Exploring Growth Through Positive Changes in Values after Violent Trauma

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Abstract

Growth after trauma can present in three types: changes in the self, changes in relationships with others, and changes in values and worldview. This dissertation is comprised of two studies which were conducted to explore the third form of posttraumatic growth, positive change in values, as it occurs after victimization through violence. It is important to develop a clear and consistent definition of this type of growth after trauma. The first manuscript is a scoping study that reviewed a breadth of literature to ascertain what is known about positive changes in values after trauma. It identified 83 papers on growth after violence that discussed positive changes in values, 60.6% of the total sample. Results of this study identified three processes reported in conjunction with positive changes in values after violence: shattering of previously held worldviews, increased clarity of personal values, and increased engagement in values-congruent behaviours. Findings of this study also report factors that contribute to this form of growth including participation in self-care, religious coping, and the presence of social supports and attachments. Results of this study also indicate that there are methodological limitations with the quantitative measures currently used to assess this form of growth. These limitations informed the qualitative design of the second study. A second manuscript is presented to report the findings of an Interpretative Phenomenological Analysis conducted with survivors of the Troubles conflict in Northern Ireland (N= 12) who reported that their values had changed in positive ways as a result of their victimization in that conflict. Each participant had experienced the traumatic bereavement of a loved one. There were four superordinate themes which arose from the analysis of this data: a) trauma helped survivors know what they value, b) context and connection impact values manifestation, c) valued action is possible and helpful, and d) even after values-based growth, pain remains. Each superordinate theme, and requisite subthemes, is

discussed in detail. Results of these two studies were used to derive a conceptualization of this form of growth. This definition states that positive values change after trauma includes an increased awareness of values, either new or old, which survivors enact in meaningful and protective ways in interactions with others and the context in which they live, even when suffering continues. Limitations, contributions to knowledge, and future directions for research are also discussed.

Résumé

La croissance à la suite d'un traumatisme peut se présenter sous trois formes : des changements de soi, des changements dans les relations avec les autres, et des changements dans les valeurs et la vision du monde. Cette thèse contient deux études qui ont été menées pour explorer la troisième forme de croissance posttraumatique, le changement positif des valeurs, qui survient en réponse à la victimisation par la violence. Il est important de développer une définition claire et cohérente de ce type de croissance après un traumatisme. Le premier manuscrit est une étude exploratoire qui examine de façon exhaustive la littérature afin de déterminer ce qui est déjà connu au sujet des changements positifs dans les valeurs à la suite d'un traumatisme. Il propose 83 articles sur la croissance en réponse à la violence traitant de changements positifs dans les valeurs, soit 60,6 % de l'échantillon total. Les résultats de cette étude énoncent trois processus souvent signalés conjointement avec des changements positifs dans les valeurs en réponse à la violence : un bouleversement des visions du monde antérieures, une clarté accrue des valeurs personnelles, et une plus grande participation à des comportements qui concordent avec les valeurs. Les résultats de cette étude font également état de facteurs qui contribuent à cette forme de croissance, notamment la participation aux soins autoadministrés, les stratégies d'adaptation religieuse, et la présence de soutiens et de liens sociaux. Les résultats de cette étude indiquent aussi que les mesures quantitatives actuellement utilisées pour évaluer cette forme de croissance présentent des limites méthodologiques. Ces limites ont servi de base à l'approche qualitative de la deuxième étude. Un deuxième manuscrit est présenté pour énoncer les conclusions d'une analyse phénoménologique interprétative réalisée auprès de survivants du conflit nord-irlandais (*The Troubles*) (n=12) qui indiquent que leurs valeurs ont changé de manière positive après leur victimisation dans ce conflit. Chaque participant a vécu le deuil traumatique d'un être cher.

L’analyse de ces données donne lieu à quatre grands thèmes : a) les traumatismes ont aidé les survivants à définir leurs valeurs, b) le contexte et la connexion influencent la manifestation des valeurs, c) les actions valorisées sont possibles et utiles, et d) même après une croissance fondée sur des valeurs, la douleur persiste. Chaque grand thème et sous-thème nécessaire est discuté en détail. Les résultats de ces deux études ont servi à élaborer une définition opérationnelle potentielle de cette forme de croissance. Cette définition stipule que le changement positif des valeurs à la suite d’un traumatisme inclut une prise de conscience accrue des valeurs nouvelles ou anciennes, incarnée par les survivants de manière utile et protectrice dans leurs interactions avec les autres et dans le contexte dans lequel ils vivent, et ce, même si la souffrance persiste. Les limites, les contributions aux connaissances et les orientations des futurs travaux de recherche sont également discutées.

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Contribution to Original Knowledge

This dissertation includes two studies which explore one form of growth after trauma independently, positive changes in values, in the context of one trauma type, violent and intentional trauma. Collectively these studies provide insight into the status of the existing literature regarding positive values change after trauma. Results of these studies offered a conceptualization of positive changes in values which was derived from the findings of both the scoping review of the literature and the Interpretative Phenomenological Analysis of survivors who report positive values change in Northern Ireland. This conceptualization states positive values change after trauma includes an increased awareness of values, either new or old, which survivors enact in meaningful and protective ways, in interactions with others and the context in which they live, even when suffering continues. Finally, results of this dissertation show that positive changes in values after trauma are not well measured by current quantitative assessments and suggest amendments in measurement to better explore this phenomenon.

Exploring Growth Through Positive Changes in Values after Violent Trauma

Though trauma can cause negative outcomes, the results of traumatic experiences can also be positive for survivors. These positive sequelae can involve changes that allow survivors to exceed levels of functioning they had achieved prior to the traumatic experience (Joseph et al., 2005). Several theories have been presented to explain these positive outcomes, such as stress-related growth (Park, Cohen, & Murch, 1996), adversarial growth (Joseph & Linley, 2005), benefit finding (Antoni et al., 2001), thriving (Carver, 1998; O'Leary, 1998), and posttraumatic growth (PTG) (Tedeschi & Calhoun, 1996). While there are differences between the theories, they all include the idea that survivors can grow by changing or clarifying beliefs, worldview, priorities, life philosophy, or values in positive and meaningful ways. These terms are used interchangeably throughout the literature. In this dissertation, they will be referred to as changes in values with one exception. The sections on models and measures of growth uses the language of the original theorists and relates that terminology to values. This dissertation seeks to expand the understanding of growth through positive changes in values in the context of violent trauma.

To effectively explore positive changes in values, clarity about several constructs is necessary, including trauma, growth, values, and positive changes in values. In many psychological settings, trauma is defined as per the Diagnostic and Statistical Manual of Mental Disorders (DSM 5) (American Psychiatric Association, 2013). According to the DSM 5, *trauma* is "exposure to actual or threatened death, serious injury, or sexual violence…" (Diagnostic Criteria: Posttraumatic Stress Disorder, criteria A) through direct exposure, witnessing, learning of an event impacting a loved one, or repeated exposure to aversive events in the workplace. However, in the context of growth after trauma, the objective nature of the event is not the central criteria for defining a trauma. Rather, trauma is determined by its subjective impact.

Insofar as an event is life-altering, stressful, and disruptive to victims' assumptive worlds, it is deemed a trauma (Tedeschi, Shakespeare-Finch, Taku, & Calhoun, 2018). Several types of events can elicit this disruption of worldviews and the type of trauma impacts how growth manifests (Shakespeare-Finch & Armstrong, 2010). The current dissertation uses this broader understanding of trauma, in congruence with the growth literature.

While this dissertation does not directly explore trauma, it does explore a positive outcome of trauma, namely positive values change as a type of growth (Tedeschi & Calhoun, 1996). Growth, often referred to as *Posttraumatic growth* (PTG), refers to positive psychological outcomes arising from the struggle with traumatic experiences (Tedeschi & Calhoun, 2004). It typically arises after a seismic trauma shatters victims' worldview leading to rumination, both automatic and deliberate (Castro, Martinez, & Abarca, 2019). Rumination reconstructs schemas leading eventually to growth (Tedeschi & Calhoun, 2004). When survivors of trauma experience PTG, they improve beyond previous states in three broad areas: changes in how they see themselves, their relationships, and their values (Tedeschi & Calhoun, 1995). Several changes in values are possible, for example increased valuing of compassion (Ai, Cascio Santangelo & Evans-Campbell, 2005) and political activism (Bauwens & Tosone, 2010).

Values have been researched in psychology and other fields for decades (Schwartz, 2016). In this dissertation, *values* are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney, Lillis, Haynos, Forman, & Juarascio, 2019; Dahl, Plumb, Stewart, & Lundgren, 2009; Florez, Schulenberg, Lair, Wilson, & Johnson, 2019; Hayes, Levin, Plumb-Vilardaga, Villatte, & Pistorello, 2013; Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Plumb, Stewart, Dahl, & Lundgren, 2009; Wilson, Sandoz, Kitchens, & Roberts, 2010). Values are related to, but distinct from meaning making,

prosocial behaviour, and altruism. In the context of growth after trauma, values can change in positive ways. For the purposes of this dissertation, *positive change in values* is defined as any change in values which survivors identify as positive; positive values change is self-determined by survivors. Survivors identify values as positive by calling values change growth, which is positive by definition (Tedeschi et al., 2018), or they may explicitly describe values change as positive.

This dissertation seeks to understand the positive change in values, and resulting values-congruent behaviour, that arise from traumatic experiences. The first study is a scoping review that explores positive changes in values reported by victims of violence. To include the broadest possible set of information, any reports of values change described in the context of growth were included. The second study is an interpretative phenomenological analysis that explores the experience of individuals who identified as having undergone values change that they deemed positive in the aftermath of violent trauma.

There are four major sections of this dissertation. The first is a literature review that introduces current issues in the growth literature including variability in prevalence rates, inconsistent relationships between growth and mental health outcomes, and on-going debate about whether growth is real or illusory. The study of individual types of growth, and positive values change specifically, may contribute to understanding these issues. The review introduces the concept of values, reviews conceptualizations of values that can support research into growth through values change and outlines several rationales for the study of growth through values change.

Subsequently, there are two studies that focus on growth that manifests after the experience of violence. First, a scoping review examines growth literature to determine what is

reported about positive values change after violence. Violent trauma survivors have different post-trauma trajectories in both psychopathology (Norris, Friedman, Watson, Byrne, Diaz & Kaniasty, 2002; Santiago et al., 2013) and growth (Gul & Karanci, 2017; Shuwiekh, Kira, & Ashby, 2018). Results of the scoping review informed the second study, a qualitative examination of the experience of growth through positive change in values in victims of the Troubles[1] conflict in Northern Ireland. In the final section, the results are discussed and a conceptualization of change in values following violent trauma is offered.

Current Issues in the Growth Literature

The idea that people can experience positive change as a result of negative experiences has a long history in religion (e.g., the ascension of Christ) and philosophy (e.g., "That which does not kill me, makes me stronger," [Nietzsche, 1911, p. 2]). Individuals exposed to trauma (Frazier et al., 2013) or violence (Brewer, Hayes, Dudgeon, Mueller-Hirth, Teeney, & Wijesinghe, 2016) may be more likely to engage in prosocial behaviours. One way to explain these positive changes is the construct of growth after trauma. Growth after trauma refers to positive psychological outcomes stemming from struggle with traumatic experiences (Tedeschi et al., 2018). This idea has burgeoned in the trauma literature since the 1980s when empirical study began. There are several types of growth after trauma including changes in self, relationships, and values (Tedeschi et al., 2018). Other commonly reported domains are increases in personal strength, observing new possibilities, and increases in appreciation of life (Tedeschi et al., 2018). As survivors experience growth, they may begin to behave differently (Shakespeare-Finch & Barrington, 2012) so both the survivor and the society can benefit. Given

[1] The Troubles refers to a period of conflict in Northern Ireland from 1969 to 1998 which is characterized by violence between Republican forces, Loyalist forces, and the British Army.

these potential positive outcomes, it is important to continue to develop our understanding of growth after trauma, and the values and behaviours that change during growth.

Though there are several potential advantages to growth after trauma, there are issues with the current literature that suggest there is more to learn. This phenomenon can occur in many contexts and appears to be widespread. It can occur in adults (Helgeson, Reynolds, & Tomich, 2006) or children (Alisic, van der Schoot, van Ginkel, & Kleber, 2008), and is slightly more likely in women than men (Vishnevsky, Cann, Calhoun, Tedeschi, & Demakis, 2010). It has been observed across a variety of trauma types including medical traumas (Koutrouli, Anagnostopoulos, & Potamianos, 2012; Sawyer, Ayers, & Field, 2010; Sherr et al., 2011), violent traumas (Frazier, Conlon, & Glaser, 2001; Solomon & Dekel, 2007) and natural disasters (Xu & Liao, 2011). The prevalence rates of reports of growth[2] vary. Across a range of studies and trauma types, prevalence rates from 3% to 98% have been reported (Linley & Joseph, 2004). Between 50.1% and 72% of veterans queried on a national study reported a moderate degree of posttraumatic growth (PTG) (Tsai, El-Gabalawy, Sledge, Southwick, & Pietrzak, 2015). A recent systematic review of growth in survivors of interpersonal violence reported a mean rate of growth of 71%, with a range of 58-99% (Elderton, Berry, & Chan, 2017). Prevalence rates this variable suggest that there is still more to learn about growth.

Although growth seems to be common, the relationship between growth and mental health outcomes is still somewhat ambiguous. Helgeson et al. (2006) reviewed research that explored the relationship between growth and physical and mental health outcomes. They included 87 predominantly cross-sectional studies that focused on adults, employed quantitative

[2] In this dissertation, the use of the word growth should be understood as growth after trauma or salutogenic outcomes of trauma.

assessments of growth, and included a measure of one of their outcomes of interest (mental health, physical health, or correlates such as characteristics of stressor, personality, demographics, and coping strategies). The review indicated that growth was modestly related to increases in well-being (r = 0.22) and decreases in depression (r = - .09), but unrelated to anxiety, distress, and quality of life. Other research suggests that increases in growth are related to increases in life satisfaction (Cann, Calhoun, Tedeschi, & Solomon, 2010). For individuals recovering from cancer, the relationship between growth and disorders like depression or anxiety varies substantially (Casellas-Grau, Ochoa, & Ruini, 2017).

The relationship between growth after trauma and psychopathology may also be impacted by trauma type (Shakespeare-Finch & Armstrong, 2010). A recent meta-analysis suggests that the relationship between growth and Posttraumatic Stress Disorder (PTSD) has linear traits but is stronger in a curvilinear pattern (Shakespeare-Finch & Lurie-Beck, 2014). This study showed that PTG is most likely at moderate levels of PTSD and decreases beyond moderate levels (Shakespeare& Lurie-Beck, 2014), with variations related to age and trauma type. Even when studies are limited to interpersonal trauma, significant variability still exists in the relationship between growth and distress (Elderton et al., 2017). Some of the variability may have been due to the inclusion of variety of types of interpersonal trauma including intimate partner violence, robbery, and sexual assault (Elderton et al., 2017). Therefore, it is not advisable to extrapolate findings from studies with mixed trauma samples (Elderton et al., 2017; Helgeson et al., 2006) and health-related trauma samples (Casellas-Grau et al., 2017) to other types of traumatic stressors. Collectively, these studies demonstrate that the relationship between growth and other desirable mental health outcomes requires further exploration and that trauma type is an important variable.

Given the inconsistent relationships between growth and desirable outcomes, it is not surprising that there is on-going debate about whether growth is real or illusory (Boerner, Jospeh, & Murphy, 2020). It has been proposed that the difference between real and illusory growth, also known as the Two Component model, may explain some of the inconsistencies in the relationship between growth and mental health (Zoellner & Maercker, 2006). Real growth has been conceptualized based on survivor described improvements that benefit functioning and are considered meaningful, often with decreases in distress (Kunz, Joseph, Geyh, & Peter, 2018; Maercker & Zoellner, 2004). Illusory growth is the illusions or defenses that survivors construct to avoid the reality of their traumatic experiences (Maercker & Zoellner, 2004). A common critique of the growth after trauma literature is that self-reported growth may be illusory growth, rather than real (Coyne & Tennan, 2010). For example, some studies show that scores on the Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996) do not correlate with positive changes on other measures which independently assess the types of growth (i.e., Frazier et al., 2009). Several authors concur that the difference between growth in which there is meaningful change for survivors of trauma (real), and growth that is a positive illusion maintained to cope with the pain arising from trauma (illusory) is important to understand (Boals & Schuler, 2018; Cheng, Ho, Hou, Lai, & Wang, 2018; Christiansen, Iversen, Ambrosi, & Elklit, 2016).

To clarify the difference between real and illusory growth, several approaches have been developed. One common approach is to explore the relationship between self-reported growth and observations or ratings by significant others (Shakespeare-Finch & Barrington, 2012; Moore et al., 2011; Park et al., 1996). This method has offered somewhat mixed results. When using the PTGI (Tedeschi & Calhoun, 1996), studies have shown that victims/survivors and significant

others do not have significant agreement about the presence of growth on values related domains, such as appreciation of life (Moore et al., 2011; Shakespeare-Finch & Barrington, 2012). Moore et al. (2011) examined the relationship between advanced cancer patient and caregiver ratings of growth using the PTGI (Tedeschi & Calhoun, 1996), and found no significant correlations between the two ratings for the growth domains appreciation of life or new possibilities. Both appreciation of life and new possibilities measure changes in values, as they explore changes in priorities and engaging in important behaviours, both key elements of the values definition guiding this dissertation. This means that patients and caregiver assessments of growth did not agree about the presence of growth in these two values-related areas, which suggests illusory growth. Shakespeare-Finch and Barrington (2012) similarly found that when comparing ratings on the PTGI (Tedeschi & Calhoun, 1996), survivors and significant others did not reach significant agreement on appreciation of life. However, when comparing ratings of behavioural change, both survivors and significant others in this study reported that survivors' behaviour had changed in meaningful ways (Shakespeare-Finch & Barrington, 2012). Agreement on behavioural changes suggests the presence of real instead of illusory growth. Therefore, it is important to learn more about growth through value change to continue developing the ability to differentiate real and illusory growth in values-related growth domains.

The field of growth after trauma has great potential to help clinicians, researchers, and victims identify positive outcomes arising from trauma. While there is a substantial literature pertaining to posttraumatic growth, more research is required as there continues to be ambiguity regarding its prevalence, relationship to desirable outcomes, and the differentiation between real and illusory growth. One approach that can clarify these issues is to isolate one type of growth for study.

Studying Types of Growth

There are many ways growth can be experienced (Mangesldorf, Eid, & Luhmann, 2019; Morris, Shakespeare-Finch, Rieck, & Newbery, 2005; Tedeschi et al., 2018). These have been referred to as aspects (Joseph, 2011), categories (Calhoun & Tedeschi, 2013; Tedeschi & Calhoun, 1995), domains (Calhoun & Tedeschi, 2006), outcomes (Tedeschi et al., 2018), elements (Berger, 2015), dimensions (Eze, Ifeagwazi, & Chukwuorji, 2019), and types (Taku & Oshio, 2015). For this dissertation, the various ways growth can manifest will be referred to as types, a term that captures a broad spectrum of change (Taku & Oshio, 2015). Types of growth can include changes in self, relationships, and values (Tedeschi & Calhoun, 1995). These three broad types have been observed in several different approaches to studying positive outcomes of trauma (Joseph, Linley, & Harris, 2004). Examples of other types include changes in priorities (Gorst-Unsworth, van Velsen, & Turner, 1993), increases in wisdom (McCormack & Joseph, 2014), and increased compassion (McCormack & McKellar, 2015). The term domain typically describes the five types of growth which are captured by the PTGI: increases in personal strength, appreciation of life, new possibilities, relating to others, and spiritual change (Tedeschi & Calhoun, 1996). For the purposes of this dissertation, the word *domain* will only be used when referring to the five types of growth identified using the PTGI.

In spite of the different types, most studies treat growth as a singular entity, represented by a global or total score. However, "… the nuances of growth following trauma may be lost in interpreting only global scores" (Armstrong & Shakespeare-Finch, 2011, p. 134); an important direction for growth research is to explore the trajectories, nuances, and characteristics of the individual types (Armstrong & Shakespeare-Finch, 2011; Aspinwall & Tedeschi, 2010; Taku & Oshio, 2015). There are several reasons for this recommendation.

First, the low correlations between types suggest that they have distinct characteristics (Eze et al.2019). Second, the trajectory by which each type of growth arises may differ. For example, studies show that the way core belief disruption leads to growth varies by the type (Eze et al., 2019; Taku & Oshio, 2015). Also, different domains of growth can relate to trauma type (Shakespeare-Finch & Armstrong, 2010; Taku & Cann, 2014). Third, the types of growth vary based on culture (Weiss & Berger, 2010). Fourth, survivors of trauma present idiosyncratic growth profiles that can vary by type (Aspinwall & Tedeschi, 2010; Calhoun & Tedeschi, 2006). For example, when Konvisser (2013) studied growth in the aftermath of politically motivated violence, they found two domains of growth, new possibilities and personal strength, appeared to be driving overall growth scores. Similarly, the type of growth predicted the amount of total growth participants reported (Taku, Iimura, & McDiarmid, 2018). Fifth, survivors who are able to identify different types of growth for themselves may engage differently with their experiences and therefore be less prone to self-deception and illusory growth (Aspinwall & Tedeschi, 2010). Sixth, different types of growth present distinct correlations to PTSD symptoms (Morris et al., 2005). Finally, if the specific types of growth are studied individually, construct validity can be assessed (McMillen & Fisher, 1998). The evidence above offers a substantial rationale to study individual types of growth. Recent research has begun to isolate a single type of growth for independent study (Markman et al., 2019). As will be discussed below, values change was selected as the single focal type of growth for this dissertation as it is commonly reported in the growth literature, provides an opportunity to merge the growth and values literatures, it benefits survivors and their communities, and has clinical utility. This dissertation focuses on positive changes in values as a type worthy of further study.

Rationale for Studying Positive Values Change

There are compelling research-based reasons for studying positive values change. There is also a personal reason. It starts with the word opportunity. Several years ago, I was providing counselling for a 21-year-old female client who was trying to recover from a brutal rape. After being told by police there would be no charges, because her broken body was not sufficient evidence of her lack of consent, she expressed pain and fear that her life was destroyed. She feared the assault had cost her an education, as she had withdrawn from university. We sat in my office, feeling her palpable despair and trying to find a way through. I asked her, "If everything is gone, if your life feels over, what is the opportunity in that?" She looked shocked, and then angry, but we finished our session. I did not see her for almost a year. When she returned, she told me that the word opportunity had seemed incredibly insensitive and hurtful at the time. I was devastated at the hurt I had caused and wondered if I was cut out for the field. She also told me that the word had stayed with her and she herself began to ask, "What if there is an opportunity here?" By the time she returned to therapy she had re-enrolled in university, changing her major to a field that would allow her to help other victims. She described new priorities related to her family, her physical well-being, and her self-awareness. She was politically active and had started an awareness campaign about sexual violence in her city. She still suffered with symptoms of anxiety and PTSD, but she was filled with pride about living a values-driven life. The assault became an opportunity to evaluate what she valued, make changes in her values and actions, and begin to build a life full of meaning. In spite of the horrible trauma she had endured, this client reported being glad to be alive, and that her newfound values had been the opportunity which arose from her assault. This client, and others, inspired curiosity about how values can grow and change following violence.

Positive change in the values held by survivors is an important type of growth. Although values can play a role in the process by which other types of growth occur (Shakespeare-Finch & Adams, 2017; Shuwiekh et al., 2018; Simsir & Dilmac, 2018; Taku & Cann, 2014; Vilenica, Shakespeare-Finch, & Obst, 2013), values change is itself a distinct type of growth, worthy of study. Shakespeare-Finch and colleagues report, "appreciation of life and changes to priorities [are] also a theme consistent with research conducted around the globe" (Shakespeare-Finch, Schweitzer, King, & Brough, 2014, p. 327). Appreciation of life taps the value of one's own life and the priorities victims set about what is important to them (Tedeschi & Calhoun, 1996). Values determine what is important and set priorities, therefore when appreciation of life and change in priorities are consistently reported, this suggests values change is also happening consistently. As the type of growth can vary across cultures (Weiss & Berger, 2010), the fact that this outcome appears robust in many countries (Shakespeare-Finch et al., 2014) suggests it is worthy of further exploration. Though values do appear throughout the growth literature, there are several opportunities to further develop our understanding of this important growth phenomenon.

