ethnic groups, especially when facing negatively life-altering events (Gerber et al., 2011). These spiritual frameworks often support people by giving them a sense of hope for the future and a sense of meaning or purpose (Harris et al., 2013).

Social support has overwhelmingly been reported as a primary means by which spirituality helps those experiencing life challenges to cope (Harris et al., 2013). Women who report higher levels of spiritual involvement also report higher levels of social support (Watlington & Murphy, 2006). The sense of community and provision of assistance to others that happens within spiritual communities has been found to increase well-being (Ahrens et al., 2010). Spiritual involvement is not necessary for social support to result in positive mental health outcomes; however, a sense of community is related to positive psychological health across multiple settings, including spiritually based ones (Ahrens et al., 2010; Harris et al., 2013; Watlington & Murphy, 2006).

Social support has been found to foster more favorable appraisals of traumatic events and more effective coping strategies (Chan & Rhodes, 2013; Prati & Pietrantonio, 2009). Social support in the spiritual context is generally intertwined with the concept of a Higher Power. Many who identify as spiritual consider social support to be the manifestation of a protective and caring Higher Power (Gall & Cornblat, 2002). Alternatively, social support may be experienced as a spiritual resource when individuals do not have a strong connection to a Higher Power or the person has rejected more traditionally defined spirituality (Gall & Cornblat, 2002). Social support and a positive relationship with a Higher Power have both been linked to lower levels of distress (Bryant-Davis et al., 2011; Frazier, 2003). The relationship with a Higher Power is often considered an interpersonal and intimate relationship and a critical source of psychological support after a traumatic event (Gall & Cornblat, 2002; Harris et al., 2013).

Despite the potential for distress, research indicates that for those who choose to engage spiritual resources, and are able to do so adaptively, spiritual coping is frequently associated with positive mental health outcomes. Coping through adaptive utilization of spiritual resources has

been associated with diminished PTSD and depression symptoms, greater empowerment, increased use of recovery-promoting activities, greater inner strength and belief in self, and increased calm (Gall et al., 2009; Watlington & Murphy, 2006; Yangerber-Hicks, 2004). For those with adaptive spiritual perspectives, infusing those beliefs into coping efforts becomes a reaffirmation of beliefs and encourages continued activation of adaptive coping efforts (Harris et al., 2013).

Spiritual Resources and Sexual Assault

There is considerable overlap between the populations most likely to use spirituality in coping and those who most commonly experience sexual assault. For example, African American women are at increased risk for sexual assault; they are also more likely to engage spirituality in coping than they are to engage with traditional therapeutic approaches (Bryant-Davis et al., 2011; RAINN, 2013). If spiritual coping resources are supported in the recovery process, it may increase the likelihood these women will engage with or to persist with interventions.

Research indicates that those who have experienced sexual assault engage in high levels of spirituality based coping (Ahrens et al., 2010; Bryant-Davis et al., 2011). Efforts such as looking to religion to find meaning, solace, and support appear to be most common. Active involvement in church and attempts to help others are the next most common spiritually based strategies within this population (Ahrens et al., 2010). Good deeds and spiritual support involve feeling connected to the community, and a sense of community is related to increased psychological well-being in a number of situations (Ahrens et al., 2010; Harris et al., 2013). Spirituality appears to provide a framework for finding meaning out of the trauma and a pathway to social support for those who have experienced sexual assault.

Unique considerations.

Impact on effective help-seeking. Although people who have experienced sexual assault have been found to most prominently utilize adaptive spiritual coping, the risk of utilizing more problematic types of spiritual coping increases among those who have experienced interpersonal types of trauma, such as sexual assault (Ahrens et al., 2010; Burke et al., 2011; Harris et al., 2010). For example, avoidance coping is used by a large majority of this population, and over half report some amount of spiritual discontent after their sexual trauma (Ahrens et al., 2010). Additionally, pleading with a Higher Power was used to cope by 70% of those who had experienced a sexual assault (Ahrens et al., 2010). The interpersonal nature of sexual assault may lead those who choose to engage spiritually based coping to experience difficulties with sense of control over the recovery process and with actively collaborating with a Higher Power in recovery efforts.

Impact on social functioning. Prayer can be a spiritual coping mechanism for support when social supports are limited; however, people who have experienced interpersonal trauma tend to use less prayer for assistance, and prayer tends to be less effective at providing support than for people who have experienced other types of trauma (Harris et al., 2010; Harris et al., 2013). Ultimately, people who have experienced interpersonal trauma may fear retribution from a Higher Power rather than support (Harris et al., 2010). This view is supported by research indicating that people who have experienced interpersonal trauma perceive more threat in their relationships, are more likely to blame themselves, are less likely to seek help in connection with a Higher Power, and may fear retribution from their Higher Power rather than religious support (Harris et al., 2010). Even when they do access coping such as prayer or spiritual support from within their community, these individuals find the resources of limited effectiveness (Harris et

al., 2010). This may be due to the difficulties with trust, managing relationships and effectively utilizing social support that are commonly reported among this population (Harris et al., 2013).

Impact on relationship with Higher Power and community members. Restoring trust and support in the relationship with a Higher Power may be just as important as it is with the rest of the social community for those who have experienced a sexual assault (Ahrens et al., 2010). Feeling that a Higher Power is watching out for them may help them feel less vulnerable (Ahrens et al., 2010). Additionally, believing in a Higher Power's love and care may provide a particularly important pathway to letting go of the self-blame so common in this population (Ahrens et al., 2010).

People who have experienced sexual assault identify low levels of support from their spiritual communities which may indicate negative interactions with church members are involved (Ahrens et al., 2010). Those who have been sexually assaulted may encounter high levels of rape myth acceptance within these spiritual communities (Ahrens et al., 2010). Victim-blaming attitudes such as instruction for people to be less sinful or to change their sexual behavior can increase distress (Bryant-Davis et al., 2011). General attitudes about sexuality or gendered violence within their spiritual communities may affect how people believe their disclosure will be received (Ahrens et al., 2010; Bryant-Davis et al., 2011). These issues and other interpersonal conflicts within the spiritual setting may affect the kind of spiritually based coping engaged with and the degree to which people utilize the important process of disclosure as part of their recovery process (Ahrens et al., 2010; Bryant-Davis et al., 2011).

Posttraumatic Growth

Positive changes possible after trauma. Schemas or worldviews are internal belief structures that people use to organize knowledge, predict outcomes, and ultimately, safely and

comfortably navigate through various life events (Janoff-Bulman, 2006). Disruption to these belief structures may contribute significantly to the devastating impact of trauma (Janoff-Bulman, 2006). However, a positive outcome to this disruption is also possible. For a number of people, the process of recovery can include developing more complex and nuanced belief structures that include both acceptance of the trauma that occurred, as well as a sense of new possibilities related to the future. These new worldviews allow the person to more comfortably navigate an expanded range of life experiences (Janoff-Bulman, 2006). The positive changes that emerge from this rebuilding effort are what are described as PTG (Calhoun & Tedeschi, 2006).

The most commonly reported prevalence of PTG ranges from approximately 30% to as high as 80% of those who have struggled with trauma (Calhoun & Tedeschi, 2006). Several demographic and personal characteristics, experiences of trauma, and coping styles provide pathways to PTG (Chan & Rhodes, 2013). Characteristics such as optimism or a sense of hope have been theorized to lead to PTG; however, these traits have yielded mixed research results as predictors (Ai, Hall, Pargament, & Tice, 2013a). On the other hand, being of non-white ethnicity, engagement in rumination, and religiousness have all been found to be predictors of high PTG (Frazier et al., 2004; Kleim & Ehlers, 2009).

Appropriate recognition and exercise of control seems to also be an important aspect of coping with trauma in a way that facilitates PTG. High levels of PTG have been reported among people who take action to deal with their traumatic experience and the resulting emotions, and who, at the same time, also accept what is unchangeable or uncontrollable about their experience (Prati & Pietrantonio, 2009). Positively reappraising a traumatic situation is one way of actively coping with trauma that research indicates leads to greater growth (Prati & Pietrantonio, 2009). Those who have experienced trauma often find themselves oscillating among varying

perspectives of the traumatic event before one is finally rebuilt into their worldview and a more secure forward momentum occurs within the recovery process (Schuettler & Boals, 2011).

Cognitive processing is necessary to the development of PTG (Vigna Bosson et al., 2012). The cognitive processing leading to PTG has been described as rumination (Calhoun & Tedeschi, 2006). This rumination is often intrusive in the early stages of the recovery, but a successful process will eventually move toward deliberate processing (Taku, Cann, Tedeschi, & Calhoun, 2009). Intrusive rumination is a potentially unproductive kind of cognitive processing often associated with negative changes following trauma, whereas deliberate rumination is a more productive form of cognitive processing (Stockton, Hunt, & Joseph, 2011). Both intrusive and deliberate rumination are associated with PTG, yet recent engagement in deliberate rumination most strongly predicts the degree of PTG (Stockton et al., 2011; Taku et al., 2009). Higher levels of intrusive thoughts are associated with lower PTG and with negative changes in outlook (Stockton et al., 2011). Intrusive thoughts soon after a traumatic event do not lead directly to PTG, but do prepare a person psychologically for the deliberate cognitive processing that comes later in the growth process (Taku et al., 2009). It is possible that initial intrusive thoughts ultimately motivate a person to search for a new sense of meaning after the trauma, leading to more deliberate rumination, and finally, to PTG (Kleim & Ehlers, 2009).

Actively thinking about the event, or deliberate rumination, has adaptive qualities contributing to PTG (Stockton et al., 2011). However, deliberately and purposefully contemplating the traumatic event and its results is less effective in promoting PTG than deliberate rumination involving an active process of meaning making and learning something from the event (Stockton et al., 2011). It is likely that actual growth requires a more active engagement in change, rather than simply engaging cognitive processes (Kleim & Ehlers, 2009).

Some research on the effectiveness of different coping styles indicates that growth related cognitions must be internalized and turned into behaviors before real growth can take place (Tallman, 2013). For example, the trait of optimism has been associated with PTG, but this association has been explained by an optimist's ability to focus on what is important and let go of worldviews inconsistent with the reality of the trauma (Prati & Pietrantonio, 2009). Optimists are more likely than others to employ active adaptive coping strategies such as positive reappraisal and the seeking of social support (Prati & Pietrantonio, 2009). Research indicates that problem focused, positive event perspective coping predicts PTG, whereas avoidant and negative event perspective coping is more closely associated with PTSD (Schuettler & Boals, 2011).

In addition to active coping methods and a sense of control over the process of recovery from trauma, supportive social networks and coping through the use of spiritual resources are also tied to increased positive changes after a traumatic event (Frazier et al., 2004; Prati & Pietrantonio, 2009). Self-disclosure to supportive others assists people as they cognitively process the trauma and develop a workable understanding of the event (Calhoun & Tedeschi, 2006). Calhoun and Tedeschi (2006) suggest that the extent to which a traumatized person engages in self-disclosure about the trauma, and the response the person receives to these disclosures may affect the PTG trajectory.

When people who have experienced trauma have helpful support networks, they tend to report more positive life changes (Bryant-Davis et al., 2011; Frazier et al., 2004). A supportive social environment fosters a more favorable appraisal of the traumatic event and, overall, more effective coping (Prati & Pietrantonio, 2009). Potentially, supportive others aid PTG through desensitizing individuals to negative feelings, enhancing the sense of closeness in relationships, promoting consideration and recognition of personal strengths, providing ways to craft narratives

about the changes that have happened, and offering perspectives that can be integrated into new belief structures (Calhoun & Tedeschi, 2006; Prati & Pietrantonio, 2009). The ability to find benefits and experience growth after trauma may ultimately contribute to better adjustment and less psychopathology overall (Kleim & Ehlers, 2009).

PTG and distress. Positive changes can happen in the aftermath of a trauma; however, the overwhelming distress that accompanies a traumatic event cannot be dismissed. When a person's whole perception of the world is turned upside down, the process of trying to find some sense of meaning through the traumatic event will naturally be accompanied by intense suffering (Burke et al., 2011; Janoff-Bulman, 2006). One of the most frequently diagnosed outcomes of trauma is PTSD. A recent literature review indicates that the rate of PTSD among populations directly exposed to trauma is approximately 25% (Santiago et al., 2013). Forty percent of those with this diagnosis will experience a chronic course (Santiago et al., 2013). Depression is also frequently diagnosed in the aftermath of trauma. Approximately 20% of those who experience trauma are diagnosed with depression (Shalev et al., 1998). Roughly 40% of those diagnosed with PTSD are also diagnosed with depression; a comorbidity that predicts greater symptom severity and lower functioning (Shalev et al., 1998). These high rates of diagnostically described distress highlight how devastating the psychological impact of trauma can be.

However, multiple variables predict both experiences of diagnostic distress such as PTSD, as well as measures of positive change such as PTG (Schuettler & Boals, 2011). Some research indicates that PTG is more likely to occur among those who are also experiencing distressing symptoms such as those described by PTSD; though the association between PTG and distress is complex (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013). Other studies have failed to find any reliable relationship between PTG and experiencing adverse outcomes such as

PTSD (Chan & Rhodes, 2013; Kunst, Winkel, & Bogaerts, 2010). Ultimately, these research results support a conceptualization of PTG and psychological distress as distinctive outcomes to trauma that often co-occur rather than being opposite ends on a spectrum of recovery (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013).

Different types of trauma, coping styles, and individual characteristics lead to varying degrees of the distinct outcomes of growth or distress (Calhoun & Tedeschi, 2006; Chan & Rhodes, 2013). In trauma events as diverse as a natural disaster, life threatening medical diagnosis, and sexual assault, PTG is consistently associated with a subjective experience of significant life challenge (Ai et al., 2013b; Chan & Rhodes, 2013; Kleim & Ehlers, 2009). When people experience a traumatic event, the event often becomes emblematic, creating internal, stable, and global attributions (Schuettler & Boals, 2011). A subjective assessment of the extent to which the incident has influenced a person's sense of identity and is an open and active part of their life, or event centrality, has been found to be a key predictor of both PTSD and PTG (Boals & Schuettler, 2011; Kleim & Ehlers, 2009; Schuettler & Boals, 2011).

After a traumatic event, both coping styles and the significance of the event become critical in the outcome trajectory (Schuettler & Boals, 2011). Distress is most strongly tied to those reporting moderate growth, rather than those who report either high or low growth (Kleim & Ehlers, 2009). High levels of growth are most likely to be associated with a life challenge central enough to disrupt a person's worldviews significantly. This may then trigger the cognitive processing associated with meaning making, generate the buffering impact of PTG, and ultimately minimize the experience of distress (Gall & Cornblat, 2002; Janoff-Bulman, 2006). In contrast, those who report moderate levels of growth may be among those activating the concept of positive change as an avoidance coping mechanism in order to preemptively

minimize feelings of distress rather than moving through the full growth process (Kleim & Ehlers, 2009).

In contrast to those who experience high distress symptoms and high growth, or those reporting moderate levels of growth, which may reflect a coping process instead of PTG, there are those who experience relatively low levels or no growth after a trauma (Janoff-Bulman, 2006; Kleim & Ehlers, 2009). This is not an adverse outcome (Calhoun & Tedeschi, 2006). For people possessing enough resiliency and self-efficacy, existing resources may be sufficient to manage the recovery with minimal life struggle, meaning the PTG process is never initiated (Schuettler & Boals, 2011). Little relationship exists with either PTG or PTSD symptoms among the resilient (Schuettler & Boals, 2011). In other cases, people may never regard the incident as enough of a crisis to require the mobilization of resources (Kleim & Ehlers, 2009). If people do not have their former beliefs shaken enough to go through the rebuilding process represented by PTG, there will also be low symptoms and low growth (Kleim & Ehlers, 2009; Janoff-Bulman, 2006). Finally, for those who have already had previous life experiences that initiated growth in particular domains, no new growth may be reported after a trauma because a ceiling has already been reached through these other experiences (Ahrens et al., 2010; Gall et al., 2011). There are numerous ways people manage the aftermath of trauma and the process does not need to result in growth to be positive.

Most research links the PTG process with positive results; however, Maercker and Zoellner (2004) have hypothesized that PTG may have a self-deceptive side linked to denial, avoidance, or wishful thinking. Participants in studies of trauma, personality, and relationship satisfaction regularly overestimate the impact of future events on their quality of life (Perera & Frazier, 2013; Tallman, 2013). It may be that there is minimal connection between perceived

change and real change (Perera & Frazier, 2013; Tallman, 2013). Slightly distorted positive perceptions of self, an exaggerated sense of personal control, and unrealistic optimism have also been found among those facing life threatening illnesses (Kleim & Ehlers, 2009). The potential for negative outcomes from these perceptual distortions must be considered in the exploration of PTG.

Ideas of growth can be accessed in ways that reflect a positive, active approach which results in a beneficial outcome, but also through avoidant-denial strategies where maladaptive effects may be more likely (Frazier et al., 2004; Kunst et al., 2010; Schuettler & Boals, 2011). Theoretically, awareness of positive changes in PTG can be related to the idea of finding benefits after a trauma as a way to cope (Calhoun & Tedeschi, 2006; Prati & Pietrantonio, 2009). Benefit finding can be an adaptive early coping mechanism, and positive reappraisal of a traumatic event has been linked to PTG (Frazier et al., 2001; Kleim & Ehlers, 2009; Prati & Pietrantonio, 2009). Positive illusions of future growth may allow individuals to keep going despite challenges, and may have the potential to positively impact both mental and physical health outcomes (Kleim & Ehlers, 2009; Kunst et al., 2010; Tallman, 2013). Therefore, steps taken to lessen distress early on, even if through avoidant coping, may help people move forward with their recovery. However, avoidance coping appears to become less helpful as time goes on (Kleim & Ehlers, 2009; Frazier et al., 2001; Prati & Pietrantonio, 2009).

