RELIGIOUS, SPIRITUAL, AND MENTAL HEALTH COPING AND POST-TRAUMATIC GROWTH IN YOUTH WITH TRAUMATIC GRIEF AND LOSS

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Abstract

Objective. For the past 20 years, spirituality has been gaining greater research attention. The literature has demonstrated that spirituality and religiosity have potential use as coping mechanisms in the face of stress and in fostering post-traumatic growth (PTG). The role of spirituality (defined as the connection to the transcendent, religiosity, and experiencing daily meaning) was examined in the face of traumatic grief and loss (TGL) in youth. It was hypothesized that spirituality would mediate the relation between TGL and PTG. Moreover, it was hypothesized that spirituality would mediate the relation between TGL and mental health. **Methods**. The data used for this study was derived from youth between the ages 17 and 24, from 47 participants. Participants were asked about their experience of spirituality as a connection to the transcendent and religiosity, spirituality in terms of daily meaning in life, TGL, PTG, and their mental health. **Results**. Spirituality predicted PTG. Moreover, it was shown that spirituality (specifically daily meaning) acted as a mediator between TGL and mental health. **Conclusion**. The findings support the relationships between spirituality, PTG, and mental health for youth.

Keywords: traumatic grief and loss (TGL), spiritual and religious coping, post-traumatic growth (PTG), youth, daily meaning, mental health, second wave positive psychology

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Religious and Spiritual Coping and Post-traumatic Growth in Response to Youth's Traumatic Grief and Loss

Over 75% of Canadians have experienced at least one traumatic event in their lifetime (Ameringen, Mancini, Patterson, & Boyle, 2008). A traumatic event is defined as one that threatens the life or physical integrity of the self or others (Ameringen et al., 2008), with the most common form of trauma for children and youth being the unexpected death of a loved one (Ameringen et al., 2008). Unfortunately, there is a high number of children and youth who experience Traumatic Grief and Loss (TGL), as there are 30% of children who live without one or both parents due to loss (Statistics Canada, 2017). According to the literature, children who have lost a parent or who have experienced a loss of a loved one, are often referred to as the "forgotten grievers" due to the lack of acknowledgement that they receive (Crehan, 2004; Horsley & Patterson, 2006), even though TGL is related to many developmental outcome challenges for young people. In contrast, spirituality, such as the experience of meaning in daily life, has been found to act as a protective factor for youth (Frankl, 1946). Therefore, exploring spirituality in relation to TGL for youth appears to be important. An understanding of this issue may lead to developments in targeted resilience-based interventions for this population.

What is Traumatic Grief and Loss (TGL)?

Grief is a universal human response to the loss of someone or something that is important to an individual. It can be exhibited by people in different ways: physically, psychologically, cognitively, and behaviourally (Stroebe et al., 2009). A concept that is more specific than grief to the loss of a person is bereavement. Bereavement is the loss of someone significant either through death (Stroebe et al., 2009). This can be very distressing for individuals, especially for children and youth, since they are still in a rapid stage of development (Stroebe et al., 2009). The

loss of a parent or a loved one is an especially traumatic event for a child (Haine et al., 2008; Paris et al., 2009). Given that children may not be able to psychologically prepare for an anticipated loss, all types of death are perceived as sudden or traumatic (Paris et al., 2009). These potentially traumatic losses could negatively affect child and youth development and can subsequently further affect their lives in adulthood (Mann et al., 2014).

Outcomes Associated with TGL in Children and Youth

From a neurological perspective, early experience of TGL can biologically affect brain development (Mann et al., 2014). Due to the essential and necessary need for children to feel safe and secure (as demonstrated in numerous research studies of attachment theory; Schore, A., 2017), when they experience a traumatic event, their amygdala—the brain area responsible for fear—can become hypersensitive. This hypersensitivity is associated with mental illness in adulthood (Mann et al., 2014). Specifically, children and youth who have experienced trauma are more likely to struggle with suicidal thoughts and behaviours (Afifi et al., 2014; Browne & Finkelhor, 1986; Paolucci et al., 2001; Santa Mina & Gallop, 1998). Almost all children and youth appear to suffer distress and behavioural change following the experience of a traumatic event (Greenwald, 2005). Reactions to trauma can include the development of new fears, separation anxiety, sleep disturbances, nightmares, depressed mood, reduced concentration, decline in schoolwork, anger, somatic complaints, and irritability (La Greca et al., 2008). Long-term challenges can include higher levels of anxiety, depression, suicide, self-harm, substance abuse, relationship difficulties, impaired attachment, difficulties in social and emotional competency, and lower self-assurance or confidence (Greenwald, 2005). Therefore, it is critical to examine what factors can aid children and youth who have experienced TGL, as there can be significant adverse long-term consequences (Mannarino & Cohen, 2011).

Treatment of TGL

The literature provides examples of multiple treatments and therapies for youth who have experienced TGL (Ryan et al., 2017; Greenwald, 2005). One of these treatments is based on a multidisciplinary practice model, and it includes play therapy to support relationship building and self-regulation (Ryan et al., 2017). As explained previously, early trauma can potentially change how a child views the world, rendering it a seemingly unsafe and insecure place (Greenwald, 2005). As such, this treatment demonstrates that interventions that provide safe, relational, and playful environments can aid children who have developed a perceived sense of unsafety and insecurity in the world (Ryan et al., 2017). This model emphasizes the healing power of safe relationships and the use of regulatory activities designed to activate specific brain regions (Ryan et al., 2017).

Another example of treatment for child and youth trauma presented in the literature is Cognitive Behavioural Therapy (CBT) which has been identified as an effective tool for treating traumas (Greenwald, 2005; Cohen et al., 2012; Jensen et al., 2014). A longitudinal study examined a CBT intervention for the period of one year in which the researchers conducted a randomized trial using the Cognitive-Behavioural Intervention for Trauma in Schools (CBITS) mental health program among recently immigrated students for 10 sessions (Stein et al., 2003). Sixty-one students were placed in an intervention group, while 65 students were waitlisted to provide a comparison group. The CBITS intervention incorporated standard CBT skills in a group format with five to eight students, to address symptoms of PTSD, anxiety, and depression. Three months after the intervention, it was concluded that treatment groups scored significantly lower on PTSD symptoms, depression, and psychosocial dysfunction than those who were waitlisted (Stein et al., 2003). Overall, many researchers have explored the effective use of CBT

in treating trauma in youth (Cohen et al., 2012; Jensen et al., 2014). Although CBT and other forms of treatments have been found to help children and youth with cognitive distortion and adaptive behaviours (Greenwald, 2005), they do not address meaning-making and spirituality in the healing process of trauma – specifically TGL.

Spirituality, Meaning-Making, and Religiosity

In the last 20 years spirituality and religiosity have undergone a renaissance of interest and have both been increasingly studied (Dein, 2014; Dhar et al., 2013). Spirituality is characterized as a complex, multidimensional construct that is apparent in an individual's beliefs, behaviours, and experiences (Fisher, 2011). In the literature, there are many definitions of spirituality. Some researchers view spirituality as a form of meaning-making, which has been defined as the ability to understand and make sense of life-events, self, and others (Frankl, 1946). Spirituality has also been defined as meaning in daily life (Armstrong, Watt, St. John, & Desson, 2019; Frankl, 1946). Meaning for children and youth includes openness to experience, hope for the future, agency over thoughts and behaviours, and a positive self-concept (Armstrong et al., 2019; Frankl, 1946). More specifically, the literature on logotherapy, explains that children find meaning through a positive self-worth. This self-worth is important because the children need to value themselves to be able to recognize their competency in taking responsibility which is followed by being able to choose meaningful actions (Baumeister & Wilson, 1996; Evans et al., 2005; Steger & Shin, 2012; Van Tongeren & Green, 2010). Moreover, openness to experience is another attribute that is essential for meaning- making (Frankl, 1946). Openness to experience helps the individual experience meaning in creative ways and allows them to perceive the joys of everyday life (Armstrong & Manion, 2015; Shantall, 1997). At the same time, other researchers view spirituality as the ability to connect to that which is sacred or the transcendent (Dhar et al., 2013). These two definitions are

not contradictory, as one of Frank's (2006) pathways to meaning involves "experiential values" or connecting with something greater than oneself—the transcendent, nature, or love of another. The transcendent is that which is outside of the self, and yet also is that which is within the self (Dhar et al., 2013). Pargament and colleagues (2013) synthesize spirituality and explain it as the search for meaning, the belief in a higher power, and finding joy and happiness in the day-to-day moments. Further, researchers such as Koenig, King, and Carson (2012), describe spirituality as the connection with the transcendent that can be within an organized religiosity, or within the self. Koenig and colleagues (2012) explain that spirituality is a continuous search for the divine, a higher being, the supernatural or a mystical force. They explain that 'spirituality' is an individualistic notion (as opposed to 'religiosity') due to the fact that it is focused on the values and subjective experience of the self. Moreover, these researchers explain that religiosity is a more formal and organized process, wherein an individual is in a community following specific rituals and rules that pertain to the specific faith with which they are involved.

Furthermore, on the topic spirituality, a qualitative study conducted by Gall, Malette, and Guirguis (2011), conveyed that there are seven themes that are found within the definition of spirituality. The themes they uncovered are the following: relationship with God or a higher power, core self, life perspective, connection with mystery, connection with the world, religiosity, and spirituality as meaningless. For example, participants explained spirituality as: a journey of self-reflection, or an element that is present within the core self of a person, or a guide that helps one live according to their values, or a personal and intimate relationship with a higher power, or a mystical force, or the universe, or other human beings, or the connection with religious belief, or the intention that one puts forward when they engage in religious behaviors. Other participants described spirituality as meaningless and/or negative (Gall et al., 2011). The researchers of this

study make a distinction between religion and religiousness. Religiousness is a reflection of different angles of religiosity (i.e., religious affiliation, organization, participation in religious practices, etc.; Gall et al., 2011). Consequently, regarding the definition of religion, the themes of religion as belief in God or a higher power, life perspective, pathway to spirituality, religiousness as negative, and extrinsic value were recognized (Gall et al., 2011). The respondents identified religion as being associated with traditional religious behaviours, laws, and rules, such as praying, engaging in rituals, and attending and participating in places of worship. Regarding the belief in God or a higher power, the respondents appeared to connect the belief in God with the active participation in religious rituals, as the connection was seen to be enhanced by prayer or attending religious ceremonies (Gall et al., 2011). Evidently, spirituality seems to have multiple definitions in the literature. For the present work, one of the main definitions that will be focused on is Frank's (2006) pathways to meaning involving daily meaning-making and "experiential values" or connecting with something greater than oneself—the transcendent, nature, and love of another. This is accompanied by Dhar and colleagues' (2013) definition of the transcendent as that which is outside of the self, and yet also it that which is within the self (Dhar et al., 2013), and Koenig, King, and Carson's (2012) description of spirituality as the connection with the transcendent that can be with an organized religion, or within the self. Lastly, spirituality has received much attention in the past two decades due to its positive association with wellbeing (Fisher, 2011; Koenig et. al., 2012). Spirituality has seemed to provide hope, optimism, increased life satisfaction, perceived social and emotional support, a healthy lifestyle, bringing a sense of meaning to one's life, and developing self-esteem (Dein, 2014).

For the purpose of this thesis, grounded in the existing literature presented here, spirituality is defined in the following terms:

- Spirituality as
    - a connection to the transcendent (transcendent spirituality), and
    - religiosity as explained by Koenig and colleagues (2012), namely as a following of specific rules and rituals of a faith tradition;
- Spirituality as daily meaning in life (existential spirituality) as explained by Frankl (1946).

Spirituality as a Coping Mechanism

Researchers explain that spirituality can act as a coping mechanism to make sense of the stressors an individual is experiencing, especially in relation to anxiety (Pargament, et al., 2013; Soenke, Landau, & Greenberg, 2013). Other researchers have summarized the significance of religious communities and how they can be a source of support, allowing people to connect to each other in times of difficulty (Pargament et al., 2013). Whether it is spirituality or religiosity specifically, there are consistent findings in the literature that religiosity and spirituality are important for overall well-being (Fisher, 2011). As previously mentioned, research suggests that religiosity and spirituality are both positively correlated to positive wellbeing. Spiritual appraisals and spiritual coping behaviors function as mediating factors in the process of coping with stress. A Spiritual Framework of Coping by Gall and collegues (2005) was developed based on the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) and incorporates its basic principles and structural components. The Transactional Model of Stress and Coping serves as a starting point for understanding research focused on religiosity and spirituality (Gall, 2005). Gall and Guirguis (2013), examined the literature to specify the role of religiosity and spirituality in relation to physical and psychological health. In regard to psychological health, religiosity and spiritual coping was observed to enhance positive mental health, PTG, and overall quality of life, and decrease symptoms of mental illness, such as depression, anxiety and post-

traumatic stress, as well as decrease one's perception of stress (Gall & Guirguis, 2013). With regards to physical health, religiosity and spiritual coping were positively correlated with higher perceived health, lower complications after cardiac surgery, and lower mortality rates (Gall & Guirguis, 2013). Thus, it is evident how spirituality and religiosity may be critical when considering a person as a whole. There is plenty of research pointing to the positive aspects of spirituality and religiosity; yet spirituality and religiosity have not been extensively examined regarding youth, particularly not for those experiencing traumatic growth and loss. The following section outlines some of the current research regarding spiritualty and religiosity in youth.

Spirituality in Youth

Spirituality and meaning- making have been seen to improve healthy identity development in youth (Bronk, 2011). Bronk (2011) followed eight youths to examine their sense of purpose and their identity development over five years. He found that the development of purpose and meaning in the youths' lives was associated with healthy development of identity and in turn, the development of healthy identity reinforced purpose and meaning (Bronk, 2011). This is one of the many potential benefits of spirituality in youth.

Another study (Michaelson et al., 2019) that specifically looked at spirituality in youth assessed the youths' connection to the self, others, nature, and the transcendent. Researchers analyzed reports from the 2014 Health Behaviour in School-aged Children (HBSC), which included 21,173 participants from Canada, 4339 participants from England and 5603 participants form Scotland. Researchers found strong associations between positive mental health and the connection to the self, others, nature, and the transcendent. This research aligns with the previous research on healthy youth development in relation to the development of purpose and meaning (Bronk, 2011).

Spirituality, as in making- meaning, has also been found to be negatively correlated with depressive symptoms and health risk behaviours such as smoking, drinking, and substance use (Armstrong & Manion, 2015; Cotton et al., 2005). Specifically, if youth experienced a sense of meaning in extracurricular activities, they reported fewer health risk behaviours (Armstrong & Manion, 2015). Further, fewer suicidal behaviours and depressive symptoms were reported, as well as higher self-reported self-esteem and social support (Armstrong & Manion, 2015). When Cotton et al. (2005) explored meaning, existential spirituality, religiosity, and the belief in Higher Power spirituality in relation to youth depressive symptoms and health-risk behaviours, such as smoking, drinking, and substance use, they found that existential well-being and religious well-being were significantly associated with fewer self-reported depressive symptoms and health risk behaviours. Moreover, in other studies, spirituality has been seen to increase positive mental health outcomes such as a sense of hope, optimism, and gratefulness (Cotton et al., 2005). In fact, some researchers argue that spirituality and spiritual health are essential, fundamental dimensions in people's overall well-being, potentially affecting all other dimensions of their health such as physical, psychological, emotional, and social (Dhar et al., 2013; Fisher, 2011). Within this research, there is a conspicuous lack of studies concerning spirituality for youth who have experienced TGL.

Trauma and Spirituality

Spirituality has also been explored in regard to trauma (Florez et al., 2018; Harris et al., 2018). Meaning-making spirituality and connection to the transcendent spirituality have been examined in relation to post-traumatic stress disorder (PTSD) in a group of African American women who had previously attempted suicide. Existential spirituality — meaning in daily life — was found to mediate the relation between levels of PTSD symptoms severity, hopelessness, and

suicidal ideation over time; however, religious well-being did not act as a mediator between PTSD and suicidal ideation. By contrast, in another study examining veterans suffering from PTSD, transcendent spirituality was found to be potentially more helpful in treating symptoms of PTSD than existential spirituality (Harris et al., 2018). In this study, an intervention called Building Spiritual Strength (BSS) was used to address spiritual concerns in trauma survivors, including relationship with a Higher Power, forgiveness, and theodicy (the problem of evil). An existential treatment was also administered. Post-treatment assessment showed that both types of treatment significantly reduced symptoms of PTSD; however, the BSS treatment appeared to be potentially more effective in treating distress in relationship with a Higher Power (Harris et al., 2018). This study exhibits the importance of spirituality in treating trauma but it was not analysed/researched with youth.

Additionally, other researchers have demonstrated how religiosity and spirituality can be mechanisms in promoting resiliency and adaptive coping in the face of TGL (Werdel et al., 2014). Through religion and a belief in a Higher Power and meaning- making is where individuals are able to interpret events that occur. Researchers explain that belief in a Higher Power and meaning-making are what help people understand events that occur and inform them of what they can do in response to these events. Those beliefs are especially important and active in times of difficulty and adversity. Werdel and colleagues (2014) explain that belief in a Higher Power and existential beliefs can help individuals find purpose and peace in the face of difficulty. However, meaning and belief in a Higher Power have not been examined with youth who have experienced TGL. Nonetheless, there is some research on PTG in youth, which is a topic covered in meaning-based and PTG literature.

Post-traumatic Growth (PTG) in Youth

PTG is the development of positive growth after the experience of adversity. People who experience this growth "become stronger with a better sense of resiliency and wisdom, become more compassionate and better in relationships, tend to re-evaluate their priorities, have increased appreciation for life, and undergo positive changes in their spiritual beliefs" (Wong, 2019). Looking at PTG from the lens of Second Wave Positive Psychology (PP2.0), PP2.0 offers a strong theoretical framework to address the needs of children and youth who have suffered from TGL. PP2.0 recognizes that for every negative there is a positive (Ivtzan, Lomas, Hefferon, & Worth, 2015; Wong, 2019) - for every trauma there can be a potential growth. Positive motivation and meaningful growth can also be derived as a result of challenges, when challenges are perceived as opportunities for growth as opposed to helplessness (Ivtzan et al., 2015; Wong, 2019). It is important to note that PP2.0 does not diminish the negativity of an experience - the 'yin, of the yang', so to speak. However, it does account for both sides and allows space for both to be explored. Before the advent of positive psychology, there was a great focus on psychological illness as Carl Rogers explains: "In my early professional years I was asking the question : How can I treat, or cure, or change this person? Now I would phrase the question in this way: How can I provide a relationship which this person may use for his own personal growth?" (Rogers & Kramer, 2012). However, modern psychology is now more inclusive of the strength and resourcefulness of humans even in their most challenging times (Frankl, 1946; Wong, 2019).

