Meaning Making and Spirituality

The Science of Resilience

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Definition

In the context of resilience, meaning making can be defined as ""the ability to find meaning in even the most stressing events" (Feder, Charney, and Collins, 2011, p. 17 in p. Theron & Theron, 2014, p. 25), which starts with "the appraisal of the personal significance of a situation" (Theron & Theron, 2014, p. 25). From this perspective, an individual's process of meaning-making is grounded in their worldview, which shapes their initial appraisal of a situation and the coping strategies they use to make meaning from the situation.

Park's (2010) Model of Meaning-Making

A useful model for understanding how meaning-making works in a resilience context is Park's (2010) Model of Meaning-Making, which updates and expands Park and Folkman's (1997) widely used model. Park's (2010) model contains six tenants or stages of the meaning-making process:

1. People possess orienting systems ("*global meaning*") that provide them with cognitive frameworks with which to interpret their experiences. Individual's global meaning systems consist of beliefs (broad views regarding justice, control, predictability, coherence, and self-views), goals (desired end states or states already possessed that one seeks to maintain) and subjective feelings (feelings of "meaningfulness," that one has purpose or direction).
2. When encountering stressful or adverse, individuals appraise the situation and assign meaning to them. Park (2010) terms this "*situational meaning*", meaning in the context of a particular encounter. The first appraised meaning is also called implicit meaning and may be instantaneously determined and then subject to continuous revision.
3. The extent to which the situational meaning is discrepant with one's global meaning determines the extent to which one experiences distress.
4. The distress caused by this discrepancy initiates a process of meaning making.
5. Through meaning-making efforts, individuals attempt to reduce the discrepancy between situational and global meaning and restore a sense of the world as meaningful and their own lives as worthwhile. Park (2010) finds four domains of this process within the literature on meaning making:
    a. Automatic vs. Deliberate processes – the meaning making process may be automatic and unconscious or a deliberate coping process that may include: positive reappraisal, revising goals and goal-directed planning, activating spiritual beliefs and experiences, downward comparisons, selectively focusing on positive attributes of the situation, or finding a more acceptable reason for an event's occurrence. Some claim that deliberate meaning making is associated with adaptive outcomes, while automatic meaning making involves intrusive thoughts and rumination that can increase psychological distress (Gan et al., 2018).

   b. Assimilation vs. Accommodation processes – changing the situational meaning to be more consistent with one's global meaning is termed assimilation, while changing global beliefs or goals is accommodation. Either process or both may occur during the meaning making process.
   c. Searching for Comprehensibility vs. Searching for Significant – part of the meaning-making process may involve attempting to make the event fit within the global meaning (comprehensibility) or it may involve determining the value or worth of the event.
   d. Cognitive vs. Emotional processing – the meaning-making process may involve habitation or regulation of negative affect and attempts to understand what one is feeling or an integration of experiential data with pre-existing schemas through thoughtful reflection. Park (2010) notes this domain is a difference of emphasis rather than essential mechanisms.
6. This process is successful when meaning is made and results in better adjustment to the stressful event. The "products" of the meaning-making process can include many of the following: a sense of having "made sense," acceptance, reattribution of causal understanding, perceptions of growth or positive life changes, changed identity or an integration of the stressful experience into identity, reappraised meaning of the stressor, changed global beliefs or goals, and restored or changed sense of meaning in life. The meaning-making process is beneficial, that is, a part of the resilience process, only insofar as individual achieve some product (i.e., meaning made). Attempting to make meaning is not necessarily linked with better adjustment and may instead signal ongoing discrepancy between an individual's global meaning and appraised meanings; in the literature, this has been linked to rumination associated with depression.

Spirituality/ Religion

Spirituality can be defined as the 'human quest for personal meaning and mutually fulfilling relationships among people, the nonhuman environment, and, for some, God" (Canda, 1988, p. 243, cited in Angell et al., 1998, p. 616). For many, spirituality is an inherent part of the human experience, related to finding meaning and purpose in our lives (Angell et al., 1998; Kim & Esquivel, 2011). For Angell et al., (1998), "what we believe about why things happen, and why they happen in the larger scheme of things is the essence of our spirituality" (p. 619). From this definition, spirituality is very similar to Park's (2010) global meaning.