Some have theorized that PTG accessed through active, problem focused coping methods may result in beneficial outcomes among people who have positive expectations about the future, whereas those with negative expectations who employ PTG as an avoidant-denial strategy experience less beneficial results (Kunst et al., 2010; Maercker & Zoellner, 2004; Schuettler & Boals, 2011). Avoidant-denial coping hampers the ability to find benefits and may reflect

discouragement in the recovery process (Gall et al., 2011). Surrendering to a situation may allow for some degree of positive adjustment, but is also associated with limited growth (Gall et al., 2011). Overall, those who actively engage with their recovery process and take a positive perspective have better outcomes and are more likely to experience PTG than those who are avoidant (Frazier et al., 2004; Maercker & Zoellner, 2004).

Active coping strategies such as anticipating positive results and planning are believed to promote PTG through the attempts to deal with the trauma and associated emotions (Prati & Pietrantonio, 2009; Tallman, 2013). However, research suggests it is equally necessary to accept what is uncontrollable or unchangeable about the trauma experience (Prati & Pietrantonio, 2009). Ultimately, coping that helps growth related cognitions turn into action might be most supportive of the PTG process (Frazier et al., 2004; Kleim & Ehlers, 2009; Tallman, 2013).

Posttraumatic Growth and Sexual Assault

As knowledge regarding the potential benefits arising from a struggle with trauma grows, the unique pathways and barriers to PTG among those who have experienced sexual trauma are important to consider. The intentional, interpersonal nature of harm involved in sexual assault may be more likely to challenge fundamental beliefs about others and the world than other types of traumatic events (Frazier et al., 2001). In fact, a study of positive and negative life changes in the aftermath of sexual assault indicates that beliefs about the goodness of other people and the security and fairness of the world continued to be negatively affected one year after the assault (Frazier et al., 2001). It is interesting that higher levels of fear, shame, and humiliation during the assault predict greater PTG later in the recovery process (Kleim & Ehlers, 2009). It is likely these aspects of the sexual assault cause great disruption to belief structures related to safety and relationships with others, meaning initiation of the growth process may be more likely than in

situations when the event is more manageable within existing belief frameworks (Janoff-Bulman, 2006).

Over time, those who experience sexual assault generally begin to sense more positive changes and fewer negative ones (Frazier, Conlin, & Glaser, 2001). In one study of people who had experienced interpersonal trauma, approximately 60% report positive change following the traumatic event (Kleim & Ehlers, 2009). Empathy, relationships, and appreciation of life are positively impacted as early as two weeks to two months after a sexual assault (Frazier et al., 2001). Later, greater positive change begins to occur in the areas of personal strength and existential areas such as sense of purpose, philosophy of life, and values or religious views (Frazier et al., 2001). These results point to a recovery trajectory of significant initial distress, but one where positive relationships with supportive others early in the process can significantly impact a positive PTG path as the process moves forward.

Re-victimization risk may be a specific aspect of recovery from sexual assault influenced by the experience PTG. Those who report PTG, particularly in the domain of new possibilities, have a diminished risk of sexual re-victimization (Miller et al., 2011). It is understood that disclosure to supportive others is an essential part of the PTG process; however, lack of disclosure to supportive others may inhibit PTG, which may then increase re-victimization risk (Calhoun & Tedeschi, 2006; Frazier et al., 2004; Miller et al., 2011). Research has begun to reveal that PTG also protects against increased PTSD symptom severity when re-victimization does occur (Kunst et al., 2010). PTG appears to have the potential to buffer against re-victimization, but difficulties with disclosure to others provides a significant barrier to PTG within this population.

Posttraumatic Growth and Coping through Use of Spiritual Resources

Many of the same people who report experiencing PTG are apt to turn to spiritual resources to cope after a trauma (Kleim & Ehlers, 2009). Women and ethnic minorities are likely to find spirituality a strong resource for coping and experience PTG as a result; however, their vulnerabilities still expose them to greater rates of PTSD than those experienced among other populations (Gerber et al., 2011). Middle age or older people experiencing traumas often experience PTG after utilizing spirituality for coping; however, after various potentially traumatic events, young university students experienced little change in their sense of meaning in life, a domain strongly associated with both spirituality and PTG (Ai et al., 2013a; Harris et al., 2013; Perera & Frazier, 2013). These differing results point to the need to more clearly understand the role of spirituality in recovery from trauma among people of various demographics.

Research indicates spirituality is a strong predictor of PTG, and coping through the use of related spiritual resources is an even stronger predictor (Ai et al., 2013a; Chan & Rhodes, 2013; Shaw et al., 2005). Spirituality constructs may facilitate PTG and better quality of life through provision of a supportive social network, and additionally, a framework of values and beliefs that may help people find a sense of meaning in their traumatic experience (Gall & Cornblat, 2002; Gerber et al., 2011; Shaw et al., 2005). This occurs through promotion of positive appraisals of the event, alleviation of distress, creation of hope, and potentially, identification of areas for growth (Ahrens et al., 2010; Pargament, Desai, & McConnell, 2006; Gall & Cornblat, 2002; Gerber et al., 2011; Park, 2005; Prati & Pietrantonio, 2009). Cognitive engagement with spiritual beliefs and active spiritual practices has the potential to play a central role in processing a traumatic event, leading to stronger and more adaptive beliefs (Vigna Bosson et al., 2012; Shaw et al., 2005). It has been hypothesized that for some people trauma prompts the mobilization of

spiritual resources for coping, which in turn, may direct the person toward experiences such as inner peace and strength, connectedness to others, positive attitude, a sense of meaning, and ultimately, PTG (Gall & Cornblat, 2002).

When spiritual resources are utilized in adaptive ways, spiritual coping is strongly associated with PTG; when these resources are utilized in less adaptive ways, the association with PTG is weaker, less consistent, and sometimes negative (Gall et al., 2011; Prati & Pietrantonio, 2009; Shaw et al., 2005). Utilizing spiritual resources for coping in adaptive ways has been associated with positive affect, higher self-esteem, and PTG, but also with PTSD (Ano & Vasconcelles, 2005; Bryant-Davis et al., 2011; Trevino et al., 2012). Yet, overall, spiritual coping has been associated with relatively low levels of distress after a trauma and high levels of growth (Ahrens et al., 2010; Prati & Pietrantonio, 2009; Shaw et al., 2005).

When spiritual coping is utilized early in the process in ways that lead to a spiritual struggle, it can still signal a conduit to growth (Ano & Vasconcelles, 2005; Gall et al., 2011). The spiritual struggle leads to a reassessment of previous beliefs. As the beliefs begin to accommodate changing worldviews and provide answers to crucial philosophical and spiritual questions, PTG is facilitated (Burke et al., 2011; Gall et al., 2011; Gerber et al., 2011). It is also important to note that a spiritual struggle can go awry (Burke et al., 2011; Gall et al., 2011; Gerber et al., 2011). Disruption to belief structures surrounding such fundamentally existential areas as sense of self and spirituality are two domains of PTG consistently associated with concurrent distress (Frazier et al., 2001). The crucial element of moving to PTG through difficulties with spiritual coping is to remain active in the struggle (Gall et al., 2011).

Some active spiritual approaches to coping that may promote PTG include prayer, positive reappraisal and the seeking of social support. Prayer may facilitate the repetitive

cognitive processing that is necessary to both move from intrusive thoughts to more deliberate rumination and to rebuild a structure of meaning more consistent with the trauma experienced (Harris, et al., 2010). Calming and focusing prayer is closely related to more secular activities such as meditation and reflection, both of which have been associated with PTG; additionally, spiritual self-disclosure occurring through meditation and reflection may fulfill some of the PTG requirements usually met through disclosure to supportive others (Harris et al., 2010; Harris et al, 2013).

The positive strategies of seeking social support and reappraisal have both been associated with PTG (Gall et al., 2011; Prati & Pietrantonio, 2009). Research indicates that the association between adaptive use of spiritual resources in coping and PTG is mediated by social support; however, positive reappraisal coping is more strongly related to PTG (Ai et al., 2013a; Prati & Pietrantonio, 2009). Reappraisal coping focusing on life affirming activities and seeing the Higher Power in a positive manner are both related to positive outcomes and high levels growth (Gall et al., 2011; Gall & Cornblat, 2002; Park, 2005). However, coping that seeks to find new meaning and purpose has the strongest association with PTG (Gall et al., 2011). This type of coping relates to the PTG process of meaning making, which depends on deliberate cognitive processing focused on integrating the trauma experience into a new understanding or view of life (Calhoun & Tedeschi, 2006; Gall et al., 2011).

A recent study found the relationship between adaptive spirituality based coping and PTG works primarily through cognitive processing (Vigna Bosson et al., 2012). It has been proposed that the practice of utilizing spirituality in coping may be unnecessary, and PTG can be achieved exclusively through deliberate processing of the event (Vigna Bosson et al., 2012). However, it must also be acknowledged that, for many individuals, spirituality is a central part of their life

and their involvement with spirituality or a Higher Power may still facilitate the deliberate rumination that in turn predicts PTG (Vigna Bosson et al., 2012).

Posttraumatic Growth, Sexual Assault, and Spiritual Resources

Demographically, women of ethnic backgrounds are among those most likely to experience sexual assault, utilize spiritual resources, and to experience PTG (Ahrens et al., 2010; Bryant-Davis et al., 2011; RAINN, 2013). Yet, those who experience a sexual assault are most commonly under age 30, whereas successful utilization of spiritual resources most commonly occurs among those who are older (Prati & Pietrantonio, 2009; RAINN, 2013). As it concerns the demographic of age and PTG, results are mixed. In some studies it appears that high levels of PTG may be most common among those who are youthful, while in others, middle age or older people seem to be more likely to experience PTG (Ai et al., 2013a; Perera & Frazier, 2013; Stanton, Bower, & Low, 2009). Further research may clarify how age intersects with gender and ethnicity as it concerns the use of spiritually based coping strategies and levels of PTG among those who have experienced a sexual assault.

The interpersonal dynamics of sexual assault involve several aspects that potentially complicate the utilization of spirituality based coping resources in the process of PTG (Harris et al., 2010). For example, the effectiveness of calming and focusing prayer was weaker among people who experienced interpersonal trauma than among those who experienced other types of trauma (Harris et al., 2010). Also, as previously discussed, it has been hypothesized that when an interpersonal trauma is experienced, beliefs about safety and fairness within society are challenged and attachment to a Higher Power may be weakened (Burke et al., 2011).

As a result, the critical PTG aspect of disclosure to supportive others can be disrupted among those who have experienced sexual assault (Calhoun & Tedeschi, 2006). Shame, blaming,

or fear may limit the ability to effectively utilize social support (Harris et al., 2010).

Additionally, how those who have experienced sexual assault are received by members of their church community may affect whether this spiritual resource poses a barrier to PTG and causes additional distress, or supports the individual in the cognitive processing needed to make meaning from the traumatic event and to move toward growth and renewal (Ahrens et al., 2010).

Research Question

Research indicates that those who have experienced sexual assault have a recovery trajectory distinct from many other types of trauma as a result of the specific interpersonal nature of their trauma (Frazier et al., 2001; Miller et al., 2011; Steenkamp et al., 2012). Additionally, sexual trauma disproportionately impacts populations with limited societal resources (Catalano, 2004; Greenfield, 1997; Tjaden & Thoennes, 1998). For those with limited resources, spirituality can serve as an accessible and effective coping resource after trauma (Ahrens et al., 2010; Harris et al., 2013; Pargament, 1997). Spiritual resources can help individuals connect with a supportive community and provide the framework of meaning necessary for PTG (Bryant-Davis et al., 2011; Gerber et al., 2011; Watlington & Murphy, 2006). However, accessing spirituality as a coping resource when under stress can be of limited help, or even harmful for those who do not have an active or integrated spiritual practice (Gall et al., 2011; Park, 2005; Ross et al., 2009). Regardless of whether accessed in adaptive or problematic ways, the use of spiritual resources to cope has been associated with PTG (Chan & Rhodes, 2013; Gerber et al., 2011; Shaw et al., 2005). However, a successful recovery trajectory requires remaining active in the coping process (Frazier et al., 2004; Kunst et al., 2010; Maercker & Zoellner, 2004).

This research seeks to gain understanding about how effectively those who have experienced a first sexual assault within the last five years use spiritually based coping strategies and how these strategies influence PTG.

Conceptual Framework

Trauma and Spirituality Based Coping

Styles of spirituality based coping. One of the aspects of recovery from a sexual assault examined in this study is coping through the use of spiritual resources. Pargament (1997) is a leading researcher in the field of spirituality based coping and he has identified three primary styles of coping related to spiritual resources: collaborative, deferring, and self-directed. Active and internalized personal exchange with a Higher Power is referred to as collaborative, while those who relinquish personal responsibility and instead delegate their stress through reliance on a Higher Power are categorized as using a deferring style (Pargament, 1997). Finally, those who focus on the free will that has been granted to them by a Higher Power and who work to solve problems primarily on their own, use a self-directed style (Pargament, 1997). So, a person who engages in collaborative spirituality based coping tends to see problem solving in their recovery as a process they work through together in conversation with a Higher Power. Alternatively, those who use a deferring strategy leave the problem solving to a Higher Power. They take a passive approach and wait to see how their situation changes as a result of a Higher Power's actions. Although a Higher Power's existence is acknowledged by those with a self-directed style, a Higher Power's assistance is not sought at all in the recovery process by those who employ this style.

Positive and negative coping. More broadly, coping through the use of spiritual resources has also been grouped into two categories: positive and negative coping. Negative

engagement with spiritual resources is usually evidenced by underlying spiritual tensions and struggles within oneself, with others, and with the Higher Power (Pargament, Feuille, & Burdzy, 2011). Conflict, doubt, and questioning related to issues of faith and a Higher Power are common (Pargament, 1997). On the other hand, positive coping through the use of spiritual resources is reflected in a secure relationship with a Higher Power, a sense of spiritual connectedness with others, and a benevolent worldview (Pargament et al., 2011). Those who use spiritual resources to cope in the ways categorized as positive are more likely to seek spiritual support and to look for meaning in the traumatic situation (Pargament, 1997). A person who utilizes a positive spirituality based coping strategy will tend toward thought patterns that reflect trust in a Higher Power's care for them and actions that seek to bring them closer to a Higher Power and others. On the other hand, those who use spirituality based coping that is categorized as negative will be more likely to have thought patterns reflecting doubts about a Higher Power's care for them and beliefs that their difficulties are because of a Higher Power's punishment or maliciousness.

Posttraumatic Growth

The theory of PTG guides the ideas contained within this research of the potential for positive change in the aftermath of a sexual trauma (Calhoun & Tedeschi, 2006). The awareness of suffering having the potential to bring about positive, transformative change is ancient. These ideas are contained in widely varying cultural histories, the teachings of many spiritual traditions and are also the focus of numerous philosophical and literary works (Calhoun & Tedeschi, 2006). The PTG process refers to change that is different from being able to withstand a traumatic event and not be damaged by it; rather it describes an experience of growth that surpasses the levels of adaptation experienced prior to the trauma (Calhoun & Tedeschi, 2006). Growth after a trauma has been experienced as greater appreciation for life, a changed sense of

priorities, warmer and more intimate relationships, an increased sense of personal strength, recognition of new possibilities in life, and as spiritual development (Calhoun & Tedeschi, 2006). Therefore, PTG theory describes not just a return to baseline after a period of significant traumatic distress, but rather an improved and more meaningful life experience (Calhoun & Tedeschi, 2006).

An individual's struggle to make meaning out of a trauma is necessary to the PTG process (Calhoun & Tedeschi, 2006). PTG occurs when people work to adapt to a new life experience after a trauma (Janoff-Bulman, 2006). There are two distinct features inherent in PTG. The first aspect theorized to be an essential component in facilitation of PTG is disclosure to supportive others (Calhoun & Tedeschi, 2006). When a person who has experienced sexual assault tells someone about their trauma, they begin the process of creating a narrative of the trauma. Disclosure to supportive others widens the perspective of the event, helping create a narrative of survival within a wider context rather than a narrow story of victimization dominated and overshadowed by the trauma. This creation of narrative supported by disclosure to others also allows for reconstruction of a workable sense of meaning after the trauma (Calhoun & Tedeschi, 2006). The second component of PTG is the deliberate cognitive processing that is believed to be crucial to PTG (Calhoun & Tedeschi, 2006). As a person goes over the traumatic event in their mind in the aftermath, they either attempt to find a way for this event to fit within their pre-existing ideas about the world, or they may need to change their previous ideas about the world so this new event can be integrated. It is this cognitive processing that allows a sense of meaning about the traumatic event to emerge.