Logotherapy

Logotherapy theory is an existential, meaning-based approach that was developed by Viktor Frankl. Children and youth appear to be naturally inclined to make meaning of their experiences (Hayes et al., 2007; Roehlkepartain et al., 2005). Consistent with Frankl's (1946)

logotherapy theory on meaning in youth, a high number of youths believe that spending time in nature, praying, and being with others can help them cope with loss (Hayes et al., 2007). In logotherapy, Frankl explains that people's ultimate gift is the freedom to make choices under any given circumstance and that with this choice, there comes responsibility. Viktor Frankl speaks from his own experience in a concentration camp and explains that, "Everything can be taken from a man but one thing: the last of the human freedoms—to choose one's attitude in any given set of circumstances, to choose one's own way" (Frankl, 1946). Logotherapy has a foundation of accountability and responsibility to the self to make good, meaningful choices. The concept of accountability and responsibility to the self is essential for growth as it allows one to believe that one is capable of change and has the potential for positive development. Furthermore, another principle of logotherapy is that one has the ability to find meaning in one's life under all circumstances, whether in joyful or mournful circumstances. Each person has the ability to make meaning behind each circumstance that they may experience. Logotherapy provides three pathways to meaning: 1) by creating a work or doing a deed; (2) by experiencing something or encountering someone; and (3) by the attitude we take toward unavoidable suffering (Frankl, 1946).

Logotherapy provides a hope - a light of some sort - in a very dark time. Youth who have experienced TGL may be able to find this light through finding meaning in their experience of loss. Through the pathways of meaning, young people can gain a perspective in their loss that can lead to an openness to new possible experiences, and hope for the future (Erikson, 1968; Markstrom & Kalmanir, 2001; VanderVen, 2008). Finding meaning through these pathways has been associated with mental health (e.g., Canadian Mental Health Association, 2018; Frankl, 1946). Loss of hope is a loss of meaning as hope fosters resiliency during difficult circumstances.

Precisely, the freedom to respond to any situation - to choose and to change our attitudes and actions - allows for hope and meaning. Frankl explains that for a person to reach one's goals and to overcome challenges, one must have a reason to do so - one's "what for" (Frankl, 1946). In the literature, hope involves the belief that one can reach future goals, an belief that bad times will improve, that life will be good, and that one's own life matters (Frankl, 1946; McDermott & Snyder, 2000; Search Institute, 2009; Spirito, Williams, Stark, & Hart, 1988).

Another very essential concept of logotherapy is the belief that each person is singular, irreplaceable, and can make a unique contribution (Frankl, 1946; Wong, 2017). Connected to this concept, the literature reflects that a positive self-worth involves liking and feeling proud of oneself given one's uniqueness, feelings of being valued by others, seeing oneself as adequate in comparison to others, and feeling worthy of happiness (Branden, 1994; Search Institute, 2013).

In one qualitative study, for late adolescents who experienced the death of a family member or friend, more than half of the participants reported experiencing deeper appreciation of life, greater caring for loved ones, strengthened emotional bonds with others, and increased emotional strength as a result of the grief experience (Oltjenbruns, 1991). Additionally, participants reported better communication skills as a result of their bereavement. Further, Brewer and Sparkes (2011) explored the positive changes and themes of PTG in youth who had experienced the loss of a loved one; themes included having a positive outlook, gratitude, appreciation of life, living life to the fullest, and altruism. Although research exists on PTG and bereavement, few researchers have focused exclusively on whether there is greater PTG with the use of religiosity and spirituality as coping mechanisms.

Limitations in the Literature

Many studies have explored TGL (e.g., Mannarino & Cohen, 2011; Werdel et al., 2014). Moreover, many studies have examined the potentially positives of spirituality with youth (Armstrong & Manion, 2015; Bronk, 2011; Cotton et al., 2005; Michaelson et al., 2019). Further, numerous studies have examined spirituality and coping following the experience of trauma in different, non-youth, populations (Florez et al., 2018; Harris et al., 2018; Starnino & Sullivan, 2016). Additionally, many studies have examined PTG following the experience of TGL (Brewer & Sparkes, 2011; Oltjenbruns, 1991). However, the relation between spirituality and PTG in youth who have experienced TGL has not been extensively studied. There is a gap in the literature regarding the coping mechanisms of religiosity and spirituality in youth who have experienced TGL that can lead to PTG. Furthermore, the relation between spirituality and mental health has been previously studied, but there is another literature gap in describing the effects of TGL and the mediating role of spirituality on mental health.

The existing literature does not emphasize the spiritual coping strategies that a child uses after the death of a loved one to attain PTG. There is also scarce research regarding the relationship between child and youth participation in religious rituals and practices after the death of a loved one. Most of the data have been obtained only from parent reports, rather than self-reports. In one study, parents' perceptions of their children's responses differed significantly from responses reported by older school-age children and adolescents (Guite et al., 2004). As such, it is necessary to also obtain data directly from children and youth to have a clear insight on what their thoughts and feelings are after the death of their loved one. In fact, children as young as six can accurately self-report on their own well-being (Armstrong, Watt, St. John, & Desson, 2019). The research that identifies differences in religious and spiritual coping strategies

used by children while taking into account PTG is also lacking. Overall, the relationship between child and youth spiritual coping strategies, grief, mental health, and PTG has not been examined in children and youth who have experienced TGL. The present study addressed many of these gaps.

Current Study

The purpose of the current study was to understand if spirituality can be helpful for youth who have experienced TGL. Specifically, does spirituality act as a coping mechanism in response to TGL?

- Does spirituality (connection to the transcendent and daily meaning) mediate the relationship between TGL symptoms and PTG?
- Does spirituality mediate the relationship between TGL symptoms and mental illness symptoms?
- TGL and spirituality were also explored as independent predictors of PTG and mental illness symptoms. Previous research (e.g., Bronk, 2011; Cotton et al., 2005; Michaelson et al., 2019; Florez et al., 2018; Harris et al., 2018; Starnino & Sullivan, 2016; Armstrong & Manion, 2015) supports these relationships. If the current study also supports these relationships, this adds credibility to the above mediation analyses that this study contributes to the research literature.

As noted, for the purpose of this research, spirituality was defined as meaning in daily life (Armstrong, Watt, St. John, & Desson, 2019; Frankl, 1946), as well as the belief in a Higher Being/connection to the transcendent (Dhar et al., 2013). Meaning for children and youth includes openness to experience, hope for the future, agency over thoughts and behaviours, and a positive self-concept (Armstrong et al., 2019; Frankl, 1946), while connection to the

transcendent includes a relationship of self with someone beyond the human level (i.e., transcendent reality or God). This involves faith towards, adoration and worship of, the source of Mystery of the universe (Dhar et al., 2013):

- In the current proposed study, it was predicted that religiosity and connection to the transcendent will mediate the relationship between TGL symptoms and PTG.
- Further, it was predicted that meaning in daily life would mediate the relationship between TGL symptoms and PTG.

Based on the above hypotheses, it was predicted that spirituality, defined in the two ways above, would mediate the relationship between TGL symptoms and PTG. Thus, spirituality may be the mechanism through which traumatic growth occurs. As described in the research literature (Brewer & Sparkes, 2011; Oltjenbruns, 1991), spirituality and TGL symptoms are also expected to be independent predictors of PTG.

The literature on mental health described previously (e.g., Armstrong & Manion, 2015; Bronk, 2011; Cotton et al., 2005; Michaelson et al., 2019), suggests that spirituality is an important protective factor for mental health.

- In the current proposed study, it was predicted that religiosity and connection to the transcendent will mediate the relationship between TGL symptoms and mental illness symptoms.
- Further, it was predicted that meaning in daily life would mediate the relationship between TGL symptoms and mental illness symptoms.

Given that spirituality is protective, it is expected that, in the face of TGL, spirituality may negate the relationship between TGL symptoms and symptoms of mental illness.

As described in the research literature (Florez et al., 2018; Harris et al., 2018; Starnino & Sullivan, 2016), spirituality and TGL symptoms are also expected to be independent predictors of mental illness symptoms.

Youths were considered as those aged 17 to 25, according to national definitions (Government of Canada, 2017). Conducting this research could potentially be used as a springboard for early intervention approaches for youth who have experienced TGL.

Methods

In this study, a quantitative research design was used involving linear hierarchical regressions to explore the relation between TGL symptoms with post traumatic growth or mental illness symptoms as outcome variables, mediated by spirituality. Firstly, to explore if the mediation analysis should be carried out, the correlations between traumatic symptoms, the two types of spirituality defined previously, PTG, and mental illness symptoms were carried out. Based on the results of the correlations, hierarchical multiple regressions were conducted, as appropriate. Simple regression analyses were also conducted to explore spirituality and TGL as independent predictors of PTG and spirituality, in support of previous research. Even though regression analyses utilize a predictive direction, causal assumptions are not made. The research design involved self-selection in response to an advertisement and a between-subjects design. Effect sizes were presented. The effect size was calculated through the Pearson r coefficient throughout all the correlations in the multiple regressions. All measurements were through self-report. *p* was considered significant at less than .05.

Participants

The researcher predicted the need for 50 participants, as calculated using an online sample size calculator to obtain a large effect size with the five variables used to conduct the regression. As noted, participants were between the ages of 17 and 24 who have experienced the loss of a loved one through death. The only exclusion criteria were if a person did not experience loss or if a person was unable to read English as the survey was to be presented in English only. Data collection was conducted following ethical approval (see Appendix A). For the original recruitment script, see Appendix B. The original intended sample was however modified, given difficulties conducting research in the site, given COVID-19 restrictions. Due to recruitment

difficulties, the researcher contacted community churches and advertised via social media such as Facebook, Instagram, and WhatsApp to recruit participants using a recruitment flyer (see Appendix C). After excluding entries that did not have any responses after completing the consent form, there were 47 participants. A compensation to the churches was offered in the form of a virtual mental health presentation concerning PTG and resiliency based on the literature. Participants were asked to complete an online self-report questionnaire on a survey database, namely SurveyMonkey, consisting of the measures outlined below.

Procedure

As noted, participants were recruited from community churches and through social media. If youth were interested in participating in the study, they were directed to a survey database, SurveyMonkey, where the survey took place. Participants were first presented with an online informed consent form (see Appendix D). The informed consent notified the participants of the purpose of the study, which was to examine the role of spirituality as a coping mechanism in response to TGL and PTG. The study involved a series of brief questionnaires that took approximately 15 minutes to complete online. If the participant was under 18 years of age, a parent had to provide consent for the participant through a consent form with adaptable language appropriate for young participants (see Appendix E). The consent forms informed the participant that this survey will involve some psychological and social risks, and that they have the right to refuse to answer any of the questions. Once the participants understood the information and the nature of their participation in the study, they were able to click “I agree” to indicate that they were willing to participate in the study, or “I disagree” if they did not want to complete the survey. If participants selected “I agree,” they were directed to the first survey which was the Traumatic Grief Inventory (TGI), while if they selected “I disagree,” they were directed to the

end of the survey. A participant had the right to withdraw from the study at any time. Participants were also asked demographic questions: age, gender, and country of residency (see Appendix F).

Following the demographic questions, participants were taken through a series of brief questionnaires that they completed by reflecting about their experience with TGL, spirituality, PTG, and mental health. In this respect, this study was a retrospective study about the experience of grief, as well as current coping mechanisms, PTG, and well-being. The participants responded to the Traumatic Grief Inventory-Self-Report Version (TGI- SR) to measure their grief experience (see Appendix G), the Spiritual Coping Strategies Scale (SCSS) to measure their spiritual and religious coping mechanisms (see Appendix H), Post-Traumatic Growth Inventory-Short Version (PTGI- SV) to measure PTG (see Appendix I), the Child Identity and Purpose Questionnaire (ChIP) to measure daily meaning in life (see Appendix J), and Interactive Symptom Assessment (ISA) to measure mental health of participants (see Appendix K). Participants were informed that all data will be stored anonymously on a password protected storage device. The data will be kept for five years at which point the data will be securely erased. Anonymity was protected by the platform SurveyMonkey where participants' identities were not recorded. Participants who may have felt any distress or anxiety after participating in this study were encouraged to contact the Ottawa Distress Center and the phone number was provided in the debriefing form. If they withdrew from the study, all information they provided was immediately destroyed.

Measures

Demographic information

Youth were to complete a form that included their age, gender, and country of residency (see Appendix F). Participants' ages varied between 17 and 25 with 75% of responses being from participants between ages 21 and 24 (see Figure 1). Gender was categorised as "male, female, and other" with 70% of participants reporting as females and 30% reporting as males (see Figure 2). Country of residency was added in case some participants heard of the study while residing in other countries (due to social media use for advertisement) with 80% of participants reporting country of residency as Canada and 20% reporting country of residency as Egypt (see Figure 3).

Figure 1.

Age Distribution by Frequency

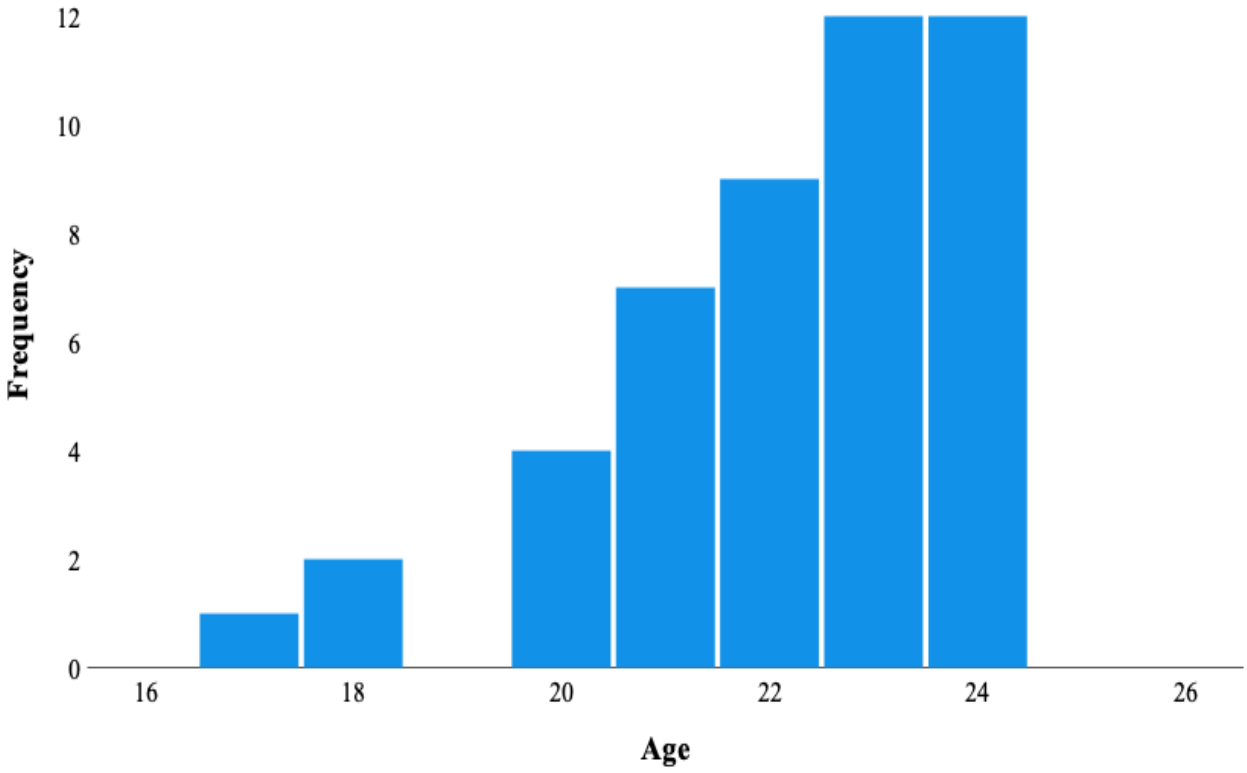


Figure 2.