Defining Values for Studying Growth After Trauma

In order to explore why it is important to study positive values change as a type of growth, there must first be a clear understanding of the phenomenon being discussed. There is a lack of consistency in defining positive values change in the growth literature. Models have referred to this type of growth as changes in priorities (Carver, 1998; McMillen & Fisher, 1998; Tedeschi & Calhoun, 1996) change in life philosophy (Joseph & Linley, 2005; Park et al., 1996), appreciation of life (Joseph & Linley, 2005; Tedeschi & Calhoun, 1996; Teseschi & Calhoun, 2004), sense of purpose, or changes in core beliefs (Calhoun & Tedeschi, 2013). Authors also

report that these changes can motivate victims to act in desirable ways (Tedeschi et al., 2018). All of these conceptualizations suggest after trauma, survivors reassess what is important to them, their guiding principles, their experience of life (appreciation) and the way they choose to act. Throughout the literature these conceptualizations are used interchangeably, which creates ambiguity regarding the true nature of these changes. A clearly conceptualized definition of values change that relates to an extensive existing definition in the values literature could advance the study of growth and provide links to the values literature.

Researchers in psychology and sociology have studied values for decades. This section will review existing definitions and conclude with a rationale for the definition of values that guides this work. Rokeach (1973) understood values as "enduring beliefs that a specific mode of conduct is personally or socially preferable to an opposite mode or converse mode of conduct" (p. 5). He emphasized both the assessment of importance and values-congruent behaviour as key to understanding values.

Shalom Schwartz (1994) extended the work of Rokeach, defining values as a hierarchy of personal beliefs that transcend situation, illuminate desirable end states, and guide behaviour. Schwartz et al. (2012) have provided a model for the universal structure of human values. The model maps 19 values along motivational continua, in which values on opposite ends oppose one another. Of importance to this discussion, researchers using Schwartz's model suggest that values can change during major life transitions (Schwartz, 2016). When these changes occur, one end of the motivational continuum increases in importance and the other end decreases; for example, as openness values increase, conservative values decrease.

Gouveia and colleagues (Gouveia, Milfont, & Guerra, 2014) have developed a functional theory of human values, in which values serve two functions: to guide actions and to demonstrate

needs. The expression of needs pertains to what people strive for: surviving or thriving (Gouveia et al., 2014). There are clear parallels between the things one needs and the things one deems important. Therefore, this model hones the understanding that values are assessments of what is important in service of either surviving or thriving.

Clinical theories extend the understanding of values by indicating how values relate to challenges. Existential psychotherapy theorists argue that values are individually articulated, chosen, and then enacted (Frankl, 1967). From this perspective, therapeutic change happens through choosing and defining personal values (Baumeister & Vohs, 2002). Unlike Schwartz et al. (2012), existential writers have argued that only pro-social values are worthy of clarification and pursuit (Frankl, 1967). This suggestion presents an interesting paradox for the growth literature. If values change in ways that are deemed positive by the victims, but are not pro-social, does this constitute growth?

Humanistic theorist Carl Rogers (1964) described values as behaviours that occur in congruence with priorities or constructed meanings that the individual *and* society deem important. Rogers (1964) believed that the suffering that brings individuals to therapy can arise from a lack of congruence with personally held values. Individuals who know and live their values are more likely to experience well-being. This connection is relevant to the growth literature because growth has been shown to only modestly relate to well-being (Helgeson et al., 2006). If growth often includes clarifying values (Joseph, 2011) and changing behaviour in valued directions (Tedeschi et al., 2018), one would expect the relationship between growth and well-being to be robust. This discord underscores the importance of developing a deeper understanding of this specific form of growth.

A recent treatment theory, Acceptance and Commitment Therapy (ACT) (Hayes et al., 2013), offers a definition of values which ties many elements of previous conceptualizations together. From the ACT perspective *values* are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al. , 2019; Dahl et al., 2009; Florez et al., 2019; Hayes et al., 2006; Hayes et al., 2013; Plumb et al., 2009; Wilson et al., 2010). The ACT definition of values suggests that when individuals enact their values, it is rewarding and they want to continue acting in a values-congruent fashion (Hayes et al., 2013) and experience a sense of purpose (Barrett, O'Connor & McHugh, 2020).

The ACT definition was selected as the guiding conceptualization of values for the current dissertation for several reasons. First, the definition has many components that are similar to the conceptualizations of changes in values in the growth literature, which will be discussed below. Both assert that individuals can select or change what they think is important and worthy of prioritization, that newfound priorities can guide behaviour, and that doing so results in a shifted experience of life. This idea is essential when conceptualizing values as this type of growth, as other theories suggest that values crystalize early in life and are unlikely to change (Sagiv, Roccas, Cieciuch, & Schwartz, 2017). In order to understand values change as a type of growth, it must be possible for values to change. Second, ACT is designated an empirically supported treatment (EST) through the American Psychological Association's Society of Clinical Psychology (Society of Clinical Psychology, 2016). This society is tasked with evaluating the evidence base of existing psychotherapeutic theories, and only those with sufficient evidence base are designated ESTs. As an EST, evidence suggests that together, the components of the ACT model have therapeutic efficacy; one of these components is values.

Though more research is required to understand the role values play in the efficacy of ACT, its role in this empirically supported model suggests this conceptualization has clinical merit. Finally, studies have shown that enacting values, as defined from an ACT perspective, is related to improved well-being (Ciarrochi, Fisher, & Lane, 2011; Lundgren, Dahl, & Hayes, 2008). Therefore, to further explore the relationship between growth and well-being, it would be useful to have a clear and consistent conceptualization of one type of growth that has already shown a significant, positive relationship to well-being. This dissertation seeks to contribute to the clarification of what is meant by positive change in values, using the ACT definition, to enable future researchers to continue exploring the relationship of this type of growth with well-being.

Positive change in values is a type of growth endorsed across theories however, the way they conceptualize and describe this change varies. This dissertation suggests that it would be helpful to develop a consistent and clear definition of values. This work uses the definition of values offered by the ACT literature: *values* are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al. , 2019; Dahl et al., 2009; Florez et al., 2019; Hayes et al., 2006; Hayes et al., 2013; Plumb et al., 2009; Wilson et al., 2010). The following section will review models of growth that highlight elements of this definition.

Models and Measures of Growth

When selecting one type of growth for study, one motivating factor can be pan-theoretical agreement. In the case of positive values change, several theorists have developed models to explain growth after trauma that include the idea that trauma can cause positive changes in values and priorities. These models include stress related growth (Park et al., 1996), benefit finding (Antoni et al., 2001), thriving (Carver, 1998; O'Leary, 1998), adversarial growth

(Joseph & Linley, 2005), and posttraumatic growth (Tedeschi & Calhoun, 1996). Many growth models do not describe values change in detail however they do contain items in their measures that reflect values. Exploring the measures highlights more precisely how these types of changes are conceptualized within each of the models. Three related models of salutogenic outcomes from trauma (meaning making, resilience, and altruism borne of suffering) do not specifically mention positive changes in values. Information on them can be found in Appendix A. The following section will illustrate how values are present in many leading models of growth, to demonstrate that it is a common type of growth worthy of further study and conceptualization.

Stress-related growth. Park et al. (1996) coined the term stress-related growth to describe positive outcomes of stress and trauma. They suggest that growth manifests through three kinds of changes: personal resources, social resources, and coping skills. These changes include the increased valuing of friends and family and collectively lead to broadly defined changes in life philosophy. Other than increased valuing of relationships, the role of values is not specified. However, they are unquestionably part of a broadly defined life philosophy, as a broad definition of life philosophy would likely include decisions about what is important and guide behavior, key components of the definition of values proposed here. The Stress-Related Growth Scale (SRGS; Park et al., 1996) that measures this model, has items about sense of purpose (My life now has more meaning and satisfaction), and clarity about what is important (I rethought how I want to live my life). This is congruent with the current definition of values; when individuals live their values, they have a clearer sense of purpose and decide what is important, and how to enact those ideas.

Benefit finding. Antoni and colleagues (2001) developed a model of growth from descriptions of the positive outcomes of women suffering from breast cancer called benefit

finding. Benefit finding can manifest in several ways including, "improvements in personal resources and skills, an enhanced sense of purpose, enhanced spirituality, closer relationships with significant others, and changes in life priorities" (Antoni et al., 2001, p. 20). Antoni et al. (2001) developed a measure that includes items to assess changes in priorities and sense of life purpose. The ideas in this model align with the proposed definition of values that describes value as what is important and what guides priorities.

McMillen and Fisher (1998) also explored benefit finding, reporting that growth after trauma has eight benefits: enhanced self-efficacy, increased community closeness, increased spirituality, increased compassion, increased faith in other people, increased family closeness, lifestyle changes, and material gains (McMillen & Fisher, 1998, p. 183). These types tap four elements of growth, one of which is changes in life priorities. With these ideas in mind, they developed the Perceived Benefits Scale (PBS; McMillen & Fisher, 1998). The scale has a lifestyle changes subscale that includes new priorities, an aspect that clearly relates to the values definition guiding this work. Also consistent with this definition are items about changes in materialism, living with simplicity and living more in the present which are examples of changes in what is important.

Thriving. In the context of trauma, O'Leary (1998) reported that thriving arises when "challenge provides the opportunity for change… it forces individuals to confront personal priorities and re-examine their sense of self" (O'Leary, 1998, p. 430). Although they are not clearly defined, common psychological improvements of thriving are greater appreciation of self and others, changes in personal philosophy or orientation to life, and changes in priorities (Carver, 1998). Personal philosophy and orientation to life are likely driven by values and priorities are a core component of the values definition at the core of this work. One instrument

developed to measure thriving is the Thriving Scale (TS; Abraido-Lanza, Guier, & Colon, 1998). The items on this scale that address values were taken from the SRGS (Park et al., 1996), so this measure does not add additional utility to the literature with respect to studying positive values change. Within the thriving model personal philosophy and orientation to life are not clearly defined, however it is likely that they include decisions about what is important, a core component of the ACT definition of values. Further, and in congruence with ACT, the thriving model asserts that trauma can change priorities, which ACT contends are driven by values.

Adversarial growth. Adversarial growth is the "process of struggling with adversity… that propel[s] the individual to a higher level of functioning than that which existed prior to the event" (Linley & Joseph, 2004, p.11). Adversarial growth arose from Organismic Valuing Theory, which states that people are driven to actualize values they deem important, which can change based on exposure to stressors (Joseph & Linley, 2005). This theory suggests that individuals can grow from re-evaluating their worldview in light of new information gleaned from trauma (Joseph & Linley, 2005). This growth includes changes in life philosophy as, "finding a fresh appreciation for each new day and renegotiating what really matters to them in the full realization that their life is finite" (Joseph & Linley, 2005, p. 263). These ideas closely parallel the idea of values as guiding decisions about what is important. In their work on adversarial growth, Joseph, Williams, & Yule (1993) developed the Changes in Outlook Questionnaire (CiOQ), which has also been adapted into a short-form (CiOQ-S) (Joseph, Linley, Shevlin, Goodfellow, & Butler, 2006). On the CiOQ (Joseph et al., 1993), values-related ideas include assessing how participants value family and relationships, and living life to the fullest. The definition of values in this work includes the idea that values can contribute to sense of purpose and motivate behaviours, both of which are implied by living life to the fullest. Also,

changes in valuing family and relationships suggest a shift in what the survivor deems important, which is also a core component of the ACT definition of values.

Posttraumatic growth. The most frequently cited model of growth after trauma is PTG (Shakespeare-Finch & Lurie-Beck, 2014). Tedeschi and Calhoun define PTG as, "positive psychological changes experienced as a result of the struggle with highly challenging life circumstances" (2004, p.1). Within this model, it is thought trauma disrupts core beliefs, which directly contributes to the development of growth (Lindstrom, Cann, Calhoun, & Tedeschi, 2013). In their early work, Tedeschi and Calhoun (1995) identify three forms of growth: in the self, in personal relationships, and in life priorities. Changes in values or life priorities are described frequently throughout the PTG literature. Development of the PTGI (Tedeschi & Calhoun, 1996) yielded five factors, or domains which are commonly reported throughout the PTG literature: appreciation of life, personal strength, relating to others, new possibilities, and spiritual change. Tedeschi and Calhoun (2004) have linked appreciation of life to positive changes in values, suggesting that change in values and priorities is accompanied by increased appreciation for the positives in life that exist after the trauma, including the "little things" (p. 6). Both engagement with the present moment and focusing on appreciation reflect positive changes in behavior, a core component of values (Barney et al., 2019; Plumb et al., 2009; Wilson et al., 2010). Within the PTG model, values change can also emerge as existential changes, such as sense of purpose and core beliefs (Calhoun & Tedeschi, 2013). Values inform decisions about what is important that guide priorities and motivate behaviour; these are mirrored in changes in core beliefs and behaviours from the perspective of PTG. PTG theory clearly presents changes in values as a core outcome of the growth process, in a way that is congruent with the definition of values used here.

Hobfoll et al. (2007) extended Tedeschi and Calhoun's (2004) model of growth to what has been termed Action Based Growth (Stasko & Ickovics, 2007). They argued that for growth to be realized and the benefits of growth to arise it must include participation in meaningful action. This aligns with the idea that behavioural activation is an essential component of valued living (Barney et al., 2019; Plumb et al., 2009; Wilson et al., 2010). While Hobfoll at al. (2007) do not explicitly explore values as motivators for survivors to engage in meaningful action, values are an important motivator for action (Barney et al., 2019; Plumb et al., 2009; Wilson et al., 2010).

Several widely used measures of PTG have been developed. They include the PTGI (Tedeschi & Calhoun, 1996), the PTGI Short Form (PTGI-SF; Cann, Calhoun, Tedeschi, Taku et al., 2010), and the PTGI-X (Tedeschi, Cann, Taku, Senol-Ruak, & Calhoun 2017), an expanded form designed to measure a broader understanding of spiritual and existential post-trauma changes (Tedeschi et al., 2017). While there is some cross-cultural variability, these three measures typically yield five factors: appreciation of life, new possibilities, personal strength, relating with others, and spiritual changes (Tedeschi et al., 2017). These measures offer additional precision for understanding how the PTG model includes values. While values may contribute to the development of many of the possible changes it measures, only two subscales of the PTGI (Tedeschi & Calhoun, 1996) explicitly query ideas related to changes in values specifically, as defined above (such as changes in priorities or doing better things with life): the *Appreciation of Life* (AIL) subscale and the *New Possibilities* (NP) subscale. Within the appreciation of life domain, one item is clearly related to values: "I changed my priorities about what is important in life" (Tedeschi & Calhoun, 1996). This item includes both a decision about what is important and how this guides priorities. This domain also includes an item reflecting

increased appreciation for the value of life ("I have a greater appreciation for the value of my own life"). The items, "I am able to do better things with my life" and "I am more likely to try to change things which need changing" (Tedeschi & Calhoun, 1996), indicate that survivors can change their behaviours in ways they deem are important, two key elements of the definition. On the PTGI-X, an item was added to the spiritual and existential change domain that asks survivors whether they have greater clarity about life's meaning (Tedeschi et al., 2017). Given the relationship between values and purpose (Barrett, O'Connor, & McHugh, 2020), this item may indicate that survivors have values changes. It is possible that values change could also be implicated in the other domains of growth. However, items included in other factors do not directly query whether the changes reported stem from different values or other possible sources. Therefore, only the appreciation of life and new possibilities factors, and possibly the spiritual/existential domain of the PTGI-X, directly assess changes in values.

Several measures have been developed and used widely to assess growth after trauma. Though these scales have substantial value for the literature, they are limited in their ability to capture and describe growth through positive values change. While many of the measures have values related items, they do not offer domains or subscales which focus exclusively on values, which means that the information they yield does not clearly offer information about values change. Therefore, to understand growth as positive values change, other methods of research are recommended. Qualitative and literature review methods may be more useful to illuminate survivors' values change after trauma. There are also benefits to both the values and growth literatures by exploring the links between them.

Understanding Values Change in the Context of Growth

The idea that trauma can change values and priorities pervades the growth literature. Joseph (2011) states that the reprioritization of values is characteristic of growth after trauma as survivors become less concerned with facades and externally prescribed values and reflect on what they authentically believe to be important. These authentic values equip survivors to face future traumas and stressors (Janoff-Bulman, 2006; Joseph, 2011). Calhoun and Tedeschi (2006) state that trauma changes what is important to survivors, often resulting in increased appreciation of life. They argue that a changed sense of what is important is at the core of the changes in philosophy of life that are often reported by survivors (Calhoun & Tedeschi, 2006). They also assert that trauma can motivate survivors to engage in important new paths in their lives (Calhoun & Tedeschi, 2006).

In addition to being present in many models and measures of growth, positive change in values has been demonstrated as an important finding in many studies. Several seminal quantitative findings reinforce the theoretical assertion that values change is a seminal part of growth. Appreciation of life, a type of growth closely tied to values as mentioned above (Tedeschi & Calhoun, 1996), is often the most common form of growth endorsed (Feder et al., 2008; Hijazi, Keith, & O'Brien, 2015; Konvisser, 2013; Lurie-Beck, Liossis, & Gow, 2008). A study of veterans reported changes in priorities was the most commonly reported type of growth (Pietrzak et al., 2010). Another type of growth closely associated with positive change in values is new possibilities. It has also been endorsed as a leading form of growth (Peltzer, 2000). The frequency with which these domains are endorsed as the most important forms of change suggests that more study is warranted to understand this common type of growth.

In a recent innovative study, Markman et al. (2019) extracted one type of growth, new possibilities, for independent study from a larger data set on female breast cancer survivors.

Their results indicate new possibilities was independently able to distinguish between survivors' approaches to problems in their lives. This study sets precedent for extracting a specific type of growth for study without consideration of the other types of growth. It also suggests that a factor of growth related to change in values, new possibilities, is robust enough to yield useful findings.

Qualitative research also supports the salience of positive changes of values after trauma. This methodology has been used to let participants describe the ways their values have changed after trauma. After trauma, victims describe clarification in what they find important in life (Melerski, 2008; Shakespeare-Finch & Copping, 2006; Volgin, Shakespeare-Finch, & Shochet, 2018). In one study, first responders were interviewed after responding to the 9/11 terrorist attacks (Melerski, 2008). They reported that the experience of these attacks clarified their priorities in positive ways (73%; N=22) and clarified what was important (59%; N=17). Victims also report increased valuing of their own lives (Adams, Shakespeare-Finch, & Armstrong, 2015). After trauma, many victims report increased willingness to engage in value-driven behaviour in service of a purposeful life (Adams et al., 2015; Armour, 2003; Gilpin-Jackson, 2013). A grounded theory study sought to identify dimensions of growth and reported that survivors of trauma report they are more able to appreciate trivial aspects of their lives and have a clearer sense of what's important (Shakespeare-Finch & Copping, 2006). Qualitative studies have also shown increases in specific values such as compassion (Hirsch & Lazar, 2011), love (Simms, 2015), and kindness (Borawski, 2007) after trauma. Qualitative studies clearly indicate that in many cases, trauma clarifies what is important to survivors, re-arranges their priorities, and motivates them to engage in behaviours that are value-driven. Taken together, these studies highlight the importance of growth through positive values change.

In spite of this theoretical agreement that trauma can change values, and several findings in congruence with this agreement, there is a paucity of pan-theoretical conceptualization of these changes, and the precise nature of what is meant by positive change in values after trauma requires refinement. The following section will review definitions of values from the decades of research on human values and suggest which of these definitions might be useful as a conceptualization of values to study positive values change in the growth literature.

Merging Literatures Strengthens Them

Joseph (2014) asserts that one way to further strengthen the conceptualization of growth is to "conceptualize [PTG] in terms of already well-defined constructs" (p. 340). Growth and values each have separate literatures that overlap in the ways outlined above. Bringing these fields together offers two benefits. The first benefit relates to defining what constitutes positive changes. Within the growth literature, some argue that if there are not increases in functioning and decreases in distress (Currier, Holland, & Neimeyer, 2009), then growth is illusory (Boals & Schuler, 2018). However, if growth is most likely at moderate levels of PTSD (Shakespeare-Finch & Lurie-Beck, 2014), survivors can endorse growth and still report impairments in psychological functioning. This suggests that research cannot use this metric as the sole determinant of whether values change is positive or negative.

Typically, when researchers make assessments about the valence of their data, they do so guided by existing literature. In the case of evaluating the valence of values change, the guidelines in the values literature are not clear. In the values literature, some have argued that all values are positive (Roccas, Sagiv, & Navon, 2017). To the author's knowledge, only the materialism value has been consistently associated with negative psychological outcomes for the person holding that value (Dittmar, Bond, Hurst, & Kasser, 2014; Kasser, 2018). Even in this

case, the relationship between materialism and negative psychological outcomes becomes less robust in environments which validate this value (Dittmar et al., 2014). Therefore, even when values have consistent relationships to poor outcomes for the values holder, it is possible some people may deem this value positive. Therefore, when trying to determine whether values change is positive, the values literature does not provide a clear framework to use in identifying values as positive or negative.

Another idea of how to determine the valence of values change is through behavioural observation, which has been used to validate growth (Shakespeare-Finch & Barrington, 2012). While this approach can be useful for validating growth, the values literature has shown that values are extremely difficult to ascertain through behavioural observation (Dilmac, Aricak, & Cesur, 2014). Behaviour can be multi-determined and factors, which are not values, can motivate behaviour including emotions such as fear (O'Laughlin-Banks & Raciti, 2017) and shame (De Hooge, Zeelenberg, & Breugelmans, 2011), or social pressures such as conformity (Nook, Ong, Morelli, Mitchell, & Zaki, 2016) and approval seeking (van Valkengoed & Steg, 2019). Therefore, while behaviour change can be helpful in identifying new behaviours arising since growth has occurred, it cannot effectively identify what specific changes in values are causing changed behaviours. Similarly, when using the PTGI (Tedeschi & Calhoun, 1996) in the growth literature, appreciation of life, a domain of growth associated with values, can be perceived differently by survivors who experience it and significant others assessing it (Shakespeare-Finch & Barrington, 2012; Shakespeare-Finch & Enders, 2008). For example, a person may make a donation to Black Lives Matter because she values equality and social justice or because she wants the approval of friends. The behaviour alone does not clearly illuminate the underlying values. This is also true of anti-social and violent behaviours. For example, in

Northern Ireland, some individuals who engaged in paramilitary activity did so in response to the violence perpetrated against them, their families, and their communities (Moloney, 2010). Victims of the Troubles who chose to engage in retaliatory violence may have been acting out of fear or anger (not values-driven), or from a positive value such as loyalty to community or protecting vulnerable loved ones. Although the experience of the violence was unquestionably negative for the victims, some who participated in violence may identify this behaviour as values-congruent and positive. The behaviour cannot be exclusively used to determine the values, and valence of those values, which motivated them.

Growth is typically considered to be an individual constructivist phenomenon (Tedeschi et al. 2018), therefore the valence of growth changes is understood best by the individual experiencing it, rather than the societal impact of said growth. While behavioural observation is an important method in the growth literature, it cannot alone indicate positive values change. It is important to ask victims about the values underlying changed behaviour and whether they are positive or negative. A clear and consistent definition of the values construct makes it easier to ask survivors about these changes specifically.

The values literature can contribute to the growth literature by suggesting that when determining the valence of positive values change, survivors should be queried. As survivors accommodate their trauma and grow in unique ways related to their pre-trauma beliefs (Joseph, 2011), growth can be difficult to identify externally. How survivors appraise a traumatic event will relate to the growth they experience (Taku & Cann, 2014). After trauma, changes arise in, "… the kind of person one considers oneself to be…" (Fontana and Rosenheck, 1998, p. 488), a clear self-assessment. The values literature supports using victims' self-assessments to determine valence. Research indicates that when survivors rank their personal values, or

compare chosen values to other values, they are able to do so accurately (Dittmar et al., 2014; Lee et al., 2019), and the process of comparison improves participants' ability to assess the importance of various values (Bilsky et al., 2015). When using comparison methods, individuals compare values, and using this comparison determine which values they deem are most important (Bilsky et al., 2015; Dittmar et al., 2014). This is similar to assessing value change in the context of growth where survivors reflect on a value they held prior to the trauma and compare it to a value they currently hold, after trauma. This finding may make a substantial contribution to the growth literature, as self-report with respect to growth has been criticized. It has been suggested that self-report more effectively identifies illusory growth than real growth (Boerner et al., 2020). The idea that survivors can compare present states to past states accurately has been criticized in the growth literature (Coyne & Tennen, 2010). However, with respect to values, the studies listed above imply that survivors may be able to accurately compare post-trauma values to pre-trauma values, which may decrease the potential limitations of self-reports of growth. This underscores the potential utility of asking survivors how their values have changed, and the valence of those changes, in the context of growth research.