In contrast, religion is often defined in association with an institution or group ratified system of beliefs. For example, Kim and Esquivel (2011) reference Hay et al.'s (2006) definition of religion as "an evolved system of beliefs, feelings, and actions shared by a group within a cultural context. Religion provides the basis for transcendental values that guide ethical, moral, and interpersonal conduct" (p. 755). While Angell et al. (1998) uses Canda's (1988) definition of religion as "an institutionally patterned system of beliefs, values, and rituals" (p. 617). However, Pargament and Cummings (2010) define religion as "a search for significance in ways related to

the sacred" (p. 194), where the sacred encompasses concepts of God or other higher powers, as well as aspects of life that take on elevated attributes, for example transcendence, by virtue of their association with the divine. Pargament and Cummings' (2010) definition of religion runs much closer to previously discussed ideas of spirituality. This conceptual confusion supports Kim and Esquivel's (2011) finding that much of the literature uses spirituality and religiosity interchangeably. Kim and Esquivel (2011) describe religion as having three orientations: engaging in ritualistic or liturgical practices, such as church attendance (extrinsic orientation); adopting a specific set of organized religious belief systems and doctrines (intrinsic orientation); and seeking to relate to the sacred and divine (search orientation). They claim that spirituality most closely matches a search orientation within religion (Kim & Esquivel, 2011).

In the context of resilience, spirituality and religion may function as a significant example of meaning-making. Pargament and Cummings (2010) link religion to Park's (2010) model of meaning-making and claim that religion both helps establish a foundational global meaning system and, when there is discrepancy between that global meaning and the situational meaning of a stressful event, religion can function as part of the meaning-making process. One key tenant of Park's (2010) global meaning is the belief that one's life has purpose, both religion and spirituality can provide that sense of purpose. Park and Folkman (1997), in their original model, describe religion as a typifying example of global meaning. Furthermore, religion or spirituality can help reconcile appraised meaning to global meaning by seeing adversity as part of God's plan or by positively reappraising the situation. Kim and Esquivel (2011) notes that "religion serves as a meaning system that provides life purpose in the face of highly stressful situations" (p. 756-757), and "spiritual values serve to maintain an optimistic outlook on life and even help one to find meaning in adverse situations" (p. 757). Thus, religion and spirituality both make up an individual's global meaning and assist in the meaning-making process.

Collective Meaning-Making

Kim and Esquivel (2011) warn not to limit spirituality exclusively to the personal realm and ignore the social responsibilities and role of communities; similarly, meaning making is not always an individual pursuit. In Wexler et al.'s (2009) definition of meaning making, they describe being able to make collective sense of one's negative experiences by seeing one's own experiences as part of a larger collective struggle. Wexler et al. (2009) use examples from the literature on Indigenous youth and sexual minority youth to look at collective meaning making. They find that enculturation is important for Indigenous youth as the production of culture creates collective meaning (Wexler et al., 2009). For sexual minority youth, connecting to a larger social group with shared experiences helps them conceptualize their personal experiences of discrimination as part of a larger collective struggle (Wexler et al., 2009). Aligning with a shared meaning system, such as those that shared within Indigenous cultures or for the LGTBQ community, "can provide an explanation for their own experiences of either racism and ethnocentrisms or homophobia and can provide helpful avenues to combat or

(re)define it as part of a phenomenon larger than themselves" (Wexler et al., 2009, p. 567). Religion and spirituality can also be thought of as a shared meaning system which, while not as focused on group struggle or oppression, can provide similar experiences of being part of something larger than oneself.

Meaning Making for Marginalized Groups

In the conversation around meaning making and resilience, it is important to recognize that marginalized peoples and communities may have different meaning systems than the dominant society. Resilience research can fall into the trap of applying dominant understandings of risk factors and positive outcomes to marginalized groups while failing to acknowledge the reciprocal processes taking place at the intersection of personal and community meaning-making (Ungar, 2004; Wexler et al., 2009). Cultural ways of being and paradigms hold expectations regarding appropriate ways to cope with adversity, thus they can shape or even direct individual's meaning-making processes (Theron & Theron, 2014; Ungar, 2011). Ungar (2004) defines resilience as "the outcome from negotiations between individuals and their environments for the resources to define themselves as healthy amidst conditions collectively viewed as adverse" (p. 342). Both resilience and meaning making can be understand as a process involving personal and collective negotiation, thus, it is crucial to recognize it as a ongoing process rather than a steady state (Theron & Theron, 2014) and attend to the different meaning systems of marginalized groups (Wexler et al., 2009).