Gender Distirbution by Frequency

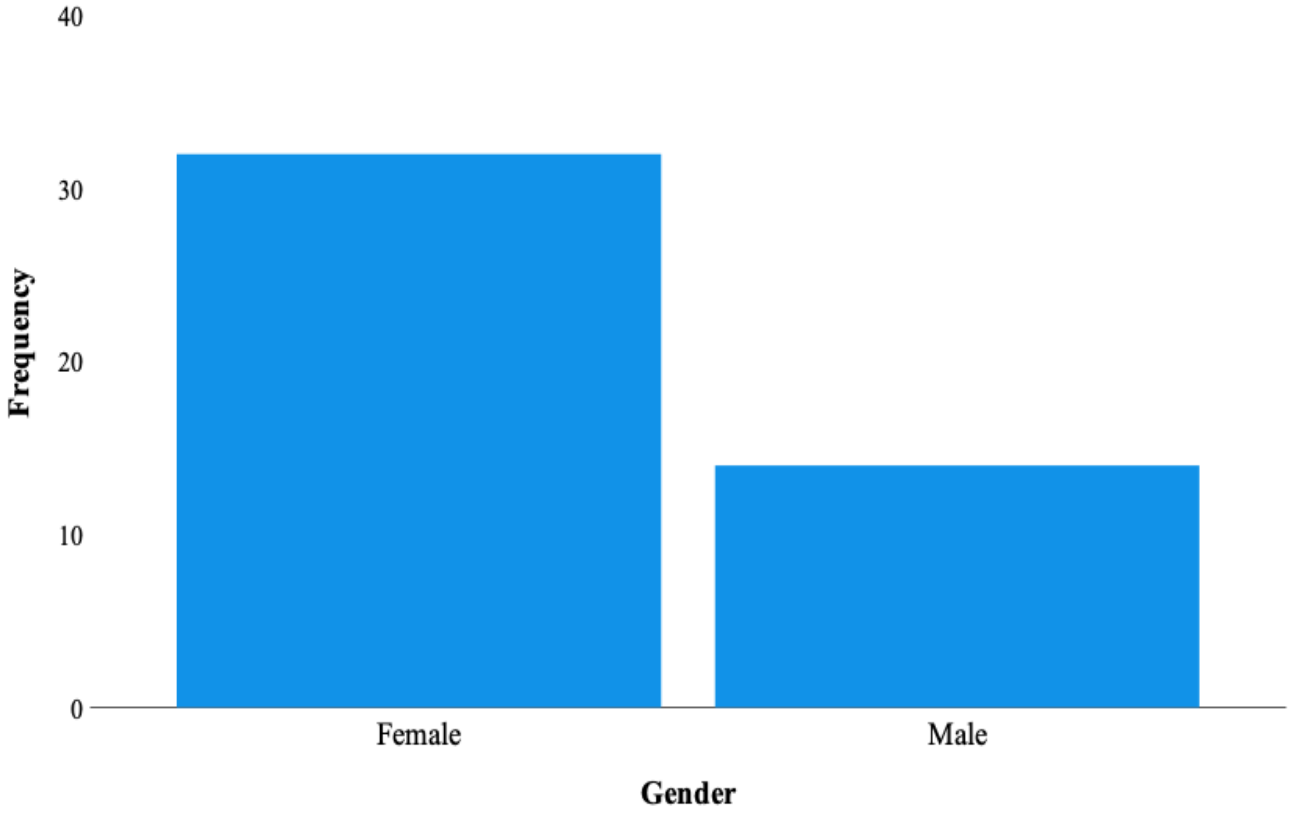
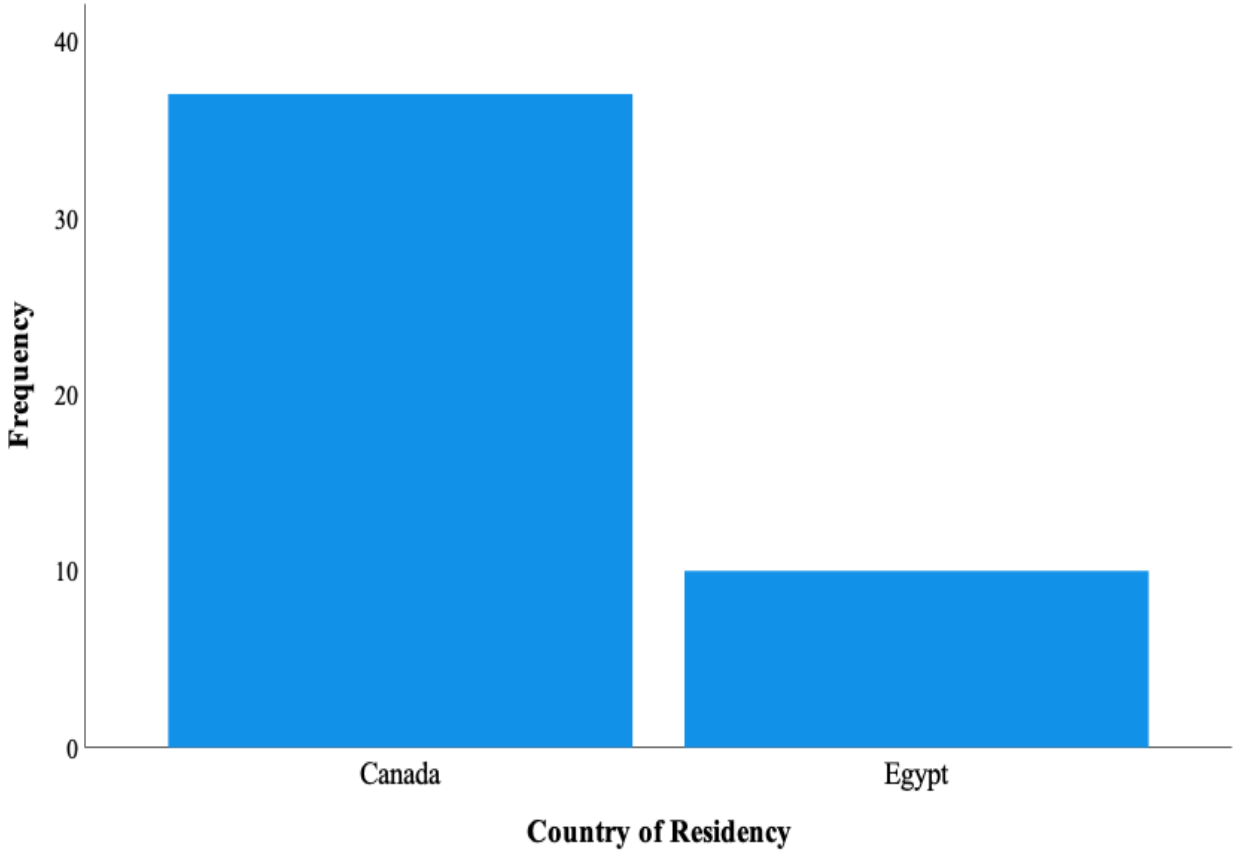


Figure 3.

Country of Residency Distribution by Frequency



Predictors

Grief Measure

The Traumatic Grief Inventory – Self-Report Version (TGI- SR) was used to measure the experience of grief (Boelen & Smid, 2017). Items utilized a five-point scale ranging from 0 (*never*) to 5 (*always*). Items on the measure include retrospective statements such as "I found it difficult to trust others", "I felt confusion about my role in life, or a diminished sense of identity", and "I experienced difficulty to move on with my life (e.g., pursue friendships, activities)". A total TGI-SR score, providing an index of the severity of grief, can be obtained by summing the 18 items. In previous studies, this measure has demonstrated internal consistency of .95 and concurrent validity, as well as preliminary evidence of construct and discriminant validity (Boelen & Smid, 2017). For the current sample, the internal consistency reliability using Cronbach's alphas was .94.

Daily meaning

To measure meaning and purpose in a participant, The Child Identity and Purpose Questionnaire (ChIP) was used (Armstrong, Watt, St. John, & Desson, 2019). This measure was developed to measure meaning in daily life, as assessed by a sense of personal agency, self-concept, hope for the future, and openness to experience. The questionnaire involves 15-items that measure the previously mentioned concepts, and participants respond using a 10-point sliding scale. The measure demonstrated credibility in past research through good perceived face validity, content validity, and internal consistency reliability was .82 (Armstrong et. al, 2019). For the current sample, the internal consistency reliability using Cronbach's alphas was .85.

Spiritual coping strategies

Spiritual and religious coping strategies were measured with the Spiritual Coping Strategies Scale (SCSS) (Baldacchino & Buhagiar, 2003). The 20-item instrument is composed of two subscales: Religious coping strategies (9 items) and Spiritual coping strategies (11 items). Participants rate each item on a 4-point scale ranging from 0 (*never used*) to 3 (*used often*), with higher scores indicating greater use of spiritual and religious coping strategies. Baldacchino and Buhagiar (2003) reported Cronbach's alphas of .82 for the religious coping strategies subscale and .74 for the spiritual coping strategies subscale, and test-retest reliabilities of r = .47 after a 3-week interval. Construct validity of the SCSS is supported by a correlation of .40 between the original SCSS and the Spiritual Well Being Instrument in adults (Baldacchino & Buhagiar, 2003). Children between ages 8 and 18 verbalized and demonstrated appropriate understanding of the instrument's items. For the current sample, the internal consistency reliability using Cronbach's alphas was .88.

Outcomes

PTG and resiliency

PTG was measured using the Post-Traumatic Growth Inventory –Short Version (PTGI-SV) which was developed to measure participants' PTG in response to a life altering stressful life event (Arpawong et al., 2016). It is an 8-item inventory that has been used among diverse adolescent and adult samples previously (Arpawong et al., 2016). The internal consistency reliability (Cronbach's alpha) for the mean of the eight items administered in a sample of high-risk, ethnically diverse, early emerging adults was .81. For the current sample, the internal consistency reliability was .82. Items utilized responses ranging from 1 (*Negative change), 2 (No*

change), and 3 (*Positive change)*. Examples of items on the scale include: "appreciation for value of my life," "direction for my life," and "handling my difficulties."

Mental Health

To measure mental health and functional well-being in participants, the Interactive Symptom Assessment (ISA) was used to assess wide variety of internalizing and externalizing domains (Armstrong et al., 2020). The questionnaire is composed of 15-items that measure DSM-V symptoms of common concerns (depression, anxiety, obsessions, attentional and behavioural issues). Participants answer using a 10-point scale. Through the current study, the measure was found to demonstrate credibility, as measured by face validity, content validity, and Cronbach's internal consistency reliability was .83 for the 12-item short form (Armstrong et al., 2020). Further, the ISA demonstrated good criterion-related validity, as scores on this measure were significantly associated with self-esteem and mental health. For the current sample, the internal consistency reliability using Cronbach's alphas was .83.

Results

Data screening and cleaning

Data was collected from 56 participants in total. Incomplete data and responses that showed a lack of care in completion were removed. The data of 9 participants were removed because they consented to the study but did not provide any answers to the questionnaires. Participants who completed the questionnaire in less than 30 seconds were excluded as the questionnaire needed at least nine minutes to answer carefully. Data screening and cleaning was carried out and there were a few missing responses that were found for some of the items. The mean was carried out for each participant and the few missing values were replaced. Missing values analyses were run in order to determine that less than 5% of responses were missing for each question. Little's MCAR test was not significant, meaning missing data were missing at random. Due to the manner the questionnaires were entered on SurveyMonkey, the Traumatic Grief Inventory – Self-Report Version (TGI- SR), the Spiritual Coping Strategies Scale (SCSS), and the Post-Traumatic Growth Inventory – Short Version (PTGI- SV) had to be reverse coded due to the direction of responses. Items number 2, 6, 7, 9, 10, and 12 had to be reverse coded on the Child Identity and Purpose Questionnaire (ChIP), and items number 1, 4, 5, 6, 7, and 13 had to be reverse coded on the Interactive Symptom Assessment (ISA).

Data analysis

The data analysis for this study was conducted using the Statistical Packages for the Social Sciences version 27.0 (SPSS). In order to test for outliers, z-scores were computed on the total scores for the TGI, PTGI, SCSS, Ch.I.P., and I.S.A.. All scores fell below a score of 3.3 and therefore it was concluded there were no outliers. Normality was tested using skewness and kurtosis in SPSS and using normality graphs (see Figures 3, 4, 5, 6, 7). Some normality

histogram graphs appeared to be positively skewed, such as that representing PTGI data. However, the PTGI data was expected to be slightly positively skewed due to the construct it intends to measure (the growth from trauma). A normal distribution falls between +2/-2 for skewness and kurtosis (Field, 2013), and the current dataset falls into these parameters (see Table 1). Based on the z-scores and the skewness and kurtosis, it can be assumed that the current dataset is normally distributed. After data cleaning, the final sample size consisted of 47 participants. According to central limit theorem, this sample was greater than 30, and thus appropriate to assume that the sampling distribution is normal and appropriate for use in parametric statistics. As such, it was appropriate to proceed with the planned statistical tests.

Figure 3.

Distribution of the total responses of TGI by Frequency

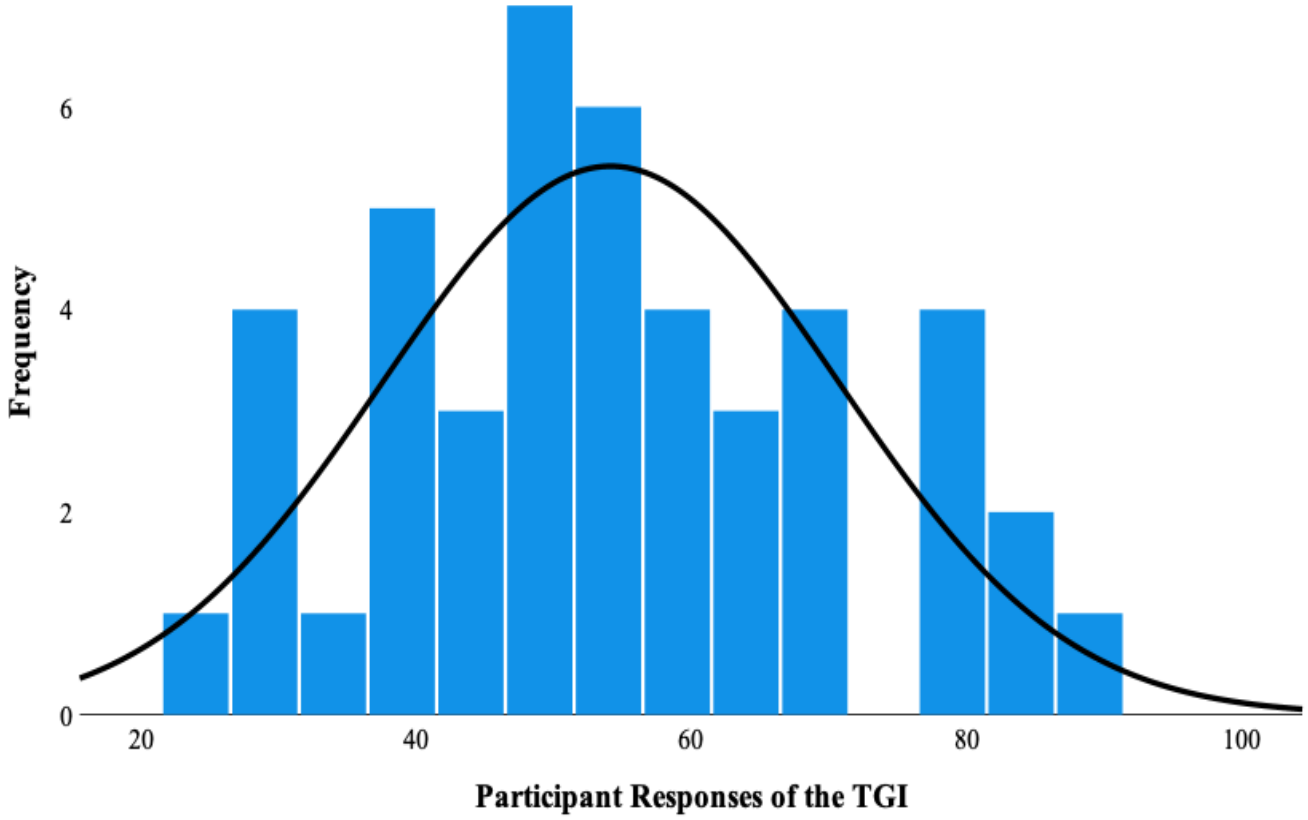


Figure 4.

Distribution of the total responses of SCSS by Frequency

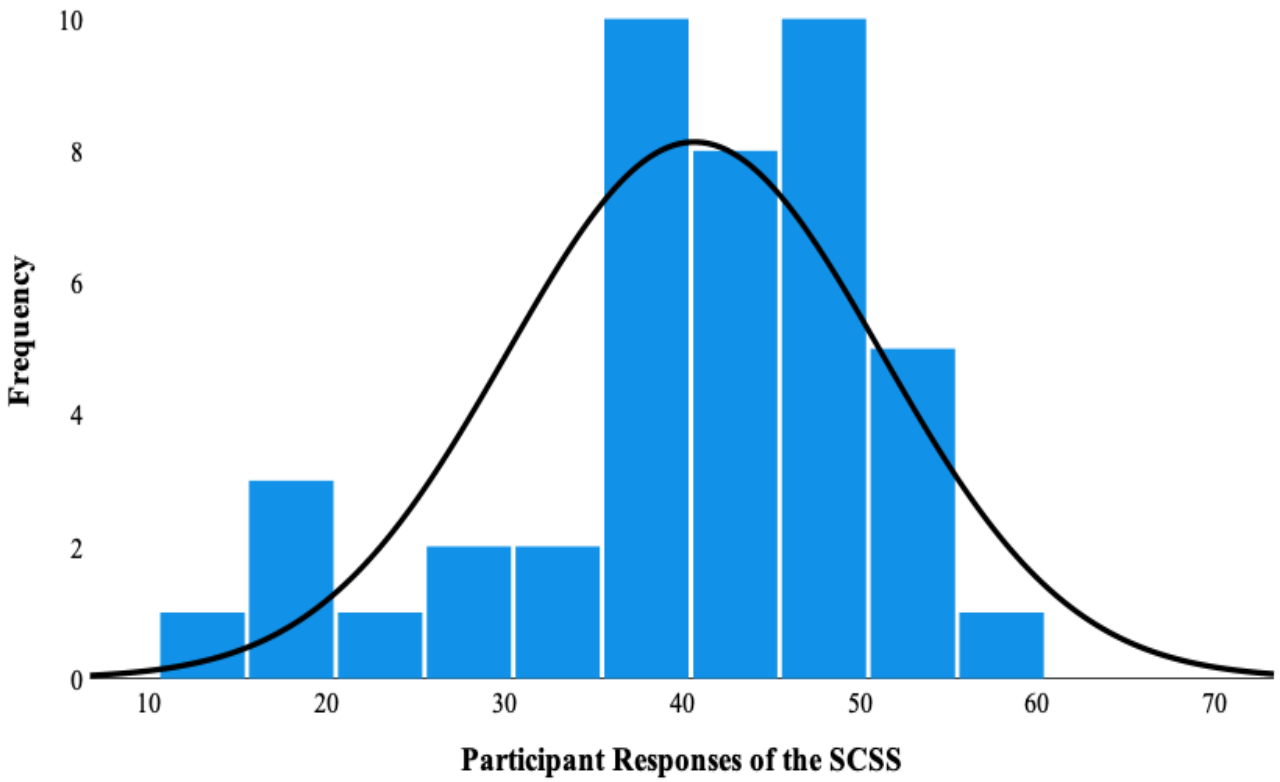


Figure 5.