In conclusion, by exploring the values literature, growth researchers can find a strong rationale for allowing survivors to determine if their values change is positive. If "… value is in the eye of the beholder, not in the object of perception" (Schwartz, 2016, p. 63), and if individuals can "…identify(ing) what they care about most within their life and. … construct a mental and verbal understanding of these things…" (Barney et al., 2019, p. 228), it is important to determine whether values change is positive by asking survivors. Consulting the values literature underscores the importance of allowing survivors to determine the valence of the changes they have experienced.

The second benefit which can arise from merging these literatures is to demonstrate the possibility of values change and suggest mechanisms of change. Traditionally, values were thought to be solidified by early adolescence (Schwartz, 2016) and stable across the lifespan (see Sagiv et al., 2017 for a review). Recent research has begun to show that values can change with age (Vilar, Hou-fu, & Gouveia, 2020) and after meaningful life events (Bardi, Lee, Hofmann-Towfigh, & Soutar, 2009). Schwartz (2016) concurs that experiences have the potential to elicit substantive values change; for example, after immigrating, individuals' values can become similar to those in their host country (Bardi, Buchanan, Goodwin, Slabu, & Robinson, 2014; Lonnqvist, Jasinskaja-Lahti, & Verkasalo, 2011). More study is required to better understand how and when values change. Growth theory asserts that values can change in substantive, positive ways following trauma. Deepening the understanding of growth through positive values change after trauma will contribute to the values literature by illustrating how seismic life events can change values for individuals.

Within the values literature, Bardi and Goodwin's (2011) model suggests that experiences that challenge values may lead to permanent change. According to this model, initial values change comes from environmental cues that elicit a re-evaluation of existing values. If new values are more useful in a new environment, it will be adopted. These changes can be automatic or effortful but are more likely when there are life-changing events. This model is very similar to a leading model of growth offered by Tedeschi et al. (2018). Both models identify an environmental cue (trauma in PTG) which leads to reflection and interpretation (automatic and deliberate rumination in PTG) and subsequent value change or growth. The similarities between these two models suggest that values may change in consistent ways after important catalysts. More study is required to hone the understanding of how values

change after trauma, the process and correlates of these changes, and the experiences of those who report them for a deepened understanding of this emerging phenomenon in the values literature.

Values Change Benefits Survivors

So far, this literature review has suggested that values change after trauma is an important phenomenon requiring further study. Such research can illuminate both the growth and values literatures. The fact that this type of growth benefits both survivors and their communities is another reason on-going exploration of this phenomenon is worthwhile.

Positive values change can benefit survivors by motivating positive behaviour. Values can guide behaviour in a dilemma, contribute to the development of goals, give a framework for planning and decisions, and influence the lens through which individuals see the world around them (Schwartz, 2016). Hobfoll et al. (2007) suggest that growth is optimized when it occurs in conjunction with behaviour change; survivors who reported changes in behaviour also reported higher levels of growth (Shakespeare-Finch & Barrington, 2012). Other research suggests that understanding how survivors engage in more altruistic behaviours may help foster quality of life (Cann, Calhoun, Tedeschi, & Solomon, 2010; Davis & McKearney, 2003). Therefore, behavioural activation is likely a beneficial part of growth after trauma. Given the role of values in directing behaviour, and the fact that one outcome of growth can be positive changes in values (Joseph, 2011), it is important to more deeply understand values-based growth outcomes and their relationship to resultant behaviour.

Values Change Can Benefit Communities

When survivors experience positive values change it can benefit their communities. For example, when studying growth in survivors of politically motivated violence, victims, "… see

negative events as an opportunity to help others, contributing to society and turning tragedy into action or activism" (Konvisser, 2013, p. 6). Similar findings reported by Tedeschi and Calhoun (1995), suggest that trauma can motivate survivors to help others and leave a meaningful legacy for loved ones. Survivors also have reported increases in empathy and compassion, that motivated them to help others (Volgin et al. 2018). This desire to help can also manifest in greater participation with community groups and charities (Shakespeare-Finch & Barrington, 2012). Evidently, survivors engage in behaviours which not only benefit them, but contribute significant benefit to their communities. It would be a useful contribution to the growth literature to understand more deeply the values change which may underscore these beneficial changes in behaviour.

Studying Positive Values Change After Trauma Has Clinical Utility

A final, but compelling reason to continue studying positive values change in the aftermath of trauma is that values work has clinical utility. Clinical theories endorse values processes that support clients in attaining desirable outcomes such as increases in well-being or therapeutic change (Baumeister & Vohs, 2002; Hayes et al., 2006). Living in congruence with values has been shown to relate to less PTSD and depressive symptoms in individuals exposed to trauma (Donahue, Khan, Huggins, & Marrow, 2017). In fact, when veterans were able to identify their values, and act in congruence with them, they showed less suicidal ideation (Bahraini et al., 2013). A recent review suggests that merely affirming personal values can decrease sense of threat and physiological responses to stress (Serowik, Khan, LoCurto, & Orsillo, 2018). Further, when individuals enact their values, they report increases in vitality, psychological well-being, and life satisfaction (Serowik et al., 2018). ACT writers have developed interventions to support clients in clarifying, affirming, and enacting their values

(Dahl et al., 2009). These are useful ideas for growth researchers, as, "… a clinical focus on the accommodation of the assumptive world to incorporate the needed changes may be useful in reducing distress and also may enhance the likelihood of the experience of growth." (Cann, Calhoun, Tedeschi, Kilmer et al., 2010, p.33). Finding interventions to support the re-development of worldviews by working with values can help survivors decrease distress and facilitate growth. These interventions may facilitate deliberate rumination, and contribute to positive changes in beliefs (Vilenica et al., 2013). A more comprehensive understanding of values change in the aftermath of trauma may provide additional avenues for clinicians to support survivors in attaining desirable outcomes after their traumatic experiences.

Violent/Intentional Trauma and Growth

Individuals respond differently to different types of traumas (Santiago et al., 2013) and trauma type can impact the degree to which growth occurs (Linley & Joseph, 2004; Shakespeare-Finch & Armstrong, 2010). The relationship between growth and PTSD can also vary as a result of trauma type (Shakespeare-Finch & Lurie-Beck, 2014). Finally, the type of growth manifested differs based on the kind of trauma experienced (Shakespeare-Finch & Armstrong, 2010). Different trajectories of values-based growth occur with different trauma types (McMillien & Fisher, 1998). Therefore, isolating trauma type when researching PTG is essential.

This dissertation explores positive changes in values specific to violent and intentional trauma. Violent/intentional trauma (Matthieu & Ivanoff, 2006; Santiago et al., 2013) was selected for several reasons. First, major models of growth include the idea that shattering of the worldview is an important precursor to the growth process (Tedeschi & Calhoun, 2004). Research suggests that worldviews shatter only under high levels of distress (Janoff-Bulman, 2006; Tedeschi & Calhoun, 2004). Other studies suggest that survivors of violent and intentional

trauma have higher levels of psychopathology than those with unintentional forms of trauma (Norris et al., 2002; Santiago et al., 2013). Psychopathology and distress are often used interchangeably in the literature (Chung & Freh, 2019). If violent trauma is more likely to illicit distress, which contributes to shattering of worldview, it may also be more likely to precede positive changes in values. This assumption is supported by Zerach et al.'s (Zerach, Solomon, Cohen, & Ein-Dor, 2013) study, which suggested that growth through positive changes in values was more common when victims reported higher levels of distress. Violent traumas can cause more severe post-trauma pathology and suffering (Norris et al., 2002; Santiago et al., 2013). Therefore, any research which illuminates ways for survivors to find purpose and comfort is important. One meaningful contribution to the PTG literature would be to isolate and explore positive changes in values as they appear following violent trauma.

Growth After Political Violence

The research reported in the second study of this dissertation focuses specifically on political violence. *Political violence* broadly encompasses four kinds of violent activity: military conflicts, projects of genocide or ethnic cleansing, terrorism and state repression, and revolution/counter-revolution (Bloxhman & Gerwarth, 2011). These kinds of violence are distinct from other forms of interpersonal violence such as criminal activity and domestic violence (Bloxham & Gerwarth, 2011). Political violence impacts its victims directly but can also show negative mental health impacts for individuals living in contexts of political violence, but not directly affected (Giacaman, Shannon, Saab, Arya, & Boyce, 2007).

Growth following political violence is worthy of study for several reasons. First it is widespread. Growth has been observed after political violence in several countries, including Chile (Cardenas-Castro, Faundez-Abarca, Arancibia-Martini, & Ceruti-Mahn, 2017; Castro et

al., 2019), Palestine (Salo, Quota, & Punamäki, 2005), Northern Ireland (Simms, 2015), the former Yugoslavia (Powell, Rosner, Butollo, Tedeschi, & Calhoun, 2003), the United States (Mark, Stevelink, Choi, & Fear, 2018), and Israel (Konvisser, 2013). Also, political violence impacts not only its victims but anyone in proximity to the violence, leading to a pervasive sense of threat (Hawley et al., 2017). As perceived threat is a significant correlate of growth after trauma (Helgeson et al., 2006), it is possible that contexts with political violence may be an important place to study growth. Results of several studies of growth after political violence suggest that survivors of this form of violence may experience important changes in values (Birkeland, Hafstad, Blix, and Heir, 2015; McCormack & Joseph, 2014; Rosner & Powell, 2006; Solomon, Waysman, Neria, Ohry, Schwarzwald, & Wiener, 1999). Further, survivors of political violence have been shown to embody the role of moral beacons engaging in pro-social behaviours (Brewer et al., 2016). These behavioural changes may be indicative of growth through positive changes in values. Given that behaviour has been demonstrated to be an effective corollary for measuring growth, these changes in behaviour indicate that political violence may lead to growth. To date, there is a paucity of studies that have isolated this growth in the context of political violence.

Growth After Trauma in Northern Ireland.

A particular instance of political violence in which growth warrants further exploration is the Troubles Conflict in Northern Ireland. The conflict in Northern Ireland, referred to as "the Troubles" or "the Conflict," lasted from 1969 to 1998 and resulted in the deaths of more than 3500 people (McKittrick & McVea, 2012; see Appendix B for a brief history of the conflict and relevant parties). In spite of the Good Friday/Belfast Agreement, peace is tenuous in Northern Ireland (McKittrick & McVea, 2012) and sectarian violence continues to the present day,

although at significantly decreased rates (Taylor et al., 2018). In many areas in Northern Ireland, segregation between Republican and Loyalist communities in both housing and education continues the divisions between these communities, challenging peace (Campbell, Cairns, & Mallett, 2004; Jarman & Bell, 2018). Given the fragility of the peace process, understanding mechanisms to support and strengthen peace is essential. Research indicates that after trauma from war, some victims act in ways that support peace (Brewer et al., 2016; Burrows & Keenan, 2004). Therefore, understanding growth after the Troubles may illuminate ways survivors contribute to the peace process.

The World Mental Health Survey showed Northern Ireland has the highest rate of PTSD of the 28 countries surveyed, even though other countries such as South Africa, Mexico, and Lebanon, also had histories of civil conflict (Ferry et al., 2008). More than 39% of adults in Northern Ireland have experienced a Troubles-related traumatic event (Bunting, Ferry, Murphy, O'Neill, & Bolton, 2013), and almost half of the citizens knew someone who was killed (Bloomfield, 1998). Civilians in armed conflict showed a strong curvilinear relationship between PTSD and PTG, such that moderate levels of PTSD related to the highest levels of PTG (Shakespeare-Finch & Lurie-Beck, 2014). Therefore, given the frequency of PTSD in Northern Ireland, it is important to explore how PTG manifests in this highly traumatized population.

To date only one study has examined PTG in Northern Ireland (Simms, 2015). This study included three case studies and indicated that PTG occurred in those participants but was tempered by ongoing suffering. The kind of growth reported most frequently was Appreciation of Life, the factor of Tedeschi and Calhoun's (2004) model which explicitly assesses changes in priorities. Victims of the Troubles conflict have been shown to engage in more pro-social and peace-supporting behaviours (Brewer & Hayes, 2013), which may arise from positive changes in

values. The second study included in this dissertation examines the experience of growth through positive changes in values following exposure to violence during the Troubles conflict of Northern Ireland.

Conclusion

In conclusion, while growth is a common phenomenon after trauma, there is more to learn. One way to continue developing the knowledge of this phenomenon is to study the types of growth individually. This dissertation studies one type of growth, positive change in values in the aftermath of violent trauma. Leading theories suggest that after trauma, values can change in positive and meaningful ways (Antoni et al., 2001; Carver, 1998; Joseph & Linley, 2005; McMillen & Fisher, 1998; Tedeschi & Calhoun, 1996, 2004). There are many terms for and conceptualizations of these changes, including changes in life philosophy, changes in priorities, and changes in values. This literature review contends that identifying and employing a clear and consistent conceptualization of these changes may contribute to researchers' on-going understanding of this type of growth after trauma. After reviewing various definitions of values, this dissertation suggests embracing the ACT definition of values as it closely mirrors the description of positive change in values offered in the growth literature, has empirical support, and has a demonstrated relationship to well-being. Positive values change after trauma is worthy of future study because it is a prevalent idea across theories, it presents an opportunity to merge two literatures, it benefits survivors and their communities, and it has substantial clinical utility.

This dissertation contains two studies. The first study is a scoping review, which summarizes a broad literature related to positive changes in values following exposure to violence. Results of this review are used to highlight components of the phenomenon that set the foundation for a conceptualization of positive changes in values after trauma. Second, a

qualitative study explores the experiences of individuals who report that their values changed in positive ways following trauma to highlight the components of this experience reported by survivors. The second study is an Interpretative Phenomenological Analysis (IPA) (Smith, Flowers, & Larkin, 2009) that explores the experience of survivors of the Troubles conflict in Northern Ireland who report positive changes in their values after their experiences of traumatic bereavement. The results of this study illuminate survivor experiences and the process of values change after trauma.

Link to First Manuscript

Studying positive values change in the context of growth offers value for researchers to deepen their understanding of growth after trauma. A deeper understanding of this dimension of growth offers utility for both growth and values literatures, research, and clinical applications. To guide this dissertation, values are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al., 2019; Florez et al., 2019; Plumb et al., 2009; Wilson et al., 2010). However, a review of the existing literature is needed to explore how changes in values manifest in the existing literature, to support the development of a conceptualization of this specific type of growth after trauma. The first manuscript of this dissertation is presented to report findings of a scoping review of the existing literature to illustrate what is known about positive changes in values following violence.

Positive Changes in Values Following Violence: A Scoping Review

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Contribution of Authors

Under the supervision of her doctoral supervisor, Dr. Marilyn Fitzpatrick, the student (Thea L. Comeau) completed the literature review and identified research questions and appropriate methodologies. The student also trained the second author in the methodology, collected and analyzed all data, interpreted the outcomes of the analysis, and wrote all sections of this dissertation.

Isabelle Leduc-Cummings audited the student's work, as well as contributing to the collection and analysis of data for this study. She also provided feedback on the manuscript and developed the attached tables and graphs.

Abstract

While trauma can cause negative outcomes, a burgeoning body of research suggests that trauma can also yield positive outcomes, often referred to as posttraumatic growth (PTG). These changes can manifest in several types; one is positive change in values. However, this type needs clearer conceptualization. To understand the unique types of PTG, as well as factors contributing to them, the types of growth need to be studied individually after specific types of trauma. A scoping review of the literature on growth through positive values change after violence was conducted to summarize existing evidence and identify gaps in the literature that limit the understanding of this phenomenon. This scoping review identified 83 studies (49 quantitative, 30 qualitative, 4 mixed methods) that report that violent trauma can positively change survivors' values. Included studies met four criteria: 1) trauma occurred in adulthood, 2) study considered only violent/intentional trauma, 3) trauma was experienced directly by study participants, and 4) study included values-related information. Studies were identified through searching databases, journals, and reference lists. Results indicate that most studies exploring growth after violence identify positive values change. Findings of this scoping review highlighted three processes by which positive value change occurs: shattering of previous worldview, clarification of values, and engaging in values-congruent action. Factors contributing to positive values change are also reported. Limitations of existing research and future directions for study are presented.

Keywords: Posttraumatic Growth, values, violence, trauma

Positive Changes in Values Following Violence: A Scoping Review

Historically, the study of trauma has been dominated by the exploration of pathogenic outcomes. However, over the last several decades, trauma research has broadened to include the study of positive, or salutogenic, outcomes. This is perhaps most commonly referred to as posttraumatic growth (PTG) or, "positive psychological changes experienced as a result of the struggle with highly challenging life circumstances" (Tedeschi & Calhoun, 2004, p.1). In the context of growth, trauma refers to subjective experiences which are sufficiently distressing to disrupt worldviews (Tedeschi, Shakespeare-Finch, Taku, & Calhoun, 2018). When survivors grow after trauma, they can report a marked change in their philosophy of life (Tedeschi & Calhoun, 1996) and the assumptions they make about the world (Valdez & Lilly, 2015), often referred to as values. Though these changes are commonly described, they are not consistently conceptualized. A scoping review serves to create a clearer picture of the key components of a phenomenon which is complex and has not been previously explored in depth (Daudt, van Mossel, & Scott, 2013). While values change is a commonly discussed type of growth, its lack of consistent conceptualization suggests the merit of a scoping review in creating a clearer conceptualization of what constitutes growth through positive change in values.

In order to review the literature, a broad and inclusive conceptualization is required. For this study, *values* are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney, Lillis, Haynos, Forman, & Juarascio, 2019; Florez, Schulenberg, Lair, Wilson, & Johnson, 2019; Plumb, Stewart, Dahl, & Lundgren, 2009; Wilson, Sandoz, Kitchens, & Roberts, 2010). Several therapeutic approaches espouse the importance of values and helping clients live more congruently with them, in general and following a traumatic experience (Plumb et al., 2009) which can improve outcomes for

individuals faced with stressors (Czech, Katz, & Orsillo, 2011). Although there is a vast literature addressing values types (Schwartz et al., 2012), there is more to learn about values clarification and the enactment of values in behaviour. This is especially true in the field of trauma.

PTG manifests frequently and in many contexts. Approximately 30-70% of individuals who face a traumatic event experience growth in the aftermath (Linley & Joseph, 2004); rates as high as 99% have been reported (Dekel, Mandl, & Solomon, 2011). PTG has been observed following a range of traumas including various health crises (Koutrouli, Anagnostopoulos, & Potamianos, 2012; Sherr et al., 2011) and violent traumas (Blix, Hansen, Birkland, Nissen, & Heir, 2013; Frazier, Conlon, & Glazer, 2001; Solomon & Dekel, 2007). It is important to consider the type of trauma preceding salutogenic outcomes as trauma type impacts growth trajectory (Shakespeare-Finch & Armstrong, 2010). A seminal meta-analysis showed that the relationship between PTSD and PTG differed based on trauma type (Shakespeare-Finch & Lurie-Beck, 2014). Therefore, the current study will isolate one trauma type for study, victimization by violence.

Several models are frequently endorsed to explain the positive changes observed after trauma (Jayawickreme & Blackie, 2014). The dominant model is the PTG model developed by Tedeschi and Calhoun (1995; 1996; 2004; Tedeschi et al., 2018). This model argues that when seismic trauma disrupts survivors' worldviews, they will ruminate, unintentionally at first, and later deliberately. Through this ruminative struggle, three broad dimensions of growth arise: changes in self, changes in relationships, and changes in priorities or life philosophy, also referred to as changes in values. Calhoun and Tedeschi (1998) define these as "a deeper appreciation of life, along with new life directions and priorities" (p. 358). Hobfoll et al. (2007),

argue that it is not just cognitive processing that leads to growth, but the behavioural activation of these cognitions in valued directions. Their model of action-oriented growth states that as individuals encounter trauma, they engage in meaning making; after meanings are enacted through behaviour can growth occur and benefit the survivor. As values motivate behaviour (Hayes et al., 2006), it would be helpful to understand this specific type of growth that can activate desirable behaviours, and potentially help survivors accrue benefits after their traumas.

Park (2010) developed another important model of growth, the Stress Related Growth model, which argues that when trying to heal from intense stressors, individuals work to make meaning of their experiences. In this process, they explore the relationship between their experience and global meaning, defined as orienting systems comprised of beliefs, goals, and subjective feelings. As values are assessments of importance which guide goals and behaviour (Hayes, Levin, Plumb-Vilardaga, Villatte, & Pistorello, 2013), global meaning likely includes values, in addition to related emotions. When there is incongruence between their global meaning and experience, survivors of trauma can alter their global meaning in positive ways to accommodate the new information gleaned from their trauma. In other words, according to this model, survivors of trauma can change their values and worldview to accommodate information learned through their traumatic experiences.

A third theory, developed by Joseph and Linley (2005), is the Organismic Valuing Theory. It states that, following trauma, individuals intentionally move in the direction of the values and needs that are most likely to lead to well-being and fulfillment. Within this model, this movement occurs after traumatic events shatter previous models of the world. Then, as survivors reconstruct their shattered models, they live more authentically in the valued direction that is most conducive to their psychological well-being (Joseph & Linley, 2005).

These models share commonalities including a clearly identified process of shattering or breakdown as a result of trauma, including disruption of core beliefs (Lindstrom, Cann, Calhoun, & Tedeschi, 2013), followed by an often intentional process of reflection that leads to growth. Further, these models all highlight the power of traumatic experiences to change survivors' values. Tedeschi and Blevins (2015) argue that research should consider the dimensions of growth individually, in order to more fully understand growth holistically. The major models of growth all highlight values as important components and outcomes of positive changes following trauma. The agreement between these models--the assertion that the individual types of growth should be studied and that values change is a type of growth--suggests that positive change in values may be a useful dimension of growth to study individually. The scoping review methodology contributes to the body of research by illuminating how this phenomenon has been studied thus far and exposing gaps in the body of work to guide research on growth after trauma, specifically positive values change.

This review explores what is known about the positive changes in values that can follow trauma. It reports exclusively on findings from studies on survivors of violent/intentional trauma experienced in adulthood. Intentional trauma is defined as trauma arising from harm that is inflicted deliberately by one person on another (Santiago et al., 2013). Isolating violent trauma for study contributes to clearer interpretation of findings as different trauma types manifest different levels and dimensions of growth (Shakespeare-Finch & Armstrong, 2010), as well as different relationships between growth and psychopathology (Shakespeare-Finch & Lurie-Beck, 2014). Violent/intentional trauma has been shown to be most likely to predict PTSD and Major Depressive Disorder (Wanklyn et al., 2016). Despite the frequency of violence (Elderton, Berry, & Chan, 2017), experiences of violence may be less likely to lead to growth (Shakespeare-Finch

& Armstrong, 2010). A recent systematic review reported that after violence, the most growth was reported in appreciation of life, changed priorities, and shifted understanding of what is important (Elderton et al., 2017). As violence is a pervasive problem (Elderton et al., 2017), it is important to deeply understand the form of growth that may be most likely to follow this common form of trauma. A scoping review will provide a clear picture of the existing research on this type of growth, as well as highlighting gaps which can be rectified by future research.

Methods

Scoping studies map the current state of a select body of published and unpublished literature to address broad constructs studied using a breadth of methodologies (Arksey & O'Malley, 2005). They do not include a quality assessment; however, they do provide a succinct review of the breadth of existing literature on a given topic (Arksey & O'Malley, 2005; Williams, Bambara, & Turner, 2012). Positive change in values is an outcome of growth that appears in many theories and is conceptualized in similar, but distinct, ways on many different measures. It has also been observed using a multitude of methods. Because scoping reviews cast a wide net, this review method best met the needs identified by the research questions. Five steps were used to conduct this scoping review: 1) identifying a research question, 2) identifying potentially relevant studies, 3) selecting studies for inclusion, 4) charting the data, and 5) collating, summarizing, and reporting the results (Arksey & O'Malley, 2005; Levac, Colquhoun, & O'Brien, 2010).