Relationship to Resilience

When resilience is understood as "the outcome from negotiations between individuals and their environments for the resources to define themselves as healthy amidst conditions collectively viewed as adverse" (Ungar, 2004, p. 342), meaning making plays a large role in how individuals define themselves as healthy. Not having a sense that life is meaningful can lead to feelings of emptiness, boredom, apathy, depression, aggression, and addiction (Schulenberg, 2004; Schulenberg et al., 2008).

Large reviews of the available evidence have shown the role of a meaning-making process in resilience following natural and technological disasters and common life stressors such as low socioeconomic status, aging, childhood abuse, and spousal death. The relationship between meaning making and resilience have been investigated in cancer patients, international students, and in a qualitative study with African American girls who had lost a friend to homicide. Wexler et al. (2009) reviews the evidence for a process of collective meaning making. As an example of global meaning and the source of much research, spirituality/ religion has been linked to resilience with mixed results. Finally, a series of case studies are presented which present extraordinary examples of meaning making.

Meaning Making and Resilience

Park (2016) conducted a review on the role of the meaning making process following natural (e.g., flood, hurricane) and technological (e.g., oil spills, fires) disasters. Park (2016) integrated the evidence into her model of meaning making to show how both global meaning and situational meaning effect post-disaster resilience. Global meaning that encompasses a strong belief in one's purpose in life, that is one's belief that their life matters and that they have valuable goals to accomplish, is a strong correlate of post-disaster resilience. Similarly, holding global beliefs that the world is controllable, fair, and that one can competently handle disasters has been shown to be adaptive even following extremely stressful disasters. Flowing from a global belief of self-efficacy, situational meaning that involve challenge appraisals are related to less distress and higher perceptions of growth and quality of life. When the disaster is appraised as challenging yet still surmountable, rooted in global beliefs of control and self-efficacy, individuals respond better. Conversely, appraisals of the disaster as a threat that will overwhelm an individual's resources and ability to handle it and appraisals of low control correlate with more distress, depression, anxiety, PTSD symptoms, and lower quality of life following various disasters.

Investigating long-term coping following disasters, Gou et al. (2013) looked at high school students use of meaning-focused coping (MFC) two years after the Sichuan earthquake, which killed nearly 70,00 people. Their sample of 339 students, aged 14 to 19 (mean = 16.52, SD = 0.80), was drawn from Mianyang City, one of the hardiest hit areas of the Sichuan province in southwestern China. Gou et al. (2013) compared meaning focused coping to problem-focused and emotion-focused coping; the literature suggests each coping type is best suited to it's own situation, so that problem-focused coping is effective with changeable stressors and emotion-focused coping is most suited to unchangeable stressors, where it was better to try and decrease the stress caused by the negative emotions arising from the situation, rather than the situation itself. However, Gou et al. (2013) find that MFC has been understudied, and they posit that it may be more effective than emotion-focused coping in the face of uncontrollable stressors, such as disasters. Gou et al. (2013) also examined MFC's relationship with post-traumatic growth, defined as the positive psychological changes that occur when an individual adaptively responds to serious life stress. The adolescents in Gou et al.'s (2013) study reported using several MFC strategies, such as accepting that the earthquake happened, accepting the death it brought, and trying to identify some benefit from the disaster. Acceptance and finding benefit in the stressor are both examples of meaning made in Park's (2010) model. In this sample, MFC had significant incremental predictive value for positive affect and well-being, and post-traumatic growth mediated this relationship. Gou et al. (2013) found that MFC improved positive outcomes whereas problem-focused coping reduced negative outcomes, such as negative affect and depression, also mediated by post-traumatic growth. Gou et al. (2013) claim that MFC predicted positive adaptation above and beyond other coping styles. The strong correlation between MFC and post-traumatic growth, fewer depressive symptoms, and higher

well-being and positive affect support the relationship between meaning-making and resilience following a natural disaster.