Distribution of the total responses of PTGI by Frequency

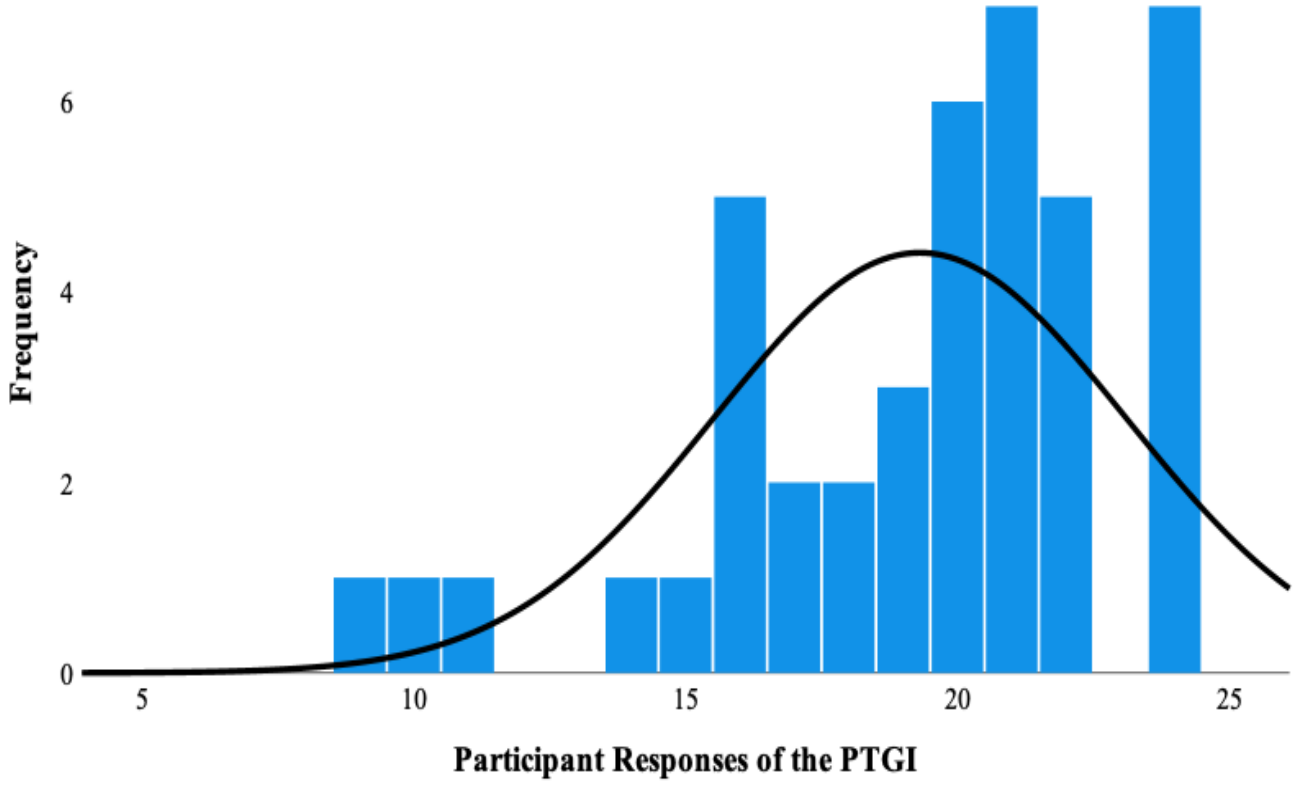


Figure 6.

Distribution of the total responses of ChIP by Frequency

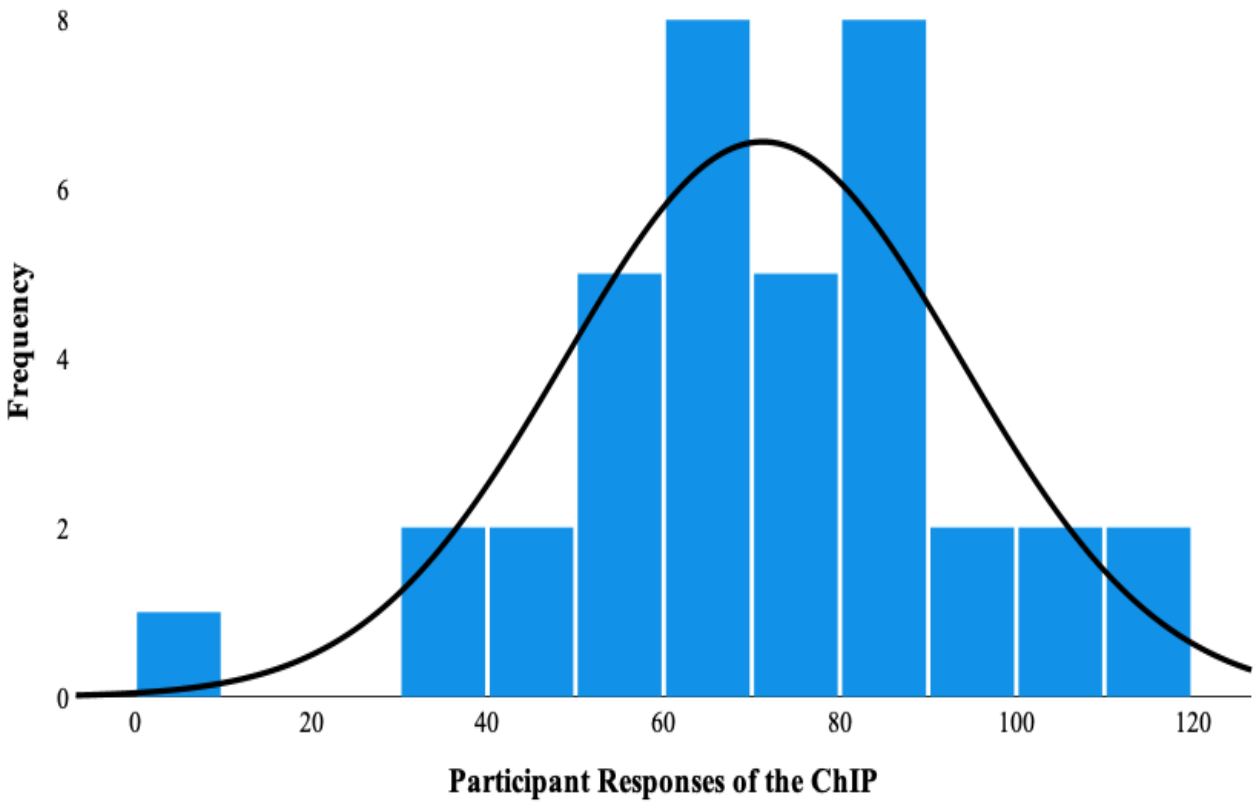
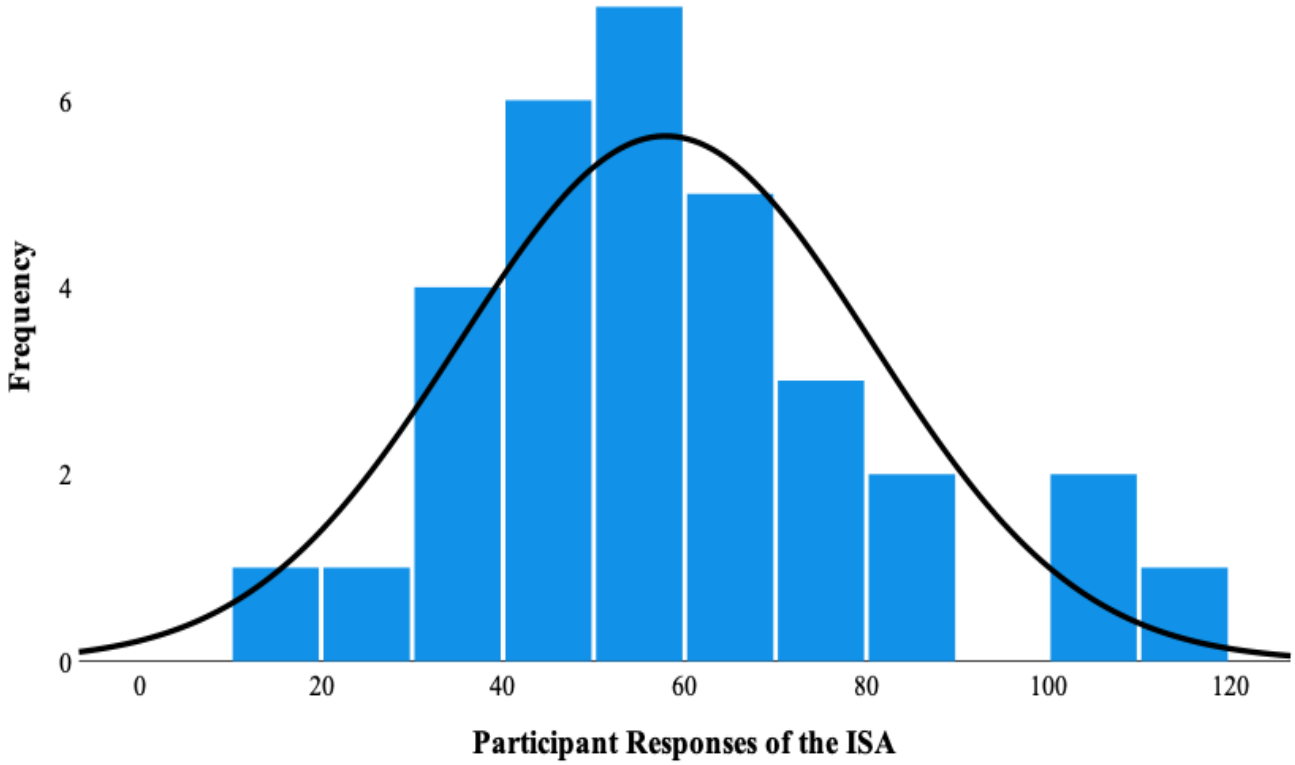


Figure 7.

Distribution of the total responses of ISA by Frequency



PTG and spirituality

- Does spirituality (as in connection to the transcendent and religiosity) mediate the relationship between PTG and TGL symptoms?

TGL (*M*= 54.16, *SD*= 16. 57) and spirituality (*M*= 40.70, *SD*= 10.55) were both correlated with PTG (*M*= 19.31, *SD*= 3.80) but spirituality and TGL symptoms were not correlated (see Table 1 for descriptive statistics and Table 2 for correlations). Therefore, a hierarchical regression was not conducted (see Figure 13 for predicted model).

Table 1.

Means and Standard Deviations for TGI, SCSS, PTGI, ChIP, and ISA

Measure	*M*	*SD*	Minimum	Maximum	Skewness		Kurtosis	
						SE		*SE*
TGI	54.16	16.57	24.00	88.00	.22	.35	-.65	.70
SCSS	40.70	10.55	13.00	58.00	-1.06	.36	.71	.71
PTGI	19.31	3.80	9.00	24.00	-.97	.37	.72	.72
ChIP	71.24	22.50	6.00	111.00	-.41	.39	.94	.76
ISA	57.91	22.73	17.00	118.00	.84	.41	1.01	.81

Table 2.

Correlations for TGI, SCSS, PTGI, ChIP, and ISA

Measure	TGI	SCSS	PTGI	ChIP	ISA
TGI	-				
SCSS	-.07	-			
PTGI	-.34*	.47**	-		
ChIP	-.56**	.17	.37*	-	
ISA	.40*	-.23	-.49**	-.70**	-

Note. * = $p<.05$, ** = $p<.001$

However, a simple linear regression was run to determine the direction of the correlation between spirituality and PTG, to support past literature that spirituality promotes PTG (Florez et al., 2018; Harris et al., 2018). The simple linear regression was conducted with spirituality as the independent variable and PTG as the outcome variable. It resulted in a statistical significance, $R^2 = .223$, $F(1, 40) = 11.495$, $p < .05$; adjusted $R^2 = .204$ meaning that spirituality, defined as religiosity and connection to the transcendent, predicts PTG (see Figure 8). Connection to the transcendent and religiosity explained 47% of the variance in PTG (see Table 3 for more information).

Figure 8.

Regression Scatterplot of PTG and Spirituality (connection to the transcendent and religiosity)

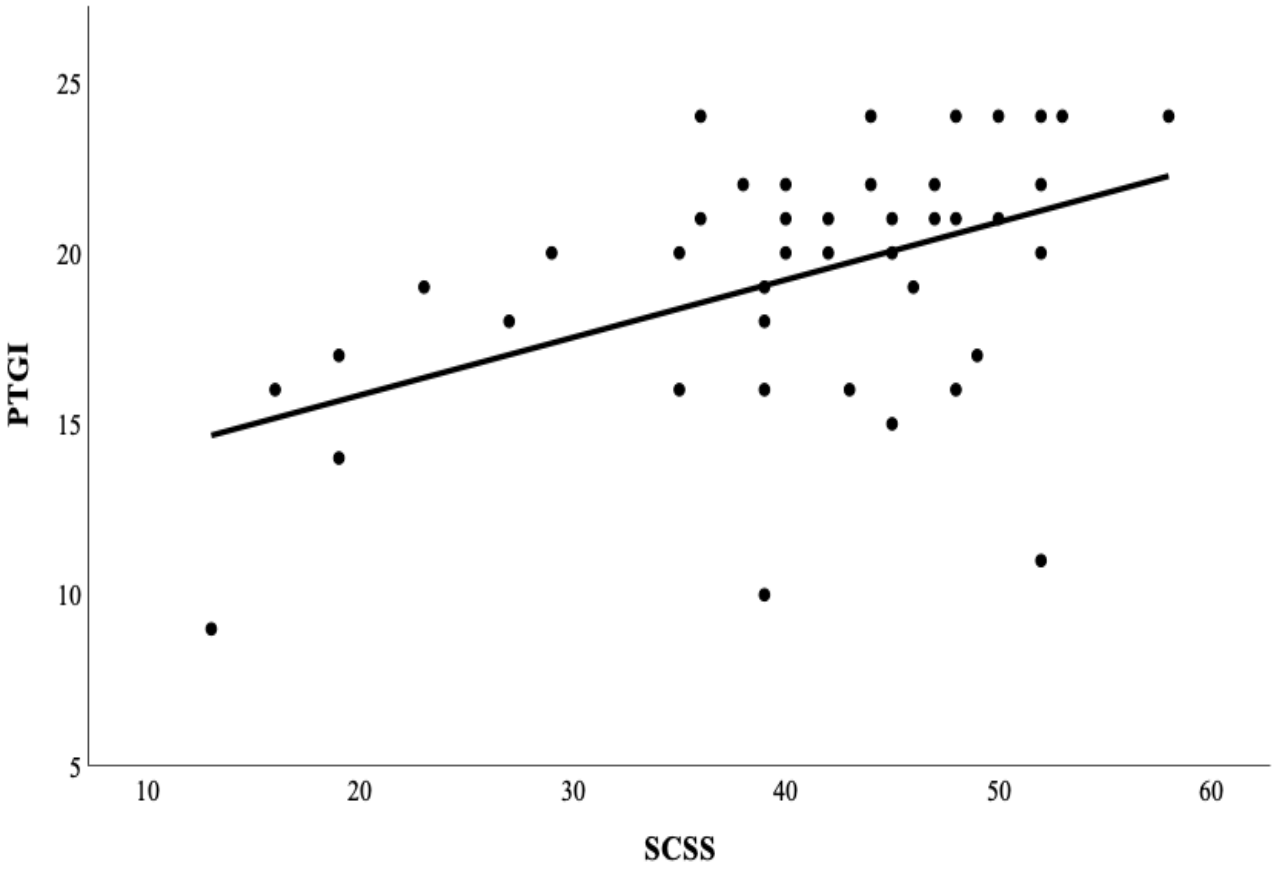


Table 3.

Regression Analysis Summary for of Spirituality (SCSS) Predicting PTG

			95% *CI*			
Variable	R^2	β	Lower	Upper	*t*	*p*
(Constant)	-	-	8.26	16.68	5.98	<.000
SCSS	.22	.47	.07	.27	3.39	.002

Note. Adjusted $R^2 = .20$

A simple linear regression was also conducted using TGL symptoms as the independent variable and PTG as the outcome variable, in support of literature described previously. The simple linear regression showed that TGL symptoms were statistically significant with PTG as the outcome, $R^2 = .113$, $F(1, 40) = 5.085$, $p < .05$; adjusted $R^2 = .091$ (see Figure 9) . TGL explained 34% of the variance in PTG (see Table 4 for more information).

Figure 9.

Regression Scatterplot of PTG and TGL

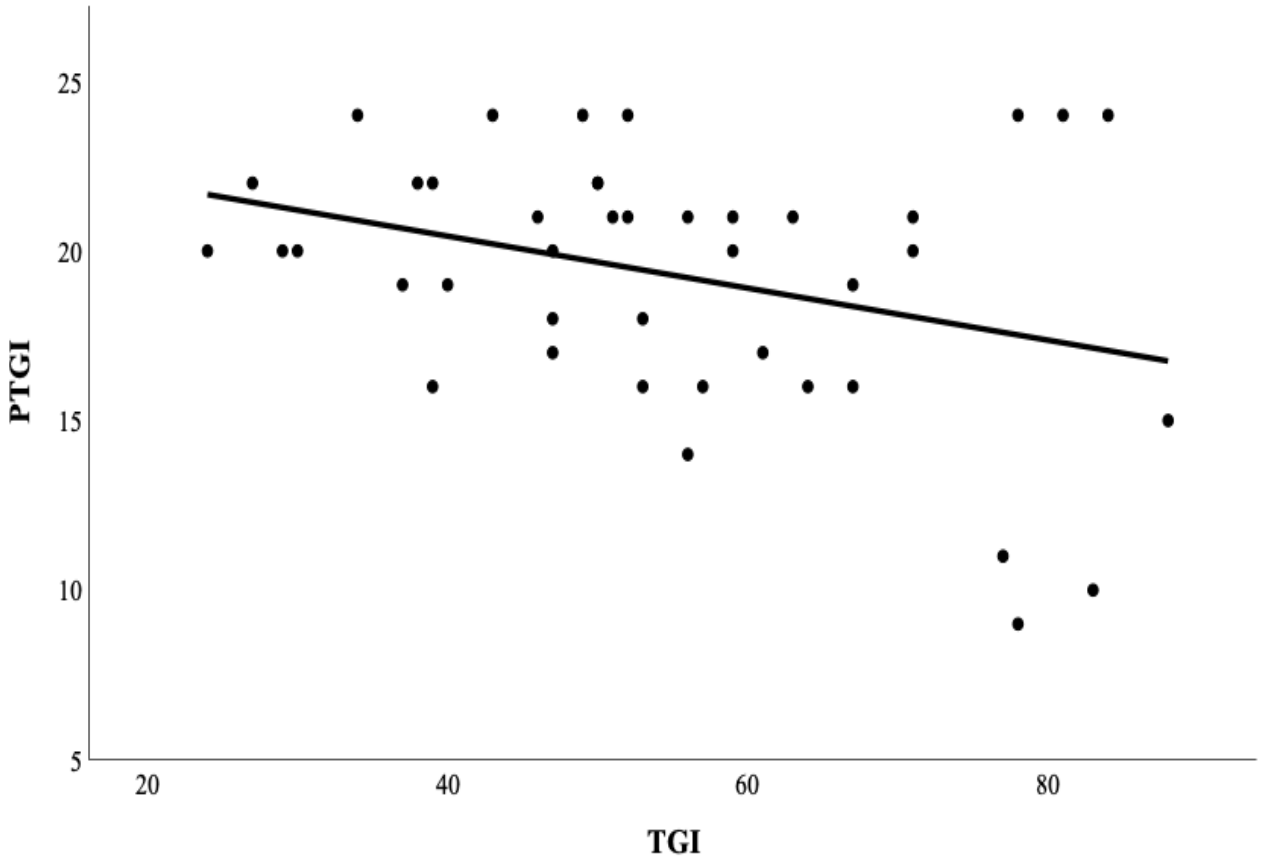


Table 4.