Step 1: Identify the Research Question

In order to provide a concise and focused review, the research question guiding the current review was, "What is known about changes in life priorities and values following violent trauma in adults?" Although changes in priorities and values are articulated across several

models of growth following trauma, there is variability in the terminology and conceptualization of this type of PTG. A definition of values that was clear enough to define the inclusion criteria, but broad enough to access the widest range of available literature was needed. To arrive at a clear definition, research on values in the areas of social and clinical psychology was consulted.

In social psychology, Schwartz (1992, 1994) defined values as a belief about a desired outcome, which transcends situations, guides behaviour, and exists on a hierarchy that informs the importance of each value. Schwartz identified 19 types of values observed cross-culturally (Schwartz et al., 2012). Schwartz' theory has generated a large body of research focused on the relationship of values to one-another. However, his definition of values is theoretical, not clinical. As trauma is highly clinically relevant, a definition which arises from clinical theories was desirable.

Psychotherapy theories focus more on the role of values in motivating behaviour and the process of values clarification and change. Rogers (1964) argued that values help individuals pursue self-actualization. He contended that disconnection from values leads to psychological difficulties that can be rectified by exploring and connecting to personally held values. Existential approaches ask clients to explore their sense of meaning and purpose in life, which is driven by core values (Martin, Campbell, & Henry, 2004). Currently, one empirically supported treatment (EST) employs values processes in its conceptualization of change: Acceptance and Commitment Therapy (ACT). While there are several clinical theories including values information, ACT is the only one of these to be listed as an EST through the American Psychological Association's Society of Clinical Psychology (Society of Clinical Psychology, 2016). The conceptualization of values offered by ACT will guide the analysis of values change in this study. ACT focuses on the clarification and behavioural activation of values and shows

promise for treatment of the impacts of violent trauma (Burrows, 2013). Within ACT, *values* are defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al., 2019; Florez et al. , 2019; Plumb et al. , 2009; Wilson et al., 2010).

The definition of values chosen to guide this study intersects in several ways with the PTG literature. The first idea in both literatures (Joseph & Linley, 2005; Plumb et al., 2009; Tedeschi & Calhoun, 2004) is that values are individual, guide decisions regarding what is important in life and can be subject to change. Second, values influence behaviour (Hayes et al., 2013; Jiga-Boy et al., 2015; Schwartz et al., 2012) including behaviours related to PTG (Hobfoll et al., 2007). Next is the idea that intentional clarification and deliberation can be used to guide the identification of personal values, an idea found in the values literature (Dahl, Plumb, Stewart, & Lundgren, 2009) and echoed in PTG theories (Cann et al., 2011; Tedeschi & Blevins, 2015). Finally, the values literature indicates that individual hierarchies of values can change (Schwartz et al., 2012). As such, the conceptualization of values in the current study includes the ideas that values are changeable, individual, identify what is important in life, can be prioritized on a hierarchy, guide behaviour, and can be changed through deliberate attention. Growth is by definition positive (Tedeschi et al., 2018), so the values changes in these papers were also deemed positive.

Step 2: Identify Potentially Relevant Studies

A broad variety of search strategies were employed to identify articles, abstracts, books, and presentations that were relevant to the research question. Three databases that commonly report clinical outcomes in psychotherapy were searched: PsycInfo, Medline, and Web of Science were searched for peer-reviewed literature published between January 1980 and April

2016. The search started with January 1980 as much of the work cited by Tedeschi & Calhoun (1995) in their seminal writing developing PTG was completed after 1980. Growth relevant terms were searched including, "posttraumatic growth", "post-traumatic growth", "stress-related growth", "adversarial growth", "thriving", "benefit finding", "positive adjustment", "positive by-products", "positive adaptation", and "meaning-making." Additionally, relevant trauma types were introduced to limit the range of articles reviewed including, "violen*", "violence", "trauma", "interpersonal violen*", "interpersonal violence", "sexual assault", "assault", "intentional trauma", "war", "rape", "terrorism", "domestic violence", "incest", and "sexual abuse". Reference lists of each selected article were reviewed to identify additional relevant articles. Further, journals that commonly publish in the area of trauma and growth including the *Journal of Loss and Trauma*, *Journal of Traumatic Stres*s, *Journal of Positive Psychology*, *Traumatology*, *Journal of Interpersonal Violence*, *and Psychological Trauma: Theory, Research, Practice, and Policy* were scanned for relevant articles. The vast number of search terms required to isolate the desired phenomenon for the current review precluded a general Google search of the grey literature. Grey literature, including unpublished dissertations and theses, identified through the searches above were reviewed. Each search was documented, and the articles identified were entered into Endnote reference software; duplicates were removed.

Step 3: Select Studies for Inclusion

This study employed 4 inclusion criteria: 1) trauma occurred in adulthood, 2) study considered only violent/intentional trauma (those instances that involve the deliberate intention to enact harm [Santiago et al., 2013]) 3) trauma was experienced directly by study participants, and 4) study included values-related information. Articles that identified spiritual changes but did not relate these changes to values or values-congruent behaviour were excluded. The

principle investigator (PI) applied the first three criteria to all yielded papers by reviewing titles and abstracts to ascertain the applicability of the paper to the research question. The PI also read full papers when inclusion or exclusion could not be determined by the title or abstract. Subsequently, the PI and an external auditor reviewed the full text of these papers to attain consensus on all 4 criteria and attained 100% consensus. Consensus meetings were held to identify the final set of studies to be included. Studies that only reported collecting total scores for the growth measures and did not report values related subscales were excluded. Papers that collected but did not report values-based data were included, as the goal of a scoping review is to include the broadest scope of papers which may speak to a research question (Levac et al, 2010).

Step 4: Chart the Data

Data were extracted and charted across 14 categories: author, year of publication, location of study, conceptualization of growth employed, specific trauma experienced, trauma type, study population, aim of study, methodology, growth specific methods, shattering measure, outcome measures, important results, and thoughts/reflections. The PI performed all data extraction. The second author initially charted data from 10% of the sample, and consensus meetings were held to achieve agreement on pertinent values-related data for extraction. In each meeting, the PI and the second author reviewed the findings of the studies in question, discussing which findings indicated values-related phenomena which spoke to the research question. Because consensus was achieved on 100% of these papers, the second author did not chart any additional papers. When deciding whether values related content was present, the findings of each study were compared to the conceptualization of values espoused by ACT to determine fit.

Step 5: Collating, Summarizing, and Reporting Results

Data were then extracted and synthesized in relation to the research question. As suggested by Levac (personal communication, September 8, 2014), the data points extracted in the charting phase were subjected to two types of analyses. First, data were analyzed using frequency distributions, illustrated in graph form. Additionally, data were also analyzed using Thematic Analysis (Braun & Clark, 2006) to identify the narrative of the data.

Results are presented starting with a frequency distribution of demographic information for included studies. Secondly, the results of the thematic analysis are presented, incorporating data from all included studies. The processes by which values-based growth is suggested to occur are presented first, in the order they would be expected to occur based on existing models (Jayawickreme & Blackie, 2014; Linley & Joseph, 2004; Park & Ai, 2006; Tedeschi & Calhoun, 2004), including the proportion of papers represented by each theme. Factors that influence values-related growth are presented subsequently. For the purposes of this review, processes by which values-based growth occur refer to the individual components of the growth process. Factors that influence values-based growth are the extraneous variables which may act on the aforementioned processes. These results are followed by the findings derived from a review of the quantitative measures. Finally, limitations of the existing literature are discussed.

Results

Description of Included Studies

This search strategy yielded 635 articles, dissertations, book chapters, and abstracts. The initial review resulted in a subset of 137 papers that met the initial 3 inclusion criteria. The PI and the auditor agreed to exclude 54 papers that did not collect data on values related content, resulting in 83 selected papers (Figure 1).

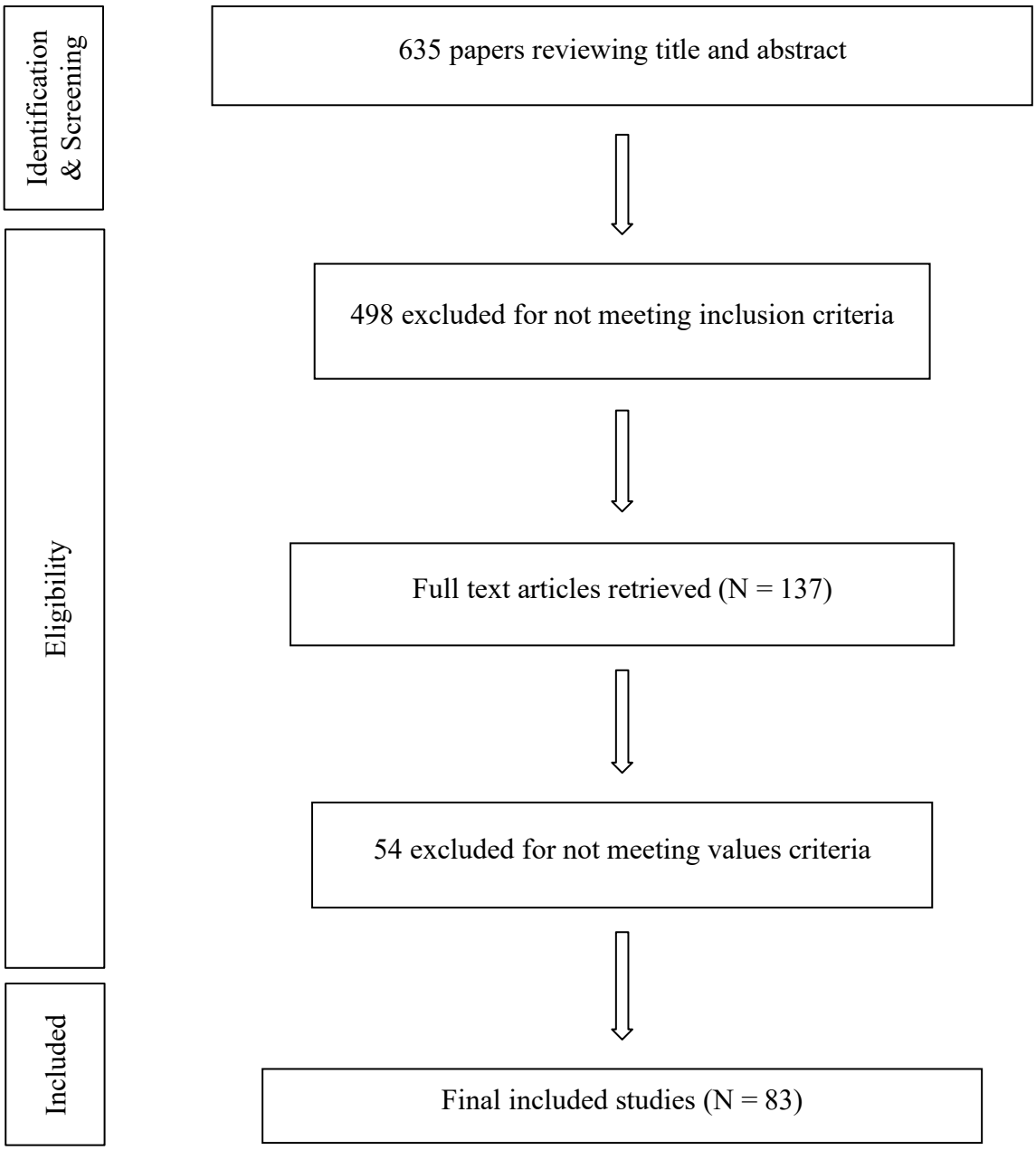

Figure 1. Flow diagram of the study selection process

The final review yielded 83 studies that report on positive changes in values following intentional trauma, or 60.6% of all studies meeting the first 3 inclusion criteria that report on growth following violence. Of these, 49 reported values using quantitative methods (59%), 30 reported using qualitative methods (36.1%), and four reported on values using mixed methods

(4.8%). The qualitative findings used a variety of qualitative methods including case study, phenomenology, auto-ethnography, and narrative inquiry. The results indicate that values-based growth occurs in populations and cultures from several continents including North America, Africa, Asia, Europe, the Middle East, and Australia. The countries in which studies were conducted can be seen in Figure 2; any country with only one study is grouped into Other.

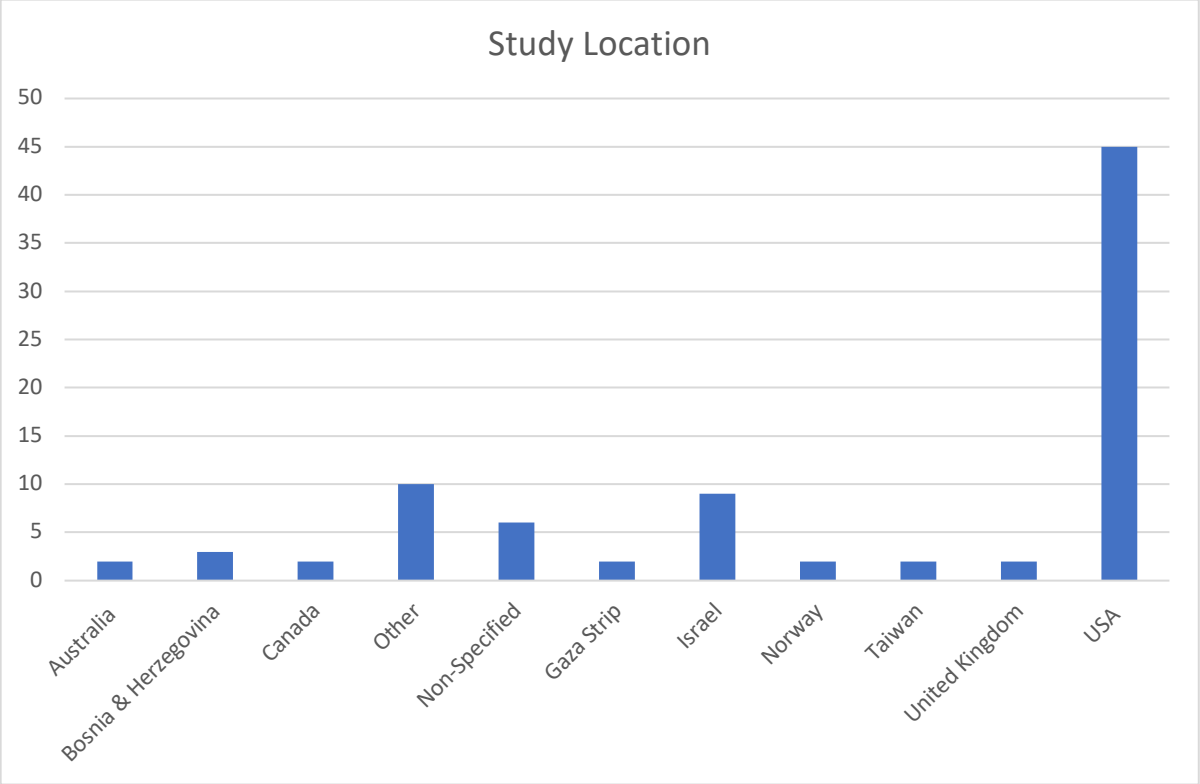

Figure 2. Bar graph showing the countries in which included research was conducted; the total number of locations identified in this table is 85, as two studies (Mattoon, 2011; Steger, Frazier, & Zaccarini, 2008) collected data in two locations.

Several papers conducted culturally based factor analyses of common quantitative measures of growth and in each of these studies, the role of values in growth outcomes remained robust. For example, studies in Sri Lanka (Jawawickreme, 2010), Kosova (Arenliu & Landsman, 2010), Bosnia (Powell, Rosner, Butollo, Tedeschi, & Calhoun, 2003), and Israel/Palestine (Salo,

Qouta, & Punamaki, 2005) all retained values as central components of growth after factor analyses. These findings will be discussed in detail below.

Values change was observed in both males and females and across many types of violent trauma, including war (with and without experiences of captivity), interpersonal assault (including sexual violence), terrorism, property mugging, torture, and political violence (see Figure 3).

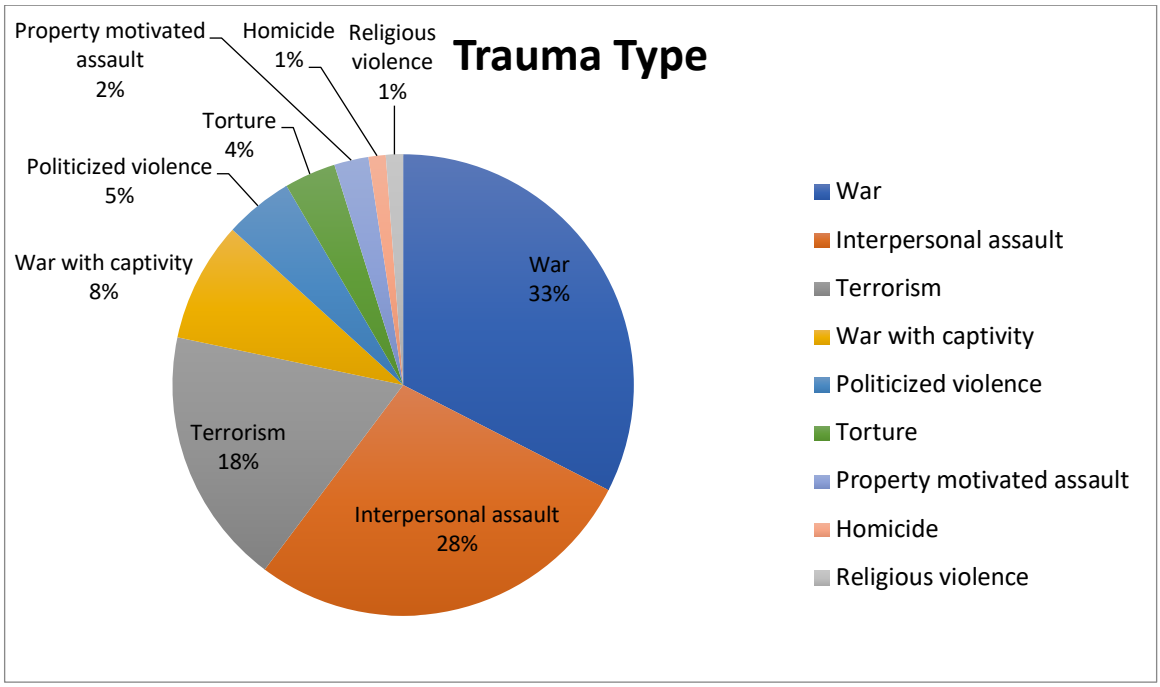

Figure 3. Pie chart indicating types of traumas included in current study

Processes of Values Change

The processes of values change reported in the included papers will be presented in the order they would be expected to occur based on leading models of growth (Tedeschi & Calhoun, 2004). The percentages reported indicate the percentage of total sample (N = 83), unless otherwise specified. See Table 1 for details about studies which included each of the processes of values change.

Table 1

Processes of Growth Identified in Studies Reporting Values-Related Growth

Authors	Year	Process of Values Related Growth Identified	Methodology	Values Identified/Changed during Clarification	Existential Questions Contributed to Clarification	Measures used to assess Process
Ai, Cascio Santangelo & Evans-Campbell,	2005	Clarification (Change in Spirituality)	Qualitative	Compassion; Political viewpoints	No	
Aldwin, Levenson, & Spiro	1994	Clarification	Quantitative		No	Elder & Clipp (1989) Measure of appraisal of effects of military service
Aloi	2010	Clarification; Action	Qualitative		No	
Arenliu & Landsman	2006	Action	Quantitative		No	PTGI
Armour	2003	Clarification; Action	Qualitative	Honesty	No	
Artra	2014	Clarification; Action	Qualitative	Love	No	
Balaratnasingam & Janca	2012	Clarification	Qualitative		No	
Bauwens & Tosone	2010	Action	Qualitative		No	
Benetato	2011	Shattering	Quantitative		No	Rumination Inventory
Bitton	2014	Action	Quantitative		No	PTGI

Blix et al.	2013	Shattering	Quantitative		No	Centrality of Events Scale
Borawski	2007	Clarification	Qualitative	Compassion ; Kindness	No	
Burt & Katz	1987	Clarification; Action	Quantitative	Political viewpoints	Yes	28-item "Changes that have come from your efforts to recover"
Cobb, Tedeschi, Calhoun, & Cann	2006	Clarification	Quantitative		No	PTGI
Elder & Clipp	1989	Clarification	Quantitative		No	Elder & Clipp (1989) Measure of appraisal of effects of military service
Fischer	2006	Clarification; Action	Mixed Methods		No	PTGI
Frazier & Burnett	1994	Clarification (Change in Spirituality)	Qualitative		No	
Frazier, Conlon & Glaser	2001	Shattering; Clarification (Change in Spirituality)	Quantitative		No	3 custom designed items to assess disruption of beliefs
Gilpin-Jackson	2013	Shattering; Clarification (Change in Spirituality)	Qualitative	Peace; Tolerance	No	
Gorst-Unsworth, van Velsen, & Turner	1993	Shattering; Clarification	Qualitative	Political viewpoints	No	
Gregory & Prana	2013	Action	Quantitative		No	PTGI
Hirsch & Lazar	2011	Clarification	Qualitative	Compassion ; Empathy; Unity	No	

Kennedy, Davis, & Taylor	1998	Clarification (Change in Spirituality)	Quantitative		No	18 item measure assessing changes in well-being, spirituality, and intrinsic religiosity
Kim & Lee	2009	Clarification	Qualitative		No	
Konvisser	2013	Clarification; Action	Mixed Methods		Yes	PTGI
Kroo & Nagy	2011	Shattering	Quantitative		No	Single item assessing change in beliefs
Mattoon	2011	Clarification (Change in Spirituality); Action	Qualitative	Compassion ; Peace	No	
McCormack & Joseph	2013	Shattering; Clarification (Change in Spirituality)	Qualitative		No	
McCormack & Joseph	2014	Clarification	Qualitative		No	
McCormack & McKellar	2015	Clarification; Action	Qualitative	Compassion	Yes	
McKee	2009	Clarification	Qualitative		Yes	
Melerski	2008	Clarification (Change in Spirituality); Action	Mixed Methods		No	Reported quantized frequencies of themes arising from grounded theory analysis
Mitchell, Gallaway, Millikan, & Bell	2013	Clarification	Quantitative	Compassion	No	PTGI
Morland, Butler & Leskin	2008	Clarification	Qualitative		Yes	
Panepinto	2005	Shattering; Action	Qualitative		No	

Parappully, Rosenbaum, van den Daele, & Nzewi	2002	Clarification (Change in Spirituality); Action	Qualitative	Compassion	No	
Peterson & Seligman	2003	Clarification (Change in Spirituality)	Quantitative	Love; Kindness; Unity; Gratitude	No	Values In Action-Inventory of Strengths
Pietrzak et al.	2010	Clarification	Quantitative		No	PTGI
Puvimanasinghe, Denson, Augoustinos, & Somasundaram	2014	Clarification	Qualitative	Compassion ; Empathy	No	
Qouta, Punamaki, & El Sarraj	1997	Clarification (Change in Spirituality)	Mixed Methods		No	Structured Interview
Senter & Caldwell	2002	Clarification (Change in Spirituality); Action	Qualitative		No	
Simms	2015	Clarification; Action	Qualitative	Love	No	
Sledge, Boydston & Rabe	1980	Clarification	Quantitative		No	14-item questionnaire on positive/negative consequences of POW captivity
Solomon et al.	1999	Clarification	Quantitative		No	Sledge et al. (1980) 14-item questionnaire on positive/negative consequences of POW captivity
Song	2012	Action	Quantitative		No	16-item measure assessing enhanced sense of self, self-affirmation, and action/realization of the self

Song & Shih	2010	Clarification; Action	Qualitative		No	
Steger, Frazier, & Zacchanini	2008	Shattering	Quantitative		No	3 items added to Life Changes Scale to assess changes in beliefs about fairness, justice, and safety in the world
Swickert, Hittner, DeRoma, & Saylor	2006	Clarification (Change in Spirituality); Action	Quantitative	Compassion	No	Perceived Benefits Scale
Taylor	2004	Clarification (Change in Spirituality); Action	Qualitative		Yes	
Tedeschi	2011	Clarification	Qualitative		No	
Tedeschi & Calhoun	2010	Clarification (Change in Spirituality)	Qualitative	Compassion	No	
Ting & Watson	2007	Clarification	Qualitative		No	
Valentine, Bankoff, & Pantalone	2013	Clarification (Change in Spirituality); Action	Qualitative		No	
Young	2007	Clarification (Change in Spirituality)	Qualitative		Yes	

Note. As changes in spirituality is a subtype of the clarification process, it is represented within brackets after clarification for studies which reported this finding

Shattering. The first process theme identified was the shattering of previously existing beliefs and worldviews following violent trauma. In total, 9 papers explored or reported shattering of worldview (10.8%), including five quantitative papers (6%) and 4 qualitative studies (4.8%) as a component of the process leading to positive values change. Only studies which looked specifically at the disruption of core beliefs and worldviews were counted as shattering. While some studies have used trauma severity to assess this idea (Morris, Shakespeare-Finch, Rieck, & Newbery, 2005), for the purpose of this scoping review studies that used measures of trauma severity, such as PTSD symptoms or rating the stressfulness of events, were excluded if they were the only measure of shattering because "it is not necessarily the inherent 'stressfulness' of the event… but rather the challenge to one's world assumptions…" (Cann, Calhoun, Tedeschi, Kilmer, et al., 2010, p. 20) that indicates shattering. Studies that used scales, such as the Impact of Events Scale (Weiss & Marmar, 1997), that assess PTSD symptom severity but not worldview disruption, were excluded. Studies that used the Centrality of Events Scale (Berntsen & Rubin, 2006) were included as it has been described as a tool to assess how much survivors re-evaluate their worldview following trauma (Johnson & Boals, 2015). Qualitative studies in which participants identified shattering or rumination on previous personal beliefs and assumptions that were shattered as a result of the traumatic experiences were included (Gilpin-Jackson, 2013; Gorst-Unsworth, van Velsen, & Turner, 1993; McCormack & Joseph, 2013; Panepinto, 2005). One such study showed that previous moral values were described as "alien" (McCormack & Joseph, 2013, p. 155), illustrating the level of shattering of pre-trauma values.