Ryff (2014) looks at meaning making as a function of eudaimonic well-being, what the author describes as a growth-orientated outlook on life. Ryff (2014) posits that factors of eudiamonic well-being include purpose in life, environmental mastery, self-acceptance, positive relations with others, high life engagement, and agency. These are measurable domains Ryff (2014) claims contribute to the meaning making and self-realization process that produce eudoamonic well-being. Ryff (2014) evaluates the empirical evidence that these factors foster resilience against types of adversity: socioeconomic inequality, the challenges of aging, and specific life stressors, such as early life abuse or loss of a spouse, using data from a national study of U.S. adults, the Midlife in the U.S. (MIDUS) study. Low socioeconomic status and low education status are associated with a marker of inflammation known as IL-6 (Interluekin-6), which is a precursor to multiple disease outcomes. However, in the MIDUS study, those with high eudiamonic well-being, composed of higher levels of purpose in life, environmental mastery, self-acceptance, and positive relations, did not show the expected levels of inflammation. Higher life engagement was a protective resource for those of an advanced age, reducing the risk of future disability and mortality. While higher purpose in life also predicted longevity and protection from cognitive impairment over the seven-year Rush Memory and Aging Project. The MIDUS study showed that the effects of child abuse on adult physical health and negative affect were less severe for individuals with greater sense of agency over their lives. While spousal loss was linked with decreased positive emotions over time, the effect was moderated by positive reappraisal. Ryff's (2014) review shows that many of the key products of the meaning-making process, such as purpose in life, positive reappraisals, and sense of control, are protective factors to major life stressors. Ryff (2014) concludes that "those who were able to find meaning, experience personal growth and enjoy good social relationships as they negotiated losses or hardship thus seemed to benefit, not only phenomenologically, but also with regard to maintaining well-regulated biological systems" (p. 5).

Pan (2011) looked at the role meaning-making plays in Chinese postgraduate students' acculturation in Hong Kong, as she claims that meaning-making and finding "meaning-in-life" are two protective factors central to the process of resilience during acculturation. Using Park and Folkman's (1997) model, Pan (2011) looks at two components of the meaning-making process, one at the global meaning level and one at the situational meaning level. Sense-making coping is the cognitive coping strategy of developing an understanding of the explanation of a stressor, it also involves finding a positive meaning or benefit from the stressor and is part of the situational meaning. Meaning-in-life refers to believing that one's life is significant, purposeful, and comprehensible, this dimension often includes goal setting and is part of one's global level of meaning. With a sample of 400 students, 50% male, the majority (n=268) aged 24-30 and not religious (n = 357), Park (2011) looked at how meaning-making protected against the risks of acculturation, specifically acculturation hassles and participant's threat appraisal of them, that is, whether they saw these hassles as overwhelming their ability to cope. Threat

appraisal of acculturation hassles mediated their affect on positive and negative affect, so that the more one appraised the hassles as a threat, the lower their positive affect and higher their negative affect (Pan, 2011). Sense-making coping significantly reduced the effect of threat appraisal on affect, and meaning-in-life had a significant effect on positive affect as well as mediating the relationship between sense-making coping and positive affect. There was also a reciprocal relationship between sense-making coping and meaning-in-life. Pan (2011) concluded that sense-making coping likely transforms threat appraisal into a challenge appraisal, which is associated with positive affect, and since meaning-in-life had a strong positive effect on sense-making coping, when students have a high sense of meaningfulness in their lives, they are more likely to appraise acculturation hassles as challenges they can overcome and therefore, exhibit resilience.