As an example of a couple paths this cognitive processing might take, after a sexual assault a person may find their prior beliefs about the goodness of other people shattered. They

may now feel fear and mistrust of others and begin to avoid being vulnerable with anyone else. Part of that avoidance might include not telling anyone about their assault. As these people cognitively process the event, they may begin to reconstruct their view of the world as full of people who cause them hurt and are to be avoided. They may also begin to see themselves as very vulnerable to these powerful others who seek to harm them. An alternative path that cognitive processing could take might consist of another person who has also experienced sexual assault, but for one reason or another, they reach out to someone who hears their story and receives them with kindness and support. This person offers them a wider perspective on their assault and how to make sense of it. Now as the person who has experienced sexual assault cognitively processes the trauma, they may not only begin to revise their understanding of the world to include those who seek to harm them, but also to include those who will display kindness, support, and perspective. It is this type of complex and nuanced view of the world and others that is often reflected by those who report PTG.

Meaning making and disclosure to supportive others will be the primary PTG ideas explored within this research. Because sexual trauma tends to involve a significant initial disruption to previous frameworks of understanding, this study is designed to gain knowledge about how participants rebuild a workable sense of meaning. The interpersonal nature of sexual trauma presents barriers to one of the primary ways meaning making is theorized to occur, through disclosure to supportive others. As a result, another important angle of investigation within the current research involves themes related to participants' decisions to disclose the trauma to others and the results of their disclosure decision.

Methods

Interestingly, those who have experienced a sexual assault often share common demographic information with those who are likely to turn to spiritual resources to cope with a trauma. However, the interpersonal nature of sexual assault often creates a barrier to disclosure about the trauma. Disclosure to supportive others is theorized to be a crucial component of recovery, particularly for the cognitive processing needed for the outcome described as PTG. The purpose of this research was to explore the ways in which spiritually based coping strategies affected the outcome of PTG among those who had experienced a sexual assault.

Research Design

This research was designed to be a cross-sectional, mixed-method, quantitative/qualitative online survey. PTG is theorized to be a process that develops over time; therefore, longitudinal research designs can provide essential information regarding that evolving process (Park & Lechner, 2006). However, due to feasibility constraints related to the time-limited nature of the project, a cross-sectional research design was determined to be more suitable for this particular project (Monette, Sullivan, & DeJong, 2011). Furthermore, it was expected that respondents would have varying lengths of time after the sexual trauma, allowing for identifying possible differences in PTG trajectory.

This research design collected quantitative data primarily through the inclusion of validated scales measuring spiritual coping strategies and levels of PTG in the survey. However, subjective, narrative questions allowing deeper exploration of participants' experiences that could not be adequately captured by quantitative, numerical measurements were also included (Berg & Lune, 2012). The decision to include qualitative data collection in the design was based on the limited amount of research literature related specifically to spiritual coping and PTG

among those who have experienced sexual assault. This suggested an exploratory approach could be helpful in developing the literature in this particular area.

Sample

A non-probability, convenience, purposive sample was most appropriate for this research due to feasibility concerns and the difficulty in enumerating the population, which would have been required to conduct a probability sample (Monette et al., 2011). The greater degree of representativeness potentially afforded by a probability sample was not considered necessary for this research due to its exploratory nature. This sample was comprised of voluntary participants responding to invitations posted in a variety of locations including online forums for those who have experienced sexual assault, public libraries, grocery stores and co-ops, coffee shops, and spiritual book stores. The snowball method was also utilized, and invitations were distributed to potential participants through acquaintances.

The population studied in this research was adults, over the age of 18, who experienced a first sexual assault within the last five years. In order to minimize the chance of participation by vulnerable populations, only adults who affirmed an age of 18 or greater were permitted to proceed to the survey. As an additional precaution, participation was also limited to those who stated they experienced their first sexual assault within the last five years. These criteria precluded participation by those who experienced childhood sexual abuse, an experience with high potential vulnerability due to significant mental health consequences related to this early abuse (Lieberman, Chu, Van Horn, & Harris, 2011). It is possible that participants may have experienced an earlier sexual assault, but retained no conscious memory of the earlier assault. However, there was no way to identify and exclude this population from the survey.

Though no specific exclusions were made in terms of ethnicity or gender, due to research regarding demographics of those who experience sexual assault, it was expected that the majority of those participating would be female and that a significant proportion of those participating would be of non-Caucasian ethnicities (RAINN, 2013). Additionally, no exclusion was made regarding spiritual affiliation or participation; however, because research indicates a strong overlap demographically between those who most commonly experience sexual assault and those who most commonly turn to spiritual resources for coping, high levels of spirituality were anticipated to be found among the survey participants (Ahrens et al., 2010; Harris et al., 2013; Pargament, 1997).

Twenty-three people began the survey and 20 respondents reported their age. The mean age of respondents was 34 years old, and the median age of respondents was 28 years old, with a standard deviation of 15 years. Of those who responded to the gender question, 79% (n=11) were female, 14% (n=2) were male, and 7% (n=1) was a transgender male (FTM). Of those who responded to the ethnicity question, 64% (n=9) identified as Caucasian, 14% (n=2) identified as Black or African American, 14% (n=2) identified as Other, with one of these respondents clarifying race as “Biracial (Asian and White)”, and 7% (n=1) identified as Asian.

Protection of Human Subjects

Recruitment process. Potential participants had the opportunity to respond voluntarily to survey invitations posted on public electronic forums for those who have experienced sexual assault, on public library, grocery store and food co-ops, coffee shops, and spiritual bookstore bulletin boards. A link was embedded in the invitation posted on electronic forums that potential participants clicked if interested in taking the survey. The link brought them to the survey webpage where they read and approved a letter of informed consent before proceeding to the

survey. Paper invitations which outlined the basics of the research were placed on public bulletin boards at libraries, grocery stores and food co-ops, coffee shops, and spiritual bookstores. The paper invitation had tear off slips at the bottom with the web address for accessing the informed consent information and survey, and there was also QR code on the paper invitation that participants could scan to access the survey web address.

Additionally, the same invitation to participate described above was provided to acquaintances of the researcher. These acquaintances had identified themselves as being part of social circles which potentially included people interested in participating in the survey. They were invited to pass the same invitation posted on electronic forums on to those within their social circle who may have had an interest in participating in the survey. Anyone passing on the invitation was asked to do so with the inclusion of a statement making clear there was no obligation to participate, there would be no way to know if they chose to participate, and they would not be asked any questions about their choice to participate.

All participants, therefore, had an opportunity to read and agree to an informed consent notice prior to continuing to the survey. Additionally, participants had the opportunity to discontinue participation in the survey at any point if they began to feel uncomfortable with the material. Participants were only required to answer questions related to age and years since first sexual assault as criteria to participate. All other questions in the survey could be left blank if the participant felt uncomfortable answering. At the end of the survey, participants were also directed to local support referrals and to a national rape and sexual assault network where a search for expanded local support referrals could be conducted. It was made clear that neither the researcher nor the University was responsible for financial costs associated with any therapeutic care sought.

Confidentiality/Anonymity. The survey was administered online through the Qualtrics data collection service. Participants independently accessed the survey through a link provided in the initial invitation without making any contact with the researcher. The Qualtrics anonymous survey link prevented identifying information such as e-mail or name from being collected, and none of this information was requested in the body of the survey. Additional measures were taken through enacting the “anonymizing responses” survey option within Qualtrics to remove respondents’ IP addresses from results and to disconnect recorded responses from the participant who provided them. All collected data was downloaded from Qualtrics to a password protected computer for data analysis and securely stored until 1/1/2015, at which time the data will be destroyed.

Informed Consent. The University of St. Thomas Institutional Review Board (IRB) Consent Form data (Appendix A) was presented to each potential participant as the first step of the Qualtrics survey process. The consent data provided participants with information regarding the researcher, the purpose of the study, study procedures, risks and benefits of participating in the study, compensation, confidentiality, and the voluntary nature of the study. Participants were required to acknowledge their understanding and consent prior to proceeding to the survey.

Data Collection Instrument and Process

Instrument. The research instrument was an online survey comprised of demographic information, quantitative information, and qualitative information (Appendix B). The demographic information collected included age, gender, and ethnicity. Initial quantitative information gathered included yes/no answers to belief in a Higher Power, disclosure about the sexual assault, and identifying participation in spiritual activities from a list of potential

activities. Additionally, two validated scales for posttraumatic growth and spiritually based coping strategies were included.

The first scale included in the survey was the Brief RCOPE, which measured the degree to which participants engaged in negative and positive spiritually based coping strategies (Pargament, Feuille, & Burdzy, 2011). The scale items were inserted into the survey as a dichotomous yes/no choice of endorsement for each item. Because particular language of spirituality was uniformly chosen for this research, the language of the scale questions was modified to reflect this approach. Also, language of “God” in the original scale was changed to “Higher Power” to be consistent with the rest of the research. The religious coping scale items have been found to have alpha values of .80 or greater, indicating high reliability (Pargament, Feuille, & Burdzy, 2011). Additionally, the validity of the Brief RCOPE has been found to have strong concurrent validity. The positive scale items strongly and consistently related to positive psychological constructs and spiritual well-being. Similarly, the negative scale items are also consistently tied to measures of poor functioning such as anxiety, depression, negative affect, and pain. Statistics across various studies show correlations ranging from .15 to as high as .80 (Pargament, Feuille, & Burdzy, 2011).

The second scale included in the survey was the Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996). This scale has been shown to have excellent internal consistency at an alpha of .90 and acceptable test-retest reliability ($r=.71$) (Tedeschi & Calhoun, 1996). Validity is evidenced through others close to the participant reporting similar levels of growth ($r=.69$) (Cann et al., 2010). This scale measured the degree to which participants endorsed growth in the various PTG domains.

Finally, several open-ended, qualitative questions were included related to disclosure about the sexual assault, relationship with a Higher Power, influence of spiritually based coping on recovery, influence of social network on recovery, and thoughts about the sexual assault. Those who did not affirm belief in a Higher Power, participation in spiritual activities, or use of spiritual resources only answered questions related to disclosure, social network, and PTG. For the quantitative question related to selection of specific ways spirituality was used to cope after the sexual assault, all answers other than “did not access spirituality to cope in any way” were considered affirmative answers in the use of spiritual resources for the purposes of determining survey direction.

Data Analysis Plan

Descriptive statistics such as mean and standard deviation were provided for demographic information, quantitative questions, and for the two scales (Brief RCOPE and PTGI). Analysis of those survey questions which elicited qualitative responses employed grounded theory methods. Prior to analysis, themes from the literature served as a starting point for understanding the data provided by respondents. In grounded theory methods, although there may be sensitizing concepts from the literature, the researcher analyzes the data by carefully reading and sticking close to the transcript while coding. The qualitative answers to each survey question were reviewed a number of times to identify emergent themes. With each reading, the coding scheme moved from more descriptive codes to more interpretive themes. After themes had been solidified, a content analysis was conducted in which the prevalence of various themes were noted, and text that was representative of each specific theme was identified. Before analysis was complete, a final review was completed to guarantee fidelity of the thematic scheme.

Findings

This research sought to gain an understanding about how people use spirituality to cope after a sexual assault, and whether this support allows people to make meaning of the event in a way that leads to psychological growth after the trauma. Spirituality was defined for the purposes of this research as any individual or communal activities which respondents understood to be sacred or spiritual. Within the literature, spiritual support included relationship with a Higher Power, relationship with a spiritual community, and other types of social relationships that could be defined as spiritual in the connections they provide (Gall & Cornblat, 2002). Previous research related to posttraumatic growth indicates that the support people receive after a trauma can be influential to the way they make meaning of the event (Calhoun & Tedeschi, 2006). Because sexual assault is an interpersonal trauma, people who have experienced this particular type of trauma may experience more difficulties making meaning of the event in a way that allows them to experience psychological growth (Frazier et al., 2001). Therefore, this research seeks to understand in what ways these various expressions of spirituality influence meaning making and psychological growth among those who have experienced sexual assault.

Participant Demographics

Twenty three respondents began the survey; however, responses to survey questions were voluntary, and respondents could leave the survey at any point or choose not to answer any of the questions. As a result, the number of respondents participating in specific questions varied. Twenty of the 23 respondents who began the survey reported their age. The mean age of respondents was 34 years old, with a median age of 28 years old and a standard deviation of 15 years. Of those who responded to the gender question, the majority (79% or n=11) were female, 14% (n=2) were male, and one respondent (7%) was a transgender male (FTM). Of those who

responded to the ethnicity question, 64% (n=9) identified as Caucasian, 14% (n=2) identified as Black or African American, 14% (n=2) identified as Other, with one of these respondents clarifying race as “Biracial (Asian and White),” and 7% (n=1) identified as Asian.

Participation in the study was restricted to those who had experienced their first sexual assault within the previous five years. The mean number of years since first sexual assault among the 16 participants who responded to this question was three years, with a standard deviation of 1.5 years. The mean number of years since last sexual assault among the 15 participants who responded to this question was two years, with a standard deviation of one year. The majority of respondents reported no difference in years between first and most recent sexual assault (73% or n=11). Of those who reported a difference in time between their first and most recent sexual assault, the mean number of years between the two trauma events was 1.75 years.

On the survey, respondents were instructed to consider both individual and communal activities which they considered to be spiritual or sacred when answering questions related to spirituality. Spirituality in this research was purposefully defined very broadly to capture a wide range of practices that one might consider spiritual. Some examples of activities that might be considered spiritual for the purposes of this research included individual prayer, communal prayer, readings that the participant considered spiritual, or participation in other individual or communal spiritual activities, which might include church attendance. As it concerns belief in a Higher Power, respondents were instructed to consider any transcendent force one might rely on for support or guidance.

Of those who responded to the question about Belief in a Higher Power, 64% (n=9) responded “yes”, and 36% (n=5) responded “no.”. An equal number of respondents, (50% or n=7) responded “yes” and “no” to the question about regular participation in spiritual activities

prior to the sexual assault. Of the seven respondents who answered the question about frequency of spiritual activities prior to the sexual assault, 57% (n=4) reported daily participation, 29% (n=2) reported approximately once per week participation, and 14% (n=1) reported approximately once per month participation.

After the sexual assault, most of those who had reported participation in spiritual activities prior to the assault also made use of their spirituality to cope after the assault (86%, n=6). Only one of the respondents who affirmed spiritual practice prior to the assault did not make use of spirituality to cope after the assault. Of those respondents who did not participate regularly in spiritual activities prior to the assault, 57% (n=4) also did not access spirituality to cope after the assault. The remainder (42% or n=3) added spirituality to their coping after their assault. Of those who added spirituality after their assault, only personal spiritual practices such as prayer or other individual spiritual activities were endorsed by all three. Amongst the 14 respondents who indicated some use of spirituality either before or after the assault, almost a third of the respondents (36% or n=5) indicated no use of spirituality to cope after the assault.

Among those who did use spirituality to cope, individual spiritual practices were the most commonly identified. The most frequently reported ways of making use of spirituality to cope after the sexual assault were prayer or meditation, (50%, n=7), and participation in personal spiritual practices, (50%, n=7). Just under a third of those using spirituality to cope after the assault accessed communal spirituality such as support from their spiritual community (29%, n=4), or attendance at spiritual services (29%, n=4). Pastoral counseling (14%, n=2), participation in other spiritual community activities (14%, n=2), and reading of spiritual books (14%, n=2) were the least common ways of using spirituality to cope. Participants were free to

identify as many types of spirituality as they used, and no participant identified any additional ways not originally included in the survey options.

Twelve of the 23 respondents who began the survey provided answers to qualitative questions seeking exploratory information. These questions addressed topics such as disclosure of the assault to others, relationship with a Higher Power, relationship with a spiritual community, other types of social support, and meaning given to the event. Analysis of these qualitative questions led naturally to two thematic categories: support and meaning-making. Subthemes within the topic of support included relationship with a Higher Power and social support as expressed within spiritual communities or other social networks. Within the topic of meaning-making, themes of denial of experience and attributions related to the perpetrator and self were present.

Support

Support: Relationship with a Higher Power. Respondents who had affirmed belief in a Higher Power and use of spiritual resources were invited to note their resonance with statements indicating ways of spiritually coping that are categorized as either positive or negative (Table 1). These statements were drawn from a previously designed scale, the RCOPE, and included in the current survey as an additional way to identify attitudes regarding spirituality (Pargament et al., 2011). Language from the original scale that specifically related to institutionalized religion was changed to reflect the broader definition of spirituality and a Higher Power used within this research. Data analysis of items from this scale noted the frequency of affirmation for various statements, and predominately looked at these statements as qualitative information. Positive attitudes regarding spirituality based coping strategies reflect trust in a Higher Power, as well as closeness with a Higher Power and others. Alternatively, negative spirituality based coping

strategies reflect doubts about a Higher Power's care or power and see difficulties as resulting from a Higher Power's punishment or maliciousness (Pargament, 1997). Respondents who did not endorse belief in a Higher Power earlier in the survey did not participate in this portion of the survey.

Positive spiritual coping. Of the ten respondents who answered the spiritual coping scale questions, half of the respondents (n=5) identified with the statement "Looked for a stronger connection with a Higher Power." The statements "Focused on my spirituality to stop worrying about my problems," "Sought a Higher Power's love and care," and "Sought help from a Higher Power in letting go of my anger" each received affirmation from just under half (n=4) of the respondents. However, the response "Tried to put my plans into action together with a Higher Power" was one of the statements receiving the lowest number of affirmations among the positive coping statements (n=2).