Regression Analysis Summary of TGL (TGI) Predicting PTG

			95% *CI*			
Variable	R^2	β	Lower	Upper	*t*	*p*
(Constant)	-	-	19.58	27.43	12.10	<.00
TGI	. 11	-.34	-.15	-.01	-2.26	.03

Note. Adjusted R^2 = .09

- Does spirituality (as in daily meaning) mediate PTG and TGL symptoms?

As per correlational analysis, spirituality (daily meaning), TGL, and PTG were all correlated (see Table 2). Therefore, a hierarchical regression was conducted to determine if daily meaning can act as a mediator between TGL symptoms and PTG. This hierarchal regression was run to test the hypothesis that a positive change in meaning is a resiliency factor predictive of PTG as a result of TGL symptoms (see Figure 14 for predicted model). TGI symptoms total scores were entered in step one, ChIP total scores were entered in step 2, and PTG scores were entered as the outcome variable. Results of the hierarchal regression were not statistically significant (see Table 5 for more information).

Table 5.

Regression Analysis Summary for Daily Meaning (ChIP) mediating TGL (TGI) and PTG

			95% *CI*				
Variable	R^2	β	Lower	Upper	*t*	*p*	*Adjusted* R^2
Model 1							
Constant	-	-	18.95	28.22	10.32	<.00	-
TGI	.09	-.31	-.16	.01	-1.90	.07	.07
Model 2							
Constant	-	-	8.74	26.98	3.98	<.00	-
TGI	.15	-.15	-.13	.06	-.77	.45	.09
ChIP	.15	.28	-.02	.12	1.47	.15	.09

In support of previous research that meaning promotes traumatic growth (Ivtzan et al. 2015, Wong, 2019), a simple linear regression was carried out incorporating daily meaning (ChIP) as the independent variable and PTG as the outcome variable. This regression resulted in a statistical significance, $R^2 = .223$, $F(1, 40) = 11.495$, $p < .05$; adjusted $R^2 = .204$ meaning that daily meaning predicts PTG (see Figure 10). Daily meaning explained 36% of the variance in PTG (see Table 6 for more information).

Figure 10.

Regression Scatterplot of PTG and Spirituality (daily meaning)

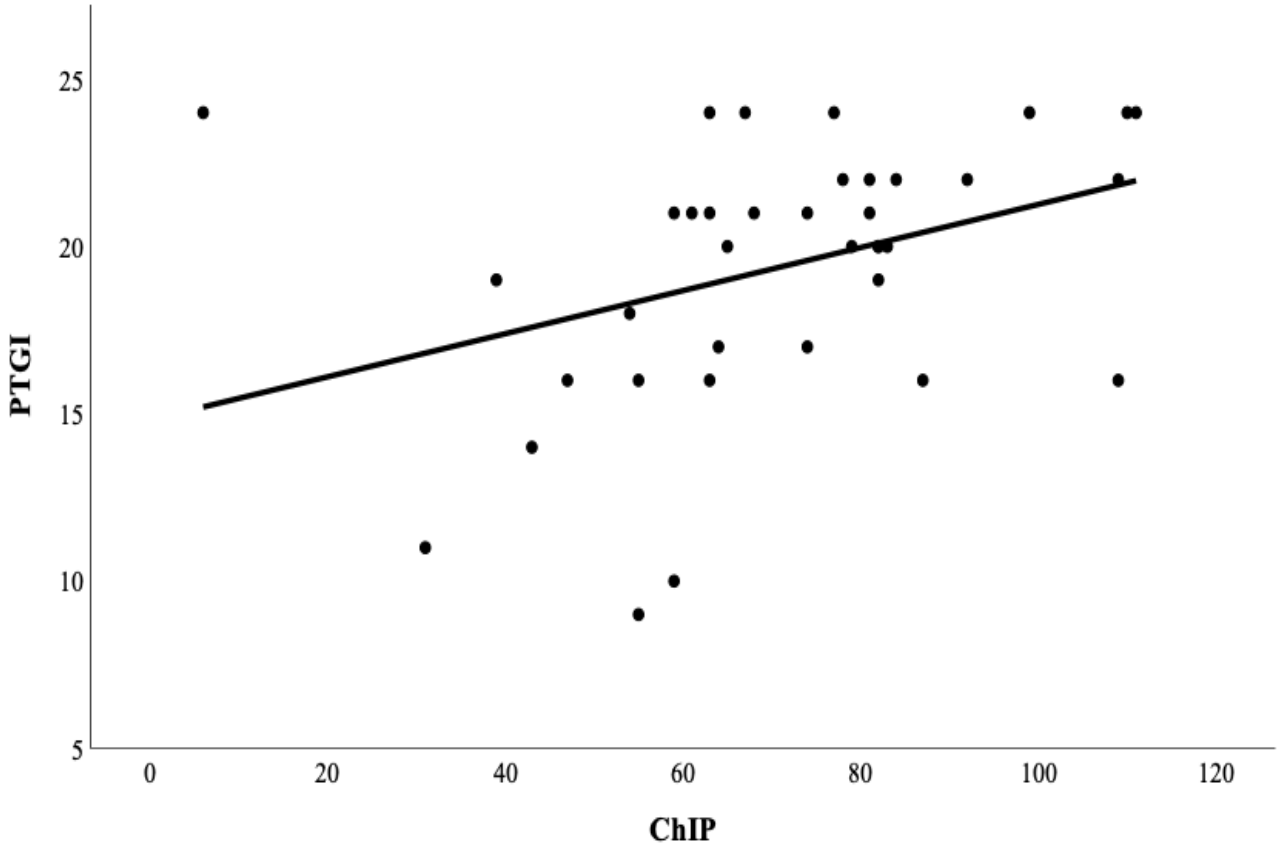


Table 6.

Regression Analysis Summary for Daily Meaning (ChIP) Predicting PTG

			95% CI			
Variable	R^2	β	Lower	Upper	t	p
(Constant)	-	-	10.61	19.02	7.16	<.00
ChiP	. 13	.36	.01	.12	2.32	.02

Note. Adjusted R^2 = .11

Spirituality and mental health in the face of TGL

- Does spirituality (connection to the transcendent and religiosity) mediate the relation between symptoms of TGL and the experience of mental illness symptoms?

Spirituality defined as connection to the transcendent and religiosity were not correlated with TGL or overall mental illness symptoms (see Table 2). Therefore, a hierarchal regression could not be carried out.

- Does spirituality (daily meaning in life) mediate the relation between symptoms of TGL and the experience of mental illness symptoms?

Daily meaning, TGL, and mental illness symptoms were all correlated with one another (see Table 2); therefore, a hierarchical regression was carried out to determine if daily meaning in life can act as a mediator between mental illness symptoms and TGL symptoms. The hierarchal regression showed that TGL predicted mental illness symptoms (Step 1): R^2 = .160, $F(1, 30) = 5.730$, p <.05; adjusted R^2 = .132. When the model incorporates daily meaning (Step 2), and inverse relationship was found, R^2 = .484, $F(2, 29) = 18.143$, $p < .001$; adjusted R^2 = .448 which shows that the relationship between the experience of TGL and mental

illness symptoms was fully mediated by daily meaning: TGL symptoms had predicted mental illness symptoms, adding daily meaning at Step 2 inversely predicted mental health symptoms despite reporting traumatic loss symptoms. Daily meaning explained 70% of the variance in mental health (see Table 7 for more information). Daily meaning does not enhance the relationship between TGL and mental illness symptoms, daily meaning removes the positive relationship between trauma symptoms and mental illness symptoms (see Figure 16) . In other words, the relation becomes a positive inverse relationship – daily meaning predicts mental health (fewer participants reported mental illness symptoms).

Table 7.

Regression Analysis Summary for Daily Meaning (ChIP) mediating TGL (TGI) and Mental Illness Symptoms (ISA)

			95%CI				
Variable	R^2	β	Lower	Upper	t	p	Adjusted R^2
Model 1							
Constant	-	-	.63	54.56	2.09	.04	-
TGI	.16	.40	.08	1.00	5.73	.02	.13
Model 2							
Constant	-	-	61.77	147.31	5.00	<.00	-
TGI	.48	<.00	-.45	.45	.02	.98	.448
ChIP	.48	-.70	-.98	-.34	-4.26	<.00	.448

Note. R^2 adjusted = .11

Additionally, in support of previous research that spirituality (daily meaning) promotes mental health (Ivtzan et al. 2015; Wong, 2019; Armstrong et al., 2019), a simple linear regression was carried out incorporating daily meaning (ChIP) as the independent variable and mental health symptoms (ISA) as the outcome variable. This regression resulted in a statistical significance, $R^2 = .48$, $F(1, 30) = 28.08$, $p < .05$; adjusted $R^2 = .47$ meaning that daily meaning predicts lower mental illness symptoms (see Figure 11). Daily meaning explained 70% of the variance in mental illness symptoms (see Table 8 for more information).

Figure 11.

Regression Scatterplot of Mental Illness Symptoms (ISA) and Spirituality (daily meaning)

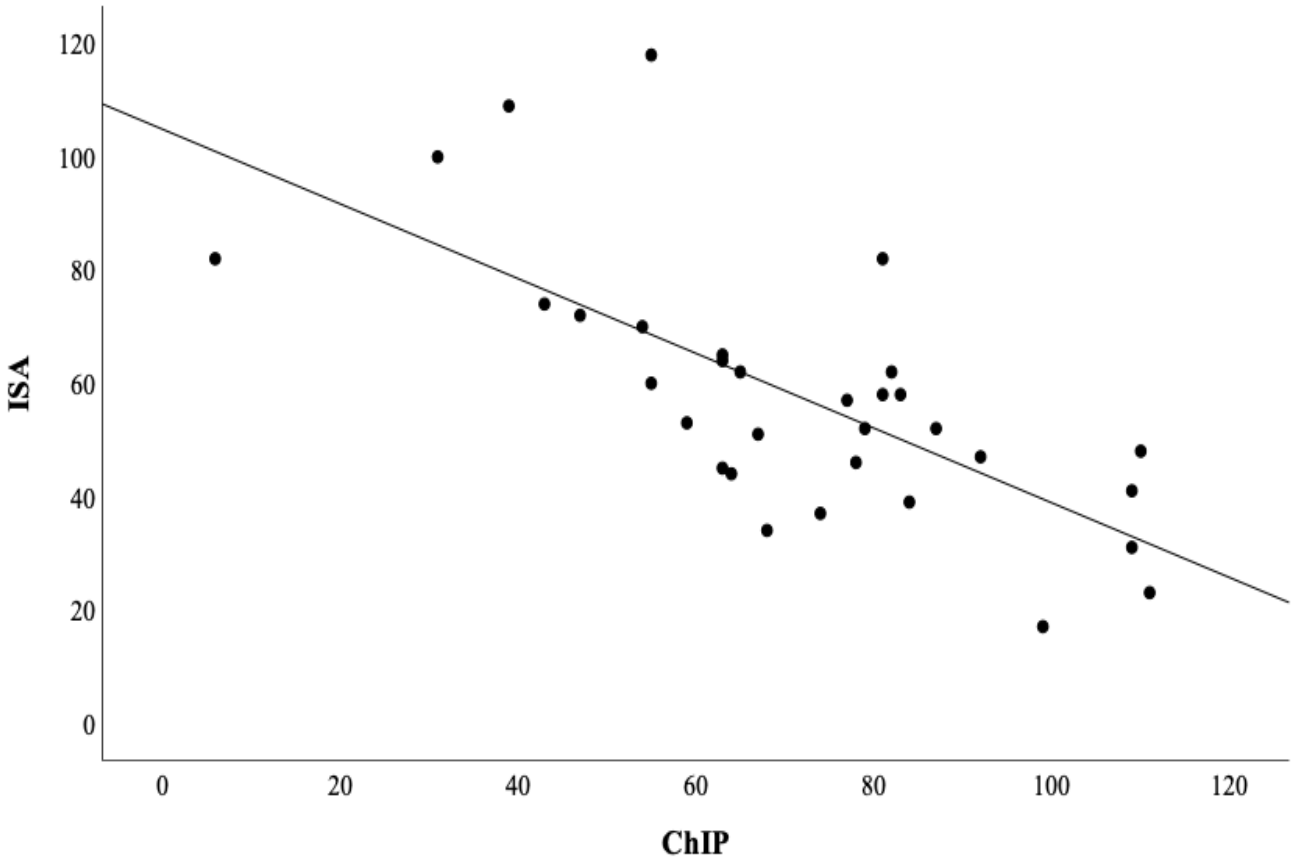


Table 8.

Regression Analysis Summary for Daily Meaning (ChIP) Predicting Mental Illness Symptoms

			95% CI			
Variable	R^2	β	Lower	Upper	t	p
(Constant)	-	-	85.84	124.03	11.23	<.00
ChiP	. 48	-.70	-.92	-.41	-5.30	<.00

Note. Adjusted R^2 = .11

Further, in support of previous research that TGL is correlated to mental illness symptoms (Mann et al., 2014; Afifi et al., 2014; Browne & Finkelhor, 1986; Paolucci et al., 2001; Santa Mina & Gallop, 1998), a simple linear regression was carried out incorporating TGL as the independent variable and mental illness symptoms (ISA) as the outcome variable. This regression resulted in a statistical significance, $R^2 = .16$, $F(1, 30) = 5.73$, $p < .05$; adjusted $R^2 = .13$ meaning that TGL predicts mental illness symptoms (see Figure 12). TGL explained 40% of the variance in mental illness symptoms (see Table 9 for more information).

Figure 12.

Regression Scatterplot of Mental Illness Symptoms (ISA) and TGL (TGI)

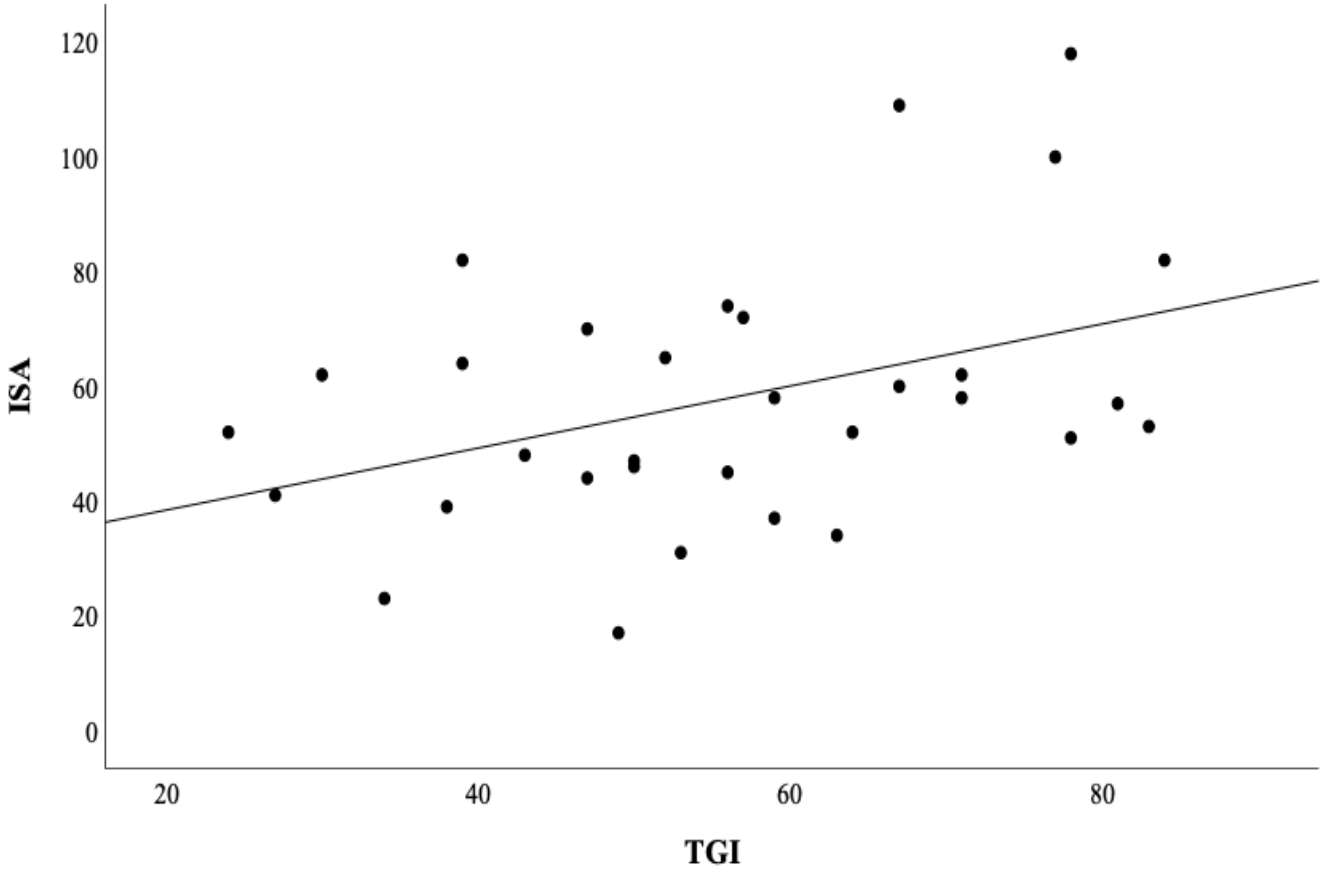


Table 9.

Regression Analysis Summary for TGL (TGI) Predicting ISA

			95% CI			
Variable	R^2	β	Lower	Upper	t	p
(Constant)	-	-	.63	54.56	2.09	.04
TGI	. 16	.40	.08	1.00	2.39	.02

Note. Adjusted R^2 = .13

Figure 13.