Gan et al. (2018) also used Park's (2010) model of meaning making to look at how cancer patients experience discrepancies between their global meaning and the situational meaning of their illness and engage in a meaning-making process. Gan et al. (2018) claims that "the meaning-making process is a critical component of resilience" (p. 595). Looking at a sample of 316 in-patients at the Department of Oncology at Beijing Hospital (148 men, 159 women, mean age = 58.35, SD = 11.32), Gan et al. (2018) divided participants into a low resilience group and a high resilience group for analytical purposes. Gan et al. (2018) found that, for low-resilient participants, meaning discrepancy positively predicted meaning making, which in turn, positively predicted situational and global meaning changes, and resulted in lower hospital anxiety and higher post-traumatic growth. Gan et al. (2018) claims that these findings support Park's (2010) model. That high resilience participants did not engage in the same process of meaning-making, Gan et al. (2018) interprets in two ways. First, according to the meaning-making model, discrepancy between situational and global meaning prompts meaning-making efforts, so Gan et al. (2018) suggests that highly resilient individuals did not experience a discrepancy between their global meaning and the situational meaning of their cancer experience, thus they did not need to search for meaning. Park and Folkman (1997) note that people do vary in the degree to which their global meaning is challenged by any particular events. The second interpretation Gan et al. (2018) offer is that meaning-making processes may pathologize normal reactions to trauma among highly resilient people and thereby undermine their resilient coping. In conclusion, Gan et al. (2018) suggest that highly resilient people are less likely to engage in meaning making as they benefit less from this process.

Johnson (2010) conducted a qualitative study to look at African American girls' meaning-making process following the loss of a friend to homicide. Her sample included 20 girls aged 16 to 19 from a large north-eastern U.S. city. Johnson (2010) claims that, in the case of dealing with the loss of a loved one, "meaning making is grief work that helps the bereaved form a coherent narrative about the loss" (p. 122). Three themes or stages of the meaning-making process emerged from Johnson's (2010) interviews: early constructions, metaphysical constructions, and motivational constructions. Early constructions involved the participants questioning the homicide, assessing the facts and their emotions, and attempting to ascribe

attribution or fault in an effort to make sense of the event, which could be seen as the situational appraisal and beginnings of the meaning-making process. Johnson (2010) notes that her participants' commonly held assumptions of a meaningful and benevolent world and their own self worth were shaken, which aligns with the discrepancy between situational meaning and global meaning that Park (2010) describes. Metaphysical constructions cover participants' more realized efforts to find meaning in the tragic event and include ideas that "things happen for a reason" and that "they've gone to a better place." Johnson (2010) also found that her participants continued to make meaning out of the event by staying connected their friend, some described holding them in their hearts or feeling them around them in spirit. For many participants, religion played a large role in making sense of their friend's death and supplying a framework for accepting it. Finally, motivational constructions refer to the resilience and positive adaptation participants were able to find following their friend's death. These included deciding that their friend would want them to move on and not stay sad and feeling like the experience had encouraged them to achieve, this took the form of academic achievement, getting out of a dangerous environment, strengthening their social ties, becoming a role model, and otherwise finding ways to honour their friend. Johnson (2010) concludes that "Meaning making helped the teens to tolerate complex thoughts and emotions related to the loss of their friends. Meaning making helped these girls to reformulate assumptions about the world, regain control, and move on with their lives" (p. 139).

Wexler et al. (2009) puts forward a concept of aligning with shared meaning systems as a form of collective meaning making, specifically for marginalized youth. Rooted in psychological theory that says people, especially young people, need ideological guides to make sense of what occurs around them and that contain values that have transcendence and historical continuity, Wexler et al. (2009) also draws heavily on Barber's conflict psychology. Barber found that during the violence of war, the presence or absence of meaning-making structures had clear consequences for young people's psychological health (Wexler et al., 2009). Meaning-making structures that helped youth's resilience to the violence located the conflict within historical struggles as well as personal and cultural continuity. For example, Palestinian youth during the Intifada had clear ways of making sense of the conflict, supported by their communities, whereas Bosnian youth in Sarajevo did not. Furthermore, how youth perceived the logic and legitimacy of the conflict, the roles they played in it, and they ways they could incorporate their experiences into their personal and social development as well as their community's experience shaped the psychological and behavioural effects of the conflict on youth. Wexler et al. (2009) applies the tenants of Barber's conflict psychology to Indigenous and sexual minority youth whose affiliation with a community that "supports selfhood within a larger purpose (e.g. indigenous sovereignty or gay rights) is important for supporting resilience" (p. 567). Numerous studies have shown the connection between Indigenous youths' well-being and their identification and involvement with their culture, while sexual minority youths' identification with the LBGTQ+ community can combat the societal isolation and discrimination they feel. In sum, Wexler et al. (2009) provide theoretical underpinning and evidence for an

understanding of meaning-making tied to a collective or cultural identity and a meaning-making structure that is especially salient for marginalized youth.