These response patterns may point toward the degree of agency respondents' believe they have regarding their recovery. Those who delegate their stress through reliance on a Higher Power are categorized as using a deferring style of spiritual coping (Pargament, 1997). Although this style of coping is considered positive, a collaborative approach, where people display a sense of agency in their recovery by working together with a Higher Power, is associated with the most positive psychological outcomes (Ross et al., 2009; Yangarber-Hicks, 2004). The high affirmation of statements pointing toward deferral through the seeking of comfort, love and protection from a Higher Power might point toward avoidance coping and indicate many participants in this study are still struggling to believe they have the needed resources to actively engage in recovery from their assault.

Negative spiritual coping. The highest number of affirmative responses (n=7) for either positive or negative coping statements were given to the negative statement “Questioned a Higher Power’s love for me.” Half of the respondents (n=5) also affirmed that they “Questioned the power of a Higher Power.” This attitude of questioning was the most common type of negative spiritual coping affirmed. Statements reflecting a sense of being punished or abandoned such as “Wondered what I did for a Higher Power to punish me,” “Wondered whether a Higher Power had abandoned me,” “Wondered whether my spiritual community had abandoned me,” and “Felt punished by a Higher Power for my lack of devotion” received a comparatively low number of responses (n=3, n=3, n=2, and n=1 respectively).

Table 1. Frequency and Percentage of Respondents’ Affirmation to Spiritual Coping Statements

Positive Coping Statement	Number (total=10)	Percentage
Looked for a stronger connection with a Higher Power	5	50%
Focused on my spirituality to stop worrying about my problems	4	40%
Sought a Higher Power's love and care	4	40%
Sought help from a Higher Power in letting go of my anger	4	40%
Sought forgiveness	2	20%
Tried to put my plans into action together with a Higher Power	2	20%
Tried to see how a Higher Power might be trying to strengthen me in this situation	2	20%

Negative Coping Statement	Number (total=10)	Percentage
Questioned a Higher Power's love for me	7	70%
Questioned the power of a Higher Power	5	50%
Wondered what I did for a Higher Power to punish me	3	30%
Wondered whether a Higher Power had abandoned me	3	30%
Wondered whether my spiritual community had abandoned me	2	20%
Felt punished by a Higher Power for my lack of devotion	1	10%
Decided the Devil made this happen	0	0%

Influence of degree of spirituality on coping style. Respondents affirmed varying degrees of involvement in spirituality prior to and following their sexual assault. For some, differences in degree of involvement prior to the assault appeared to influence positive or negative engagement with spirituality to cope. One of the most striking differences was between those who participated daily in spiritual activities prior to the assault and those who participated

less frequently or not at all. In both cases, the groups affirmed belief in a Higher Power. The positive coping statements “Sought a Higher Power’s love and care” and “Sought help from a Higher Power in letting go of my anger” were affirmed by 100% of those with daily participation prior to the assault. In contrast, only 20% of those with less frequent or no participation in spiritual activities prior to the assault affirmed these statements. A similar dynamic seemed to be present with the positive coping statement “Looked for a stronger connection with a Higher Power.” One hundred percent of those with daily participation in spiritual activities prior to the assault affirmed this statement; whereas only 40% of those with less frequent or no participation in spiritual activities prior to the assault affirmed the statement. In contrast, the statement “Sought forgiveness” was affirmed by 100% of those who had less frequent than daily or no participation in spiritual activities prior to the assault. Significantly fewer (60%) of the respondents who participated daily in spiritual activities prior to the assault affirmed this statement.

Among respondents who indicated they did not believe in a Higher Power, and did not participate in spiritual activities prior to the assault, but who made use of spiritual coping after the assault, the only statement affirmed was the statement “Focused on my spirituality to stop worrying about my problems.” No other positive or negative spiritual coping statement was affirmed by anyone in this group. In contrast, affirmation of this statement among those who indicated belief in a Higher Power was only 20%-33%, with those participating daily in spiritual activities prior to the assault having the lowest percentage of affirmation for the statement.

Descriptions of relationship with a Higher Power. Respondents to the current research survey described relationships with a Higher Power that largely fell outside typically defined institutionalized religious boundaries or language. All respondents who provided a description of

their relationship with a Higher Power affirmed belief in something beyond themselves; however, many described relationships that fell outside typically defined religious boundaries or language. Respondents described newly developing and individualized relationships with a Higher Power. Those who described a lower frequency of participation in spiritual activities prior to the assault and then utilized spiritual coping after the assault were most likely describe an emerging relationship with some concept of a Higher Power.

Respondent #6: “Slowly building a strong relationship. Never had a relationship with a higher power before”

Respondent #17: “Don’t believe in God, just a higher power”

Respondent #4: “I am more spiritual than anything. I want to be connected with myself and others. I take an Eastern Buddhist approach at connecting with others, my higher power, and myself”

A theme of looking with hope to the relationship with a Higher Power as a source of love, comfort, or forgiveness also emerged. Those who described the most confidence in the ability of their Higher Power to provide that love and comfort were those who described daily participation in spiritual activities prior to their sexual assault. In contrast, those with less frequent or no participation prior to the sexual assault expressed more of a sense of longing or hopefulness that protection or comfort could be provided.

Respondent #4: “I do not know or understand my higher power but I do believe there is one. I pray at times for comfort. Mostly, I try to live in a way that I and my higher power would be proud of”

Respondent #14: “Through it [relationship with a Higher Power] I am made whole. It is my peace and my shelter.”

Respondent #9: "He is the only one who loves me and my assault and being gay does not matter."

Respondent #22: "I know there is something out there that may or may not be looking after us, but I am not sure to what extent."

All respondents affirming belief in a Higher Power, participation in spiritual activities prior to the assault, and use of spiritual coping after the assault seemed to be seeking support through some conceptualization of a Higher Power. However, those without significantly integrated spirituality prior to the assault also appeared to have doubts about what is possible in relationship with a Higher Power. Those new to accessing spiritual resources also struggled more in clearly defining their relationship with a Higher Power. These findings indicate there may be more confidence in the ability of a Higher Power to meet the needs for love and protection among those with daily participation in spiritual activities prior to the assault. For those with limited or no participation in spiritual activities prior to their assault, spirituality might be experienced as more of an aspirational support. Overall, respondents seemed to be struggling to create a relationship that could be relied on for spiritual support and care, perhaps reflecting an attempt to secure a degree of support and care not sufficiently found within their social networks.

Support: Disclosure. As it concerns disclosure to supportive others, of the 14 who responded to this question, only 14% (n=2) chose the response that they had not ever told anyone about their sexual assault. The remaining 12 respondents indicated they had shared their experience of sexual assault with someone. However, the experience of disclosure to those within their social community and reporting the assault to authorities may not have been adequately delineated for participants.

Respondent #3: "I told my friends but never reported it to the cops because I was scared and thought nobody would believe me. I was so terrified."

The other respondent (#6) who indicated they had not told anyone about their sexual assault indicated it was not disclosed in order to avoid judgment, "so they don't judge." Overall, the fear of what others would think appeared to be a significant negative influence on disclosure for respondents.

Support: Community. Survey respondents reported both positive and negative experiences within their social and spiritual communities after disclosure of their sexual assault. When asked about what ways their social network supported them after the assault, one respondent (#18) simply replied "companionship." It was the understanding provided by others within this companionship that respondents identified with most positively.

Respondent #7: "Several of my friends helped me cope or were there to listen if I needed to talk"

Respondent #3: "The support groups on Facebook help because I can relate to others who have been sexually assaulted."

Respondents described feeling most supported when someone understood what they were going through. Being accepted and understood in the aftermath of a sexual assault emerged as a critical aspect of feeling supported. In contrast to communal traumas such as a community-wide natural disaster, sexual assault is typically a trauma experienced individually. Therefore, finding others who can understand the sexual assault experience may be especially difficult.

Respondents identified that their spiritual communities and social networks often failed to support them. Judgment and lack of understanding were key ways in which respondents felt hurt or unsupported within their communities.

Respondent #4: "I experienced some judgement [sic] for continuing my relationship with the person who assaulted me as he was my boyfriend at the time. I was mostly ashamed of myself."

Respondent #5: "They [social network] never understood the true impact the incidents had on me."

Respondent #7: "Some people in my life denied or minimized what happened. Some people gave me very condescending advice. Some people make jokes about rape & domestic violence."

Respondent #9: "My pastor told me it was the sin of being gay that brought the punishment of being raped. I felt unwelcome at church."

When people described not feeling supported it was often because of feared or enacted judgment from others about the assault, either the respondent's responsibility for the assault or about behaviors or actions by the respondent after the assault. It is interesting to note that many of the respondents describing unsupportive social experiences were also more likely to use negative spiritual coping. It is possible there is a parallel experience between the way these respondents experience their social supports and their relationship with a Higher Power.

The responses highlight a theme related to social or spiritual support that reflects a need to feel accepted and understood. There is a longing for loving and protective relationships described, but also difficulty with feeling secure that this sort of relationship is possible. When considered in the context of spirituality, it appears a number of respondents may be trying to secure through their relationship with a Higher Power the love and forgiveness that, for many, did not appear to be present within their spiritual or social communities. Overall, the nature of responses depict respondents with a tenuous belief that love, care, understanding, or protection

can be found within relationship, and respondents who may still be struggling to believe they have the needed resources to effectively recover from their assault.

Meaning-Making

Meaning-Making: Posttraumatic growth. PTG is a concept that seeks to measure ways in which people are able to develop more positive worldviews in the aftermath of trauma (Calhoun & Tedeschi, 2006). One of the goals of this research was to explore the degree to which the use of spiritually based coping might influence the outcome of PTG among people who had experienced the trauma of sexual assault. Respondents to the current survey were asked to respond to a 21-item self-report 6-point Likert scale inventory measuring their level of PTG (Table 2). Of the 23 respondents who began the survey, nine respondents completed this inventory. The scale consists of items ranging in response from zero, which represents that the respondent did not experience the stated change as a result of the specified trauma, to five, which represents that the respondent experienced the stated change to a significant degree as a result of the specified trauma. There is not a provided cut-off of scale scores to measure particular degrees of growth, but as compared to other published scores, growth among the respondents of this survey was lower than would be expected for people who have experienced trauma. The mean scale score of 54.44 among the current survey respondents was significantly lower than previously published mean scores for women (mean = 90.26) and men (mean = 73.61) who have experienced trauma (Tedeschi & Calhoun, 1996). It is possible the interpersonal nature of sexual trauma could contribute to lower than average scores on the PTGI. Sexual trauma often involves the complexity of sorting through the assault within the context of a social environment that has either perpetrated the attack or lacks understanding and acceptance in the aftermath of the assault.

Table 2. Mean scores for PTGI

Post-traumatic Growth Inventory (PTGI)	Mean Score (n=9)
Factor I – Relating to Others	
I more clearly see that I can count on people in times of trouble	2.33
I have a greater sense of closeness with others	2.22
I am more willing to express my emotions	2
I have more compassion for others	3.89
I put more effort into my relationships	3.11
I learned a great deal about how wonderful people are	2.11
I better accept needing others	3
<u>Mean Factor I</u>	<u>18.67</u>
Average Mean for Factor I	2.66
Factor II – New Possibilities	
I developed new interests	1.78
I established a new path for my life	3.11
I am able to do better things with my life	1.78
New opportunities are available which wouldn't have been otherwise	1.44
I am more likely to try to change things which need changing	3.33
<u>Mean Factor II</u>	<u>11.44</u>
Average Mean for Factor II	2.29
Factor III – Personal Strength	
I have a greater feeling of self-reliance	2.44
I know better that I can handle difficulties	2.56
I am better able to accept the way things work out	2.22
I discovered that I'm stronger than I thought I was	3.89
<u>Mean Factor III</u>	<u>11.11</u>
Average Mean for Factor III	2.78
Factor IV – Spiritual Change	
I have a better understanding of spiritual matters	2.22
I have a stronger religious faith	1.33
<u>Mean Factor IV</u>	<u>3.56</u>
Average Mean for Factor IV	1.78
Factor V – Appreciation of Life	
I changed my priorities about what is important in life	3.56
I have a greater appreciation for the value of my own life	2.78
I can better appreciate each day	3.33
<u>Mean Factor V</u>	<u>9.67</u>
Average Mean for Factor V	3.22
Total PTGI Mean	54.44

In addition to looking at PTG scores overall, scores were also analyzed by degree of spirituality prior to the assault (Table 3). One category included respondents who did not access spirituality at all prior to the assault, but added spirituality to cope after the assault. The other two categories included respondents who affirmed belief in a Higher Power and accessed

spirituality both prior to and after the assault. Among respondents who utilized spirituality prior to the assault, categories included daily participation, and infrequent or no participation.

To categorize those who were more likely to use either positive or negative spiritual coping after the assault, the respondents who answered both the PTGI and RCOPE questions (n=7) were grouped by their rate of affirmation or lack of affirmation for statements within the RCOPE inventory. Numbers of affirmative responses to various statements were counted for each participant, and then the number of affirmations for negative coping statements was subtracted from the number of affirmations for positive coping statements. As a result, each respondent received a score ranging from +5 to -5. The average score among the respondents was +2. Therefore, to determine those more or less likely to use negative or positive spiritual coping, +2 was used as the dividing measure. Responses were categorized as those receiving a score of +2 or over being more likely than others in this research to use positive coping strategies, and those receiving a score of +1 or less being more likely than others in this research to utilize negative coping strategies. The two respondents to the PTGI who did not participate in the RCOPE portion of the survey because they did not affirm belief in a Higher Power or participation in spiritual activities prior to or after the assault were analyzed in a separate category. The findings related to differences between positive, negative, or no spiritual coping is presented first, and then the contribution to PTGI scores related to the degree of spirituality prior to the assault is presented as a further analysis of the results in these first three categories.

Table 3. Comparison of PTG means

<u>Post-traumatic Growth Inventory (PTGI)</u>	<u>Positive Spiritual Coping (n=3)</u>	<u>Negative Spiritual Coping (n=4)</u>	<u>No spirituality prior to or after assault (n=2)</u>	<u>Active spirituality prior to and after assault (n=3)</u>	<u>Limited spirituality prior to and use of spirituality after assault (n=2)</u>	<u>Addition of spirituality after assault (n=2)</u>
<i>Factor I – Relating to Others</i>						
I more clearly see that I can count on people in times of trouble	4.33	.5	3	3.33	2	.5
I have a greater sense of closeness with others	4.67	.75	1.5	3.67	2	1
I am more willing to express my emotions	2	1.5	3	2	2.5	.5
I have more compassion for others	4	3.75	4	3.67	4	4
I put more effort into my relationships	3.33	2.75	3.5	3	3.5	2.5
I learned a great deal about how wonderful people are	4.67	.25	2	3.33	2.5	0
I better accept needing others	4.33	2.25	2.5	3.33	3	3
<u>Mean Factor I</u>	3.90	1.68	2.79	3.19	2.78	1.64
<i>Factor II – New Possibilities</i>						
I developed new interests	.67	2.75	1.5	.67	1.5	4
I established a new path for my life	3.33	3.25	2.5	2.33	4	4
I am able to do better things with my life	2.33	1.25	2	1.33	3.5	.5
New opportunities are available which wouldn't have been otherwise	2	.5	2.5	1.67	.5	1
I am more likely to try to change things which need changing	4	2.5	4	3	4.5	2
<u>Mean Factor II</u>	2.47	2.05	2.5	1.8	2.8	2.3
<i>Factor III – Personal Strength</i>						
I have a greater feeling of self-reliance	2	2.75	2.5	3	3	2.5
I know better that I can handle difficulties	3.33	1.75	3	2	3	1
I am better able to accept the way things work out	3	1.25	3	3	4	0
I discovered that I'm stronger than I thought I was	5	3.75	2.5	2	4.5	3.5
<u>Mean Factor III</u>	3.33	2.38	2.75	2.92	3.625	1.75
<i>Factor IV – Spiritual Change</i>						
I have a better understanding of spiritual matters	2.67	3	0	2	2.5	4.5
I have a stronger religious faith	2	1.5	0	.33	3	2.5
<u>Mean Factor IV</u>	2.33	2.25	0	1.17	2.75	3.5
<i>Factor V – Appreciation of Life</i>						
I changed my priorities about what is important in life	3.33	3.75	3.5	2.33	4.5	4.5
I have a greater appreciation for the value of my own life	3	2.5	3	2.33	3.5	2.5
I can better appreciate each day	4.33	3	2.5	4	4.5	2
<u>Mean Factor V</u>	3.56	3.08	3	2.89	4.17	3
<u>Total PTGI Mean</u>	68.33	45.25	52	54	66	46

Relating to others. The first domain of statements in the PTGI deals with how respondents see their relationships with others. This domain is a valuable measure when considering the experience of sexual assault. In these interpersonal traumas, the relational context may have contributed to the trauma, and may also make recovery from the trauma more difficult. Respondents in this survey on average scored 18.67, while other published scores among those who have experienced various forms of trauma are 29.68 (women) and 23.30 (men). The overall mean scores for statements within this category ranged from 2-3.89, with an average mean score of 2.67. This domain ranked third out of the five growth domains for being a significant area of change.