Clarification. The second theme identified in the current study illuminates the finding that following trauma, values can be changed and clarified. In one study, as many as 73% of

respondents reported that their traumatic experience clarified their priorities and goals, and 59% reported more clarity on whom they value (Melerski, 2008). In total, 44 of the 83 studies (53%) reported increases in clarity of personal values, priorities, life philosophy or worldview. Each of these terms has been used interchangeably with values in the growth literature and hence have been grouped together. Of these, there were 12 quantitative studies, 28 qualitative studies, and four studies used mixed methods to report on increased clarity of values.

Some of these studies elaborated on the types of values that arose from this increased clarity. In 19 studies (22.9%), participants identified a significant increase in prosocial values. In descending order of frequency, these included compassion (12%), love (3.6%), empathy (2.4%), kindness (2.4%), peace (2.4%), unity (2.4%), tolerance (1.2%), honesty (1.2%), and gratitude (1.2%). Participants also described substantive changes in their political viewpoints. Three of the 83 studies (3.6%) found that participants felt their ideas, awareness and interest in politics shifted as a result of their violent experience. This change was particularly substantial following torture, after which Gorst-Unsworth et al (1993) found that 58% of survivors of torture surveyed in one study identified changes in political beliefs.

In seven reports (8.4%), participants described attaining clarity on their values by grappling with existential questions. The existential questions pertained to seeking life purpose and meaning-making, as well as future desired life directions. Seventeen papers (20.5%) also described changes in spirituality arising from violent trauma. Participants described both increases (Melerski, 2008; Peterson & Seligman, 2003; Qouta, Punamaki, & El Sarraj, 1997; Simms, 2015; Swickert, Hittner, DeRoma, & Saylor, 2006; Ting & Watson, 2007, Valentine, Bankoff, & Pantalone, 2013) and decreases (McCormack & Joseph, 2013) in the relevance of their spirituality. Both types of change were identified as positive.

Action. When growth is reported following violence through positive values change, values-related behaviour can also increase. Of the 83 studies included in this review, 22 (26.5%), identified changes in values-congruent behaviour arising from violent trauma. Of these, 13 utilized qualitative methods, six used quantitative methods, and three used mixed methods. Studies showed changes in action through increases in willingness to act in service of altruistic goals, especially in the service of others (i.e. Konvisser, 2013; McCormack & McKellar, 2015; Melerski, 2008; Panepinto, 2005) or fighting for what they think is right (Armour, 2003). Four studies (4.8%) identified behavioural changes specifically around political activism (Bauwens & Tosone, 2010; Burt & Katz, 1987; Parappully, Rosenbaum, van den Daele, & Nzewi, 2002; Song, 2012). For example, survivors identified that social activism became an important part of their lives following the murder of a child (Parappully et al., 2002). Changing goals often highlight the changed values of survivors following trauma. Participants in 4 studies (4.8%) reported that they explored and changed their life goals (Frazier & Burnett, 1994; Melerski, 2008; Song & Shih, 2010; Young, 2007) following exposure to violence.

Factors Related to Values Change

This scoping review identified a multitude of factors that influence the processes of positive change in values following trauma. See Table 2 for studies reporting factors related to values change.

Table 2

Factors Related to Positive Values Change

Author	Year	Methodology	General Factor	Demographic Factor	Psychological Factor
Bauwens & Tosone	2010	Qualitative	Self-Care		
Burt & Katz	1987	Quantitative	Self-Care		
Elder & Clipp	1989	Quantitative			Self-Discipline
Erbes et al.	2005	Quantitative	Attachment/ Social-Support		Self-Discipline; Trauma Severity
Feder et al.	2008	Quantitative	Religious Engagement		Optimism
Fischer	2006	Mixed Methods		Female Gender	
Frazier & Burnett	1994	Qualitative	Self-Care		
Gallaway, Millikan & Bell	2011	Quantitative			Trauma Severity; Alcohol Use; Suicidal Ideation
Grubaugh & Resick	2007	Quanatitative		Older Age; Higher Level of Education	
Gwynn	2009	Quantitative			Perceived/Objective threat
Hijazi, Keith, & O'Brien	2015	Quantitative		Minority Ethnicity	PTSD; Cognitive Flexibility
Jayawickreme	2010	Quantitative	Religious Engagement	Income	Life Satisfaction
Kennedy, Davis, & Taylor	1998	Quantitative	Religious Engagement		
Kleim & Ehlers	2009	Quantitative	Religious Engagement		PTSD;
Kroo & Nagy	2011	Quantitative	Religious Engagement		Hope
Lurie-Beck, Liossis, & Gow	2008	Quantitative	Attachment/ Social-Support	Older Age	PTSD;
Maguen et al.	2006	Quantitative		Minority Ethnicity; Reservist in Military	Perceived/Objective threat

McCormack & Joseph	2013	Qualitative	Self-Care	
McCormack & Joseph	2014	Qualitative	Self-Care	
Miller, Canales, Amacker, Backstrom, & Gidycz	2011	Quantitative		Revictimization
Parapully et al.	2002	Qualitative	Self-Care	
Qouta, Punamaki, & El Sarraj	1997	Mixed Methods	Attachment/ Social-Support	Self-Discipline; Planful Problem Solving
Salo, Qouta, & Punamaki,	2005	Quantitative	Religious Engagement; Attachment/ Social-Support	
Senter & Caldwell	2002	Qualitative		Self-Discipline
Sledge, Boydstun, & Rabe	1980	Quantitative		Trauma Severity
Song	2012	Quantitative	Attachment/ Social-Support	
Song & Shih	2010	Qualitative	Self-Care	
Taylor	2004	Qualitative	Self-Care	
Tedeschi & Calhoun	2010	Qualitative	Self-Care	
Valentine, Bankoff, & Pantalone	2013	Qualitative	Self-Care	
Young	2007	Qualitative	Self-Care	

The three general factors most associated with values related growth were self-care, religious coping, and social support or attachment. Eleven studies (13.3%) showed that an increased focus on valuing the self and self-care was a critical ingredient in enacting values. Six papers (7.2%) showed that those participants who endorsed religious engagement were more likely to experience PTG of which values change was a core component. Attachment and social

support showed relationships to positive changes in values in five studies (6%). Turunen, Haravuori, Punamaki, Suomalainen, and Marttunen (2014) showed conflicting results suggesting that attachment has no relationship to values related growth; future studies should examine this relationship.

Demographic factors characterizing those who experienced greater values-change after trauma were older age (2.4%), minority ethnicity (2.4%), being female (1.2%), and higher levels of education (1.2%). Income (1.2%) was also positively correlated with one of the value-based subscales of the PTGI (Tedeschi & Calhoun, 1996), new possibilities. Also, those who participated in military service through the reserves were more likely to show positive changes in values than those on active duty (1.2%).

Several psychological factors were shown to be associated with positive changes in values. Self-discipline was the most frequent factor (4.8%) associated with values related growth. PTSD (3.6%) and trauma severity (3.6%) were both related to positive changes in values, with three studies highlighting these relationships. Optimism (1.2%), hope (1.2%), cognitive flexibility (1.2%), perceived and objective threat (2.4%), and life satisfaction (1.2%) all showed a positive relationship to changes in values. Planful problem solving (1.2%), alcohol use (1.2%), and recent suicidal ideation (1.2%) showed negative relationships to changes in values. Several coping styles showed a relationship to positive changes in values including task-oriented coping (Rosner & Powell, 2006), avoidance coping (Rosner & Powell, 2006), and religious coping (Feder et al., 2008). Revictimization decreased the likelihood of experiencing growth through changes in values (1.2%). Participants also describe factors that may contribute to increased values-congruent behaviours specifically, including increased self-discipline (Elder & Clipp, 1989; Erbes et al., 2005; Qouta et al., 1997; Senter & Caldwell, 2002), autonomy (Burt

& Katz, 1987, McCormack & Joseph, 2014), leadership and teamwork (Peterson & Seligman, 2003).

Finally, it appears that growth in the domain of values contributes significantly to growth in general. Participants who were able to more clearly identify a sense of purpose or personal priorities after trauma were more likely to endorse posttraumatic growth (Jayawickreme, 2010). Participants reported reflecting and calling upon their values as they face trauma in the process of achieving growth following trauma (Konvisser, 2013).

Quantitative Measures of Growth

As a large percentage of the included studies (59%) used quantitative measures, it is important to review the measures used and their specific contribution to the scoping review. The most common measures were the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996) and the Posttraumatic Growth Inventory Short Form (PTGI-SF; Cann, Calhoun, Tedeschi, Taku, et al., 2010). As data collection for this scoping study concluded in April 2016 prior to publication of the PTGI-X (Tedeschi, Cann, Taku, Senol-Durak, & Calhoun, 2017) no studies using this measure were included. The PTGI and PTGI-SF have five domains. Two of these, appreciation of life and new possibilities, explore values-based changes such as change in priorities and engaging in behaviours deemed important (Tedeschi & Calhoun, 2004). The Perceived Benefits Scale (McMillen & Fisher, 1998) includes one item to assess changes in priorities, as well as including a subscale assessing changes in compassion and pro-social values. The VIA Inventory of Strengths (Peterson & Seligman, 2004) explores the presence of prosocial traits at the population level, as well as changes in these traits after significant violent events such as 9/11 (Peterson & Seligman, 2003). Frazier and colleagues created a custom-designed life change measure (Frazier et al., 2001), based on the three types of growth identified by

Tedeschi and Calhoun (1995); changes in self, changes in relationships and changes in priorities. Finally, the Changes in Outlook Questionnaire (Joseph, Williams, & Yule, 1993) has been used in conjunction with the PTGI to explore positive changes in values. This measure does not assess values change directly, however several items explore survivors' sense of meaning and purpose, which has been included in the conceptualization of values employed by this review.

Results of the quantitative studies included in this review demonstrate variability in the frequency with which values related changes are reported. Of the 49 quantitative studies, 29 quantitative studies and 2 mixed methods studies (37.3%), employed the PTGI (Tedeschi & Calhoun, 1996) and 4 studies (4.8%) used the PTGI-SF (Cann, Calhoun, Tedeschi, Taku, et al., 2010). Of these 35 studies, 15 (18.1%) provided comparative data for the subscales; 9 of these 15 studies (10.8% of the total sample, 60% of the PTGI studies with comparative data) indicated that appreciation of life was among the two most endorsed domains. New possibilities was distributed across being most and least likely to be endorsed, with five studies (6% of total sample, 15% of PTGI studies with comparative data) stating it was amongst the two most frequently endorsed subscales and 6 studies reporting it was amongst the two least frequently endorsed (7.2% of the total sample, 18.1% of the PTGI studies with comparative data).

When the PTGI and PTGI-SF are used in some countries, the factor structure of these measures shifts. Four studies in this scoping review demonstrated alternative factor structures while continuing to report values-related changes. In Sri Lanka (Jayawickreme, 2010), Kosovo (Arenliu & Landsman, 2010), Bosnia (Powell et al., 2003), and Israel/Palestine (Salo et al., 2005), researchers conducted factor analyses of the PTGI and PTGI-SF to explore whether the factors observed in Western samples would retain relevance. In each of these analyses, factors differed slightly from those previously observed. However, in each case factors related to values

(appreciation of life and new possibilities) retained relevance. In Sri Lanka, Jayawickreme (2010) observed that there were only two pertinent factors, changes (including new possibilities and personal strength) and spiritual change. In Kosova, three factors arose for the Albanian language version of the PTGI: personal strength and new possibilities, relating to others, and appreciation of life (Arenliu & Landsman, 2010). The two values-based subscales of the PTGI and PTGI-SF retained relevance in this post-conflict zone. Powell et al. (2003) found that in Bosnia, growth was typified by changes in self, changes in relationships, and changes in values/priorities, rather than the five factors proposed by the PTGI (Tedeschi & Calhoun, 1996), again demonstrating the cross-cultural relevance of values change in growth processes. Finally, in Israel/Palestine, Salo et al. (2005) used a varimax rotation to arrive at a three-factor model: personal strength, affiliation to others, and changes in spirituality. The items associated with appreciation of life and new possibilities loaded onto the personal strength and changes in spirituality domains, and hence were retained for analysis. While the PTGI and PTGI-SF have been used in many countries in which the original five factor structure is maintained, it is noteworthy that when the factor structure shifts, factors related to value remain robust.

Discussion

This review included a broad range of studies reviewing positive change in values following violence. An important direction for growth research is to study the domains of growth individually (Tedeschi & Blevins, 2015). This review contributes to knowledge in this area by isolating and exploring the nature of these changes in values specifically. Of the 137 studies meeting inclusion criteria and reviewing growth after violence, 83 endorsed values-based growth. These findings include quantitative, qualitative, and mixed methods. The findings of the

current study provide support for the theory that values and priorities of trauma survivors are impacted in positive ways by their experiences (Jayawickreme & Blackie, 2014).

Participants in a variety of cultures endorsed positive changes in values as a way that they experienced growth after violent/intentional trauma. In their review of the cross-cultural applicability of PTG, Splevins, Cohen, Bowley, and Joseph (2010) caution that growth may manifest differently across cultures and may be vulnerable to cultural biases. Results of the current review suggest that changes in values may be a central component of growth across cultures. This provides an interesting opportunity to compare growth in different parts of the world. Schwartz's substantial body of research has validated a structure of human values observed in more than 60 countries (Schwartz et al., 2012). While the hierarchy of these values may differ across cultures, the values themselves have been observed in many countries and may be less vulnerable to the cultural variances impacting growth reported by Splevins. This values framework could provide a useful tool to compare positive values change after violence in different cultures. Future research should explore the way values change and in what directions to better understand the cultural influences on this type of growth. For example, research could investigate differences in how survivors endorse prosocial values in collectivistic and individualistic cultures.

Results of this review also illuminate the processes by which changes in values may occur after intentional trauma. Several theories (Joseph & Linley, 2005; Park, 2010; Tedeschi et al., 2018) identify a shattering of worldview after trauma, which causes sufficient distress to alter underlying beliefs with which survivors previously navigated their worlds. They have argued that in order for growth to occur, there must be sufficient suffering to shatter previous worldviews to make room for growth related cognitions (Janoff-Bulman, 2006; Joseph & Linley

2005; Tedeschi & Blevins, 2015; Tedeschi & Calhoun, 2004). Despite the central role of shattering in these models, only 9 studies of the 83 reviewed identified processes of shattering. In addition to qualitative methods and customized questions, two quantitative measures were identified in the current review to measure shattering: the Centrality of Events Scale (Berntsen & Rubin, 2006) and the Rumination Inventory (Calhoun, Cann, Tedeschi, and McMillan, 2000). Of note, two other frequently used measures of shattering, the Core Beliefs Inventory (Cann, A., Calhoun, L., Tedeschi, R., Kilmer et al., 2010) and the World Assumptions Scale (Janoff-Bulman, 1989), were not used by any studies meeting inclusion criteria for this review. The small proportion of studies assessing shattering is noteworthy. Given the suggested importance of shattering in the growth process, it is important for future quantitative studies to measure and for qualitative studies to include questions about shattering to investigate if this important precursor for growth is present. While shattering may be a distinct phenomenon from growth, its status as an important precursor suggests that its presence would make identifying growth easier. The authenticity of self-reported growth continues to be debated (Boerner, Joseph, & Murphy, 2020). One way to continue bolstering the literature against this critique is to ensure that when growth is measured, the precursors for growth are present, i.e. shattering. Knowing when the conditions that contribute to growth are absent may help researchers distinguish between authentic and inauthentic growth. If this construct is important in PTG then understanding the trajectory from shattering to growth holds great promise in helping those who experience trauma.

Results of this review show that violent trauma serves to *clarify* participants' values and priorities. Therapeutic models suggest that increased clarity of values is an important component in the development of well-being (Hayes et al., 2006; Rogers, 1964). It is possible that previous studies have failed to show a consistent relationship between PTG and well-being (Cordova,

Cunningham, Carlson, & Andrykowski, 2001; Durkin & Joseph, 2009) because they did not consider the trajectories of different types of growth individually. This could neglect the potential positive relationship between growth through changes in values and well-being. Future studies should explore the unique trajectories of different types of posttraumatic growth, considering the changes in relationship to self, relationship to others, and life priorities, as they relate to well-being to further clarify this relationship (Kashdan & Kane, 2011).

This scoping review showed that values clarity can be achieved through grappling with existential questions. Tedeschi and Calhoun (2004) suggest that growth occurs following participants' intentional rumination about the meaning of their traumatic experience in their understanding of the world. The results of this scoping review support Janoff-Bulman's (2006) assertion that confronting existential questions is a driving force for how rumination leads to the construction of a meaningful existence, and hence, growth. It is possible that the engagement with existential questions provides an opportunity for survivors of trauma to reflect specifically on their values. More research is required to understand the links between existential questioning after trauma and values clarification. Reflection on values may also facilitate growth holistically following violent trauma. This is of significant clinical importance, as several interventions exist (see Dahl, Plumb-Vilardaga, & Stewart, 2009) that can facilitate values focused thinking and may enable growth in survivors of trauma. Future studies should examine the impact of these interventions in facilitating PTG, to see if supporting survivors in exploring their values will facilitate the development of PTG.

In congruence with the action model described by Hobfoll et al. (2007), studies included in this review described an increase in motivation for victims to live in congruence with their values. Hobfoll's model (2007) suggests that growth is actualized when survivors of trauma

convert their reflections on their traumatic experiences into behaviour in valued directions. This scoping review demonstrated that survivors of violent trauma report being driven to make behavioural changes congruent with their newly clarified values including career direction (Taylor, 2004), political activism (Song, 2012), and altruistic behaviours (Konvisser, 2013; McCormack & McKellar, 2015; Melerski, 2008; Panepinto, 2005). This concurs with previous findings which suggests that when growth happens through changes in values, survivors begin to behave differently, and this change is seen by significant others around them (Shakespeare-Finch & Barrington, 2012). Research outside the area of PTG suggests that living in congruence with values is positively associated with well-being (Ciarrochi, Fisher, & Lane, 2011) and therefore it is possible that the increases in values clarity and action identified in this study may be related to more well-being in trauma survivors. Researchers should include a conceptualization of values that includes behavioural activation (e.g., Hayes et al., 2006) in future studies exploring changes in values following violence. Future studies should also explore the pathways between shattering, clarification, and action in value-based growth after violence, to further understand the trajectory of this type of growth after one specific trauma type.

Several factors were shown to relate to positive changes in values including demographic variables like gender, age, income, education, and minority identity. Additionally, several psychological factors were associated with values-based growth including optimism, hope, religiosity and religious coping, cognitive flexibility, and perceived and objective threat. Research has yet to explore the impact of interventions to develop psychological factors that support positive values change. Additionally, there are several factors associated with growth that warrant further examination. For example, research suggests that behavioural interventions can improve well-being (Weiss, Westerhof, & Bohlmeijer, 2016). Further, prosocial behaviour

after trauma is linked to increases in well-being, though it is not clear that this relationship is causal, nor were the values underlying this prosocial behaviour assessed (Frazier et al., 2013). Therefore, the link between values-congruent behaviour and well-being in trauma survivors warrants investigation to establish which behavioural interventions may support survivors and facilitate their growth following trauma. Similarly, spirituality and religion are often associated with increases in growth after trauma (Shaw, Joseph, & Linley, 2005). In this review, more than a quarter of included papers either described changes in spirituality or use of religious coping associated with value-based growth. While these changes were by no means universal, the sizable minority of papers which include spiritual themes suggest more research is required to further explore the links between spirituality and values-based processes after trauma.

The three factors most commonly associated with changes in values are self-care, religiosity and religious coping, and attachment. Findings of this review study indicate that survivors of trauma are motivated towards self-care, as it allows them to feel more capable of enacting their newly clarified values. The results of this review concur with the self-compassion literature (Neff, 2011), which suggests that through nurturing and caring for the self, individuals can be more effective at reaching their goals.

The findings of this study reinforce previous assertions that religious and spiritual processes can be closely associated with posttraumatic growth. While this relationship was not observed in all papers, it was observed in more than one quarter of included papers suggesting that it is worthy of further examination. This review extended previous findings to show positive associations between religious/spiritual change and changes in values following violence. Previous research suggested that observed changes in religiosity associated with growth after trauma are important because they may include a change in sense of purpose, or provide a

framework within which to recreate systems of meaning after trauma shatters the assumptive world (Shaw, Joseph, & Linley, 2005). Of the 83 papers included in the current review, 17 showed participants also experienced changes in their spiritual practices, in addition to changes in values. These findings were beyond the scope of the current review and hence the specific nature of these changes in spiritual practice was excluded from further analysis. That being said, changes in spirituality are often conflated with changes in values and morals in the literature (ie: Ai, Cascio, Santangelo, & Evans-Campbell, 2005), without investigating the link between these two constructs. Despite this common conflation, it is possible that individuals may experience a change in their spiritual beliefs and practices that do not relate to changes in values and values-congruent behaviour. More research is required to illuminate the relationship between these two similar but distinct constructs.

The third factor most commonly linked to values-based growth was attachment and social support. Recent research suggests that avoidant attachment patterns predict decreased PTG generally (Arikan, Stopa, Carnelly, & Karl, 2016). Results of the current review suggest that attachment patterns also show an important relationship to values-based growth after violent trauma. Because the number of papers in the current review that report this relationship is limited, more research is required to understand the role of attachment processes in positive changes in values following violence.

Results of this review also showed that existing quantitative measures do not provide sufficient information regarding value-based change. This is especially relevant given a recent systematic review (Elderton, Berry, & Chan, 2015) that showed appreciation of life, the subscale most focused on values change, was the most commonly endorsed subscale on the PTGI. While values change may underscore many of the positive changes observed after violence, measures

do not include subscales that exclusively focus on values related change, and as such it is difficult to determine whether the findings derived from these measures indicate a prevalence of value-related change or other kinds of changes. Hence, the quantitative data was limited in its utility with respect to the current research question.

Finally, future studies should consider the role of culture in the processes of values change after trauma. It may be that the types of values changed and behaviour observed may be culturally specific, contributing to the difficulty for quantitative measures to capture these changes. There is a paucity of research on the impact of survivors who have undergone positive values change following violence in their communities. Given the relationship between values and behaviour espoused by ACT, as well as Hobfoll et al. (2007), it is likely survivors' changes in values-related behaviour has positive impacts on their societies. Victims of trauma have also been shown to engage in more prosocial behaviour (Frazier et al., 2013), though the values change driving these behaviour changes needs further exploration. Findings by Brewer et al. (2016) suggest that victims of violence may be more likely to engage in humanitarian behaviour than others, but they provide little information regarding the process of these changes. As such, future research is required to understand how societies benefit from the moral contributions of these survivors, and the specific role survivors' values change plays in these benefits.