Predicted model but regression could not be conducted due to lack of correlation between TGL and spirituality (connection to the transcendent and religiosity)

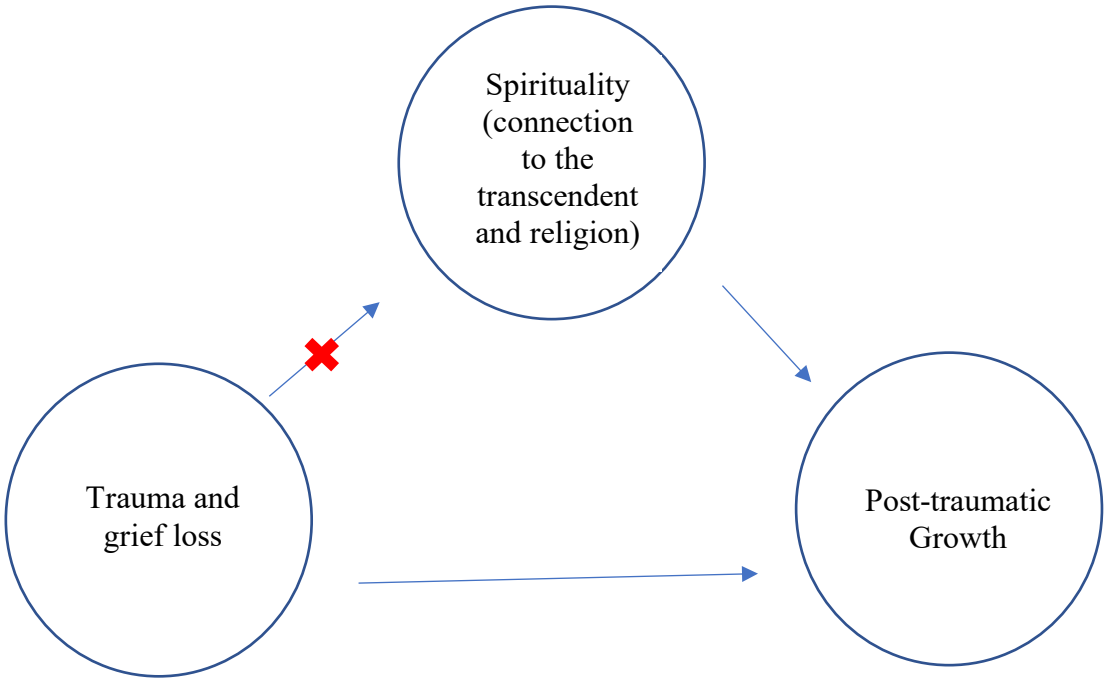
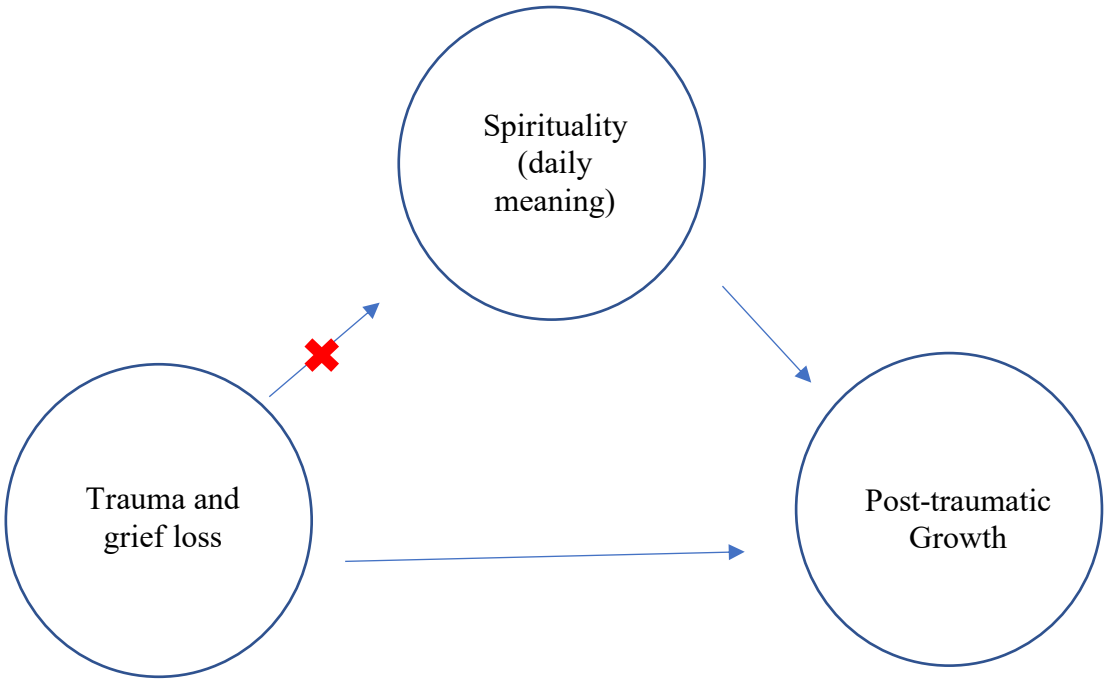


Figure 14.

Predicted model but regression yielded non-significance



Discussion

The present research aimed to examine the relationships between TGL, spirituality (defined as connection to the transcendent and religiosity, and meaning in daily life), PTG, and mental illness symptoms. The main hypothesises for this study were:

- Do religiosity and spirituality (connection to the transcendent and religiosity, and daily meaning) mediate the relationship between TGL symptoms and PTG?
- Do religiosity and spirituality (connection to the transcendent and religiosity, and daily meaning) mediate the relationship between TGL and mental illness symptoms?
- TGL and spirituality were also explored as independent predictors of PTG and mental illness. Previous research (e.g., e.g., Bronk, 2011; Cotton et al., 2005; Michaelson et al., 2019; Florez et al., 2018; Harris et al., 2018; Starnino & Sullivan, 2016; Armstrong & Manion, 2015) supports these relationships. If the current study also supports these relationships, this adds credibility to the above mediation analyses that this study contributes to the research literature.

The analyses yielded several noteworthy findings. Spirituality did not mediate the relationship between TGL and PTG; specifically, spirituality defined as religiosity and connecting to the transcendent and spirituality defined as meaning in daily life were not found to be significant mediators. However, the results showed that spirituality (connection to the transcendent and religiosity) was independently a predictor of PTG (see Figure 15). This is consistent with previously described research literature (Florez et al., 2018; Harris et al., 2018). Furthermore, also consistent with previous literature (Ivtzan et al., 2015), the results showed that spirituality (daily meaning) was independently a predictor of PTG (see Figure 16).

Figure 15.

Spirituality as independent predictor of PTG

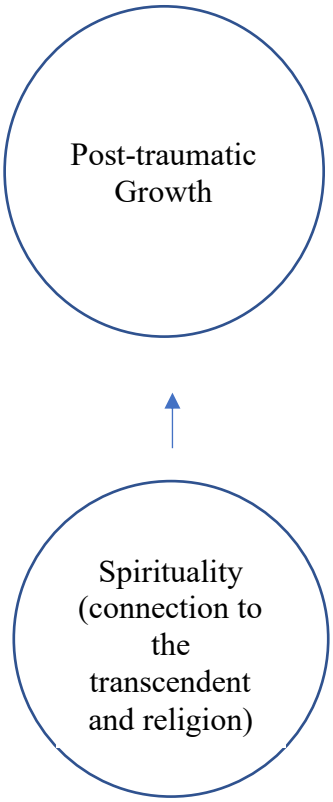
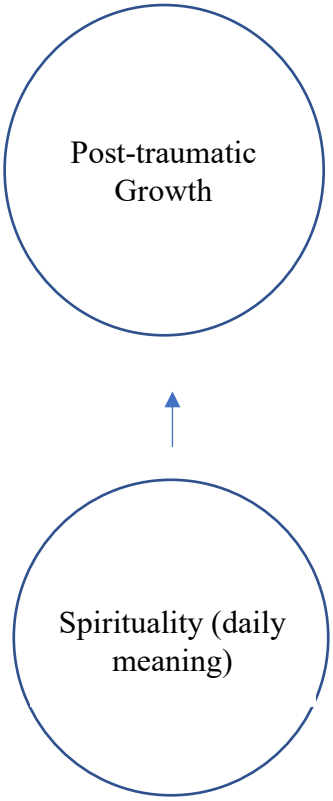


Figure 16.

Spirituality as independent predictor of PTG



TGL was also independently a predictor of PTG (see Figure 17). Furthermore, the analyses showed that daily meaning, TGL, and PTG were all positively correlated (see Table 2). Additionally, it was predicted that meaning would mediate the relation between TGL and mental illness symptoms. The analyses demonstrated that daily meaning does mediate the relation between TGL and mental illness symptoms (see Figure 18). TGL independently predicting mental illness symptoms and spirituality (daily meaning) independently inversely predicting mental illness symptoms, in other words, spirituality daily meaning independently predicts mental health (see Figure 19 & 20). This supports previous research (Armstrong et al., 2019),

adding credibility to the new contributions (the mediation analyses). Below is a brief review of the theoretical frameworks that support these findings.

Figure 17.

TGL as independent predictors of PTG

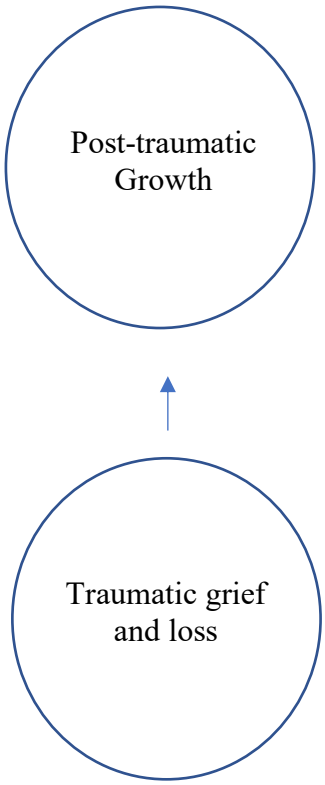


Figure 18.

Daily meaning mediating relation between TGL and mental illness symptoms

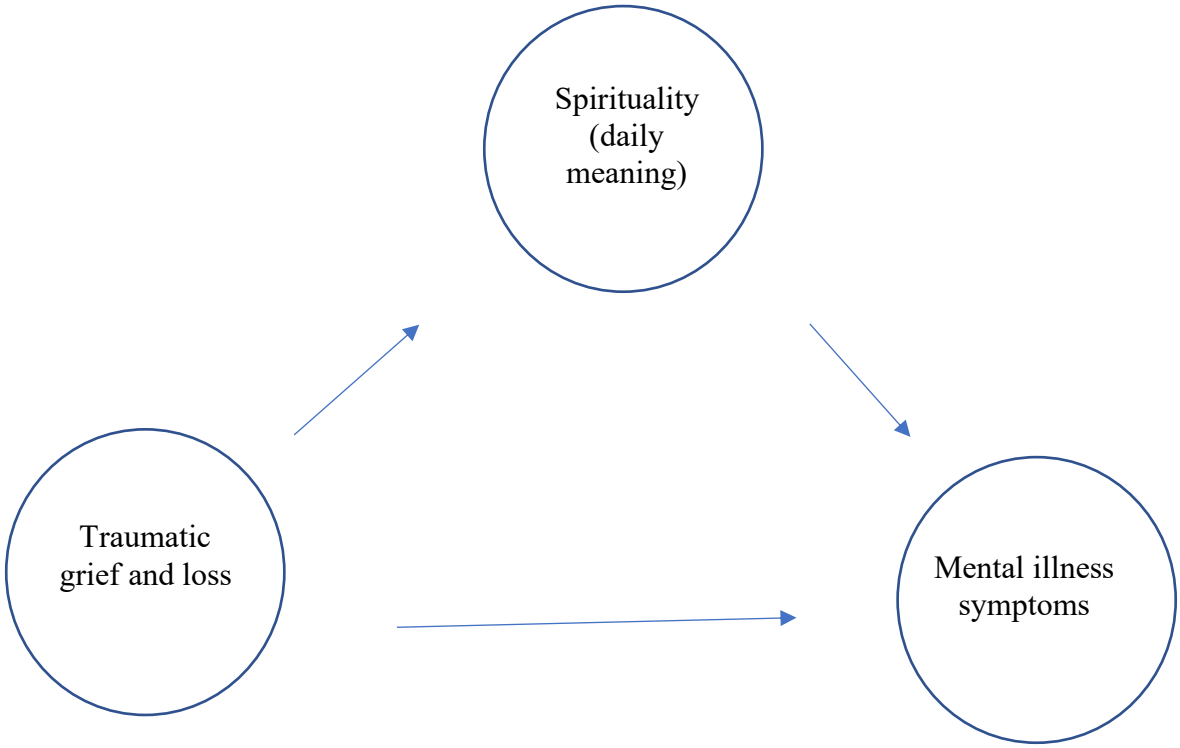


Figure 19.

TGL as independent predictor of Mental Illness Symptoms

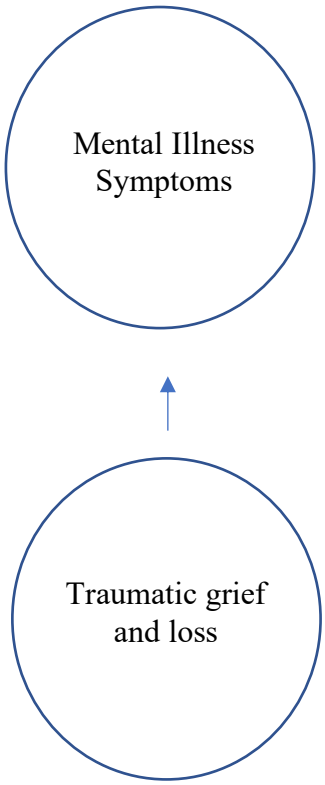
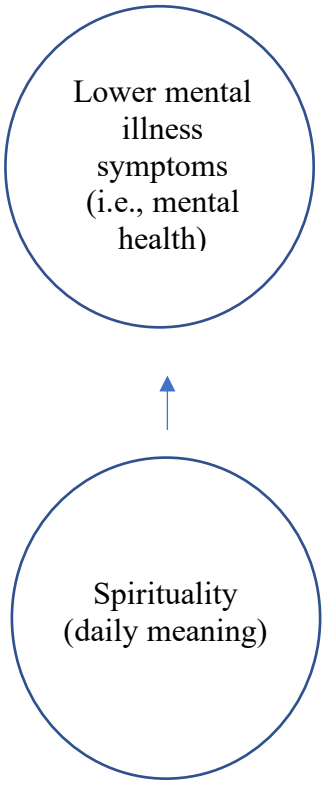


Figure 20.

Spirituality (Daily Meaning) as Independent Predictor of Mental Health



Transactional stress model of Spirituality

The results showed that spirituality (as a connection to the transcendent and religiosity) independently predicted PTG. These results align with the literature on spirituality: one of the leading researchers of spirituality, Pargament (1997), explains that the transactional model of stress and coping (Lazarus & Folkman, 1984) can be used to understand the literature on religiosity and spirituality. He also focuses on religious coping and emphasizes religious appraisals and attributions in response to life stressors (e.g., Pargament & Hahn, 1986; Pargament, Koenig, & Perez, 2000). Moreover, he demonstrates how spiritual attachment

(connection) to God is an essential need in the religious coping process (Belavich & Pargament, 2002). Due to spirituality being such a complex, subjective, and dynamic construct, it is compatible with the basic principles of the transactional model of coping (Gall, 2005). Spirituality in the transactional model of coping functions on different levels of the stress and coping process (Park & Folkman, 1997). More specifically, it can function at the level of person factors (e.g., beliefs), primary and secondary appraisals (e.g., God attributions), coping behaviour (e.g., prayer), coping resources (e.g., connection to nature), and meaning- making (e.g., spiritual reappraisal) (Gall, 2005). The personal beliefs of an individual help the individual make meaning of their stressors as they interpret and comprehend the events around them through a spiritual belief. These spiritual beliefs act as a buffer to help the individual make sense of one's own suffering and provide a sense of hope (Schwab & Petersen, 1990).

Moreover, one's spiritual beliefs can facilitate and strengthen one's social support in the face of difficulty (Koenig et. al., 2012). Further, spiritual beliefs can aid an individual to have resources of attributions (such as God's will). These attributions can aid in reducing the initial levels of difficulty so that one can engage in coping behaviours (Davis, Nolen-Hoeksema, & Larson, 1998). Furthermore, spiritual coping can involve specific behaviours which aid the individual in responding to the stressor at hand. An example of spiritual coping is prayer, which has been suggested by the research literature to be one of the most profound religious coping behaviours used and is also supportive of other positive coping (Stolley et al., 1999). Moreover, Pargament explains that a person who has a collaborative relationship with God - that is, someone who involves God in a mutual problem-solving process- can be empowered in challenging situations (Pargament & Park, 1995). Pargament has also shown that an individual with a surrendering style, that involves an active decision to release personal control to God

when in a situation that fall outside of one's control, provides the individual with a sense of relief, comfort, and security rendering God in charge of the situation (Cole & Pargament, 1999).

Overall, spiritual coping behaviours and beliefs are common responses to great stress and have been significantly associated with greater well-being, greater life satisfaction, fewer mental and physical health problems, and fewer interpersonal problems (Koenig et. al., 2012). Consequently, spiritual coping has been a predictor in well-being throughout several studies cross-sectionally and longitudinally (Pargament et al., 1994). Therefore, the findings presented in this thesis demonstrating that spirituality (connection to the transcendent and daily meaning) is an independent predictor of PTG; and spirituality (daily meaning) is an independent predictor to mental health are grounded in the spiritual transactional coping model.