Overall, the highest mean score within this domain was for the statement “I have more compassion for others” (3.89). The next highest scores were for the statements “I put more effort into my relationships” (3.11) and “I better accept needing others” (3.0). On the other hand, the lowest mean score within this category was for the statement, “I am more willing to express my emotions” (2.0). The statements receiving the next lowest scores were “I learned a great deal about how wonderful people are” (2.11), “I have a greater sense of closeness with others” (2.22), and “I clearly see that I can count on people in times of trouble” (2.33).

When results in this domain are separated out and looked at by style of spiritual coping, those respondents most likely to use positive spiritual coping had the highest average mean score (3.90). The statements receiving the highest mean score (4.66) among this group were “I have a greater sense of closeness with others” and “I have learned a great deal about how wonderful people are.” The statements receiving the next highest rate of affirmation (4.33) were “I more clearly see I can count on people in times of trouble” and “I better accept needing others.”

In contrast, the group with one of the lowest mean scores (1.68) within this domain was for those who were more likely to use negative spiritual coping. The statement receiving the highest mean score (3.75) within this group was “I have more compassion for others.” The next highest mean score (2.75) was for the statement “I put more effort into my relationship with others.” The statement that received the highest mean score among those most likely to utilize positive spiritual coping, “I more clearly see I can count on others in times of trouble,” received the lowest mean score (.5) among those most likely to utilize negative spiritual coping. From these findings, it becomes clear that the relational experience is very different in the aftermath of a sexual assault between those who use negative spiritual coping and those who use positive spiritual coping.

Finally, the group that did not affirm belief in a Higher Power, participation in spiritual activities, or use of spiritual coping after the assault, received a mean score in the middle of the two other groups (2.79). Within this group the statement receiving the highest mean score (3.5) was “I put more effort into my relationship with others.” They also had fairly high mean scores (3) for the statements “I more clearly see I can count on people in times of trouble” and “I am more willing to express my emotions.” This group seems to have a more mixed experience of relationship with others, where they appear to be exerting significant effort within relationships, similar to the group that was more likely to use negative spiritual coping. However, this group appears to be having more success being able to be vulnerable with others and to rely on others when they are struggling.

Respondents affirmed a range of changes related to their relationships with others depending on the coping they engage. Those who are more likely to utilize positive spiritual coping seem to have the most beneficial access to supportive relationships after the assault,

which may explain their high PTG scores. Those who coped without the use of spirituality had the next best access to supportive relationships and degree of growth after the assault, but they appeared to work harder at these relationships to gain the resulting benefits. Finally, those who were more likely to utilize negative spiritual coping seemed to struggle most significantly with relationship. Their greatest access to growth related to relationship with others seemed to come from engaging a sense of compassion for the suffering of others. However, they also appear to struggle with developing relationships, and to have serious doubts about whether relationships can be counted on for support.

New possibilities. The second domain of statements in the PTGI deals with respondents' sense of increased possibility within their lives. Respondents in this survey scored 11.44 while other published scores among those who have experienced various forms of trauma had scores of 20.94 (women) and 18.35 (men). The mean scores in this domain ranged from 1.44-3.33, with an average mean score of 2.29. This domain was the second lowest of the five domains for a positive endorsement of the statements being a significant area of change. It is of note that a greater dichotomy of scores existed within this domain as compared to the other four domains. In this domain, the two statements with the highest mean scores have scores above three, and the other statements had scores below 2.

The highest mean score (3.33) within this domain was for the statement "I am more likely to change things which need changing." The statement "I established a new path for my life" also received a high mean score (3.11). In contrast, the following two statements received a score of 1.78, "I developed new interests" and "I am able to do better things with my life." The lowest score in this domain (1.44) was associated with the statement, "New opportunities are available which wouldn't have been otherwise."

When spiritual coping is considered within the domain of new possibilities, those who did not affirm belief in a Higher Power, participation in spiritual activities prior to the assault, or use of spiritual coping after the assault had the highest mean score (2.5). The respondents who were most likely to make use of positive spiritual coping received a mean score only slightly less (2.47). The statement “I am more willing to try to change things which need changing” received the highest mean score (4.0) among both of these groups. The group most likely to make use of positive spiritual coping also had a fairly high mean score (3.33) for the statement “I established a new path for my life.” However, the group utilizing positive spiritual coping also had the lowest mean score for a statement overall (.66) within this domain for the statement “I developed new interests.” The group that was most likely to use negative spiritual coping had a lower overall mean score than the other two groups (2.05). However, the statement receiving the highest mean score among this group (3.25) was one that also received a high score among those using positive spiritual coping, “I established a new path for my life.”

Respondents in all categories of spiritual coping after the assault were most likely to affirm statements that indicate a sense of agency about making changes or taking their life in a new direction. It might be that respondents, regardless of the style of coping used after the assault, experienced some degree of responsibility for the assault, but then also felt motivated to make changes in their lives to try, in some way, to demonstrate their power over the situation. Statements related to new interests, and better or different opportunities in life received relatively lower scores across-the-board. It appears that overall respondents were unlikely to perceive new doors of opportunity as arising within their lives as a result of their sexual trauma. Instead, they seemed to see changes in their life as occurring through their own focused change efforts. This

finding may indicate respondents believe they possess the power and resources needed to recover from the sexual trauma.

Personal strength. The third domain of statements in the PTGI addresses respondents' sense of increased personal strength. Given the vulnerable nature of sexual assault, it is interesting to note that this category had the second highest average mean score of 3.22. Mean scores for individual statements ranged from 2.22 to 3.89. Most scores were 2's with one statement getting a significantly higher mean score of 3.89. The overall score for this domain was 11.11 compared to other published mean scores among those who have experienced various traumas of 17.90 (women) and 15.30 (men).

One score within this category (3.89) was notably higher than the mean scores for the other statements in the category. The statement was "I discovered that I'm stronger than I thought I was." The other statements in the category included "I know better that I can handle difficulties" (mean score=2.56), "I have a greater feeling of self-reliance" (mean score=2.44), and "I am better able to accept the way things work out" (mean score=2.11).

The group with the highest mean score (3.33) in the domain of personal strength was the group of respondents more likely to make use of positive spiritual coping. This group gave their highest scores to the statements "I discovered that I'm stronger than I thought I was" (5), the statement "I know better that I can handle difficulties" (3.33), and the statement "I am better able to accept the way things work out" (3). The group that did not access spirituality to cope at all received an overall mean score of 2.75 in this domain, with their highest mean scores (3.0) going to the statements "I know better that I can handle difficulties" and "I am better able to accept the way things work out." The group that was more likely to use negative spiritual coping received the lowest mean score (2.38) in this domain. However, similar to the group most likely to use

positive spiritual coping, they also received their highest mean score (3.75) for the statement “I discovered that I’m stronger than I thought I was.” Out of all the statements in this domain, this group was least likely to affirm the statement “I am better able to accept the way things work out” with a mean score of 1.25.

All respondents to this survey describe having an increased sense of their own strength in the face of difficulty. Those who made use of positive spirituality to cope and those who did not access spirituality to cope both appear to have a strong awareness of their personal strength, including the ability to accept what is outside of their control. However, it is of note that those respondents more likely to use negative spiritual coping received the lowest overall score within the domain of personal strength for the statement related to acceptance. Acceptance seems to be particularly difficult for those using negative spiritual coping.

Spiritual change. The fourth category of growth within the PTGI relates to respondents’ perceived change in the experience of spirituality. Although this research seeks to understand how spiritually based coping strategies impact growth among those who have experienced sexual assault, it is also of note whether respondents experienced growth within the domain of spirituality after the experience sexual assault. Among respondents to the current survey, this domain received the lowest affirmation as an area of change overall (average mean score = 1.78). The statement receiving the highest mean score in this category (2.22) was “I have a better understanding of spiritual matters.” In contrast, the statement “I have a stronger religious faith” received a significantly lower mean score (1.13). There were only two statements within this domain. The overall score for this domain was 3.56 compared with other published mean scores among those who have experienced various traumas of 8.29 (women) and 4.96 (men).

As might be expected, the group without affirmation of belief in a Higher Power, participation in spiritual activities, or use of spiritual coping did not affirm either statement in this category to any degree, leaving them with a mean score of zero. The group most likely to use positive spiritual coping received the highest overall mean score (2.33), with the highest mean score attributed to the statement “I have a better understanding of spiritual matters” (2.66). However, this group’s affirmation of the statement “I have a stronger religious faith” was not much lower (2.0). The group that was more likely to utilize negative spiritual coping had a lower overall score (2.25), and more distinct difference between their affirmations of the statements. The statement “I have a better understanding of spiritual matters” received a mean score of 3.0; whereas, the statement “I have a stronger religious faith” received a far lower mean score of 1.5.

Despite many respondents developing and defining a relationship with a Higher Power, having a stronger religious faith did not resonate as powerfully as having an increased understanding of spiritual matters. This may reflect a different stage of connection with spirituality where “understanding” points to cognitive engagement and “faith” to a relationship. Overall, respondents to this survey appear to be in the early stages of developing a working spiritual relationship. Additionally, some respondents describe difficulties navigating these spiritual relationships because of negative coping styles and, potentially, pre-existing relational difficulties. Another explanation for the greater affirmation of understanding spiritual matters versus stronger religious faith may be a lack of resonance with the language of institutionalized religion. The nuanced distinction between spirituality and institutionalized religion is a topic outside the scope of this research; however, it is possible affirmation within this domain would have been higher among this population if statements had referred to having stronger spirituality practices rather than stronger religious faith.

Appreciation of life. The final category of growth within the PTGI measures how much respondents feel their appreciation of life has grown. This category received the overall highest mean score of 3.22. The range of mean scores for individual statements was 2.78-3.56. The overall score for this domain was 9.67 compared with other published mean scores among those who have experienced various traumas of 13.45 (women) and 11.70 (men).

The highest mean score in this category was for the statement “I changed my priorities about what is important in life” with a mean score of 3.56. The next highest mean score was for the statement “I can better appreciate each day” with a mean score of 3.33. Even the lowest mean score in this domain was still relatively high compared with other domain mean scores among the current research respondents at 2.78. The statement receiving this score was “I have a greater appreciation for the value of my own life.”

The highest mean score within this category was received by the group most likely to use positive spiritual coping (3.56). They gave the highest affirmation to the statement “I can better appreciate each day” with a mean score of 4.33. The next highest mean score for this domain was among the group that is more likely to use negative spiritual coping (3.08). They gave their highest affirmation to the statement “I changed my priorities about what is important in life” (3.75). Finally, the group with the lowest mean score (3.0) in this domain was the group that did not affirm belief in a Higher Power, participation in spiritual activities prior to the assault, or use of spiritual coping after the assault. This group also gave their highest affirmation (3.5) to the statement, “I changed my priorities about what is important in life.”

This category had the highest growth overall and scores across all groups within this domain had little variation. The most commonly affirmed statement addressed an active change in priorities about what is important in life for these respondents. When these scores are

considered in the context of the next highest overall domain score of personal strength, it makes sense to theorize that respondents have taken a purposeful stance within their life, and that has involved gaining a stronger appreciation for their personal value and each day of their life.

Respondents appear to have begun to make changes in their lives as a result of the sexual assault and are beginning to process the implications of the trauma for their experience of self and others.

Influence of spiritual coping style versus degree of participation prior to the assault. In addition to analyzing PTGI results by style of spiritual coping after the assault, a review of PTG results based on the degree of spirituality prior to the assault was also completed to examine the influence of this prior participation on later spiritual coping and PTG. There were three categories of participation reviewed. The first category included those who affirmed belief in a Higher Power, participated daily in spiritual activities prior to the assault, and used some form of spiritual coping after the assault. The second category included those who affirmed belief in a Higher Power, but participated infrequently in spiritual activities or not at all prior to the assault, and used some form of spiritual coping after the assault. The final category included those who did not affirm belief in a Higher Power, did not participate in spiritual activities prior to the sexual assault, but who utilized some form of spiritual coping after the assault.

There were two respondents in the group that was not spiritual prior to the assault, but used spiritual coping after the assault. Both of these respondents were more likely to utilize negative coping. As a result, their PTG results were parallel to the results for the negative coping group as a whole. There were some notable differences, however. In the domain of new possibilities, this group had particularly high mean scores (4) for the statements “I developed new interests” and “I established a new path for my life.” In the domain related to personal

strength, this group had a mean score of zero for the statement “I am better able to accept the way things work out.” No other group had such uniform difficulty with acceptance. This group also had the highest mean score (4.5) for the statement “I have a better understanding of spiritual matters” in the spiritual domain. These differences are consistent with a group which has added spirituality as a new coping mechanism in the aftermath of their sexual assault. This newly accessed spirituality may be the new interest and path this group has undertaken and it is providing them with increased understanding of spiritual matters. This group’s distinct lack of affirmation for acceptance and the fact that both of the members of this group were more likely to use negative spiritual coping may point toward difficulties this group is having integrating spirituality as an effective method of coping.

The group that described belief in a Higher Power and participated in spiritual activities prior to the assault infrequently or not at all, but made use of either positive or negative spirituality after the assault also had two respondents. One member was more likely to use positive spiritual coping and the other member was more likely to use negative spiritual coping. Overall, this group had the highest PTG scores of any group in every domain except relating to others, where they still had a relatively high score. Within this category of respondents, the style of spiritual coping utilized after the assault appeared to have a stronger influence on PTG than belief in a Higher Power or degree of participation in spiritual activities prior to the assault. The two individuals within this category ranked statements in more alignment with others using a similar style of spiritual coping than with each other. Although, the individual more likely to use negative spiritual coping overall rated growth higher than other individuals likely to use a negative coping style, which contributed to the high PTG growth scores among this group. However, it of note that both members of this group gave the statement “I am better able to

accept the way things work out” a higher score (4) than any other member of the group with a similar style of coping. It is possible there may be something about the shared experience of belief and low/no participation in spiritual activities prior to the assault, combined with the use of any type of spiritual coping after the assault that allowed these respondents to feel greater gains in acceptance than others.

Finally, the group that affirmed belief in a Higher Power, participated daily in spiritual activities prior to the assault, and used spiritual coping after the assault, was made up primarily of those who were more likely to use positive spiritual coping after the assault (66.7% or n=2). The one member who used negative spiritual coping after the assault had no score that was higher than those received by respondents using positive spiritual coping. In this category, it again appears the style of spiritual coping used after the assault was a more significant influence on PTG scores than the degree of spirituality engaged in prior to the assault. This group had the lowest average mean score of any group in the domains of new possibilities (1.8) and spirituality (1.17). In the category of spirituality, this group had an active spirituality prior to the assault and continued to engage their spirituality after the assault. Therefore, it makes sense that the group would indicate little change in their experience of spirituality as a result of the assault. A similar phenomenon appears to be in play with the category of new possibilities, in that members of this group appeared to continue to rely on the same resources and supports after the assault as before, so they report little change in their interests or life paths. In addition, the member of this group who primarily used negative spiritual coping also gave significantly lower scores in the domain of new possibilities than the other two respondents, which further lowered the overall score for this domain.

In general, the degree of participation in spiritual activities prior to the assault appeared to be less influential in PTG scores than the style of coping (positive or negative) a respondent was most likely to utilize after their assault. However, those with daily participation prior to the assault were most likely to use positive spiritual coping after the assault. In contrast, those without any spirituality prior to the assault, but who added spirituality to cope after the assault were most likely to use negative spirituality. Those with belief, but infrequent or no participation prior to the assault were divided in terms of the way they used spiritual coping after the assault. The group that added spiritual coping as a resource after the assault had some significant differences in areas of growth that were consistent with a change in life perspective related to spirituality. Also, the group that used spirituality both prior to and after the assault had lower growth scores in the areas of new possibilities and spirituality. This reflects an already developed sense of spirituality and the continued use of this spirituality to manage their recovery after the sexual assault.

Meaning-Making: Denial of the experience. Respondents described having difficulty initially understanding the trauma they experienced as sexual assault. Some were in a relationship with the perpetrator at the time of the assault. As a result, they needed to make sense of not only what had happened to them, but also what that meant for their relationship with a significant person within their lives.

Respondent #7: "I was in denial for years. There were a lot of events that I didn't believe were sexual assault, even though in retrospect it should have been obvious."

Respondent #4: "I ignored what happened to me while we were in a relationship. After I left him I started to come to terms with what happened."

Many respondents appeared to struggle with how to make sense of what had happened to them. Although the reasons for denial of their experience as sexual assault were not explicitly stated, for some it appears denying the experience was a sexual assault allowed maintenance of important relationships. In general, these respondents may have been working within a framework of meaning that prevented them from seeing their experience as sexual assault until later in their recovery process.

Meaning-Making: Attributions related to the perpetrator and to self. In order to make sense of the experience, several respondents described attributing the attack to the mental illness of the perpetrator and to their own vulnerabilities. Some respondents gave responses that indicated part of how they were able to make sense of the attack was to understand their attack as being the result of misfortune or bad luck.

Respondent #7: "Perp is a psychopath. Perp targeted me because of ways I was vulnerable. I don't know what led to me being so vulnerable. In a spiritual sense, I got 'unlucky' because of negative karma from previous lives and earlier in this life."

Respondent #4: "He was a mentally ill person and I have a low self-esteem. I think he is a messed up person and the situation was horrible and made me feel bad about who I am."

Several respondents also described eventually moving toward taking a stance of personal control and self-forgiveness related to the sexual assault.