Limitations

This study had several limitations that may be rectified in future research. First among these is the lack of quality assessment. Though scoping reviews do not typically include a quality assessment (Levac et al., 2010), future reviews may be strengthened by assessing the quality of data in addition to its breadth. Further, as there are several models of growth after trauma, there are several conceptualizations of positive change in values after trauma. Though

this study was guided by an empirically validated and clinically useful conceptualization of values (Hayes et al., 2006), a common definition of these types of changes may improve the quality and rigour of future research into change in values after violence. Another limitation of the current review was difficulty accessing unpublished findings. Though unpublished dissertations and conference presentations were included wherever possible, it is possible that unpublished findings were excluded when they were not documented through the searched databases, journals, or Google Scholar. This could result in an overestimation of the relationship between violent trauma and positive change in values. Time limitations of the current study precluded the consultation of stakeholders who may have been able to provide additional unpublished data. The current review is limited to papers published in English, which may restrict its ability to comment on cross-cultural changes in values processes.

Limitations of Quantitative Measures of Growth

Though there are several quantitative measures which are used to assess growth, this review demonstrated that none of these measures includes subscales or factors exclusively dedicated to the identification of value-based change. For example, the PTGI (Tedeschi & Calhoun, 1996) includes two factors which explicitly assess changes in values: appreciation of life and new possibilities (Tedeschi & Calhoun, 1996). Unfortunately, these subscales also include items which assess change not directly related to values. As such, it is unclear whether the findings achieved using these subscales truly illustrate values-based change in survivors. Though these subscales are limited in their ability to identify value-based change, they are the most frequently employed quantitative tools.

Another significant finding of this study, and limitation of quantitative research in this area, was that values data is often discarded and not reported in studies of growth following

trauma. Several studies were excluded from the current review for only employing total scores of the PTGI and other relevant measures in their analyses. Additionally, five included papers reported collecting subscale data, however, they did not report the findings they achieved using this data (Dekel, Ein-Dor, & Solomon, 2012; Goorin, 2011; Hobfoll et al., 2008; Kaler, Erbes, Tedeschi, Arbisi, & Polusny, 2011; Lee, Luxton, Reger, & Gahm, 2010). As such, it is difficult to determine which of these reported findings might contribute to our understanding of value-based growth. Further, shortly after the completion of this scoping review, an expanded version of the PTGI (Tedeschi & Calhoun, 1996) was developed, named the PTGI-X (Tedeschi et al., 2017). This expanded version specifically expanded the spiritual and existential capabilities of the PTGI, including adding an assessment of growth through clarity in life's meaning, which is very likely related to values. While the new PTGI-X does not add a specific values change factor, this new item does expand the capacity of the PTGI to measure values-related changes. Future research should focus on understanding how positive change in values happens, including analyses of values-related subscales and measures to track the trajectory and duration of value-based changes. Additionally, future research should include longitudinal exploration of value change processes, including the evolution of values clarity and engagement in values-congruent behaviour.

Conclusion and Contributions

The majority of studies of growth after violence show that values can change in positive ways after this type of trauma. Key findings of this review suggest that when this type of growth happens after violence, survivors often report newfound clarity regarding what they value, and several describe accompanying changes in behaviour. Though shattering is suggested to be a key part of growth (Tedeschi et al., 2018), only a small minority of studies measured this

precursor for growth. This suggests there is more to learn about the role shattering plays in this type of growth after violence. The findings also demonstrate that exposure to violence can clarify values for survivors, which may come about through wrestling with existential questions. Several factors were shown to be associated with values related growth, including self-care, religious coping, and social support or attachment. This review highlights limitations of existing quantitative measures of growth with respect to reporting on values, suggesting that innovative methods may be needed to study growth through positive values change in future studies. Though leading models agree that values can change in positive and meaningful ways after trauma (Hobfoll et al., 2007; Joseph & Linley, 2005; Park, 2010; Tedeschi & Calhoun, 1996) and many studies of growth after violence document these kinds of changes, future studies should deepen this literature by studying this specific type of growth independently. Doing so will enable a more nuanced and comprehensive understanding of what constitutes positive values change in the aftermath of violence.

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Linking Manuscript 1 and Manuscript 2

Results of the first study in this dissertation report that after violence, the majority of included studies of growth demonstrated positive changes in values. Findings of this scoping review also demonstrated that there are limitations of common quantitative measures of growth with respect to studying the specific type of growth at the focus of this dissertation, positive change in values. As quantitative measures of growth do not have specific factors or subscales exclusively dedicated to the study of values, and provide finite information about the types of values changes which can occur, other research methods may be useful to continue exploring and developing the understanding of this type of growth. Results of this scoping review suggest that qualitative studies are able to capture the process and experience of positive changes in values arising from trauma. Existing qualitative literature indicates that participants often report a process of worldview shattering after trauma, followed by reflection on values and life philosophy that leads to clarity for victims/survivors. Findings also suggested an increased likelihood that victims/survivors will engage in values-congruent behaviour following trauma.

Research to date, both qualitative and quantitative, has indicated that there are positive changes in values after trauma. Several authors concur that an important future direction for growth research is to focus on developing understanding of the unique types of trauma (Armstrong & Shakespeare-Finch, 2011; Aspinwall & Tedeschi, 2010; Taku & Oshio, 2015). Because existing quantitative measures of growth have limitations in their ability to detect changes in values and priorities, the study reported in the following manuscript will specifically explore the process and experience of positive values change using qualitative methodology. This methodological approach will allow for the exploratory research necessary to capture the unique experience of this important form of growth. Manuscript 2 reports findings of an

Interpretative Phenomenological Analysis that explored the experience of positive values change in survivors of conflict in Northern Ireland. Due to publication page limits, the following manuscript will present one exemplary quote for each identified subtheme. Additional supporting quotes for each subtheme can be found in Appendix C.

Posttraumatic Growth through Positive Values Change: Experiences from Northern Ireland

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Thea L. Comeau completed the literature review, and study design including selection of methodology under the supervision Dr. Marilyn Fitzpatrick. She recruited the participants and trained the research assistants, Emma Cox & Jiwon Lee. She conducted all interviews and guided the research assistants in data analysis. Finally, Thea Comeau wrote this manuscript, with feedback from Dr. Marilyn Fitzpatrick and Dr. Jane Simms.

The research assistants contributed to data analysis and provided feedback on the author's analysis and development of themes.

Dr. Jane Simms supported recruitment by facilitating connection to the groups and assisted in developing ethical recruitment strategies. She also provided insights into the culture of Northern Ireland and feedback and guidance on the manuscript.

Abstract

Many survivors of trauma report positive values change, but this type of posttraumatic growth warrants further research. This study explored individual experiences of positive values change arising from bereavement through the Troubles conflict in Northern Ireland. Semi-structured interviews were conducted with 12 Troubles survivors. Data was analyzed using interpretative phenomenological analysis which yielded four superordinate themes: (a) trauma helped survivors know what they value, (b) context and connection impact values manifestation, (c) valued action is possible and helpful, and (d) even after growth, pain remains. Results of this study were used to develop the following conceptualization of growth through positive values change: values change after trauma include an increased clarity of values, either new or old, which are enacted in meaningful and protective ways, in interactions with others and the context in which they live, even when suffering continues. Limitations and future directions for research are discussed.
Keywords: Posttraumatic Growth; Northern Ireland; political violence; traumatic bereavement; personal values

Growth through Positive Values Change: Experiences from Northern Ireland

After political violence, some survivors increase their pro-social behaviours and attitudes (Brewer et al., 2016; Shakespeare-Finch, Schweitzer, King, & Brough, 2014). Survivors of political violence may demonstrate willingness to focus on the important things in life, their values, and engage in altruistic actions (Konvisser, 2013). In particular, individuals victimized through the political violence of the Troubles conflict in Northern Ireland may become "moral beacons" (Brewer et al., 2016) in their communities, likely to support peace and collaborative governance (Brewer & Hayes, 2013). To date, research has not adequately explained these increases in pro-social behaviour. One possible explanation for these positive changes may be posttraumatic growth (Simms, 2015). This study explores the experience of individuals who report growth, through values changes they deemed positive, after their loved ones were killed in the Troubles conflict in Northern Ireland.

In order to understand the growth that may be happening in Northern Ireland, this paper will begin by outlining what is known about growth through positive changes in values. Conceptualizations of growth after trauma include benefit-finding (Antoni et al., 2001), adversarial growth (Linley & Joseph, 2004), thriving (Carver, 1998), stress-related growth (Park, Cohen, & Murch, 1996) and, perhaps most commonly, posttraumatic growth (PTG) (Tedeschi & Calhoun, 1996). PTG is "positive psychological changes experienced as a result of the struggle with traumatic or highly challenging life circumstances." (Tedeschi, Shakespeare-Finch, Taku, & Calhoun, 2018, p. 3). Growth after trauma manifests in different types, which should be studied individually (Taku & Oshio, 2015). Though terminology differs across theories of growth after trauma, the aforementioned theories concur that one type of growth is positive changes in priorities and values (Tedeschi et al., 2018). While all these theories suggest positive changes in

values can happen after trauma, there is no clear and consistent conceptualization for what constitutes these kinds of growth. Whether discussing change in worldview, life priorities, values, or life philosophy, scholars agree that these changes influence what survivors think is important and guide decisions and behaviours after trauma.

The literature on values includes a number of definitions which can contribute to understanding this type of growth. The definition that guided this study was selected from Acceptance and Commitment Therapy (ACT), an empirically supported treatment that has demonstrated the importance of values, and values-congruent behaviour in ameliorating suffering (Czech, Katz, & Orsillo, 2011). From this perspective, values are chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney, Lillis, Haynos, Forman, & Juarascio, 2019; Florez, Schulenberg, Lair, Wilson, & Johnson, 2019; Wilson, Sandoz, Kitchens, & Roberts, 2010). A nuanced understanding of how values determine importance and the behavioural enactment of values can lend clarity to the ambiguous construct of positive changes in life priorities, life philosophy, and worldview in the growth after trauma literature, which will be referred to as changes in values in this paper.

Results of a recent scoping review showed that changes in values and priorities are reported in 60.6% of studies exploring PTG after violent trauma (Comeau et al., in preparation). In some studies, changes in values and priorities were endorsed as the most common of the domains of growth (Birkeland, Hafstad, Blix, & Heir, 2015; Bitton, 2014). While the scoping study suggests that values-based growth is common, results also indicated that quantitative measures, such as the Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996), have limitations with respect to studying positive values change. Specifically, quantitative

measures do not capture the breadth of possible values change and the factors or subscales include non-values related changes, limiting the ability of these measures to provide data specifically about positive values change. For example, the PTGI (Tedeschi & Calhoun, 1996) explores changes in appreciating the value of life and increases in compassion, but does not explore increases in participating in altruistic actions or political beliefs, both of which have been reported by victims of violence in previous qualitative research (Gorst-Unsworth, van Velsen, & Turner, 1993; Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2014).

On the other hand, qualitative studies have also described positive changes in values after trauma (Aloi, 2010; Gilpin-Jackson, 2009; Kim & Lee, 2009; McCormack & Joseph, 2013; McCormack & McKellar, 2015; Panepinto, 2005; Senter & Caldwell, 2002; Ting & Watson, 2007). Qualitative studies of growth report that trauma can clarify values and increase engagement in values-congruent behaviours (Comeau et al., in preparation). Isolating this type of growth for further study can clarify existing ambiguities and contribute to developing a consistent and pan-theoretical conceptualization of this type of change. Qualitative research offers an opportunity to obtain detail that would not be available in quantitative research, especially about the experiences of a given phenomenon. In this study, qualitative methods allow the research to clarify the experience of survivors of violence who report positive values change, while maintaining a broad scope of the possible values changes these survivors may report.

To understand growth through positive values change, individual trauma type may be an important variable as growth occurs in different ways after different kinds of trauma (Shakespeare-Finch & Armstrong, 2010). Intentional trauma, such as murder or rape, is more likely to result in PTSD symptoms than traumas such as car accidents or natural disasters

(Santiago et al., 2013). The strength of the curvilinear relationship between PTG and PTSD symptoms differs across trauma types. Prior research has demonstrated that civilian trauma in conflict zones has a stronger, curvilinear relationship between PTG and PTSD symptoms than the trauma of caring for an ill loved one (Shakespeare-Finch & Lurie-Beck, 2014) demonstrating how different types of trauma are important to single out rather than looking at trauma as a unified experience. Single incident traumas with a clear end point were more likely to result in growth than traumas that were on-going or those which included systemic oppression and discrimination (Shuwiekh, Kira, & Ashby, 2018). Given these different trajectories of distress and growth after trauma, PTG research that isolates trauma type may provide more clarity regarding the manifestation and trajectory of specific types of growth in survivors.

One trauma type warranting further study in the PTG literature is political violence, such as that of Northern Ireland. Political violence includes military conflict, genocide and ethnic cleansing, terrorism, state repression, and revolution/counter-revolution (Bloxham & Gerwarth, 2011). The impacts of political violence can be broad; both direct victims and those indirectly impacted by the conflict can experience mental health problems (Giacaman et al., 2007; Hawley et al., 2017). Studies of political violence in countries other than Northern Ireland suggest that values change may be an important part of the growth experience for survivors (Birkeland et al., 2015; McCormack & Joseph, 2014; Rosner & Powell, 2006; Solomon, Waysman, Neria, Ohry, Schwarzwald, & Wiener, 1999). While early research suggested growth may be occurring in Northern Ireland (Curran, 1988), to date there is only one study of PTG arising from the Troubles in Northern Ireland (Simms, 2015). In that case study, all three participants reported increased appreciation and a changed philosophy of life as a result of their Troubles-related

experiences (Simms, 2015). These findings suggest that this phenomenon is worthy of further exploration in the Northern Irish context.

Growth in Northern Ireland also warrants further study as Northern Ireland shows some of the highest rates of trauma in the world; more than 60% of adults report a lifetime traumatic event, with lifetime estimates of PTSD at 8.8% (Ferry, Bunting, Murphy, O'Neill, Stein, & Koenen, 2014). As a point of comparison, the lifetime prevalence of PTSD in Spain it is 2.2% (Olaya, Alonso, Atwoli, Kessler, Vilagut, & Haro, 2015). Many of these traumas in Northern Ireland derived from a 39-year conflict which ended in 1998, often referred to as the Troubles, between predominantly Catholic Republicans, predominantly Protestant Loyalists, and the British Armed Forces. In this conflict, more than 30% of Northern Ireland citizens lost a relative or close friend and half knew someone who was killed (Bloomfield, 1998). There is a paucity of research into growth after trauma in this population, although studies do suggest positive outcomes for survivors (Brewer & Hayes, 2013; Brewer et al., 2016; Simms, 2015). As civilians in conflict zones show a curvilinear relationship between PTSD and PTG (Shakespeare-Finch & Lurie-Beck, 2014), in a country with so many people struggling with PTSD, it is likely that growth occurs as well. To date, studies have not explored the experience of values-based growth in those traumatically bereaved by the Troubles.

In the context of political violence generally, and the Troubles conflict in Northern Ireland specifically, research has not sufficiently explored the experience of traumatically bereaved survivors who report growth through positive change in values. To increase understanding of this type of growth, this study employed Interpretative Phenomenological Analysis to explore the experience of positive change in values following traumatic bereavement experienced during the Troubles in Northern Ireland.

Methods

Methodological Approach

Interpretative Phenomenological Analysis (IPA) is an idiographic qualitative method that uses semi-structured interviews to understand the individual experience of a phenomenon (Smith, Flowers, & Larkin, 2009). IPA relies on the double hermeneutic; researchers interpret the "sense-making" of the participant, through the lens of their specialized knowledge (Smith et al., 2009). IPA is a "bottom up" approach to data collection (Adams, Shakespeare-Finch, & Armstrong, 2015), that facilitates new insights and meanings about previously under-researched concepts, such as growth through positive changes in values. It often employs small samples to enable in-depth analysis of the data (Smith et al., 2009). Because IPA is sensitive to context, it was an ideal choice for studying the political conflict in Northern Ireland.

Participants

Participants were 18 or older and identified as having experienced positive changes in values as a result of traumatic bereavement during the Troubles. In this case, trauma is defined using the criteria suggested by Tedeschi and colleagues (Tedeschi et al., 2018) for determining trauma in the context of growth. They suggest that trauma refers to events which are deemed life-altering, stressful, and disruptive to victims' assumptive worlds, as assessed by the victims of these events. Therefore, trauma is defined by its subjective impact on survivors. Secondly, bereavement in the context of this dissertation is defined as the death of a loved one (friend, family member, or romantic partner) as a direct result of sectarian violence perpetrated during the Troubles conflict, often in bombings or shootings. Participants who had been part of the military, paramilitary, or security forces were excluded as the experience is likely different for those who were active participants and those who were not, thereby threatening the homogeneity

of the sample. Within IPA it is possible to select a cluster of data which stratifies a large data set along an important variable, like type of experience or gender, for in depth analysis before moving on to other clusters (J. Smith, personal communication, November 16, 2015; Vilenica, 2014). Twelve victims/survivors (5 male, 7 female) were chosen as the cluster for this study. The criteria used for the selection were that selected participants expressed their values in congruence with the definition set out above and their values had changed in positive ways as a result of Troubles-related traumatic bereavement. All lived in rural settings at the time of their bereavement. Fifteen participants were excluded from the analysis for one or more of the following reasons: conceptualized values in a way that was not congruent with the definition guiding this dissertation (for example, divinely ordained by God, rather than chosen; N = 2), they did not attribute their changed values to their Troubles related trauma (N = 2), they were not bereaved (N = 1), they were bereaved in an urban context (N = 2), or they had additional significant traumatic experiences that were not a result of Troubles-related violence (N = 9) The exclusionary criteria ensured that the twelve included participants represented the phenomenon of positive values change following a Troubles-related trauma. The selected participants represented both Catholic and Protestant communities, though not all endorsed these identifiers. They also represented a multitude of traumatic losses including parents, siblings, spouses, friends, and children. Analysis and findings of the 15 additional interviews will be reported elsewhere.

Procedures

Following ethical approval from the McGill University Research Ethics Board, participants were sought through support groups for victims of the Troubles conflict. Due to the vulnerable nature of this population, support groups were instrumental in the identification of

participants and scheduling of interviews. Support groups exist throughout Northern Ireland to provide survivors with communities of support in which they can feel safe and connected. Under the advisement of the fourth author, these groups were deemed the least threatening and most effective ways to advertise the study to victims of the Troubles. The principle investigator (PI) contacted groups, communicated the intent and purpose of the study, and invited groups to provide the researcher's contact information to interested participants. Victims self-identified to leaders of support groups with whom they felt comfortable if they chose to participate in the study in order to facilitate psychological safety throughout the recruitment process. Potential participants were provided with the PI's contact information and initiated contact with the PI, who emailed them consent forms and information packets. Interviews were scheduled by the support groups in locations that participants deemed comfortable. All interviews were conducted between March and May 2015. Participants were interviewed using a semi-structured interview guide (see Appendix D), developed by the PI and reviewed by two of the contributing authors. All interviews were conducted by the PI and recorded digitally. Interviews lasted between 0.5 and 3.25 hours. All interviews were assigned an anonymized identification code and transcribed verbatim by a contracted transcriptionist. Transcripts were verified by the PI.

Data Analysis and Quality Assurance Measures

Data analysis followed the steps for IPA set out by Smith, Flowers, and Larkin (2009). Each step was completed by the PI and one other coder. First, transcripts were read and re-read to ensure familiarity with the unique experience of each participant. Second, key quotes were identified as data points and coded using notes to clarify the participant's meaning in the given data point. To do so, each data point was reviewed and interpreted by the coder using descriptive notes (i.e. Was the interviewee trying to describe an important part of their thinking

or experience?), linguistic notes (i.e. What type of language and style is the interviewee using to communicate their interpretations of their own experience?), and/or conceptual notes (i.e. How does the interviewee make sense of the content or experience they are discussing?). These notes were documented for each data point. In the third step, emerging themes were derived from the documented notes for each of the data points, to produce concise statements that captured participant meanings and interpretation of their experiences. Consensus meetings (Yardley, 2000) between the PI and each other coder ensured 100% consensus on the relevant data points extracted and the meanings and themes assigned to each data point in the 12 transcripts.

After these steps were completed and consensus achieved at the case level, the first three authors met to combine the themes into superordinate themes for each transcript. Four transcripts were completed this way. The PI completed the analysis of the remaining eight transcripts. The themes and resultant superordinate themes for the remaining eight transcripts were then reviewed to consensus by the other two coders. Once the superordinate themes for each transcript were identified, the PI compared these superordinate themes across cases to identify patterns and grouped them across participants as suggested by Smith et al. (2009). The two other coders then reviewed the grouping of themes arrived at by looking across participants and provided feedback to ensure consensus regarding the groupings. Finally, the PI reviewed the grouped superordinate themes (which will be referred to as subthemes for the rest of this manuscript) to establish the final set of overarching cross-case superordinate themes. The second and third authors audited this process and provided feedback to ensure that their understanding of participant meanings was captured by the final set of four superordinate themes. At each stage of theme development and grouping, the first three authors discussed the

nuances of the language choices for each theme name to ensure they accurately represented the meanings communicated by participants.

Results

Sample Characteristics

The final purposive sample for this study included 12 victim/survivor participants, each traumatically bereaved by violence during the Troubles in Northern Ireland, who also lived rurally at the time of their bereavement and were not injured themselves. All self-selected to participate as they identified having experienced positive changes in their values following their bereavement. This sample was predominantly female (N = 7) and currently resided in rural regions (N = 11).

Overview of Themes

Four superordinate themes emerged across participants: (a) trauma helped survivors know what they value, (b) context and connection impact values manifestation, (c) valued action is possible and helpful, and (d) even after values-based growth, pain remains. These superordinate themes are comprised of 10 subthemes; the frequency of each of these is reported in Table 1. Each superordinate theme will be described with supporting quotes and demonstrated using one participant exemplar of the theme being discussed. Additional quotes and context for each can be found in Appendix C. Participants have all been given gender-matched pseudonyms.

Table 1

Superordinate Themes and Subthemes

Superordinate theme	Sub-theme	Number of Occurrences	Percentage

Trauma helped survivors know what they value		11	91.7%
Context and connection impact values manifestation	Shared values provide common ground for connecting with the other	10	83.3%
	Connection combats ignorance, facilitating values-congruent behaviour	10	83.3%
	Context influences values clarification and enactment	10	83.3%
Valued action is possible and helpful	Values can be chosen, and lived, no matter what	11	91.7%
	Living your values helps	12	100%
	Continuing the legacy of the dead through values provides comfort and purpose	7	58.3%
Even after values-based growth, pain remains	Suffering is on-going	10	83.3%
	Trauma shatters worldview	12	100%
	Victims move towards values when their experiences are honoured rather than neglected	11	91.7%

Superordinate Theme 1: Trauma Helped Survivors Know What They Value

Participants reported two ways that their values became clearer after losing a loved one to violence: discovering new values or strengthening the salience of old values. Some participants reported identifying new values after their loss. Prior to his wife's death, Charlie valued having fun with the men in his community, particularly playing and refereeing sports. "Everything was laid out for me, you know I was like a robot, like a battery hen. But then when this happened all changed." After his wife was killed in a bombing, he reported that he began to value being with his family and supporting other victims more than interacting with friends. Pleasure and fun became less important than caring for the hurt and vulnerable.

The second way that trauma led to clarifying values was for participants whose existing values were tested and verified by the traumatic death of a loved one. Therefore, in these cases, values were not changed, but the relationship to the existing value was strengthened by the

traumatic experience. Karen reasoned "because values are about morality in my mind, there's no new information about morality when my mother was murdered." Prior to her mother's death, Karen was guided by the value, "hate the sin, not the sinner." In spite of the pain and anger she felt when her mother was murdered, she felt there was no reason to warrant changing her deeply held values. Rather her experience strengthened her adherence to hating the sin not the sinner.