Second wave positive psychology and PTG

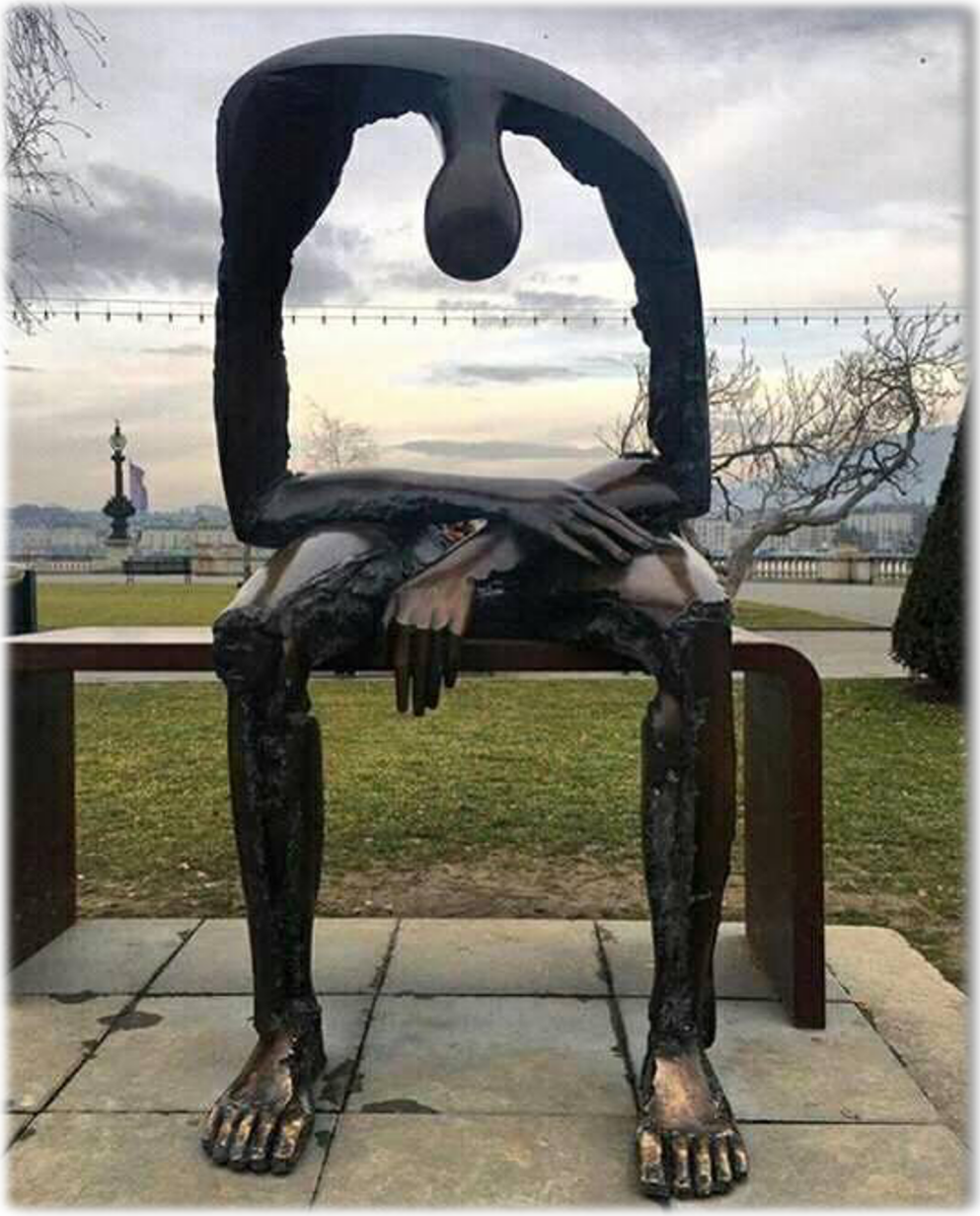
The findings of this thesis support that daily meaning is an independent predictor of PTG. Moreover, Wong's research explains that learned helplessness can be combatted with learned resourcefulness where an individual's challenges can elicit inner resources and strength if used as an opportunity (2019). The results of the current research that suggest spirituality (connection to the transcendent/religiosity and daily meaning) are both independent routes to PTG is well grounded in PP2.0, as this theoretical framework focuses on the potential of growth rather than the lack of growth. Therefore, looking at TGL in youth from the lens of PP2.0 could provide a transformative process of healing for youth.

From a PP2.0 perspective, providing helpful tools to youth who have experienced TGL would be essential to achieving an optimal balance between the negatives and positives (growth) of such a TGL experience (Wong, 2019). PP2.0, explains that, with suppression of difficult emotions, it is challenging to make a positive change and experience optimal well-being (Ivtzan

et al., 2015). Compared to emotional suppression, PP2.0 provides a framework of a balance between the complex emotions, challenging emotions and pleasant emotions. Therefore, flourishing in PP2.0 involves recognizing and embracing the complex dialectical nature of existence. To visually demonstrate this concept, a beautiful artistic depiction that represents the dialectical tension of suffering and happiness after the loss of a loved one is demonstrated through the sculpture entitled *Melancolie*, created by Albert György in 1949 (as referenced in (Wong, 2019) (see Figure 21). It powerfully portrays the grief of losing a loved one and the emptiness one feels deep down, even while one is experiencing happiness. Wong reflects on this piece and explains, "[this piece of] work speaks of the contradictory nature of ambivalent human emotions and of the dialectic tension between suffering and happiness" (2019). Thus, PP2.0 provides a theoretical framework for PTG and meaning that are complementary with this study's results: experiencing daily meaning in life is predictive of positive growth. Further, the current study suggests that a TGL experience predicts mental illness symptoms, but daily meaning in life negates that relationship and also leads to well-being.

Figure 21.

Melancolie, created by Albert György in 1949



Logotherapy

The importance of daily meaning in life in relation to well-being in the face of a trauma may be best explained by logotherapy theory developed by Viktor Frankl (1946). Frankl explains three pathways to meaning in daily life: 1) by creating a work or doing a deed; (2) by experiencing something or encountering someone; and (3) by the attitude we take toward unavoidable suffering. Therefore, for youth who have experienced a TGL experience, their mental health may be mediated by those pathways to meaning (e.g., Canadian Mental Health Association, 2018; Frankl, 1946). More specifically, if a youth experiences a loss, their mental health can be improved by creating or doing an action. Their mental health after a traumatic loss and grief could also be improved through encountering something or someone (either transcendently or existentially). Additionally, the mental health of youth who experienced TGL mental health could be enhanced by their ability to take responsibility for their attitude, behaviours, and meaning-making.

As previously explained in the introduction, logotherapy thrives on hope – hope that the difficult times come to an end and hope for the future (Frankl, 1946). After the experience of TGL, youth may need to be helped to attain this hope. Evidently, hope that their life continues to matter and that they have a unique purpose could go a long way. After a traumatic loss, youth could experience a sense of meaninglessness and lack of purpose especially if it was a traumatic loss (Mannarino & Cohen, 2011). Therefore, helping youth recognize their own unique purpose in this life could be a source of healing and also growth from the experience of TGL.

Clinical and organizational recommendations

It should be noted that, given the small sample size, results should be interpreted with caution; however, if these results are further supported by future research the following recommendations could be helpful.

- Grounded in PP2.0, the current research suggests that youth who have experienced TGL may benefit from an approach that transforms their challenge as an opportunity to find meaning and growth, while continuing to validate the client's (the young person's) experience.
- Furthermore, enhancing the awareness of youth regarding PTG could potentially foster understanding and acceptance of the challenges that are associated with TGL in youth, as acceptance of challenges is an important component of PP2.0 (Wong, 2019).
- Moreover, clinically, it may be important to provide youth who have experienced TGL with a sense of self-compassion and connectiveness with other people, nature, or experiences as these concepts are central goals of PP2.0 and logotherapy (Frankl, 1946; Wong, 2019). Self-compassion and connectedness would be ideal for youth to make sense of their loss and to have an opportunity to search and process for meaning. In order to experience meaning in daily life, promoting openness to experience (to feelings, learning), self-esteem, hope for the future, and agency over thought and behaviours may be relevant (Armstrong et al., 2019).
- As Frankl (1946) notes, self-worth is essential for children and youth to be able to engage in making meaning of their own experiences. For youth who have experienced TGL, it may be helpful to provide them with activities to enhance their self-worth through providing them with opportunities that carry meaning to them personally. The activities

created for children and youth need to be tailored to the individual for the child or youth to experience a sense of meaning (Armstrong, 2011). The activities should be structured recreational activities that promotes success, provides a challenge, is believed to be important for the individual, is hard to give up, and is experienced as fun (Armstrong, 2011). These activities could be personalized through asking the youth what kinds of activities interest them.

- Youth need to be provided the safety and clinical space to be able to explore their hope and "their why" to their "what" (Frankl, 1946). As Frankl notes, meaning comes through active engagement and participation in the world and with others (1946). As the findings of the current research showed that spirituality is a route for PTG, when a youth reports being spiritual (connected to the divine/religious), the clinician could try to use their spirituality as a resource to help them make meaning and develop growth from their TGL.
- Youth could also greatly benefit from the provision of a sense of agency over their life, allowing them to feel confident to take responsibility and choose to make meaning (Frankl, 1946) from their TGL. Agency can be fostered in the following ways (Centre of Excellence for Youth Engagement, 2005):
    1. Having youth make their own decisions that personally affect their lives through targeting their families then expanding to schools and communities;
    2. Involving and communicating with youth about issues that they deep to be important;
    3. Including young people in making decisions and involving them in the process of establishing and running youth programs;

4. Providing opportunities for youth to partner with adults to discuss important problems;
5. Aiding youth to help other youth and have peer mentorship;
6. Helping youth develop skills that will help them advocate for their own wants and to create programs to engage youth;
7. Helping youth connect to organizations that can support them in implementing their own opinions and ideas;
8. Empowering and supporting organizations that aid young people in meaningful ways.

- Frankl suggested that perceiving that life is meaningful through engaging in appreciated activities can promote psychological well-being and prevent hopelessness for youth (Frankl, 1946). Therefore, as the results of the present study support that daily meaning promotes mental health, even in the face of TGL, it may be essential to provide youth with activities that promote meaningful engagement, giving them an opportunity to process and make meaning of their traumatic loss and grief and to protect them from hopelessness.
- Helping youth connect to the transcendent could also be beneficial in helping youth make meaning of their experience and loss. One of the pathways to meaning according to Frankl is encountering someone or something (1946). Facilitating exploration for youth to encounter something or someone spiritually could help them make meaning and find greater purpose in the midst of their loss and experience.

Limitations

Study design

There are a few limitations in the present study. The study is retrospective, meaning that participants are asked to report on a past experience (when they have experienced loss). In general, a specific problem with retrospective studies exists: the temporal relationship is often difficult to assess (Tofthagen, 2012). Thus, in this study it is hard to specifically know when exactly participants felt specific emotion, whether at a specific point or another. It is very easy to confuse emotions at specific time points in one's experiences. In this study, participants were asked to reflect on their religious and spiritual coping mechanism, their experience of grief, and their PTG. With these reflections about different points in time, one could easily mistake an emotion of one time point to another time point.

Additionally, this study design was quantitative and did not qualitatively examine the experience of the youth who went through a TGL. A mixed-methods study design would have provided a more in-depth analysis of the PTG, spirituality, and mental health experience. The quantitative study design can be limited in its form of collection as it does not capture the individualistic experience of each participant as one would find in a qualitative design (McGrath, 2011). However, this quantitative design was helpful in testing objective theories such as PP2.0 and logotherapy (Frankl, 1946; Wong, 2019). This research design also examined the relation between PTG, TGL, spirituality, daily meaning, and mental health as measurable variables. Moreover, the survey design is limited due to its self-report nature. Self-report could lead to problematic responses due to multiple reasons. One such reason is the social desirability effect, wherein participants desire to present themselves in a more desired manner (Brenner & DeLamater, 2016). Self-reported answers may also be exaggerated depending on the participants.

Respondents may be too embarrassed to reveal private details. There can also be cases when respondents guess the hypothesis of the study and provide biased responses to confirm the researcher's prediction. Participants may also forget relevant details due to lack of self-awareness. Further, self-report studies are inherently biased by the person's feelings at the time they fill out the questionnaire. If a participant is in a negative mood at the time they fill out the questionnaire, for example, their answers may be more negative. Similarly, if a participant is in a positive mood at the time, then the answers may be more positive. These biases and tendencies may skew the results of the study. In addition, with all studies relying on voluntary participation, results can be biased by a lack of respondents. This voluntary participation shows there might be systematic differences between people who respond and people who do not respond due to demand characteristics.

Sample

Another limitation is the small sample size with a specification on youth, which may not provide generalizable results to other age groups. However, this study's intention was specifically to study youth's experience of TGL. Sample size, however, may have been a limiting factor in the present research. TGL symptoms were not correlated with connection to the transcendent/religiosity as they have been in other studies (e.g. Brewer & Sparkes, 2011; Florez et al., 2018; Harris et al., 2018; Oltjenbruns, 1991; Starnino & Sullivan, 2016) . Moreover, some of the respondents were from Egypt, as the researcher posted the recruitment flyer on social media, which could result in the research not being fully generalizable to Canadian youth. However, only 20% of responses were from Egypt; therefore, the mixed residential sample may produce more universal results.

Measures

A post-traumatic stress disorder measure could have yielded more general results concerning traumatic symptoms; however, the intention of the present research was specifically to examine the TGL symptoms, rather than general traumatic stress symptoms. Moreover, this study did not account for some factors - the time of the experienced loss, the relationship to the deceased, whether the participant lived with the deceased, or how much time has already passed since the loss – as there can be long-term growth that is not present right after the experience of loss (Werdel et. al., 2014). Additionally, the SCSS measure may have been a limitation as it may not have accurately measured spirituality due to the current COVID-19 restrictions on religious services and rituals that may have affected people's religious participation.

Implications

In the present research, connection to the transcendent and religiosity, as well as daily meaning in life, were found to be predictive of PTG. TGL and mental illness symptoms are mediated by daily meaning, as meaning fosters mental health. These results suggest that counsellor trainees may benefit from education on spirituality in future treatment, in order to help their clients to achieve greater PTG. Assisting youth and families explore their belief system could potentially help them make meaning of their loss and maintain a feeling of connectedness to the deceased (Howell et al., 2015). Furthermore, spirituality could be used as a resource to give meaning to the grieving process, and the perception of an ongoing and personal relationship with the deceased could be a primary component to effective and healthy coping (Andrews & Marotta, 2005). Counselors need to have competence in spiritual issues when working TGL, especially since grief varies depending on developmental level, culture, and spiritual or religious beliefs. More specifically, counselors should be prepared when working with clients who raise

spiritual and existential issues after a loss (Michael & Cooper, 2013). Moreover, fostering daily meaning in youths' lives also appears to be relevant in promoting mental health in the face of TGL.

Directions for Future Research

For future research, it would be wise to investigate any covariates that might be skewing the results. Potential covariates may include age, religion, the deceased's age, date of loss, relationship to participant, and whether the participant had lived with the deceased. Each variable can skew the results by affecting the independent variable of spiritual coping mechanism and the dependent variable of PTG. Age and time of loss can affect how both these variables exhibit themselves and their association. Moreover, the relationship with the deceased can affect the traumatic impact and maybe the PTG following the traumatic impact. For example, some research shows that parental loss is more traumatic than loss of any other individuals in a young person's life (Haine et al., 2008; Howell et al., 2015). Therefore, aside from the religious and spiritual coping mechanisms used following the loss of a loved one, all these variables might differentially predict PTG.

This study demonstrated that spirituality predicts PTG which is important to note for clinicians. However, future research can comprehend this relation at a deeper level through the accompaniment of participants through their experiences (before and after loss) through a longitudinal study. Furthermore, this study showed that TGL symptoms and mental health are mediated by daily meaning, which future research could further examine to better understand specific interventions that provide daily meaning for youth. Additionally, to render this study more generalizable, future research should consider conducting this study with a wider variety of samples to ensure that it holds external validity. As previously discussed, religiosity and

spirituality have numerous physical and psychological benefits, however they still continue to be understudied in different populations and with regards to various issues.

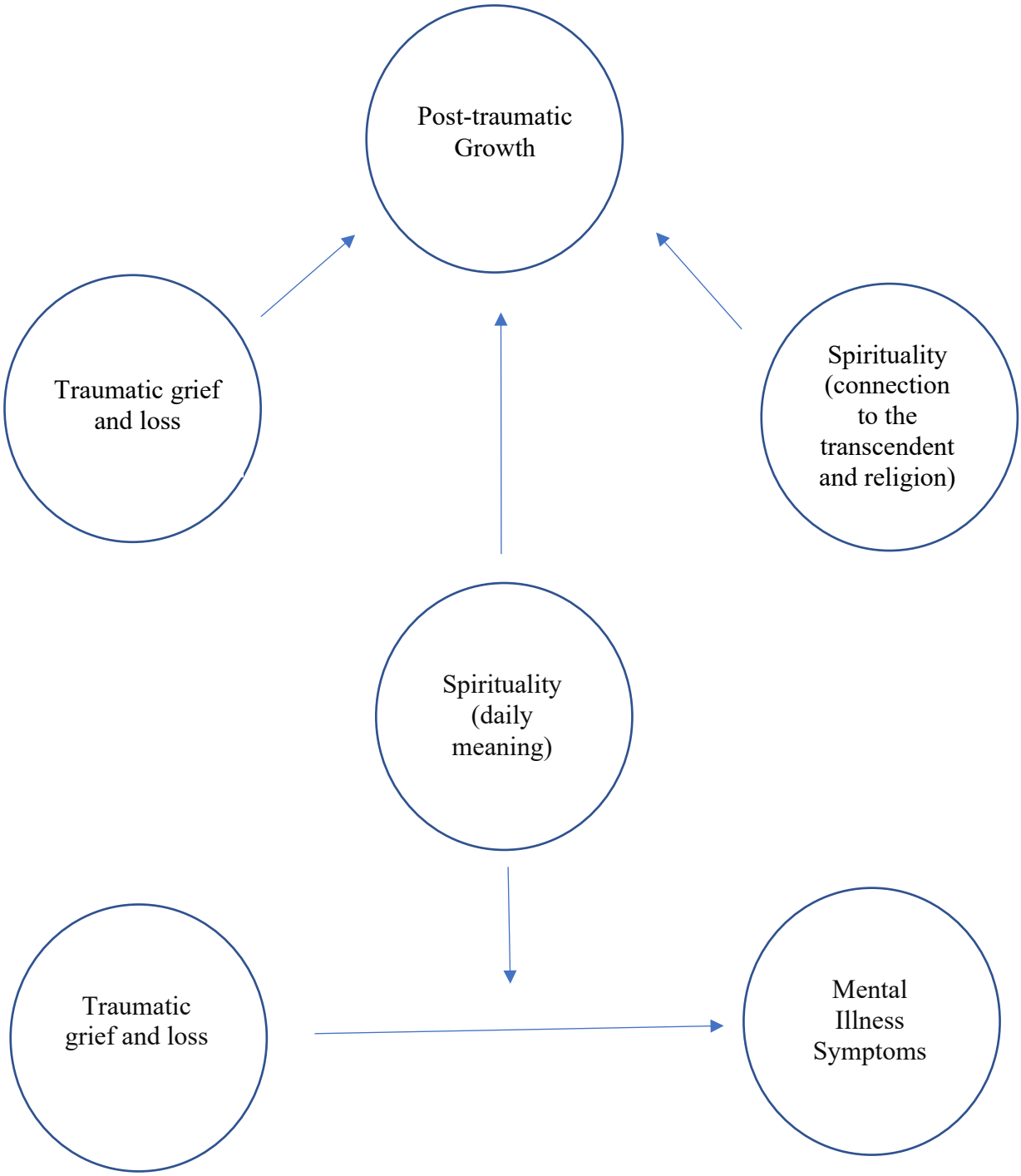
Conclusion

Many studies have examined spirituality in youth in the promotion of well-being (Armstrong & Manion, 2015; Bronk, 2011; Cotton et al., 2005; Michaelson et al., 2019). Moreover, there are some studies that examined the relation between PTG and the experience of traumatic loss and grief (Brewer & Sparkes, 2011; Oltjenbruns, 1991). Yet, there is not enough literature examining spirituality (connection to the transcendent and daily meaning) on youth who have experienced TGL regarding PTG and mental health. The purpose of this study was to examine the relationship between spirituality (religiosity and connection to the transcendent, and daily meaning), PTG, and mental illness symptoms in youth who have experienced TGL. It has been demonstrated that spirituality (religiosity and connection to the transcendent, and daily meaning) can both provide greater opportunity for PTG and daily meaning can mediate mental health for youth who have experienced TGL (see Figure 18 for an illustration of the final results). The results of the current research, if they are supported by future research, could be beneficial for clinical and programming recommendations to help youth to make meaning of their TGL. These results could be the foundation to future interventions that can be applied clinically and organizationally. Personally, a quote that summarizes PTG,

"Perhaps Jesus' tears and His smile were very close to one another. Perhaps sometimes they would blend, for the lips can smile when the eyes are still bathed in tears, like a rainbow which begins to shine in the midst of the rain, or the sun's caress on the damp wheat" (Gillet, 1990).