Respondent #4: "Now I feel that I have learned from what happened. I learned to love myself and taught myself boundaries....I have been working on setting better boundaries with men and to recognize when a situation is not right for me."

Respondent #2: "I feel better about it [the sexual assault]. I know that it wasn't my fault."

Respondent #8: "I used to feel extremely guilty, and now I have a clearer view on what happened."

Initially after the sexual assault, respondents seemed most likely to minimize or deny that anything damaging had occurred. When the person who was sexually assaulted was intimately involved with the perpetrator, this seemed to be particularly true. In order to maintain the relationship, they denied that a sexual assault had occurred. Later, respondents made sense of the assault through attributions of mental illness on the part of the perpetrator and vulnerability or misfortune on their part. Some respondents seemed eventually to be able to let go of a sense of responsibility or guilt for the assault and reclaim a sense of personal control over their interpersonal experience.

The complexity of needing to sort through the personal experience of being assaulted within the context of a social environment that has either perpetrated the attack or is lacking in understanding or acceptance could contribute to the overall lower than average scores on the PTGI. Critical to the process of PTG is the disclosure and processing of trauma with supportive others (Calhoun & Tedeschi, 2006). While there was a high rate of disclosure to others among the respondents to this survey, they also frequently described negative reactions from within their social supports. Those who have experienced sexual assault may also have internal and external forces pushing toward denial of the experience. Unless the experience of sexual assault can be named and accepted both by the person who experienced the sexual assault and by supportive people within their life, the meaning-making process involved in psychological growth may ultimately be impeded.

Discussion

This research was undertaken to develop an understanding about how various aspects of spirituality impact PTG among those who have experienced sexual assault. Information regarding respondents' demographics, sexual assault history, and spirituality prior to the assault was gathered, as well as data concerning the use of spirituality to cope after the assault, experience of social support, meaning-making in relation to the assault, and the degree of psychological growth experienced as a result of the assault. Spirituality within this research was defined to include any individual or communal activities which the respondent considered spiritual or sacred, and a Higher Power was defined as any transcendent force that one relied upon for support or guidance.

Participant Demographics

Although no specific exclusion was made in terms of ethnicity or gender, it was anticipated that the majority of survey respondents would be female and a significant portion would be of non-Caucasian ethnicity due to the demographics of those who most frequently experience sexual assault and use spiritual resources to cope. As expected, the majority of respondents were female; however, contrary to expectations, most respondents were of Caucasian ethnicity. Women of ethnic backgrounds are among those most likely to experience sexual assault due to systemic issues of race, gender, poverty, and social status (The Advocates for Human Rights, 2006; RAINN, 2013). Additionally, research indicates that women and racial minorities, who tend to have less societal power and fewer resources, are more likely than majority groups to use spiritual resources (Gerber, Boals, & Schuettler, 2011; Trevino et al., 2012). Reaching ethnic minorities requires specific attention to sampling frame, making contacts, and supporting provision of requested information (Feskens, Hox, Lensvelt-Mulders, &

Schmeets, 2006). Despite attempts to reach out specifically to organizations such as churches with high rates of ethnic minority participation, feasibility constraints within the current research limited the ability to attend to these critical issues. As a result, respondents were reached primarily through sample sources not known to have high rates of ethnic participation.

As expected, the respondents to the current survey were, on average, fairly young. Participation in this study was restricted to those who had experienced their first sexual assault within the previous five years, and research indicates that those who experience sexual assault are frequently under age 30 (RAINN, 2013). However, successful utilization of spiritual resources most commonly occurs among those who are older (Prati & Pietrantonio, 2009).

About two-thirds of the participants in this study indicated belief in a Higher Power, and only half indicated regular participation in spiritual activities prior to their sexual assault. In contrast, greater than 90% of the American population reports belief in a Higher Power and almost 80% report engaging in regular spiritual activity (Newport 2011; Pew Research Center, 2012). It is possible the rates of belief and engagement in spiritual activities among this sample compared with the general population may be related to both the small percentage of ethnic minorities participating and the young age at which sexual assault frequently occurs.

Prayer and participation in other personal spiritual practices were the most commonly reported forms of spirituality used to cope among respondents. Communal spirituality such as attendance at spiritual services or accessing support from a spiritual community was reported less frequently. The high degree of personal spiritual activity in contrast to communal activity is of interest. Spirituality's effectiveness as a supportive coping mechanism is theorized to be due, in large part, to the strong influence of the spiritual community in the process of meaning-making after a traumatic event (Chan & Rhodes, 2013; Harris et al., 2013; Prati & Pietrantonio,

2009; Watlington & Murphy, 2006). However, research also indicates that personal spirituality such as prayer can play a significant role in recovery. Prayer influences recovery primarily through perceptions about the Higher Power and the frameworks of meaning within which personal spirituality is engaged (Ai et al., 2013b; Burke et al., 2011; Gall & Cornblat, 2002; Janoff-Bulman, 2006). Identified belief in a Higher Power and engagement in spiritual activity may reflect a cognitive engagement with the idea of spirituality rather than a more supportively perceived relational engagement. It is possible PTG scores were low overall in this study because respondents' style of spirituality or other social connections ultimately did not provide adequate support or frameworks of meaning for higher growth to occur.

Relationship with a Higher Power

Respondents most commonly affirmed spiritually based coping statements that described looking for a stronger connection with a Higher Power or seeking a Higher Power's love, care, and support in dealing with difficulty. However, the highest number of affirmations among respondents occurred with statements questioning a Higher Power's ability or willingness to provide that love, care, and support. Those with highly integrated spirituality prior to the assault unanimously affirmed statements of seeking connection and support from a Higher Power, whereas those adding or increasing their spirituality as a coping strategy after the assault were more likely to seek forgiveness or relief from worry. These findings are consistent with research indicating that those who have made use of spirituality in the past are best able to make use of it to cope after a traumatic event. However, those without this prior access may have difficulty making effective use of spirituality as a beneficial resource (Gall et al., 2009).

Research indicates that when those who have experienced sexual assault believe a Higher Power is watching over them, they may not feel as vulnerable. Furthermore, believing in the love

and care of a Higher Power has been found to be an important pathway to letting go of the self-blame that is so common in this population (Ahrens et al., 2010). However, research indicates that those who have experienced interpersonal traumas may have difficulties effectively accessing relationships for support, including the relationship with a Higher Power (Ahrens et al., 2010; Burke et al., 2011; Harris et al., 2010). For those without previously integrated spirituality, the attempt to access relationship with a Higher Power to cope may become an additional burden rather than a support. Research has found that when those without previously integrated spirituality attempt to access spirituality in a time of stress, they may experience limited benefit or even additional distress as a result of spiritual questioning or interpretations of a Higher Power as punishing (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013; Gall et al., 2009).

Those with previously integrated spirituality appear to be looking relationally toward their existing connection with a Higher Power to provide them with love, care and the letting go of anger toward others. On the other hand, those respondents who have added or increased their spirituality after the assault appear primarily to be seeking relief from negative experiences with personal implications such as worry and a sense of self-blame for the assault. Those who delegate their stress through reliance on a Higher Power have been identified in the literature as using a deferring style of coping, whereas those who have a more active and internalized personal exchange with a Higher Power are described as engaging a collaborative coping style (Pargament, 1997). Although the deferral of stress through spiritual coping has been identified as an influence on positive outcomes, active and collaborative approaches where people work together in relationship with a Higher Power is associated with the most positive psychological outcomes (Ross et al., 2009; Yangarber-Hicks, 2004). Confidence in the ability to overcome

difficulties may allow people to relate more securely when calling upon a Higher Power for support. When the relationship with a Higher Power is secure, people are more likely to collaborate with their spiritual resources in coping attempts. On the other hand, when feeling helpless, people tend to use less collaborative coping techniques, and instead, plead for help from a Higher Power or try to become entirely self-sufficient in both their social and spiritual worlds (Ai et al., 2013b; Yangarber-Hicks, 2004).

Overall, respondents affirmed statements that are categorized as positive spiritual coping, with the distinct exception being high affirmation of negative spiritual coping statements related to doubts about the love and influence of a Higher Power. Those respondents without integrated spirituality prior to the sexual assault were especially susceptible to doubts about what is possible in the relationship with a Higher Power. Many respondents indicated they were looking for a stronger connection with a Higher Power and described their relationship with a Higher Power as a place where they seek comfort, protection, love, and help with coping. However, a significant portion of respondents also described uncertainty about how to effectively engage in a relationship with their Higher Power. Ultimately, a compromised relationship with a Higher Power, along with an impaired sense of control, may point toward difficulties with the use of both social and spiritual resources, which can significantly impact recovery.

Social Support

While some respondents identified that their spiritual and social communities supported them through acceptance and understanding, many expressed fearing judgment or lack of understanding. When people have been sexually assaulted, restoration of positive social connection is an integral part of the recovery (Bryant-Davis et al., 2011). However, negative

responses from intimate social supports can seriously inhibit the recovery process (Borja, Callahan, & Long, 2006; Ullman & Filipas, 2001).

Research indicates that distancing from self-blame is one of the most important roles social support can play in recovery (Ahrens et al., 2010). However, more respondents spoke of the negative versus positive social response. Some respondents spoke of particular instances where they were blamed for their role in the sexual assault or its aftermath. Other respondents spoke primarily of their intense fear of receiving this negative social response. The nature of interpersonal trauma and the effect it has on a person's ability to make effective use of social supports may play a role in this experience of fear, leading some to stop reaching out to others in their social arena altogether (Ahrens et al., 2010; Harris et al., 2010). Shame, blaming, or fear may limit the ability to effectively utilize social support (Harris et al., 2010). Among the respondents, some seemed to be held back from disclosure because of this fear of negative reaction; however, others who had received negative feedback were able to move forward and find alternative positive social connections.

Most of the respondents to this survey described disclosing their sexual assault to someone; however, the strong presence of either actual or feared negative response to their disclosure may have disrupted respondents' ability to effectively engage social supports in the process of meaning-making after their assault. Disclosure to supportive others is an important element in the deliberate cognitive processing critical to PTG after a trauma such as sexual assault (Calhoun & Tedeschi, 2006). How people are received when they do disclose to members of their social and spiritual communities may affect whether these resources cause additional distress and limit growth, or support the cognitive processing needed to make meaning from the event and move toward growth (Ahrens et al., 2010).

Respondents to the current study did appear to be working to find places where they could share their experience with supportive others who would listen and support them. This limited movement toward areas of social support appears to have similarities to the tentative relationships some respondents described developing with a Higher Power. It has been theorized that there is a parallel experience between social and spiritual attachments (Gall et al., 2009; Kirkpatrick, 1995). Relationships with a Higher Power often mirror the way people experience members of their spiritual communities or social networks (Kirkpatrick, 1995). The literature suggests this could be an indiscriminate attribution across both spiritual and interpersonal domains, or it could be a reflection of a predisposition to feeling abandoned by a Higher Power or to social withdrawal if rejection by others is perceived (Burke et al., 2011; Shaw et al., 2005). The struggle to develop trustworthy and supportive relationships in both social and spiritual areas communicated by some respondents could be explained through this theory of parallel attachment processes. Those respondents who experience difficulty making effective use of spiritual relationships to cope might be experiencing similar difficulties making effective use of resources within their social network, as well. Difficulty with identifying supportive relationships where the experience of sexual assault can be disclosed and processed in a way that positively influences meaning-making could ultimately limit the experience of psychological growth for these respondents.

Meaning-Making: Posttraumatic Growth

The PTG scores among respondents to this survey were overall lower than previously published scores for people who have experienced various types of trauma. Lower growth scores among this population compared with the wider population of those experiencing trauma may be due to the interpersonal nature of sexual assault. Past research indicates that the intentional,

interpersonal nature of harm involved in sexual assault may be more likely to challenge fundamental beliefs about others and the world than other types of traumatic events (Frazier et al., 2001). It was theorized that this greater challenge to fundamental beliefs among those who had experienced sexual assault would result in higher growth than among other populations experiencing trauma. However, contrary to this hypothesis, respondents to this survey reported notably lower growth scores than other published scores among those experiencing trauma. The five domains of growth explored within the PTGI (relating to others, new possibilities, personal strength, spiritual change, and appreciation of life) further examines the dynamics of the lower than expected PTG score and the way spirituality impacts this growth.

Relating to others. Because the relational context plays such an important role in an interpersonal trauma such as sexual assault, this domain provided important information about how this population makes use of spiritual and social support networks in their growth process. The style of spiritual coping, whether primarily positive or negative, played a significant role in the degree of growth respondents affirmed. Those who were able to make positive use of spiritual and social networks after the assault provided the highest PTG scores. Those who did not make use of spirituality at all described exerting increased effort in relationships, but were ultimately able to access supportive relationships and progress toward notable growth in this domain. The respondents more likely to use negative spiritual coping described the greatest struggle with relationships and the most doubt about what is possible in relationship with others.

Research has indicated there is a distinct recovery trajectory for those who experience sexual assault. There is typically significant initial distress; however, when there are positive relationships with supportive others early in the recovery process it positively impacts PTG (Calhoun & Tedeschi, 2006; Frazier et al., 2001). Those using positive spiritual coping affirmed

statements that point toward supportive experiences within their relationships. One of the ways spirituality has been theorized to support those recovering from trauma is through provision of a supportive social network (Gall & Cornblat, 2002; Gerber et al., 2011; Shaw et al., 2005).

However, the relational experience for those making use of negative spiritual coping was very different. They were the group least likely to affirm a belief that they could count on others when experiencing trouble and indicated they put a great deal of effort into relationships. The group that did not make use of spiritual resources at all described putting more effort into relationships, but affirmed other statements that indicate they were able to gain positive interpersonal results from their relational efforts.

Many of the respondents who described negative experiences within their social and spiritual networks after the trauma made use of negative spiritual coping. It has been hypothesized that when an interpersonal trauma is experienced, beliefs about safety and fairness within society are challenged and attachment to a Higher Power may be weakened (Burke et al., 2011). Shame, blaming, or fear may also limit ability to effectively utilize social support (Harris et al., 2010). Those who experienced or feared negative social reactions after the assault were more likely to engage negative spiritual coping. This negative spiritual engagement style may reflect indiscriminate application of relational style across both spiritual and interpersonal domains as a result of experiences predisposing the respondent to feel abandoned and to socially withdraw when rejection is perceived (Burke et al., 2011; Kirkpatrick, 1995; Shaw et al., 2005). Overall, when there was limited social support for any reason after the trauma, respondents were more likely to experience challenges in making effective use of relationships as a supportive resource in their recovery.

Among the explanations for a lower PTG score among this population is past research indicating that beliefs about the goodness of other people and the security and fairness of the world are negatively affected among those experiencing sexual assault (Frazier et al., 2001). While significant disruptions to beliefs can trigger the growth process, access to supportive others who help rebuild more positive appraisals of the traumatic event are critical to PTG (Calhoun & Tedeschi, 2006; Janoff-Bulman, 2006). Respondents to the current survey reported that recovery often necessitated sorting through the assault experience within the context of a social environment that either perpetrated the attack or lacked understanding and acceptance in the aftermath of the assault. Ultimately, the complexity of this context may have limited or inhibited the growth process among this population.

New possibilities. This domain received the second lowest PTG scores among the five domains. It was also the domain with the greatest dichotomy among scores for various statements. Statements affirming making purposeful life changes received the highest scores from respondents; whereas, statements relating to new interests or opportunities as a result of the trauma received significantly lower scores. Growth in this domain has been identified as an outcome of developing increasingly nuanced and complex world beliefs. This wider belief system allows those who have experienced trauma to navigate more comfortably within a wider range of life experiences (Janoff-Bulman, 2006). When people develop their belief systems in this way they are able to both accept the reality of the trauma, and most importantly for this domain, a sense of new possibilities.

In this domain, those who did not access spirituality at all received the highest scores, with the group using positive spiritual coping following only slightly behind. Both groups affirmed strongly being more willing to change things that need to change. While the group most

likely to use negative coping had the lowest score within the domain, all three groups had similar scores and were most likely to affirm statements indicating a sense of agency about making changes or purposefully taking their life in a new direction. Regardless of coping style, all groups may have felt some degree of motivation to make changes in their life in order to experience a sense of power over their situation. However, this motivation must be considered within the context of the domain receiving the second lowest score overall among the five domains.

Research indicates those who have experienced sexual assault use high rates of avoidance coping, which points to some degree of difficulty in feeling a sense of control over the recovery process (Ahrens et al., 2010). However, higher PTG is reported among those who take action to deal with their traumatic experience and the resulting emotions (Prati & Pietrantonio, 2009). The only group who had high affirmation for the previous PTG 'relating to others' domain statement dealing with the expression of emotion was the group that did not use spirituality to cope at all. An increased willingness to engage with the emotional aftermath of their trauma may play a role in this group having the highest score in this domain of new possibilities. Research also suggests that when those recovering from sexual assault have more support, they tend to believe the recovery process is under their control and that they have the resources needed to deal with the assault (Frazier et al., 2004). Those making use of negative spiritual coping were the least likely to feel confident in support from those in their spiritual or social networks. This limited access to support may have influenced the lower experience of new possibilities among this group. On the other hand, both the group using positive spiritual coping and the group not using spirituality at all identified being able to access positive social supports. This access to social supports may

play a role in their higher scores within this domain through greater confidence in their resources and ultimately a heightened sense of control over their recovery process.