Superordinate Theme 2: Context and Connection Impact Values Manifestation

Participants reported that their context, including the people with whom they were connected, guided the development and enactment of values after their losses. This theme had three sub-themes: (a) shared values provide common ground for connecting with the other, (b) connection combats ignorance, facilitating values-congruent behaviour, and (c) context influences values clarification and enactment.

Shared values provide common ground for connecting with the other. Participants stated that shared values provide a foundation to connect with members of other communities from whom they had been segregated. Barbara, whose sister was killed in a shooting, had respect and understanding for those whose acts were based in deeply held principles. By situating what the offenders had done in the context of her values it was easier to connect and empathize with them.

> I have more respect for them…. They did what they felt they had to do. I didn't agree with the murdering, but (with) *why* they felt they had to go onto the street and do what they had to do.

As participants clarified their values, and recognized them in others, they could feel compassion and empathy, even for people who had killed members of their families.

Connection combats ignorance, facilitating values-congruent behaviour. Participants reported that values-congruent behaviour was easiest when they felt connected to other people. Georgette described striving to live according to her value of being strong and fighting back against injustice. The connection to her loved ones prevented her getting lost and overwhelmed by hatred of those who harmed her. When she felt connected to her loved ones, she found new motivation to keep fighting to live her values, saying,

> when your grandchildren smile at you, and they come into the house, and maybe you're having a really bad day or maybe a really bad nightmare about your past, that little smile is just the ray of sunshine you need to say, 'that's why I'm fighting.'

Decreasing ignorance and fear of the other contributed to the ease of values enactment. George, who lost his father, reported that as he connected to those in other communities and challenged the arbitrary divisions of his past it became easier to live with compassion and empathy.

> I found out that there (were) other people my age who were like me… exactly the same as me. And they had questions of what's Catholic, who Protestants are. I felt a victim, of course. But when I was mixing with people, I was also saying they're a victim because their mom and dad has had to drive down the street with cops firing and shooting.

Context influences values clarification and enactment. Participants reported that context directly influenced how values were clarified and enacted. In Northern Ireland, individuals can be identified as Protestant/Unionist/Loyalist or Catholic/Nationalist/Republican by their names or the schools they attended. Barbara's value, which arose from her traumatic

loss, made her want to interact with members of both Protestant and Catholic communities without judgment or hatred. However, because of the on-going culture in Northern Ireland, she feared for the safety of her child if she did not segregate him, "because then he would stand out as – like, some people you have to guess their name – their name and their school – but he would stand out straight away." It was harder for her to interact, and encourage her children to interact, with members of other communities when she knew they could still be at risk.

An important contextual factor that influenced values was being a parent. Participants who were parents identified changes in their values through what they taught their children. One of Judy's guiding principles was protecting her children from experiences like hers. "Well, I wouldn't like to see my kids living through what we lived through, definitely not." Although integration and cross-community work scared her, she engaged in these processes to try to ensure her children would not experience the traumas she had experienced.

Superordinate Theme 3: Valued Action Is Possible and Helpful

Victim/survivors clearly articulated that even in the face of great suffering, it was possible to enact their values, which made them feel better. This superordinate theme is comprised of three subordinate themes (a) values can be chosen, and lived, no matter what, (b) living your values helps, and (c) continuing the legacy of the dead through values provides comfort and purpose.

Values can be chosen, and lived, no matter what. Although all participants had experienced traumatic loss, most did not believe their suffering should prevent them from living according to their values. John said, "it's hard to forgive when something happens like that, you know, but ... I would forgive." He believed that forgiveness was a positive value he had begun to prioritize since the death of his sister. Participants also said that victims must take

responsibility for moving their lives in valued directions. Paul's value was to be fully engaged in his life with his wife and children, in spite of surviving a shooting attack in which he lost a friend. He saw it as his responsibility to facilitate his own healing, so he could be an active husband and father.

> The way I look it, I'm a cog in a wheel…. See, if that cog's broken, that wheel can't go round. So, if you're in that middle and you're that cog…and all your family's around you and you don't function, your family doesn't function cause you're the one who makes that wheel go round. So, if you sit there and say, 'Right, I'm not gonna move'… you won't let nobody oil the cog or give it a bit of a lubrication and make it go, it'll always stay still, it'll never move.'

Living your values helps. All participants reported that living their values was rewarding. After losing his sister to a bomb, John described his own healing arising from being able to be emotionally present for his family, and support them, rather than focusing on his own pain. "Just to be there for them (*his children)* now, and able to talk about it you know. That's what helps you." The participants stated that living your values provided a degree of protection from guilt, shame, and sadness that was helpful even if they could not change the past.

Participants reported that they were able to fight back against the people who hurt them in values-congruent ways. Although they saw other victims who were disempowered by their experiences, acting in values-congruent ways allowed them to feel powerful and strong instead of broken. Jillian felt better because she was able to speak to the person who killed her daughter, rather than attacking her physically. "I thought I'll go for her….I was so shaking with anger, and I spoke out loud and things I said about her I wanted her to hear." Although speaking in anger might be difficult to understand as values-related action, Jillian believed she was honouring her

values by not giving in to retaliatory violence, while also not being silent in the presence of those who killed her daughter (Moloney, 2010). This was a values-congruent act for Jillian.

Continuing the legacy of the dead through values provides comfort and purpose. When participants acted on the values of their deceased loved one, they felt a sense of comfort and purpose. Harold spoke about feeing comforted by being a voice for his deceased father by continuing to stand up for the rights of his community, arguing for their rights to march and organize "… I get comfort from going back there to stand up for my Dad." By ensuring that his community's rights and tradition continue, he lived his father's purpose and found his own. Paul spoke about a sense of purpose from his loss, sharing the story of his friend who died.

> One of my goals in life was always to tell people my story and talk to young people…. know why I was still left on this earth? – I'm here… to pass the message on to people that wee (*victim*) didn't die in vain.

Superordinate Theme 4: Even After Values-Based Growth, Pain Remains

Participants' narratives showed that even though they had experienced growth, they continued to feel pain. This theme has three subthemes; (a) suffering is on-going, (b) trauma shatters worldview, painfully disrupting meaning-making, and (c) victims move towards values when honoured, rather than neglected.

Suffering is on-going. Participants reported that even though they have experienced positive changes in values after their loss, they continued to suffer, including on-going isolation and fear. The participants who endorsed this subtheme reported that it was important that others understood that experiencing growth did not eliminate suffering. Some spoke of feeling isolated because others often did not understand, even if they too were survivors. Harold shared, "everybody knows everybody else, and everybody remembers what happened, and people

remembers the wee boy that lost his father." He described the notoriety as a victim as a continual reminder that he had lost his father and that he is responsible for his father's legacy. Though he felt his values had changed in meaningful ways after his father's murder, he continued to deal with his grief. At times, he felt overwhelmed with the responsibility to represent his father, knowing that his mistakes also reflected on his dad.

Participants described on-going fear and sense of threat, even within their communities. Annette compared the sense of safety they had felt in an earlier time to life after their traumatic losses. Though she found meaning in her loss, she never recovered her sense of safety: "I would like to be back the way it was …before the Troubles ever started…because when I was young… we could go up the street and left our back door open…never would have nobody come in…it felt safe."

Trauma shatters worldview. Participants described feeling their worldview had been shattered by their losses and were unsure how to navigate a world that was senseless and unsafe. Paul felt that previous rules were no longer effective or relevant and was confused and afraid. He shared the moment of shattering after his trauma.

> I went to pieces….Everyone – my mom, my dad held me back – and I said, 'I have to go out! They're gonna come back and kill me 'cause I seen them… they're gonna kill me!'…. My brain started to scramble, and I didn't know where to go and what to do or where to run to.

When trauma transgressed deeply held values, it exacerbated the shattering. Jillian described how the women who killed her daughter, a mother and a daughter, had transgressed her sacred understanding of mothers and daughters, "she was a mother and daughter like

(*participant's daughter*) and me. And she had a wee girl in the jail…she wouldn't like I'd of killed her wee girl."

Victims move towards values when their experiences are honoured, rather than neglected. Participants reported that feeling neglected, ignored, and invalidated was a major barrier to values-congruent living. Karen reported that when the suffering of victims was taken seriously and services were funded, she felt better able to stand up and fight back against governmental forces that did not represent her. "It is amazing how so many years after, so many things have happened that we're finally getting people… that are helping us find our voices independently."

In spite of some systemic changes in listening to victim voices, 11 out of 12 participants felt that the political and health care systems had neglected them. The neglect interfered with living values-driven lives. Francine stated that after the death of her sister-in-law, she would have benefitted from, "A bit of recognition, because they felt that their lives meant nothing because they weren't remembered, you know." Francine needed to move forward in valued directions with her life. Once an acknowledgement came, it was easier for her to move forward in values-congruent ways, such as being a more active participant in her new church. Participants were better able to enact their values when they were acknowledged.

Discussion

The aim of the current study was to explore the experience of growth through positive changes in values of participants who experienced traumatic bereavement during the Troubles conflict in Northern Ireland. Participants reported that after trauma they came to know what they valued, and what was important to them. The process was impacted by the context in which they lived and the people to whom they were connected. As they coped with on-going pain and

suffering, participants were able to engage in values-congruent actions and found these actions helpful.

The current study builds on previous literature (Taku & Oshio, 2015) by studying violent trauma and an individual type of growth, change in values, as a distinct phenomenon. The participants experienced violent trauma that caused meaningful shifts in valuing, either changing values or clarifying the importance of existing values. Common measures of growth have not included the idea of clarifying or strengthening an existing value (McMillen & Fisher, 1998; Park et al., 1996; Tedeschi & Calhoun, 1996). For example, the PTGI (Tedeschi & Calhoun, 1996) assesses changes in priorities, but not changes in relationships to existing priorities. The results of this study suggest that a conceptualization of positive changes in values in the aftermath of trauma should include both the potential for a change in survivors' values, or a change in their relationship to existing values.

Participants in this research endorsed a wide range of values arising from their traumatic experiences, such as supporting family, advocating for themselves, and standing up for justice. Values that were reported in this study, such as supporting family and advocating for oneself, suggest that values change likely contributes to the process by which other domains of growth develop, including changes in relationships and personal strength. This concurs with previous research which suggests values may play a role in the process of growth generally (Shuwiekh, Kira, & Ashby, 2018). While values may contribute to many other types of growth, they may not always do so. For example, after surviving violence, a survivor may report that they are stronger than they thought they were. In this case, their increased sense of personal strength may come from a belief in their good fortune (luck) or their relief that they were not more seriously injured, rather than a change in personal values. In other cases, survivors may report more

personal strength because their values were clarified and have become a source of personal strength. More research is required to deepen the understanding of the possible contribution positive change in values can make to the development of other types of growth. The results from this study underline the idea that there is a broad range of values that can arise through positive change in values. Though this breadth of specific values is too great to measure, this work identified several processes by which values change: adopting new values and changed relationships to existing values. Measuring these processes would enable the growth literature to hone the understanding of how positive values change, the processes by which these specific types of growth changes occur, and how these changes relate to other types of growth.

Consistent with the idea that values serve as motivation for action (Frankl, 1967; Hayes et al., 2013), participants pursued valued action, such as continuing the legacy of lost loved ones. They did this even if they were still suffering. In the growth literature, there has been a disagreement between those who believe action is a necessary component of growth (Hobfoll et al., 2007) and Tedeschi, Calhoun, and Cann, (2007) who suggest that action is not always present. In congruence with previous findings (Hobfoll et al., 2007; Shakespeare-Finch & Barrington, 2012), and supporting the conceptualization of values used in this dissertation, this study demonstrated, for the vast majority of the participants in this study (91.7%) growth, when manifested through positive changes in values, included action. However, the values that underscored these behaviours were not always apparent from the behaviour. Therefore, findings of this study concur that behavioural observation can be an important method for studying growth, but in order to understand positive values change behavioural observation is not sufficient on its own. Future research that incorporated both behavioural observation and the

direct query of survivors about how their values have changed would provide a powerful tool for understanding this type of growth.

A key finding of this study was that context was important to the clarification and manifestation of values. This finding supports the idea that contextual factors are important for understanding growth trajectories (Joseph & Linley, 2005; Tedeschi et al., 2018). Though previous models suggest both distal and proximal factors contribute to growth (Tedeschi et al., 2018), participants in this study predominantly identified distal factors, those at the cultural level, as impacting their experience of positive values change. The impact of shared values with the other may represent proximate contextual influences on participants' growth journey, though this requires further investigation. If survivors are limited by contextual factors, like longstanding political and social structures, from enacting changes in their values, the changes they experience may not be visible to others. This may be a partial explanation of the critique that growth is often uncorroborated by significant others (Cho & Park, 2013). Future studies should assess survivors' perceptions of contextual barriers to values-congruent action as part of behavioural validation of growth. This will help future research determine the difference between authentic growth, which is not being enacted, and illusory growth which is based in defences and therefore cannot be observed by significant others.

Also contributing to the exploration of proximal and distal factors influencing growth, this study is the second to explore PTG in Northern Ireland. Simms' (2015) case studies suggested that one way growth manifests in Northern Ireland is through discovering what matters and finding inner strength. Participants in the current study highlighted the importance of finding what really matters to them in the aftermath of their Troubles-related trauma. While participants in both studies also reported they had experienced growth, they also continued to

suffer as a result of their trauma. It is possible that given the on-going nature of the conflict in Northern Ireland, a distal contextual factor, survivors may experience continual triggers that extend their suffering without preventing growth. More research is required to explore the factors that contribute to, and inhibit, growth in Northern Ireland. Additionally, as victims in Northern Ireland can become moral beacons in their community (Brewer et al., 2016), it is important to continue exploring how growth processes, especially those driven by positive value change, contribute to the prosocial activities of Troubles survivors.

All participants emphasized that while they did experience growth after their victimization, they also experienced a shattering of their worldview, and many reported on-going suffering. It is important to note that the experience of shattering was reported, but this did not necessarily mean previous values were no longer endorsed. Rather, shattering is a marker of the level of disturbance brought by the traumatic experience with which survivors grapple as they heal. This is consistent with Tedeschi et al.'s (2018) model of growth, which suggests the first step of the growth process is shattering of previous beliefs and worldviews. It also concurs with findings that disruptions of core beliefs are related to more growth after trauma (Zhou, Wu, Fu, & An, 2015).

Participants also described on-going suffering, suggesting that their growth and suffering are not mutually exclusive. This supports the idea that related pathology and growth are distinct phenomena which can co-occur, not two ends of the same trajectory (Shakespeare-Finch & Lurie-Beck, 2014; Zhou et al., 2015). While participants did report that suffering made it difficult at times to engage in values-congruent behaviour, they also reported that they were able to do so anyway. Future studies should explore the role on-going post-trauma suffering and worldview shattering play in survivors' participation in values-congruent behaviour.

One unique feature of this study was the Troubles-related traumatic bereavement experiences of the participants. To date, there is a paucity of research on growth in the context of Troubles-related traumatic bereavement, as compared to other Troubles-related experiences. The current study replicated findings from other studies of growth after traumatic bereavement, which suggest that acting in service of justice and finding purpose in the loved one's death have been important changes in values and values-congruent behaviour (Armour, 2003; Parappully, Rosenbaum, Van Den Daele, & Nzewi, 2002). Further, growth through Appreciation of Life, a domain of PTG (Tedeschi & Calhoun, 1996) associated with values-based change, appears to be more likely in the context of violent, traumatic bereavement than in other circumstances of bereavement (Currier, Mallot, Martinez, Sandy, & Neimeyer, 2013). It appears that there is a unique manifestation of value-based growth in the context of traumatic bereavement that warrants further exploration.

This study has several limitations. First, the procedure included a single interview. IPA studies can include 2-3 interviews with each participant to increase the depth and breadth of information received and interpreted. The decision to limit data collection to one interview was made due to the extremely vulnerable nature of the population being studied. However, it may represent a limitation to the findings. Second, support groups provided invaluable access to this vulnerable population. However, it is impossible to know the impact of the procedures groups used to identify participants, or the impact of their membership in these groups, on the findings.

Another limitation of this study is that all participants were rurally, traumatically bereaved through the Troubles conflict. While this represents an innovation in the field, as there is a dearth of research on growth in this population, this also limits the generalizability of the study. As stated above, traumatic bereavement may cause growth to manifest in unique ways

which may not appear in other groups. Further study is required to explore whether the results of this study can be replicated with other forms of political violence.

Although qualitative findings are never generalizable, particular issues about the Northern Irish context should be noted by the reader. These findings may not be relevant to countries without histories of conflict, where people do not have Western identities, or with survivors of other kinds of trauma. In addition, the on-going instability and potential re-traumatization of participants in Northern Ireland may be a source of influence. Though the conflict formally ended in 1998, acts of political violence and instability continue. Finally, the PI's outsider status in Northern Ireland is also a consideration. As someone outside the conflict, she may have had access across conflicted communities that insiders could not access. It is also possible that speaking with a non-resident of Northern Ireland may have limited the information that participants provided in the interviews.

This study focused on one form of growth, positive changes in values. The results suggest a conceptualization of positive values change after trauma that contains four linked elements: values change after trauma include an increased clarity of values, either new or old, which are enacted in meaningful and protective ways, in interactions with others and the context in which they live, even when suffering continues. Future studies can test these elements to explore whether the values processes captured here are also experienced in other populations and contexts. Specifically, it will be important to explore whether the findings of the current study replicate in non-conflict zones, non-Western nations, and with those who have experienced other types of trauma. Additionally, it will be important to understand how values-based growth after trauma manifests after single incident trauma and in contexts in which conflict is not on-going. As several of these components of values-based change are not present in the PTGI (Tedeschi &

Calhoun, 1996), quantitative measures could be developed or refined in order to assess the frequency and cross-cultural utility of these findings.

This study expands the existing literature by isolating one form of growth after trauma, positive changes in values and priorities, and examining it in the context of one trauma type. The findings of this study confirm theoretical assertions that values can be clarified and changed in positive ways by trauma and that this is an important form of growth that has been underexplored. This study yielded the elements of conceptualization of growth through changes in values, which can be used to develop measures of growth and deepen the understanding of this phenomenon. As evidence builds that growth manifests through positive change in values, these findings offer insight into an important type of growth for survivors of trauma.

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General Discussion

This dissertation is comprised of two studies that examined growth after violent trauma through positive change in values. There are three types of growth after trauma that have been identified: changes in perception of the self, in personal relationships, and positive changes in values (Tedeschi & Calhoun, 1996). However, positive change in values has not been clearly and consistently conceptualized and is often referred to as changes in life philosophy, changes in priorities, changes in beliefs, or changes in worldview. For the purposes of this dissertation, values were defined as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al., 2019; Florez et al., 2019; Plumb et al., 2009; Wilson et al., 2010). Recent research suggests that the pathways by which growth occurs are different based on the type of growth that is experienced (Taku & Oshio, 2015). Additionally, the amount of positive change in values observed differs based on the trauma type that precipitated the growth (Shakespeare-Finch & Armstrong, 2010). This dissertation isolated growth after violent and intentional trauma for further inquiry through two studies, a scoping review and an interpretative phenomenological analysis (IPA). The results yielded several contributions to knowledge, which are described below. There were also several limitations to this research which will then be discussed. Finally, future directions for research in this area are proposed.

Contributions to Knowledge

To fully understand growth, the types of growth should be considered (Taku & Oshio, 2015). Trauma types must also be isolated as they impact the manifestation of growth after trauma (Shakespeare-Finch & Armstrong, 2010). The studies in this dissertation isolated one form of growth (positive change in values) and one form of trauma (violent trauma) for

independent study. The first contribution of the work is a review of the existing literature pertaining to growth through positive changes in values. The second is a proposed conceptualization of what is meant by positive changes in values following trauma. The third contribution of this dissertation is to highlight issues with quantitative measures that, when rectified, can support a more complete understanding of growth through positive change in values.

Status of the Existing Literature

Results of the first study demonstrated that the majority of papers (60.6%) exploring growth after violent trauma report positive changes in values in survivors. Clearly this type of growth is worthy of further examination. The components of positive changes in values were also previously unclear. The results of this scoping review identified three components of growth through positive changes in values: shattering of previous worldview, increased clarity of values, and increased engagement in values-congruent behaviour. These three components provided insights into what existing literature suggests survivors might experience when they report growth through positive changes in values.

Results of this dissertation also contribute to the values literature. Findings of both studies confirmed that after experiences of violent and intentional trauma, values can change. These findings contribute to the values literature, as previous research suggested that values crystallized early in life and were subsequently difficult to change (Sagiv et al., 2017). These findings also contribute to the values literature by providing ecologically valid data in support of the possibility of values change after violence.

A Proposed Conceptualization of Positive Change in Values After Violent Trauma

The growth literature does not currently have a clear and consistent conceptualization of growth through positive changes in values. One important way the values literature has defined values is as chosen, self-reinforcing, dynamic decisions about what is important that guide priorities and motivate behaviour (Barney et al., 2019; Florez et al., 2019; Plumb et al., 2009; Wilson et al., 2010). However, it was unclear whether the definition of values in the values literature applies to positive changes in values in the context of growth. Having employed this definition from the values literature in its two studies, this dissertation proposes the following conceptualization of growth through positive changes in values: positive values change after trauma include increased awareness of values, either new or old, which survivors enact in meaningful and protective ways, in interactions with others and the context in which they live, even when suffering continues. Each component of this conceptualization will be presented individually.

Values change after trauma include increased awareness of values. The scoping review showed that survivors of violence report an increased clarity of their values. Participants in the IPA study described newfound clarity of their values, whether those were new values or increased clarity of values they held prior to the trauma. The idea that survivors can report growth after trauma through increased clarity of previously held values has not been widely discussed in the growth literature before. Therefore, a conceptualization of positive changes in values after trauma should include both the development of new values and increased endorsement of previous values. Items that capture these changes in values and changed relationship to existing values should be included in measurement instruments if they are to successfully capture positive values change following trauma.

Values are enacted in meaningful and protective ways. Results of both studies reported that values were not only clarified by trauma, but that survivors acted in congruence with their values. Survivors reported that these values-congruent behaviours were meaningful and protective, making it easier for them to cope with the pain caused by their traumatic experiences. These findings support previous assertions that victims engage in more pro-social behaviours after trauma (Brewer et al., 2016) and that growth is actualized when cognitions are enacted (Hobfoll et al., 2007). This finding suggests that an effective conceptualization of growth through positive changes in values should include changes in behaviour that are value driven and meaningful for survivors. Measures of growth should include items to assess positive changes in values-driven behaviour.

Values are apparent in interactions with others and in survivors' contexts. Participants reported that the context in which they lived and the people with whom they had contact influenced the ways they were able to enact their clarified values. This idea suggests a potential explanation as to why previous literature reported that significant others did not observe changes in survivors of trauma who identified as having experienced growth (Frazier et al., 2009). Survivors in this study reported that they felt limited in enacting values-congruent behaviours in the context of Northern Ireland. If context causes survivors to limit new behaviours to their immediate circle, growth may be less visible and may be understood as the absence of growth. The consideration of context in the manifestation of values-based growth has not been extensively explored. Items that explore how context influences the expression of values-based growth could more effectively capture growth after trauma.

Even when survivors grow, suffering continues. Participants in the second study indicated that living in accordance with their values was meaningful and protective. However,

they still reported pain and suffering arising from the traumas they experienced. One critique of the growth literature is that growth has an inconsistent relationship with psychopathology (Shakespeare-Finch & Lurie-Beck, 2014). This finding suggests that values-based growth and suffering can co-exist; they are not mutually exclusive. Future measures to assess this form of growth should consider the role of on-going suffering in survivors' experiences of growth after violent trauma.

Needed Innovations in Measurement

The scoping review of positive change in values after violence reviewed 137 papers, 83 of which reported positive change in values. Of these, 59% were quantitative studies. This is problematic, as existing quantitative measures of growth do not focus exclusively or extensively on values-based change. Two limitations exist with current measures of growth. First, they do not have subscales or factors which focus on positive change in values. Second, they consider only very specific kinds of values change, such as increases in appreciation of life and increases in compassion, and do not consider changes in altruism or political beliefs that have been reported by survivors (Gorst-Unsworth, van Velsen, & Turner, 1993; Puvimanasinghe, Denson, Augoustinos, & Somasundaram, 2014). This narrow focus neglects the vast array of values change which can arise from traumatic experiences, as well as the processes by which values change happens. The conceptualization offered by this dissertation can provide guidance for the development of quantitative measures of growth that would more adequately capture positive changes in values. These measures should include items that assess processes related to values-based growth including new clarity regarding personal values (both old and new), new behaviours which are congruent with new values clarity, the context which influences how values manifest, and on-going suffering.