Figure 18.

Summary of the final results



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Appendices

Appendix A

Research Ethics Board Approval

UNIVERSITÉ SAINT-PAUL UNIVERSITY

19-10-2020
dd-mm-yyyy

Bureau de la recherche et de la déontologie (BRD)
Office of Research and Ethics (ORE)

Comité d'éthique de la recherche (CÉR) | Certificat d'éthique
Research Ethics Board (REB) | Ethics Certificate

REB File Number **1360.8/20**

Hanna Armstrong Slatter	**Mariam** Laura Mark	**Faculty of Human Sciences** Faculty of Human Sciences Faculty of Theology	**Student-Principal Investigator** Thesis Supervisor Thesis Supervisor

Type of project MA Thesis Project

Title Religious and Spiritual Coping and Post-traumatic Growth in Response to Youth Traumatic Grief or Loss

Approval date	Expiry Date	Decision
19-10-2020 (dd-mm-yyyy)	**18-10-2021** (dd-mm-yyyy)	**1 (Approved)**

Committee comments

The Research Ethics Board (REB) approved the project.
The researcher is invited to use the reference number 1360.8/20 when recruiting participants.

1. In accordance with the Tri-Council Policy Statement, the Saint Paul University Research Ethics Board (REB) has examined and approved the application for an ethics certificate for this project for the period indicated and subject to the conditions listed above.

2. The research protocol may not be modified without prior written approval from the REB. This includes, among others, the extension of the research, additional recruitment for the inclusion of new participants, changes in location of the fieldwork, any stage where a research permit is required, such as work in schools. Minor administrative changes are allowed.

3. The REB must be notified of all changes or unanticipated circumstances that have a serious impact on the conduct of the research, that relate to the risk to participants and their safety.

4. Modifications to the project, information, consent and recruitment documentation must be submitted to the Office of Research and Ethics for approval by the REB.

5. The investigator must submit a report four weeks prior to the expiry date of the certificate stated above requesting an extension or that the file be closed.

6. Documents relating to publicity, recruitment and consent of participants should bear the file number of the certificate. They must also indicate the coordinates of the investigator should participants have questions related to the research project. In which case, the documents will refer to the Chair of the REB and provide the coordinates of the Office of Research and Ethics.

Louis Perron
Chair
Research Ethics Board

1/2

UNIVERSITÉ SAINT-PAUL UNIVERSITY

Appendix B

Recruitment Email

To whom it may concern,

My name is Mariam Hanna, a 2nd year master's student in the program of Counselling Psychotherapy and Spirituality at Saint Paul University. I am contacting you in regard to a study I am conducting concerning youth who have experienced any traumatic grief or loss. My thesis supervisors are Dr. Laura Armstrong and Dr. Mark Slatter. The purpose of my study is to understand if spirituality can be an aid in youth who have experienced TGL (TGL). Specifically, does the use of religion and spirituality act as a coping mechanism in response to TGL result in greater self-reported Post-traumatic Growth (PTG).

The study involves a series of brief questionnaires that will take approximately 20 minutes to complete online using SurveyMonkey platform. Eligibility criteria requires participants need to be aged 12-24 and English speaking.

In efforts to compensate the Ottawa Service Bureau, a mental health presentation on resiliency and positive psychology will be offered online. Please let me know if you are interested.

Looking forward to working with you,

Mariam Hanna

Appendix C

Recruitment Flyer

Appendix D

Informed Consent Form

Religious and Spiritual Coping and Post-traumatic Growth in Response to Youth Traumatic Grief or Loss

Mariam Hanna, B.A., Master's student, School of Counselling, Psychotherapy & Spirituality

Dr. Laura Armstrong, Ph.D., C.Psych., Associate Professor, School of Counselling, Psychotherapy & Spirituality

Dr. Mark Slatter, M.A., L.Th. Associate Professor, Faculty of Theology

Dear Participant,

You are invited to participate in the above-mentioned research study conducted by Mariam Hanna, an MA student working under the supervision of Dr. Laura Armstrong and Dr. Mark Slatter. The purpose of the study is to understand if spirituality can be an aid in youth who have experienced loss in their life.

Specifically, does the use of religion and spirituality act as a coping mechanism in response of a traumatic loss and experience of grief result in greater growth after loss and grief. Your participation will consist of completing questionnaires that will take 20 minutes to complete. Your participation in this study will entail that you volunteer some personal information, and this may cause you to feel some emotional risk of feeling sad due to the remembrance of loss.

The level of risk for participating in this study is minimal. Participants may be uncomfort able or sad feelings when providing comments or completing the questionnaire, as they will be a sked questions about loss and grief.

Participants have been provided with the following direction: If you experience any emotional di stress following your participation, you can access the Ottawa Distress Centre (distress: 613-238-3311; crisis: 613-722-6914 or 1-866-996-0991; www.dcottawa.on.ca). You have received assurance from the researcher that every effort will be made to minimize these risks specifically in asking the participant about their experience in a retrospective manner. Your participation in this study will help the literature understand how spirituality and religion can affect growth after the experience of loss and grief. It will also help institutions to act according to the results of this study for youth.

You have received assurance from the researcher that the information you will share will remain strictly confidential. If you consent, you understand that the contents will be used only for data analysis and that your confidentiality will be protected as data will be anonymous and stored on a password protected storage device.

The data will be kept for 5 years at which point the data will be securely erased. The data will be kept on a password protected computer or encrypted stick in the locked Psychotherapy research centre office. In order to minimize the risk of security breaches and to help ensure your confidentiality we recommend that you use standard safety measures such as signing out of your account, closing your browser and locking your screen or device when you are no longer using them / when you have completed the study. Anonymity will be protected in the following manner: participation will be done through SurveyMonkey where participant's identity will not be recorded.

A compensation to the organization (Ottawa Youth Bureau) will be in the form of a ment al health presentation (maybe virtual) concerning posttraumatic growth and resiliency based on t he literature. The Ottawa Youth Bureau will be provided with a summary of the results using

email. You are under no obligation to participate and if you choose to participate, you can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If you choose to withdraw, all data gathered until the time of withdrawal will be disposed of and erased.

This study has been approved by the Research Ethics Board of Saint Paul University (# 1360.8/20). If you have any questions about the study, you may contact the researcher or her supervisors Dr. Laura Armstrong and Mark Slatter.

If you have any questions regarding the ethical conduct of this study, you may contact the Office of Research and Ethics, Saint Paul University, 223 Main Street, Ottawa, ON K1S 1C4

Tel.: (613) 236-1393

If you agree to participate in the above research study conducted by Mariam Hanna of the School of Counselling, Psychotherapy & Spirituality, Saint Paul University please check the I consent box. If you do not want to participate please check the I do not consent box.

☐ **I consent**

☐ **I do not consent**

For youth who are under 18, parents please check here to consent.

☐ **Parent consent**

☐ **Parent does not consent**

Appendix E

Informed Consent with adaptable language for participants underage

Does my religion and my connection to something greater than me help me deal with a difficult loss?

Mariam Hanna, B.A., Master's student, School of Counselling, Psychotherapy & Spirituality

Dr. Laura Armstrong, Ph.D., C.Psych., Associate Professor, School of Counselling, Psychotherapy & Spirituality

Dr. Mark Slatter, M.A., L.Th. Associate Professor, Faculty of Theology

Hello!

You are invited to participate in the above-mentioned research study conducted by Mariam Hanna, an MA student working under the supervision of Dr. Laura Armstrong and Dr. Mark Slatter. The purpose of the study is to know if your religion or/and your relationship to a higher being can help you when you experience a difficult loss. You will need to complete a 20-minute survey. This survey might make a little bit sad because you might have to remember a time you lost someone you cared for.

If you experience any emotional distress following your participation, you can access the Ottawa Distress Centre (distress: 613-238-3311; crisis: 613-722-6914 or 1-866-996-0991; www.dcottawa.on.ca).

All your information will be confidential meaning that nobody will know your answers and your answers will not be tracked to your identity. Your answers will be kept on a password protected computer or encrypted stick in the locked Psychotherapy research centre office. You do not have to participate in this study and if you choose to participate, you can leave anytime or refuse to answer any questions. If you choose to leave the study, all your answers will be erased.

If you have any questions about the study, you may contact the researcher or her supervisors (Dr. Laura Armstrong and Mark Slatter. If you have any questions regarding the ethical conduct of this study, you may contact the Office of Research and Ethics, Saint Paul University, 223 Main Street, Ottawa, ON K1S 1C4

Tel.: (613) 236-1393

If you agree to participate in the above research study conducted by Mariam Hanna of the School of Counselling, Psychotherapy & Spirituality, Saint Paul University please check the I consent box. If you do not want to participate please check the I do not consent box.

☐ **I consent**

☐ **I do not consent**

For youth who are under 18, parents please check here to consent.

☐ **Parent consent**

☐ **Parent does not consent**

Appendix F

Demographics

1. How old are you? _____
2. Gender?
3. What is your country of residence? _____

Appendix G

Traumatic Grief Inventory--Self-Report Version (TGI- SR) (Boelen & Smid, 2017):

1. I had intrusive thoughts and images associated with his/her death.
2. I experienced intense emotional pain, sorrow, or pangs of grief.
3. I felt a strong longing or yearning for the deceased.
4. I felt confusion about my role in life, or a diminished sense of identity.
5. I had trouble to accept the loss.
6. I avoided places, objects or thoughts reminding me of his/her death.
7. I found it difficult to trust others.
8. I felt bitter or angry about the loss.
9. I experienced difficulty to move on with my life (e.g., pursue friendships, activities).
10. I felt numb over the loss.
11. I felt that life is meaningless or empty without the deceased.
12. I felt shocked or stunned by his/her death.
13. I noticed that my functioning (in my work, private life, and/or social life) was seriously impaired as a result of his/her death.
14. I had intrusive thoughts and images associated with the circumstances of his/ her death.
15. I had difficulties with positive reminiscing about the deceased.
16. I had negative thoughts about myself in relation to the deceased or the death (e.g., self-blame).
17. I experienced a desire to die in order to be with the deceased.
18. I felt alone or detached from other people.

Note . Items utilized 5-point scales: 1 = “never ,” 2 = “rarely ,” 3 = “sometimes ,” 4 = “frequently ,” and 5 = “always .”

Appendix H

Spiritual Coping Strategies Scale (SCSS) (Baldacchino & Buhagiar, 2003):

1) Using personal/private prayer

2) Realtionship with God or higher power

3) Build, maintian relationships with relatives and friends

4) Prayng with someone else or a group

5) Discussing problems with someone else

6) Using spiritual/religios objects/icons

7) Seeing the positive side of your situation

8) Using radio or TV religious/spiritual programs

9) Living day by day hoping that the future will be brighter

10) Reading spiritual inspirational texts

11) Accepting the current situation of life

12) Finding meaning and purpose to live

13) Apprecitiating the beauty of arts, e.g., music, paintings, and handcrafts

14) Confiding in relatives and friends

15) Attending [a place of worship]

16) Self-reflection as a means of ifentifying your potneitals and stregnths

17) Helping others as a means of giving love and peace to others

18) Trusting in God, hoping that things will get better

19) Vowing or promising God

20) Appreicating nature, for exmaple sea, sun, plants, and flowers

Note: Participants rate each item on a 4-point scale ranging from 0 “never used” to 3 “used often”, with higher scores indicating greater use of spiritual and religious coping strategies

Appendix I

Post-Traumatic Growth Inventory--Short Version (PTGI- SV) (Arpawong et al., 2016):

1. Appreciation for value of my life
2. Direction for my life
3. Handling my difficulties
4. My understanding of spiritual matters
5. My sense of closeness with others
6. Involvement in things that interest me
7. My compassion for others
8. My own inner strength

Note: Items utilized responses ranging from 1 (‘Negative change’) to 3 (‘Positive change’), while 2 indicates ‘No change.’

Appendix J

Child Identity and Purpose Questionnaire (ChIP)

(Armstrong, Watt, St. John, & Desson, 2019):

Participants rate themselves on a 10 point scale whether they are more like Ceira or Chip.

1. When things aren't going well for CHIP, he thinks he can come up with ways to fix the problem/when things aren't going well for Ceira, she thinks she can't come up with ways to solve the problem

2. Ceira believes she can make choices about things in her life/Chip thinks he can't make choices about things in his life

3. When Chip has a difficult feeling like sadness, fear, or anger, he finds it easy to think about things to feel a bit better/When Ceira has a difficult feeling like sadness, fear, or anger, she finds it hard to think about something to feel a bit bettera(agency)

4. When Ceira has a difficult feeling like sadness, fear, or anger, she talks to someone or plays with someone/When Chip has a difficult feeling like sadness, fear, or anger, he doesn't talk to someone or play with someonea(agency)

5. When Chip has a difficult feeling like sadness, fear, or anger, he chooses to relax, have fun, or create

something/When Ceira has a difficult feeling like sadness, fear, or anger, she chooses not to do much of anythinga(agency)

6. Chip is happy to be Chip/Ceira wishes that she were a different persona(self-concept)

7. Chip thinks that he is important to other people/Ceira thinks that he is not important to other peoplea(self-concept)

8. Ceira thinks that she has done many things to be proud of/Chip thinks that he has not done many things to be proud ofa(self-concept)

9. Ceira thinks that she can do things as well as other kids/Chip doesn't think that he can do things as well as other kids

10. When things are going badly, Ceira thinks that things will get better/When things are going badly, Chip thinks that things will never get better

11. Ceira knows that good things will happen in her life as she grows up/Chip doesn't know if good things will happen in his life as he grows upa(hope)

12. Chip believes that his life is important/Ceira believes that her life doesn't mattera(hope)

13. Chip likes to make believe or come up with new ideas/Ceira likes to see, hear smell, taste or see things

right in front of her, rather than coming up with new ideas

14. Ceira knows that she can find ways to get something that is important to her/Chip doesn't know if he

can find ways to get things that are important to hima(hope)

15. Ceira is interested in watching her feelings as well as other people's feelings/Chip is more interested in

what he can see, feel, hear, taste, and touch, rather than feelingsa(openness)

16. Chip likes to try new things and learn new things/Ceira likes to stick with things that she knowsa(openness)

17. Ceira often participates in a very fun activity with other children and one or more adult leaders/Chip does not often participate in a very fun activity with other children and one or more adult leadersa(openness)

Note. Ch.I.P.-I Child Identity and Purpose Questionnaire–Interactive. Parentheses reflect the measure subcategory to which the item belongs (Agency, Hope, Self-Esteem, and Openness).

Appendix K

Interactive Symptom Assessment (ISA)

(Armstrong et al., 2020):

Participants rate themselves on a 10 point scale whether they are more like ISA or Eibe.

1) ISA thinks that someone cared about her this week / Eibe doesn't think that anyone cared about him this week.

2) ISA felt good about the friends in her life this week / Eibe didn't feel good about the friends in his life this week

3) Eibe felt that he did many things well this week / ISA felt that she didn't do anything well this week

4) Eibe is feeling happy. Over the past week, he has been feeling happy most of the time / ISA is feeling sad. Over the past week, she has been feeling sad most of the time

5) This week, ISA wanted to do many fun things / Eibe did not feel like doing much this week

6) ISA had good dreams at night and good day dreams / Eibe had bad dreams at night or scary pictures in his head during the day

7) ISA didn't lie to anyone this week / Eibe told many lies this week

8) This week, Eibe enjoyed doing lots of his favourite week / This week ISA was bored when doing things that she usually finds fun

9) ISA was cheerful this week / Eibe was grouchy this week

10) ISA did not have arguments or fights with her family or friends this week / Eibe often had arguments with his family or friends this week

11) Eibe was not worried this week / ISA was feeling worried a lot this week

12) Eibe was not feeling nervous or afraid this week / ISA was feeling nervous or afraid often this week

13) ISA had no headaches or stomach aches this week/ Eibe had headaches or stomach aches many days this week

14) This week, Eibe didn't have to do things over and over again until they were perfect or felt right / This week, ISA had to do things over and over again until they were perfect or until they felt right

15) Eibe didn't worry about dirt, germs or getting sick this week / ISA was worried about dirt, germs, or getting sick this week

16) ISA had no trouble finishing her school work this week / Eibe had trouble finishing his school work this week

17) Eibe was well-behaved and followed the rules at school this week / This week, ISA got in trouble at school for not following the rules

18) ISA was well-behaved at home this week / This week, Eibe got in trouble at home for not following the rules

19) Eibe did not push, hit, or kick any other kids this week / This week, ISA pushed, hit or kicked another child

20) Eibe was nice to everyone this week / ISA said mean things to someone this week

21) ISA found it easy to sit still in class this week / Eibe found it hard to sit still in class this week

22) Eibe looked in the mirror this week and felt good about what he saw / ISA looked in the mirror and did not feel good about what she saw

23) ISA was proud of herself this week / Eibe was not proud of himself this week