Respondents to this survey did not appear to perceive new doors of opportunity arising within their lives as a result of their sexual trauma. However, they did uniformly have some experience of increased willingness to make changes leading to a new life path through their own focused change efforts. There appears to be a somewhat differentially experienced emerging belief within this population that the resources needed to recover are within their reach. Past research indicates that altered life philosophies are positive changes that most commonly occur later in the recovery process for survivors of sexual assault (Frazier et al., 2001). While the scores in this domain are currently low, there are signs that respondents are developing a sense of power over their circumstances. The mean time since the most recent sexual assault among the respondents was only two years, which is still early in the process of recovery from a sexual assault. As a result, higher growth could occur later in the process as the recovery continues to progress. It would be interesting to note whether the differential in scores among the different styles of spiritual coping would also increase later in the process.

Personal strength. Consistent with the statements respondents affirmed in the domain of new possibilities, all respondents to the current survey describe having an increased sense of their own strength in the face of difficulty. In contrast to new possibilities; however, this domain had the highest overall score of all five PTG domains. The statement describing newly discovered strength received significantly greater affirmation than any other statement among all three groups. Therefore, further support exists for the idea that, overall, respondents are developing a belief in their power and, as a result, their ability to effect changes over their recovery.

On the other hand, the area that had the greatest difference in scores in this domain was related to the statement about ability to accept the way things work out. Research indicates that growth occurs when people develop more expansive world views that incorporate both new possibilities in their life and acceptance of the trauma that has occurred (Janoff-Bulman, 2006). In both the case of new possibilities and acceptance of what has occurred, those who are more likely to use negative spiritual coping experienced less affirmation for growth statements. Greater growth has been found among those who both take action to deal with the trauma, but also accept what is unchangeable or uncontrollable about the experience (Prati & Pietrantonio, 2009). Although all groups appear to be engaging actively in their recovery, the group most likely to use negative spiritual coping was the only group demonstrating significant difficulty with acceptance through low affirmation of this particular personal strength statement. This limited ability to accept the trauma experience may be a key factor in the consistently lower growth scores among this group most likely to use negative spiritual coping.

Spiritual change. This domain received the lowest change score out of any of the other five domains. As expected, the group that did not use spirituality to cope at all provided no affirmation for either of the spiritual change statements. The absolute lack of affirmation of spiritual change among the group who did not access spirituality either before or after their assault significantly lowered the overall score for respondents within this domain.

Both groups scored affirmation of change in spiritual matters more highly than change in religious faith. However, those making use of negative coping gave a higher score to the statement related to spiritual matters and a significantly lower score to the statement related to religious faith. The difference between spirituality and institutionalized religion is a nuanced discussion outside the scope of this research; however the majority of respondents in this survey

identified primarily personal spiritual practices rather than communal spirituality. It is possible respondents were associating communal spirituality with institutionalized religion. Research indicates that those who have experienced sexual assault tend to receive low support from within spiritual communities, where victim-blaming and attitudes reflecting rape myths can commonly occur (Ahrens et al., 2010; Bryant-Davis et al., 2011). The descriptive answers to questions about social responses affirm the presence of these attitudes within at least one respondent's spiritual community. Those who make use of negative spiritual coping may be more vulnerable to the psychological impact of these unsupportive experiences within the spiritual community. This group's notably negative association with statements involving religious faith versus those involving spiritual matters may result from these associations.

Appreciation of life. This domain had the highest growth overall and scores within this domain had little variation across all styles of spirituality. The most commonly affirmed statement addressed an active change in priorities about what is important in life for these respondents. Their descriptive answers commonly affirmed priority changes that involve building stronger relationships with others, a Higher Power, and themselves. The findings in this domain are in alignment with the domain having the second highest score, personal strength. It might be that this domain and the domain of personal strength are beginning indicators for developing growth in other areas.

There was less difference between styles of spirituality within this domain. Universally, respondents appear to be trying to make active changes in their lives. Positive spiritual coping and coping without the use of spirituality appear to lead to more PTG than negative spiritual coping. However, it is valuable to note that groups engaging all the different styles of coping were able to access significant levels of growth in the domains of appreciation of life and

personal strength. In general, respondents were particularly affirming of statements indicating belief in their strength and their willingness to make changes. Research indicates this commitment to remaining active in the process is crucial to a successful recovery trajectory (Frazier et al., 2004; Kunst et al., 2010; Maercker & Zoellner, 2004).

Respondents to this survey affirmed statements that indicate an increased sense of personal strength and purposeful change. These findings indicate that the respondents have key resources needed to remain active in their recovery process, even if those engaged in negative spiritual coping struggle with critical aspects of growth such as finding and making use of supportive relationships, or feeling a sense of acceptance about their trauma experience. Research indicates that even when negative spiritual coping dominates, positive outcomes such as PTG remain possible as long as people remain engaged in the process, and effective cognitive processing of the traumatic event eventually occurs (Gall et al, 2011; Gerber et al., 2011; Vigna Bosson et al., 2012).

It is also important to note that negative spiritual coping may be part of a longer recovery process. Research indicates that when engagement with spiritual resources is characterized by underlying tensions, struggles with self, others, and a Higher Power, psychological distress is more common, at least initially (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013; Pargament, 2011). Although those who use positive spiritual coping tend to have the best outcomes in terms of PTG, cognitive processing appears to be most critical in the process of growth. Those who use negative spiritual coping may eventually be able to access positive outcomes if they stay active in the recovery process.

Influence of spirituality prior to the assault. When PTGI results were analyzed based on frequency of participation in spiritual activities prior to the assault, the style of spiritual

copied used after the assault continued to be a more influential factor in PTG scores. Past research has found that the way people engage with spirituality is more predictive of outcomes than other variables such as spiritual affiliation, frequency of worship attendance, or demographics such as ethnicity, age, or gender (Trevino et al., 2012; Ross, Handal, Clark, & Vander Wal, 2009; Yangarber-Hicks, 2004). Although the style of spiritual coping used was found to be most important in determining PTG scores, how frequently people participated in spiritual activities prior to the assault appeared to influence the style of spiritual coping engaged after the assault.

Those who participated daily in spiritual activities prior to the assault were most likely to use positive spiritual coping. Research has found that those with highly integrated spirituality tend to be able to make the most effective use of spirituality after a trauma (Gall et al., 2009; Watlington & Murphy, 2006). This group had lower growth scores in the domains of new possibilities and spirituality than other groups. Those with previously integrated spirituality may have already reached a ceiling of growth in these domains due to earlier spirituality experiences (Ahrens et al., 2010; Gall et al., 2011). Because these respondents were able to effectively access prior coping styles after the assault, they also may not have experienced enough of a challenge to their former beliefs for significant change in interests or life path to occur (Kleim & Ehlers, 2009; Janoff-Bulman, 2006). On the other hand, those who added spirituality after their assault had significantly higher scores than other groups for statements related to having a better understanding of spiritual matters in the spirituality domain and regarding new interests or life path in the new possibilities domain. These results are consistent with a group that has added spirituality as a new element in their life experience in order to cope after the sexual assault.

In contrast to those with integrated spirituality prior to the assault, those who added spirituality to cope after the assault were most likely to make use of negative spirituality. Previous research indicates that those who have less integrated spirituality tend to have notable difficulty accessing and applying their spirituality toward coping in a productive way (Gall et al., 2009). Especially when there are perceptions of spiritual punishment or doubts involved, as was the case in the current study, the use of spirituality to cope may exacerbate the distress (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013).

This group which added spirituality to cope after the assault scored the statement related to acceptance at zero. The complete absence of affirmation for acceptance of the trauma situation among those who added spirituality after the assault significantly influenced the low growth scores for this statement among those who are more likely to use negative coping. Although the research clearly indicates that those who add spirituality after a trauma are more likely to experience difficulty in making effective use of spirituality to cope, there was little in the literature to explain why acceptance of the way things work out is so difficult for this group. One possibility could be that this group experiences higher degrees of distress and less growth than those who engage more positively with spirituality (Ano & Vasconcelles, 2005; Chan & Rhodes, 2013; Gall et al., 2009). As a result of feeling less success in management of their situation, this group may be more focused on continuing to push toward change and less willing to accept their situation. Research indicates that remaining engaged in the struggle to arrive at more effective life philosophies is crucial to the process of PTG when spiritual difficulties are encountered (Gall et al., 2011; Gerber et al., 2011; Vigna Bosson, Kelley, & Jones, 2012). The identified lack of acceptance within this group could be indicative of an ongoing process.

Finally, the group that had a limited degree of spirituality prior to the assault and made some use of spirituality to cope after the assault was split in terms of their style of spiritual coping after the assault. The answers by the two respondents in this category had more in common with the coping style engaged in than with each other, though overall the respondent in this category more likely to use negative coping gave higher growth scores than others using negative coping.

Research indicates there are times when the idea of growth may be used to avoid distress rather than as an actual measure of growth (Kleim & Ehlers, 2009). Given that those using negative spiritual coping are more likely to experience high levels of distress, there is the possibility that the idea of growth may be being accessed to minimize distress rather than providing a reflection of a true growth process. This attempt to find benefits early in the recovery process can be an adaptive early coping mechanism and help people move forward in their recovery process. However, research also indicates that this avoidance of distress becomes less helpful over time (Frazier et al., 2001; Kleim & Ehlers, 2009; Prati & Pietrantonio, 2009). In fact, research indicates that those with negative expectations who employ PTG as an avoidant-denial strategy are least likely to experience beneficial results (Kunst et al., 2010; Maercker & Zoellner, 2004; Schuettler & Boals, 2011).

An avoidant style of coping may be a reflection of discouragement in the recovery process (Gall et al., 2011). It is of note that both respondents in this group gave the highest growth scores among members of their coping style group to the statement regarding acceptance of their situation. This trend may support the possibility that this group's high PTG scores reflect an avoidant coping style, rather than a genuine growth process. If so, it will be important for members of this group to eventually transition to an increasingly active stage of recovery.

Ultimately those who are active in their recovery process and take a positive perspective have better outcomes. They are also more likely to experience PTG than those who are avoidant (Frazier et al., 2004; Maercker & Zoellner, 2004).

Denial of Experience

PTG among current respondents was lower than would be expected for a population who has experienced prior trauma. One potential explanation for this low growth score is the degree to which respondents did not initially acknowledge their experience as sexual assault. Several respondents indicated that they denied the impact of what they had experienced in order to maintain important social relationships. One key predictor of PTG is the extent to which an incident influences a person's sense of identity and is an active and open part of their life, or what has been called event centrality (Boals & Schuettler, 2011; Kleim & Ehlers, 2009; Schuettler & Boals, 2011). People are most likely to identify their experience as rape when there is a stereotypical assault involving a high level of force (Ahrens et al., 2010). However, the sexual assault appeared to be far more ambiguous for many of the respondents to the current survey. It is theorized that an event must be regarded as enough of a crisis to shake former beliefs before the rebuilding process represented by PTG will begin (Gall & Cornblat, 2002; Klein & Ehlers, 2009; Janoff-Bulman, 2006). Until the trauma event was understood in the context of sexual assault, survey respondents may not have experienced enough challenge to their former beliefs to trigger the PTG process. As a result, the low PTG scores may reflect respondents who are in the beginning stages of processing their experience as sexual trauma.

An additional perspective related to PTG relates to people who have experienced previous traumas. Research indicates that when a previous life experience has already initiated growth in a particular PTG domain, no new growth may be reported after the most recent trauma

because a ceiling was already reached through other experiences (Ahrens et al., 2010; Gall et al., 2011). No questions assessed respondents' exposure to other forms of trauma prior to the first sexual assault reported on in this research. Respondents may have had significant previous alterations to their worldviews triggering a previous PTG process as a result of past traumas not reported on in the survey.

Re-victimization has been identified through research as common among those who experience sexual assault (Miller et al., 2011). It is possible the difficulty many respondents describe in recognizing their experience as sexual assault could be an indication of previous trauma events significantly influencing their worldviews. Research has shown that multiple traumas occurring repeatedly over long periods of time impact a person's personality development and their ability to experience trust within relationships (Ford & Courtois, 2009). Although current survey participation was limited to those who had a first sexual assault after the age of 18, it remains possible that many respondents experienced additional traumas of other types or sexual traumas that were unable to be recalled or identified. As a result, prior traumas may have contributed to an earlier PTG process where no further growth remains possible in certain domains. It is also possible that prior traumas may have already altered worldviews in ways that allowed respondents to accommodate the most recent trauma without a significant challenge to their beliefs about relationships. This possibility may be supported by several survey responses pointing toward some degree of difficulty with supportive relationships which can be a reaction to complex trauma (Ford & Courtois, 2009). In either the case of a ceiling of growth already being reached, or pre-existing worldviews not being challenged enough to trigger the growth process, low PTG could result.

Attributions and Control

Although early in the recovery process respondents seemed to minimize or have difficulty naming the trauma that occurred, several respondents indicated they were later able to make sense of the assault through attributions related to the perpetrator and their own degree of power over the sexual assault. Some respondents described karma or something else about them that made them vulnerable to attack. Other respondents described a lessening sense of guilt or self-blame along with an increasing sense of empowerment related to boundaries. Respondents began to see their perpetrator as someone who also had vulnerabilities through attributions of mental illness. These examples of active and evolving thoughts about the trauma reflect a cognitive process called deliberate rumination (Calhoun & Tedeschi, 2006). This process has adaptive qualities after a trauma and contributes significantly to PTG (Stockton et al., 2011).

However, actual growth requires more than just engaging in cognitive processes. It requires active engagement in change (Kleim & Ehlers, 2009). A lived experience integrated throughout mind, body, and soul rather than simply cognitive engagement results in psychological change (Katonah, 2006). Research indicates that high levels of PTG are most common among people who take action to deal with their traumatic experience and the resulting emotions, and who, at the same time, also accept what is unchangeable or uncontrollable about their experience (Prati & Pietrantonio, 2009). Responses focused on forces outside of respondents' control such as karma or personal vulnerabilities point to respondents' continuing struggle to feel agency over their circumstances. On the other hand, descriptions of working to develop more effective interpersonal boundaries and acknowledging the vulnerability of their perpetrator through attributions of mental illness appear to point toward an evolving perspective of acceptance and empowerment, as well as active efforts to make changes in their life.

Active engagement of spiritual beliefs has the potential to play a central role in cognitively processing a traumatic event, and, as a result, may lead to stronger and more adaptive beliefs (Vigna Bosson et al., 2012; Shaw et al., 2005). Research indicates that when people actively engage in dialogue with a Higher Power and perceive spiritual support from these actions they have better outcomes (Ai et al., 2013b; Gall & Cornblat, 2002). The way respondents answered questions about their use of spirituality after the assault provides another glimpse into how they might perceive personal agency within the recovery process.

Many respondents affirmed statements that indicated they were looking to a Higher Power for protection, love, and care. These statements could be categorized as reflecting a deferring style of coping where stress is delegated to another to be managed (Pargament, 1997). Deferral coping has been associated with life satisfaction, but also a passive stance toward recovery (Yangarber-Hicks, 2004). Although deferral coping may be positive to the extent it acknowledges and accepts what is outside of one's control, it has also been found to be negative when utilized as an avoidance coping mechanism (Yangarber-Hicks, 2004). Nonetheless, research indicates that avoidance coping is common among those who have experienced sexual assault (Aherns et al., 2010). In contrast, those who actively engage with their recovery and take a positive perspective are more likely to experience PTG and have a positive outcome (Gall et al., 2011; Frazier et al., 2004; Maercker & Zoellner, 2004). Affirmation among respondents for seeking protection, love, and care from a Higher Power may reflect a deferral style of coping. If this style of coping is in use among respondents as a passive strategy to avoid distress, it may provide further explanation for the lower PTG scores.

Implications for Future Research and Clinical Practice

Future research. This research resulted in a lower than expected mean PTG score. There are a number of possible explanations for this low PTG score, but one factor may be related to demographic make-up. Although the study population was primarily of Caucasian background, research indicates that those of ethnic minorities are most likely to experience sexual assault, to employ spiritual coping, and to have high PTG scores (Ahrens et al., 2010; Bryant-Davis et al., 2011; RAINN, 2013). Women and other marginalized populations tend to be especially vulnerable to sexual assault because they are often seen by others as sexually available and unworthy of protection due to race, gender, poverty, or social status (The Advocates for Human Rights, 2006). These same populations also lack adequate access to resources, which is a factor in their increased likelihood of turning to spirituality for support in the aftermath of a sexual assault (Ahrens et al., 2010; Bryant-Davis et al., 2011).

Response rates to research studies among ethnic minorities tends to be low (Feskens, Hox, Lensvelt-Mulders, & Schmeets, 2006). Future research into the effect of spiritual coping on PTG among those who have experienced sexual assault may be enhanced by a research design that specifically solicits participation from members of ethnic communities. Participation from within these communities could be improved by conducting in-person interviews in multiple languages or with the provision of interpreters. Additionally, developing relationships with support groups or organizations where members of these communities already have an established and trusted connection could also increase participation.