Limitations

There were four main limitations that impacted this dissertation. The first limitation of this dissertation pertains to the definition of values chosen to guide this work. While the definition selected to guide the work is an important and useful definition of values from the perspective of clinical and counselling psychology, there are several other definitions of values, which also may have been useful. Though a clear definition of values is required to study positive change in values, the selection of another values definition may have resulted in different results. Secondly, in this dissertation positive values were defined as self-determined, meaning participant values change was considered positive if they deemed it so. This presents an additional limitation to the dissertation, as some participant determination about their values may not be positive for their communities or societies, or may relate to negative long-term outcomes for themselves. While there were not clear frameworks in the values nor growth literature for determining what makes a values change positive, this dissertation may have yielded different results if another approach to determining valence of values change had been adopted. Future research should explore other conceptualizations of values as they relate to growth to evaluate the selection of the ACT definition of values.

The second limitation pertains to the scoping review. While the scoping review was useful in beginning to identify the components of growth through positive change in values, scoping reviews do not include quality assessments. It is possible a quality assessment could have resulted in a different manuscript selection, and therefore different results. However, as quantitative measures of growth do not adequately capture the phenomenon of positive changes in values, a quality assessment could also have substantially limited studies that illuminated this

phenomenon. Further review of the literature and evaluation of the quality of growth studies which report positive changes in values is required.

The third limitation of this dissertation is related to the use of Interpretative Phenomenological Analysis (IPA) and the population in the second study. IPA is a qualitative method that encourages researchers to explore the role of context in participants' experiences. It allowed for the detailed examination of the experiences of survivors of the Troubles conflict in Northern Ireland. However, the consideration of context yields findings that are not generalizable. While the consideration of context was essential for understanding the phenomenon as it arises in post-conflict Northern Ireland, there are nuances of this sectarian conflict which may limit the applicability of these results to other populations.

An additional limitation of both studies of this dissertation is that they relied predominantly on cross-sectional and retrospective data. Therefore, it is unclear whether the results described in the scoping review and the changes described by participants in Northern Ireland arose directly from their traumatic experiences or were caused by other factors. The self-report nature of the data in study two may also limit the accuracy of the perceptions of growth reported.

Future Directions for Research

The results of the current dissertation provide the foundation for several directions for future research. The conceptualization of what may constitute growth through positive changes in values, explored throughout this dissertation, needs substantive further investigation. Future studies should explore whether this conceptualization of positive values change applies in other populations, in other contexts, and other trauma types, as each of these variables has been shown to impact the manner through which growth manifests. This conceptualization should be

explored using qualitative methods and other types of reviews, to explore whether survivors of other trauma types and in other locations offer similar descriptions of positive changes in values after trauma.

Another avenue is to use the conceptualization to develop measures or refine measures to better study growth through values change. Measures are needed to explore the four components: clarity of values, the benefit of engagement in values-driven behaviour, on-going suffering, and the impact of context in the development and enactment of values. New measures could detect these components of positive changes in values, as well as measuring change over time to ascertain the degree of growth and its longevity.

Future studies should continue to explore the process by which these changes in values after trauma occur. Participants in study two did not describe engaging in the effortful processing that is typically thought to precede growth. Frequently, they reported difficulty in understanding how their changes in values occurred. As such, it is possible that changes in values occur through processes which might be different for other types of growth after trauma. Longitudinal studies are required to deepen the understanding of positive values change and whether this process is distinct from the models of growth in the existing literature.

Future research could also explore other values trajectories, such as values which change in ways survivors deem are negative, or when the relationship to values can be changed when the value itself is not. Negative values change would likely present a very different experience for survivors than the positive values change described in this dissertation. Future studies should explore how the experience of a negative values change relates to growth. Also, the study of values being confirmed after testing by trauma presents an interesting form of growth which requires further development and testing. It is possible that survivors who report their values

were tried and confirmed report different growth experiences, or different presentations of growth holistically. This warrants further study.

Finally, research could explore the clinical utility of the concept of positive values change after trauma. When working to facilitate growth in psychotherapy, clinicians must be cautious regarding how and when they introduce the concept of growth into the therapy process (Joseph & Linley, 2006; Tedeschi, Calhoun, & Groleau, 2015). To avoid risk, while supporting survivors in finding growth, it may be useful to implement values interventions for survivors of trauma. Several clinical theories employ values interventions to facilitate therapeutic change (Hayes et al., 2013; Rogers, 1964). It is possible that implementing values interventions with trauma survivors may assist them in achieving growth, without discussing growth directly or too early in the process. Values interventions and measures may allow clients to reflect on their values and derive comfort from acting in congruence with those values. These are two components of values-based growth which survivors reported in this dissertation. Therefore, these interventions, while not directly introducing growth to the therapy, may facilitate clients' engagement with values processes that could lead to growth in this domain.

Conclusion

This dissertation contributes to the literature by isolating one form of growth after trauma, positive changes in values, and studying it in depth. Through a Scoping Review and an Interpretative Phenomenological Analysis, this dissertation developed a possible conceptualization of positive values change after trauma: positive values change includes an increased awareness of values, either new or old, which survivors enact in meaningful and protective ways, in interactions with others and the context in which they live, even when suffering continues. This conceptualization should be evaluated further to determine its

applicability across study populations and trauma types. It can be used to guide the development of quantitative measures of growth which more adequately capture positive changes in values after violence. Understanding growth through positive changes in values can contribute to our empirical understanding of this phenomenon and help enable clinicians to better support trauma survivors to grow by making positive changes in values.

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Appendix A

Review of related models excluded from current review

There are several related models of growth which will be excluded from the current dissertation for a variety of reasons; generally, they do not directly consider positive values change after trauma. However, as these models are related and may contribute to the reader's understanding, each of these is reviewed below, presented with rationale for their exclusion.

Altruism borne of suffering. An often excluded but related concept in the consideration of positive changes in values and priorities is altruism borne of suffering (ABS; Staub & Vollhardt, 2008). ABS refers to a process by which survivors "reclaim their meaning and turn towards others, becoming caring and helpful" (Staub & Vollhardt, 2008, p. 267). While the manifestation of altruism borne of suffering appears to be similar to positive changes in values and priorities, it is different in the following ways. First, this theory refers specifically to observable behaviour, without examining the underlying psychological changes that explain the given behaviour. Therefore, it is impossible to know whether the individual's values and priorities have changed, or if there is another explanation for the change in behaviour. Second, this conceptualization does not include changes in values and priorities, which would not appear altruistic. For example, some survivors may develop an increased sense of caution and care for the self, with the congruent behaviour of engaging in less risk-taking. Though this survivor would have experienced self-identified positive changes to values and priorities, they would not be described as demonstrating increased altruism borne of their suffering. As these differences may indicate a phenomenon different from the focus of this dissertation, it will be excluded from further discussion.

Resilience. The PI also chose to exclude resilience from the current dissertation, as resilience is a distinct phenomenon from growth. While growth represents an improvement in functioning that surpasses pre-trauma levels, resilience is defined as, "the ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event… to maintain relatively stable healthy levels of psychological and physical functioning" (Bonanno, 2004, p. 20). It is thought to refer to an individual's ability to avoid a decrease or depletion in functioning, which might otherwise arise from a traumatic event (Bonanno, 2004). When survivors' relationships to their values change in meaningful ways, this process is clearly growth and not indicative of an avoidance of harm or return to pretrauma levels. Therefore, this phenomenon is different from growth in which survivors are impacted by their experience and are fundamentally changed by the trauma (Tedeschi & Calhoun, 2004). Windle and colleagues (2011) report that there are 19 quantitative measures of resilience which are valid and reliable. To ensure none of these measures capture growth related changes, the author reviewed all 19 measures and identified that none of them query the positive changes in values that are the focus of this dissertation. For these reasons, resilience is excluded from further consideration in the current review.

Meaning Making. While growth after trauma can be conceptualized as a meaning making process, meaning making is too broad a lens to capture the positive intrapsychic changes to which this dissertation refers (Davis, Nolen-Hoeksema, & Larson, 1998). Seminal theories of meaning making include two components of this process, global meaning making and situational meaning making (Park & Ai, 2006). Global meaning making is thought to include three components: beliefs, goals, and subjective feelings (Park & Ai, 2006). Situational meaning making refers to the specific appraisals of a given experience, which is compared to global

systems of meaning making (Park & Ai, 2006). In the context of trauma, global and situational meanings made are compared to guide a survivor's reaction to the traumatic experience (Park & Ai, 2006). While this process may elicit positive outcomes, there are a multitude of sequelae that can arise from this meaning making process. As such, it cannot be held as synonymous with growth and therefore will be excluded from the current review.

Appendix B

A Brief History of The Troubles (McKittrick & McVea, 2012)

The history of violence in Northern Ireland stems from long before the country came into existence. Until 1920, Ireland existed as one nation, under the control of Great Britain. In 1916, a violent uprising, known as the Easter Rising, occurred in Dublin. This uprising was quickly extinguished, and Great Britain swiftly executed many of the leaders of the movement. The extreme reaction of the British government created much sympathy for Irish Republicans. It was in this ethos of sympathy that the Irish Republican Army (IRA) rose to prominence and began their campaign for Irish independence. From 1916-1920, the IRA engaged in many acts of violence against British dominance, which collectively became known as the War of Independence.

In an effort to quell the violence, and after a period of significant negotiation, Northern Ireland came into existence with the signing of the Government of Ireland Act in 1920 (McKittrick & McVea, 2012). This legislation divided the island of Ireland into two separate states, the Republic of Ireland and Northern Ireland. Prior to separation, the island of Ireland was divided into 32 counties. In the course of the separation, the borders of Northern Ireland were drawn around six of the 32 counties: Down, Antrim, Derry, Tyrone, Armagh, and Fermanagh. Northern Ireland remained in Great Britain, though established a devolved parliament, being left by Britain to govern their own affairs. After continued fighting, the Republic of Ireland established their Dail, or parliament, in 1921.

The significance of the six counties included in Northern Ireland cannot be understated. Unlike much of the Republic of Ireland, collectively, these six counties were made up of a Protestant majority, with a sizable Catholic minority. From 1921-1969 exclusively Protestant

leaders ruled the government. There was widespread oppression and discrimination of Catholic citizens, especially in jobs and housing (McKittrick & McVea, 2012). Additionally, lines of voting constituencies were altered by the Protestant government to ensure Catholics could not elect Catholic representatives to parliament (Ellison & Martin, 2000). For example, only those who owned property could vote, and landowners, who were predominantly Protestant, were given multiple votes per person. This systematic oppression led to continual periods of struggle.

In 1967, the Northern Ireland Civil Rights Association (NICRA) was formed. Inspired by the civil rights movement in the United States, NICRA sought equal representation in government and equal opportunities in employment and housing. The creation of this organization created much unrest and resistance from the Protestant leadership who feared that increases in the rights of Catholics would lead to the downfall of Northern Ireland and the establishment of a united Ireland. At this stage in the conflict, the lines between Protestant and Catholic were not as fiercely drawn as they would come to be later in the conflict. Working class Protestants and Catholics, as well as students of all description, participated in the civil rights movement, looking to equalize the power of the exclusively Protestant middle class. As the administration was convinced that the civil rights movement sought a united Ireland, they would not acquiesce to any demands. They rigidly continued with policies of gerrymandering and discrimination, leading to continued bouts of intense conflict.

The current dissertation focuses on the most recent period of conflict, colloquially referred to as ‘The Troubles’. It is commonly accepted that the conflict began on August 14-15, 1969 when marches in Londonderry/Derry erupted into violence. The police lost control of the violent crowds in Londonderry/Derry, and later in Belfast. The British army was dispatched to Northern Ireland to dispel rioters and restore peace. They would not leave for four decades.

As the Troubles increased in breadth and severity, a significant polarization occurred, essentially ending collaboration between Protestants and Catholics in the public arena. Several paramilitary organizations gained prominence and power, and engaged in violence to achieve their desired ends. They are often grouped into organizations with Republican values, and those with Loyalist values. The republican groups sought the removal of Great Britain from all of Ireland, creating one Irish nation to be governed by the Dail in Dublin. The most famous of these is the Irish Republican Army (IRA), which was responsible for many shootings and bombings. Their victims were often, but not exclusively, Protestant. The IRA claimed to target only individuals who actively participated in facilitating the aggression of the British on Irish soil. After conflict within its ranks regarding the intensity and use of violence, the IRA was divided into the Official IRA and the Provisional IRA. Traditionally the Provisional IRA was more prone to using violence to achieve their goals. Another significant Republican faction is the Irish National Liberation Army (INLA), who were also responsible for many attacks and bombings throughout the Troubles.

On the other side, the most infamous Loyalist paramilitary group is the Ulster Volunteer Force (UVF). They often engaged in retaliatory violence in response to attacks by either the IRA or the INLA. The UVF identified their role as protectors of Ulster from infringement by forces who would see them disconnected from the United Kingdom, whether that be the British government or Republican forces. Another significant loyalist paramilitary group was the Ulster Defense Association (UDA). The Ulster Freedom Fighters (UFF) and Ulster Protestant Volunteers (UPV) were other less significant Loyalist paramilitary organizations who participated in the Troubles.

The impact of The Troubles cannot be overstated. For details of the specific violent incidents which comprised the troubles, please see *Making Sense of the Troubles* by McKittrick and McVea (2012). The toll on the lives of the citizens of Northern Ireland continues to this day. From 1969 to 1998, 3739 people were killed: 2096 civilians, 305 members of the police or police special forces, 711 members of the armies of either Northern Ireland or Great Britain, 568 known members of paramilitary groups, and 59 were unclassified (often those travelling in Northern Ireland and unrelated to the conflict).

The beginning of the end of the Troubles came on August 31, 1994 when the IRA declared an official ceasefire to armed violence. This ceasefire was followed in October 1994 by a ceasefire by the coalition of Loyalist paramilitaries. The IRA's ceasefire fell apart in 1996, and bombings ensued, but it was re-established in the Spring of 1997. The Troubles officially came to a close with the ratification of the Good Friday Agreement, also known as the Belfast Agreement, which was signed by the paramilitaries, and their political representatives, the British, and the Irish governments. There were several subsequent attempts to re-establish the government of Northern Ireland, which culminated in the successful creation of the government in 2007.

Appendix C

Supplementary Evidentiary Quotes

In this appendix, the reader can find selected additional quotes to provide evidence of each of the subthemes which are arose from the data analysis presented in Manuscript 2. For Superordinate Theme 1, supplementary quotes will be provided for that superordinate theme as it has no subthemes. Quotes will be presented here with the same gender-matched pseudonyms used in Manuscript 2.

Superordinate Theme 1: Trauma helped survivors know what they value

- When George's father was murdered, he realized valuing community loyalty was not important. Now he wanted to get to know and accept people for who they were individually not for the group they belonged to. He stated, "Destruction brought reconstruction in, definitely, a spiritual way."
- Jillian's daughter was killed in a bombing, and she reported this made her reflect on how she wanted to life her life. She stated, "Its' important to enjoy life, we don't know how long we're going to be here, that's the way I look at it."
- Harold's father was killed in a murder which was attributed to paramilitary forces but never solved. He described having a great deal of clarity with respect to his values. When the interviewer asked where his values clarity came from, he replied, "Because of what happened to my dad."

Superordinate Theme 2: Context and connection impact values manifestation

(a) Shared values provide common ground for connecting with the other

- Karen reported being frustrated with the split and distinction between Protestants and Catholics, reporting that she felt more in common with people who shared her values than those on her side. She stated,

> People talk about both sides, something about there's violence on both sides. It depends how you define your sides…to my mind, … the most important side is to decide what you're on is where you stand on terrorist appeasement….there are no terrorists on my side… I have far more in common with a totally innocent anti-terrorist victim …who's a nationalist Roman Catholic.

- John reported that though he would never excuse the murder of his sister, that he had used his values to develop empathy and understanding for the people who killed her, rather than developing hatred. He stated,

> It just means that you forgive the ones who committed these atrocities and that, but suppose a lot of them thinks there is a war that's going on, and they don't realize what they were doing, now that the war is stopped, they may have changed, you know, which they probably have, I hope… Yeah, you could imagine a bit, yeah, when they get time to think about things, you know, and be caught up in terrorism and that.

(b) Connection combats ignorance, facilitating values-congruent behaviour

- Barbara shared her inspiration to live her own values after seeing ex-combatants interacting peacefully. "This mini bus landed, and we seen all these marching in, and they were all together: these men that were trying to murder each other a few years ago, all coming in together".

- Charlie reported that the bombing which killed his wife and injured his daughter had not differentiated between communities in the people who were targeted. He reported feeling connected to all victims, and wanting to interact with them as a result of this. He stated,

> The day the … bomb went off, nobody asked you, when they were lying crying and dying on the street, none of the people were asking were you Catholic or Protestant, and the blood was all the one colour, that was running down the street

- Francine reported finding commonality with another woman unexpectedly after her sister-in-law was killed in a bombing, stating, “She was kind of like myself looking for answers, we didn't know each other personally or anything like that, but through all this trauma, it's just strange.”

(c) Context influences values clarification and enactment

- Francine reported that living her values was more important because, as a mother, she did not want her family to be harmed further after her sister-in-law was killed by a bombing. She stated that the death of her sister-in-law made her especially determined to convey her desired value of caring to her family. She stated,

> Families can be very cruel to each other, you know. That’s one of the things I've tried to teach our kids. If they fight amongst themselves, I have said, 'Look, you're brothers and sisters. You've the same blood running through your veins. Don't split up

> because of this…keep talking. Get round, solve the problem, sit down and talk'….and they do listen.

- Paul stated that he feels he has to be careful about expressing his values through political action to his political views after surviving a shooting that killed his friend, stating,

> I don't have a political view… I always just sort of like the mix, and I like the stable one because I always thought that one was too dangerous because you can be pulled away to the one side or the other side, you know.

Superordinate Theme 3: Valued action is possible and helpful

(a) Values can be chosen, and lived, no matter what

- Though Harold's father was killed by an allegedly sectarian attack, he reported that his loss in no way excused him from living his values, stating, "it's just simply, I think you have to make your own decisions between good and bad."
- Karen stated that her mother's murder did not change her responsibility for living her value of hating the sin, not the sinner, nor did her loss change her mind about those values. She reported that living out her value of wishing the best for everyone was not the same as excusing their behaviour, which she enacted stating

> It really did hold, and there was not exceptions, it was the simplicity of that notion you should never hate people just the things they do, and that yeah, that I could truly say that I wish the best for everyone, including the people that murdered my mother, but the best is not pretending that what they did was ok

- Charlie stated that he is committed to facilitating cross-community connections and healing even when it is painful after his wife was killed and daughter injured in a sectarian attack. He stated,

> If we're going to build a society that our children and grandchildren can grow up in without sectarianism and hatred, then we must, no matter how much it hurts, we have to sit down with these people, we may not like it, I don't like it, but I'm prepared to sit down and listen to them

(b) Living your values helps

- Jillian reported that even though she still grieves her daughter, killed in a bombing attack, she works to live a life engaged with her value of hunting for joy, and that this value helps her cope. She described taking a trip where she deliberately oriented to joy, rather than missing her daughter. She stated:

> I stood on a pebbled street, small street, and there were small houses, and the curtains and the wee net curtains and everything was gleaming and these we houses and I stood in amazement and I looked I was standing on the page of a fairy tale book, you know those fairy tales, that you get with the wee houses and the cobble streets and I said looking at those, honestly didn't look real it was so beautiful

- Paul reported that in order to survive witnessing the death of his friend, he worked to build a life he found was meaningful and in line with his values, and that being successful at building this life has saved him. He stated:

> All I want is for me to live the rest of my days….I don't want…to live my rest my day and be at peace with myself, and be at peace that there are

> no…that this wee man didn't die in vain, and that I can help other people, and that I can be the person that I always wanted to be 'cause the person I always wanted to be is sitting here now, believe it or believe it not.

(c) Continuing the legacy of the dead through values provides comfort and purpose

- Harold reported that he derives a great deal of comfort and motivation from trying to embody the legacy of his father, who was killed in a shooting. He stated, "I channelled my energies. I was a very passionate unionist and Orangeman, so I channelled by energies into the loyal orders, and I wanted to be in them 'cause my dad was in them, and the band, you know."
- Charlie discussed the importance of honouring his wife's legacy by continuing her work with orphans, "There's things I have done that if the wife hadn't been killed that the amount of lives that she has, with her bringing that child to Ireland, the amount of lives she has changed, god rest her, is unbelievable." After her death, Charlie continued her work by adopting the orphan child his wife had selected to help. This was new for him and he reported finding a sense of purpose in ensuring the child his wife had helped was still being helped.

Superordinate Theme 4: Even after values-based growth, pain remains.

(a) Suffering is on-going

- Charlie described on-going haunting memories of the day a bombing killed his wife, stating that he continued to experience,

> The smell of burning flesh, after the bomb went off. And I can still see that town, when it went off, the shop I'd been in … with the wife and children and I went out and went in the next door and when I turned to come out

> again the bomb went off, and the front of the shop I was in was sucked out, where it was blew in where she was and you couldn't, when I stepped out on the street, I can still see it going down the street, in, out, … the front of [the] chemist came out like something you see in schwarzenegar commando, just sucked the glass clean out of it

- Annette reported that she had moved on from the death of her younger brother, and built a life she found meaningful, however she stated, "I go about and I have a laugh and a joke about things, but it's never...it's still in me."

(b) Trauma shatters worldview, painfully disrupting meaning-making

- Annette reported that she was never able to see the world in the same way after her brother was killed, stating that both she and her family were unable to see the world as the same safe place they believed it was prior to the murder. She reported,

> My youngest brother was only ten, and I took him to live with me in … a different area … and I was walking down the road with him, and I was going to the swimming pool, and all of a sudden he stopped in the middle of the street, and I says, 'What's wrong? Why did you stop? Why are you making me stop?:' He says, 'I don't want to get shot.' He says, 'There's a policeman there, and I don't want to get shot the way my brother was shot'. You know, and I couldn't say to him…I didn't know what to say to him.

- Francine reported that after her sister-in-law was killed she lost faith in a justice system, which she had previously trusted and believed in. She reported that the death of such an innocent young woman rocked her belief in the world and a

global sense of justice, stating, “You know, completely innocent, you know, and then nothing done about it and no justice got.”

(c) Victims move towards values when honoured, rather than neglected.

- Karen reported that she feels stuck in her suffering and prevented from moving forward in values-congruent directions because the leaders do not respect or listen to victims. She stated that she would be willing and eager to do things to support peace if she felt it was not being prevented by the people in power. She expressed this saying, “We could do difficult and we’d be glad to do difficult for real peace.”
- Francine stated that feeling her experience of losing her sister-in-law was disregarded made if feel as though she died for nothing. She shared that she needed “…a bit of recognition, because they felt that their lives meant nothing because they weren't remembered, you know.”
- Charlie reported that after his wife died, he had lost faith in the government and systems to take care of him. He reported that the government did not care about victims and their wisdom. He shared, “it didn’t matter what the victims thought, its, they had all these big boys in that hadn’t a clue, not a clue.”

Appendix D

Interview Guide

How did the trauma you experienced impact the way you look at the world?

Prompts: In what ways did you feel lost or confused?
In what ways did you feel motivated or a sense of possibility?

How do you feel like your priorities in life were impacted following this trauma?

How do you feel like your values system changed following this trauma?
Prompts: Do you feel like these changes were positive, negative or both, and why?
How have these changes impacted the way you see yourself? The way you engage in relationships?
What was the experience of these values change?

Given the changes in your values or life priorities, how do you feel the way you act has changed as a result of the trauma?
How do these changes manifest day to day?
How do these changes manifest in your personal relationships?

In what ways have these changes in your values impacted the way you view the troubles, and the conflict that drove them? How does impact how you view the peace process?
Do you act differently in your community/around others/in your family/politically as a result of these values change?

Often when we are exposed to traumatic things, there are complex outcomes that can be both positive and negative. What were some of the positive outcomes you experienced following your traumatic experience?