Additionally, the respondents to the current survey were, on average, fairly young. Research indicates that those who experience sexual assaults are most commonly under age 30, whereas successful utilization of spiritual resources most commonly occurs among those who are

older (Prati & Pietrantonio, 2009; RAINN, 2013). The current research limited the time since the most recent sexual assault to five years; however, many of the findings pointed to the possibility that those who have experienced sexual assault go through a long recovery process. PTG might have been lower among the current survey respondents because they were still in an initial phase of this process. Respondents appeared to be in the early stages of developing supportive spiritual and social relationships, as well as in claiming a sense of agency over their recovery.

Longitudinal research that explores the changing experience of growth over time and among people of different ages may provide more information about whether there is a longer, dynamic process involved in recovery from sexual assault. Future research should also look differentially at outcomes such as PTG among various demographic categories such as age, ethnicity, and gender.

This research was explored in a limited way the differential impact to PTG between spiritual activity prior to a sexual assault and the way respondents used their spirituality to cope after the sexual assault. This exploration revealed that how respondents used their spirituality after the assault was a more important factor in PTG than their degree of spiritual activity prior to the assault, which is consistent with other research. This study also highlighted the importance of supportive relationships to the effective use of spiritual resources and, ultimately, to PTG. Future research exploring rational cognitive versus emotive felt relationships with spirituality may provide more detailed and nuanced information about the influence of spirituality on outcomes after trauma.

Deferral to a Higher Power is a nuanced description of spiritual coping that could also be further explored in future research. One way to explore this topic would be to research those who have experienced sexual assault and who participate in Alcoholics Anonymous (AA). Those who

have experienced sexual assault commonly cope through use of chemicals (Ladwig & Andersen, 1989). Within the AA program, one of the first steps is to turn control over to a Higher Power (Alcoholics Anonymous, 2002). Exploration of whether this deferral to a Higher Power is more likely to be experienced as a passive or an active and collaborative process among those who have experienced sexual assault could provide important insight into how effectively spiritual coping resources are accessed among this population.

Two key themes that emerged from this research were the influence of social supports and the frameworks for making meaning of the traumatic event. Family systems can be influential sources for both support and frameworks of meaning-making. Therefore, future research into the impact of spirituality on the outcome of PTG among those who have experienced sexual assault may benefit from specifically exploring the impact of systemic family dynamics on the recovery process.

Clinical practice. The preamble of the NASW Code of Ethics identifies the primary mission of social workers as enhancing human wellbeing, with particular attention to the needs and empowerment of those who are vulnerable or oppressed (National Association of Social Workers, 2008). The ethical preferences for empowerment within social work include the ethics of respect, collaboration, inclusion, and power (Miley, O'Melia, & DuBois, 2013). Respecting clients involves affirming the strengths they bring to their healing process (Miley et al., 2013). Clients often bring spiritual resources to their recovery, especially those who have experienced sexual trauma (Ahrens et al., 2010; Bryant-Davis et al., 2011). Working collaboratively with these clients to make the best use of these existing resources helps clients access and exercise the power they have over their recovery process (Miley et al., 2013). Among those who have

experienced sexual assault, having a sense of control over the recovery process is a key factor in positive outcomes (Frazier et al., 2004).

In addition, vulnerable populations are identified as a principal focus of social work efforts (National Association of Social Workers, 2008). Studies indicate women are the primary group who experiences sexual assault, and women and minorities are most likely to utilize spiritual resources after a trauma (Catalano, 2004; Trevino et al., 2012). Women are also most likely to report PTG in the aftermath of a trauma, possibly due to their increased use of spiritual resources (Gerber et al., 2011; Trevino et al., 2012). Therefore, the vulnerable populations social workers seek to serve are among those most impacted by sexual assault, most likely to use spiritually based coping, and most likely to feel the positive impact of PTG (Catalano, 2005; Gerber et al., 2011; Trevino et al., 2012). As a result, there is a clear potential to improve the services social workers identify as most significant to the profession by developing awareness of spiritually based coping and the potential to impact outcomes such as PTG. Through better understanding of spiritually based coping and the influence on PTG, social work professionals may be better equipped to meet the needs of the vulnerable populations they serve.

This research points not only to the need for clinicians to attend to whether their clients are making use of spiritual resources to cope, but also how they are making use of these spiritual resources. Attention to the way spirituality is being used to cope may help identify clients with relational difficulties needing additional support in their recovery process. As future research improves knowledge about how various people access spirituality to cope after trauma, more nuanced tools for assessment and matching interventions to specific client needs can be developed. The uniquely interpersonal nature of sexual assault and the relational difficulties experienced within both their social and spiritual realms highlight the value of precise clinical

tools. Assessments designed to understand the spiritual coping styles engaged by those after an interpersonal trauma such as sexual assault could allow clinicians to effectively anticipate common barriers to recovery.

Finally, clinicians need to build stronger collaborations with spiritual leaders so clients are not caught between two frameworks of meaning that are at best, not communicating, or worse, at odds. This collaboration needs to occur at both an individual level for specific client needs and at a wider systemic level. Clinicians need to be open to learning more about the spiritual frameworks their clients are working within. This information can be gained through collaboration with spiritual leaders. Spiritual leaders supporting clients need to be provided with critical information about the psychological issues involved in sexual assault, and how the typical recovery process evolves. In addition, a wider effort to improve general knowledge sharing between spiritual communities and clinicians can provide a more supportive environment for clients.

One area of special concern related to spirituality and recovery from sexual assault involves those who identify as LGBT and access spiritual resources. There may be an increased need for sensitive collaboration in order to support this population. There are many complex dimensions that must be considered related to these clients' relational and meaning making environments.

Strengths and Limitations

This research design had the strength of providing a strong degree of protection for the research subjects on a topic that can be quite personal. The survey was online, anonymous, and voluntary. Participants were free to initiate the process by following the link to the survey, and were also free to decline participation at any point in the process. This research was also

designed to focus attention on participants' existing resources for coping, and how these resources support their process, as well as on potential positive outcomes versus distressing outcomes in order to provide additional protection for participants. Despite this focus, simply answering questions related to sexual trauma may have still triggered distress in some participants. Information about resources for follow-up support was provided to participants at the end of the survey. Therefore, if participants experienced discomfort as a result of participating in the survey, they would be able to contact these resources to receive support for working through any distress. Although adults who have experienced sexual assault are not specifically identified as a vulnerable population, the trauma experience does confer some degree of vulnerability and this research design attempted to provide some protection for participants.

An exploratory design for this research question was a strength given the still emerging nature of understanding related to both religious coping and posttraumatic growth. In particular, the literature related to these phenomena as it concerns those who have experienced sexual assault remains very limited. Therefore, this research design allowed knowledge about the topic to be further developed. Predictive research or quantitative correlations were premature given the currently limited knowledge base related to this topic. Despite the early stage of knowledge development related to this topic, this design did have the strength of utilizing valid and reliable instruments for the measurement of spirituality based coping strategies and the outcome of posttraumatic growth.

A key limitation to this research design was the lack of representativeness. Due to the goals of this study and feasibility constraints, a non-probability, purposive, convenience study design was chosen. This research primarily accessed participants through word-of-mouth and online forums. As a result of this sampling methodology, the participants in the current research

were primarily Caucasian with lower than average utilization of communal spiritual resources. Because the goal of this study was primarily exploratory, this research design was deemed sufficient to begin understanding the variables involved and their relationship (Monette et al., 2011). However, the population accessed was not representative of the ethnic populations most likely to make use of spiritual resources. Additionally, as a result of this design, the results of the study cannot be generalized to other populations.

Limiting the participants to those who had experienced their most recent sexual assault within the last five years was a limitation to understanding how spiritual coping impacts PTG among those who have experienced sexual assault. The results indicated that many respondents struggled to identify their experience as sexual assault initially. Additionally, there were indications in the findings pointing to a longer process of recovery and growth among the respondents. This longer process may be, in part, due to the interpersonal nature of sexual trauma. The research design limited respondents to those in the early stages of recovery from sexual assault and prevented gaining an understanding of any longer, more dynamic recovery process among this population.

Another limitation to this study was the cross-sectional design. Research has indicated that PTG is a process that develops over time (Park & Lechner, 2006). Longitudinal research would be most appropriate for understanding how this growth process unfolds. However, the exploratory nature of this research did indicate that a cross-sectional design was sufficient to begin building a base of understanding for the intersection of spiritually based coping and PTG among those who have experienced sexual assault.

Conclusion

Spirituality has been shown to be a potentially supportive resource in processing a traumatic event. However, when spirituality is accessed in negative ways it can also be an additional burden or a way to avoid distress involved in recovery (Ano & Vasconcelles, 2005; Kleim & Ehlers, 2009). This research focused on how spirituality impacts PTG after a sexual assault; however, literature suggests the key to PTG is effective cognitive processing of the event rather than processing within the specific framework of spirituality (Park, 2005; Vigna Bosson et al., 2012). It appears from the PTGI results that positive engagement with spirituality is a very effective, and for some, easily accessed, framework of meaning within which to adaptively engage these cognitive processes. However, outcomes among those respondents who did not access spirituality at all were nearly as strong as for those who adaptively engaged spirituality in the recovery process. Those who do not use spirituality at all appear to be able to build supportive relationships and have effective access to a different relational framework within which to process their recovery. In contrast, negative engagement with spirituality after a trauma appeared to be associated with significant difficulty making use of supportive relationships and an increased experience of struggle in the recovery process overall. Therefore, when considering needed support for those who have experienced sexual assault, it appears to be of primary importance to bear in mind the frameworks of understanding within which a particular individual is attempting to process the trauma.

For many individuals, spirituality will provide an effective and easily accessed framework of support. However, first accessing spirituality as a coping resource in the aftermath of a sexual trauma may not be beneficial. When an individual has chosen to add spirituality into their life in order to cope after a sexual assault, they may require additional support to deal with

interpersonal difficulties. They may also benefit from encouragement to remain actively engaged in the recovery process. Those individuals with limited engagement in spirituality prior to the assault may also seek out their spirituality after the assault as a form of comfort. However, using spirituality to cope in these ways may limit recovery over time unless it also provides a framework within which to cognitively process new beliefs and worldviews.

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Appendix A

Consent Form University of St. Thomas

The Role of Spirituality-Based Coping in Facilitation of Posttraumatic Growth among People Who Have Experienced Sexual Assault

I am doing research about how people use spirituality to deal with a sexual assault and how this may lead to positive changes in thoughts afterwards. You were invited complete this survey because you said you were first sexually assaulted less than five years ago and are 18 or older.

This study is being conducted by Richelle Amundson, a graduate student at the School of Social Work, University of St. Thomas/St. Catherine University and supervised by Jessica Toft, PhD.

Background Information

This study seeks to understand whether turning to spirituality after being sexually assaulted changed your thoughts about the experience. The survey will ask questions about whether you ever told anyone about the sexual assault, how you understand the experience, your spirituality before and after the assault, and if you felt supported afterwards.

Many studies have looked at how spirituality affects well-being. Other studies have identified when people experience positive changes after a trauma. Not much research has been done related to these topics among those who have experienced sexual assault. This study will ask previously tested questions to measure your style of managing difficulty through spirituality and how much your experience changed positively. You will also be asked to describe your experience of spirituality, social support, discussion of the assault with others, as well as how you understand the experience.

Procedures

If you agree to participate in this study, you will be asked to complete an online survey that is estimated to take approximately 30-45 minutes to complete. The survey is consists of questions related to age, gender, ethnicity, beliefs about a Higher Power, participation in spirituality-based activities and communities, disclosure to others, and ways in which your experience has changed as a result of the sexual assault.

Risks and Benefits of Participating in the Study

Some of the questions asked in this survey may trigger unpleasant feelings or memories related to your sexual assault or to your experience of spirituality. Due to these risks, you will be provided with a list of agencies providing support for those who have experienced sexual assault. The participant is responsible for any costs involved in support obtained. There is no direct

benefit to participation in this survey and there will be no monetary payment provided for participating.

Confidentiality

The records of this study will be kept confidential. In any sort of report published, information will not be provided that will make it possible to identify you in any way. In order to maintain anonymity, the survey invitation link is anonymous and will not allow collection of any personal information such as e-mail, name, or IP address. Participant identifying information will be disconnected from the responses recorded. The survey data used for analysis will be kept in a secure, password-protected computer program until 1/1/15, at which time the data will be destroyed. All statistical results from the research will be reported in aggregate only.

Voluntary Nature of the Study

Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with any cooperating agencies or institutions, or with the University of St Thomas/St. Catherine University. If you decide to participate, you are free to withdraw at any point up to and until the completion of the survey. You are also free to skip any questions that may be asked. Should you decide to completely withdraw from the survey after beginning the process, do not submit your survey information. After submission of the responses, the anonymous nature of the survey will prevent identification of specific participant's responses for exclusion from the study.

Contacts and Questions

Researcher name: Richelle Amundson
Researcher email: amun7278@stthomas.edu
Researcher phone: [REDACTED]
Research Advisor name: Jessica E. Toft, PhD., LISW
Research Advisor email: jetoft@stthomas.edu
Research Advisor phone: [REDACTED]
UST IRB Office: [REDACTED]

Please feel free to contact any of the people listed above with questions or concerns related to this study.

I understand that by proceeding with the survey and submitting the survey, I have given my consent to participate in the study.

10. If yes, how frequently (select the option that comes closest):

- Every day
- About once a week
- About once a month
- About once every other month
- About once or twice a year
- Less frequently than once or twice per year

11. Did you make use of your spirituality to cope after the assault in any of the following ways? (Mark all that apply)

- Prayer or Meditation
- Reading of spiritual books
- Support from a spiritual community
- Attendance at spiritual services
- Participating in spiritual community activities
- Participation in personal spiritual practices
- Pastoral counseling
- Other spiritual activities (please describe _____)
- Did not access spirituality to cope in any way

(If no to questions related to belief in a Higher Power, participation in spiritual activities prior to the assault, and use of spirituality to cope, respondent will be guided to questions related to social support, meaning-making, and then PTGI)

(If any affirmative answers chosen for the above questions, the respondent will be guided to the following questions related to spirituality and relationship to a Higher Power)

12. To what extent do the following statements accurately identify your experience of using spiritually-based strategies to cope after the sexual assault:

Focused on my spirituality to stop worrying about my problems:	Yes	No
Looked for a stronger connection with a Higher Power:	Yes	No
Questioned the Higher Power's love for me:	Yes	No
Questioned the power of the Higher Power:	Yes	No
Decided the devil made this happen:	Yes	No
Felt punished by the Higher Power for my lack of devotion:	Yes	No
Sought a Higher Power's love and care:	Yes	No
Sought forgiveness:	Yes	No
Sought help from a Higher Power in letting go of my anger:	Yes	No
Wondered what I did for the Higher Power to punish me:	Yes	No
Wondered whether my spiritual community had abandoned me:	Yes	No
Wondered whether the Higher Power had abandoned me:	Yes	No
Tried to put my plans into action together with a Higher Power:	Yes	No
Tried to see how a Higher Power might be trying to strengthen me in this situation:	Yes	No

13. Describe your view of the Higher Power:
14. Describe your relationship with the Higher Power:
15. Describe any ways that your spirituality helped you after your sexual assault:
16. Describe any ways that your spirituality made things more difficult for you after your sexual assault:
17. In what ways, if any, did your spiritual community help you after your assault?
18. In what ways, if any, did your spiritual community make things more difficult for you after your sexual assault?

(Respondents directed here if they answered “no” to belief in a Higher Power, participation in spiritual activities, and use of spiritual coping)

19. In what ways, if any, did your social network help you after your assault?
20. In what ways, if any, did your social network make things more difficult for you after your sexual assault?
21. How have your thoughts about the sexual assault changed over time?
22. How do you make sense of having been sexually assaulted?
23. Indicate for each of the statements below the degree to which this change occurred in your life as a result of your sexual assault, using the following scale:

*0=I did not experience this change as a result of my crisis.
 1=I experienced this change to a very small degree as a result of my crisis.
 2=I experienced this change to a small degree as a result of my crisis.
 3=I experienced this change to a moderate degree as a result of my crisis.
 4=I experienced this change to a great degree as a result of my crisis.
 5=I experienced this change to a very great degree as a result of my crisis.*

I changed my priorities about what is important in life:	0	1	2	3	4	5
I have a greater appreciation for the value of my own life:	0	1	2	3	4	5
I developed new interests:	0	1	2	3	4	5
I have a greater feeling of self-reliance:	0	1	2	3	4	5
I have a better understanding of spiritual matters:	0	1	2	3	4	5
I more clearly see that I can count on people in times of trouble:	0	1	2	3	4	5
I established a new path for my life:	0	1	2	3	4	5

I have a greater sense of closeness with others:	0	1	2	3	4	5
I am more willing to express my emotions:	0	1	2	3	4	5
I know better that I can handle difficulties:	0	1	2	3	4	5
I am able to do better things with my life:	0	1	2	3	4	5
I am better able to accept the way things work out:	0	1	2	3	4	5
I can better appreciate each day:	0	1	2	3	4	5
New opportunities are available which wouldn't have been otherwise:	0	1	2	3	4	5
I have more compassion for others:	0	1	2	3	4	5
I put more effort into my relationships:	0	1	2	3	4	5
I am more likely to try to change things which need changing:	0	1	2	3	4	5
I have a stronger religious faith:	0	1	2	3	4	5
I discovered that I'm stronger than I thought I was:	0	1	2	3	4	5
I learned a great deal about how wonderful people are:	0	1	2	3	4	5
I better accept needing others:	0	1	2	3	4	5