Spirituality and Resilience

Pargament and Cummings (2010) see religion as a significant resilience factor for many people and overview the relationship between religion and coping. They claim that individuals with more limited social and personal resources, such as older adults and disenfranchised groups, are more likely to turn to religion as a coping strategy; furthermore, they claim that religious solutions are particularly compelling when people face life stressors that show the limit of human agency and control (Pargament & Cummings, 2010). They identify four ways in which religion provides important resources for resilience: involvement in church institutional life; religious practices, such as prayer and mediation; religious beliefs; and religious experiences (e.g. mysticism). In terms of the meaning-making model, religion provides a framework for benevolent reappraisal, religious forgiveness, and a sense that there is an underlying reason for the universe in general and one's experiences in particular. In terms of Park's (2010) model, Pargament and Cummings (2010) notes that one of the functions of global meaning is the belief that one's life has an ultimate purpose and suggests that religion provides this sense of purpose. Reviewing the evidence, Pargament and Cummings (2010) find that religiousness has been associated with resilience in the sense of improved outcomes following a stressor, including HIV diagnosis, sexual assault, and experiences of schizophrenia or bipolar disorder. They note that a higher level of religiosity, composed of higher level of attendance at religious services, prayer frequency, and importance of religious faith, has been associated with lower levels of depression. Religiosity has also been associated with social support and greater perceived social support, which is important for seeking help and utilizing one's resources in times of stress. The social aspect of religiosity, such as attending services and interacting with religious individuals, has been associated with reduced anxiety and levels of anger and hostility, as well as with increased positive affect (Pargament & Cummings, 2010). Kim and Esquivel (2011) found that religiosity was negatively associated with adolescent delinquency and that there is some evidence that the role of religious forgiveness is helpful in interventions reducing youth hostility and anger. Kim and Esquivel (2011) also found that religiosity is negative associated with substance use and acts as a buffer between stress and substance-use coping strategies in adolescents, and that the religious attendance and religious commitment aspects of religiosity significantly correlated with academic outcomes. They suggest that high levels of religiosity support positive lifestyle decisions, such as academic commitment and avoidance of substances (Kim & Esquivel, 2011). Overall, the literature provides support for the positive relationship between life satisfaction and religiosity and spirituality across different age groups and ethnicities (Kim & Esquivel, 2011; Pargament & Cummings, 2010).

Kim and Esquivel (2011) look at spirituality as a protective factor during specifically adolescence. Although they see spirituality as a life-long process, Kim and Esquivel (2011) find that the theological and psychological literature claims adolescence as a period of "spiritual

awakening" characterized by an existential search for meaning, an enhanced capacity for spiritual experiences, and a process of challenging traditional religious values. Kim and Esquivel (2011) identify four major pathways by which spirituality, and religion, facilitate resilience: by helping to built attachment relationships, opening access to sources of social support, providing guiding conduct and moral values, and offering opportunities for personal growth and development. Furthermore, they find that the literature supports life purpose and meaning as mediating the relationship between spirituality and positive outcomes in adolescence. Reviewing the literature, they found that existential well-being, defined as a sense of life purpose and life satisfaction with no reference to religion, significantly negatively correlated with depression. Similarly, greater spiritual well-being predicted lower trait anxiety, while religion by itself did not predict youth anxiety unless associated with meaning and purpose in life. Kim and Esquivel (2011) claim that the meaning spirituality provides is more important than strictly religious beliefs for reducing adolescent depression.

Spirituality and religion have been looked at repeatedly for their relationship to depression and other forms of mental health, such as schizophrenia and bipolar disorder. Mosquerio et al. (2015) looked at the relationship between resilience and religiosity in 143 psychiatric inpatients diagnosed with depression in a tertiary care general hospital in South Brazil (mean age = 46; 59.4% women; 86.5% white). In this sample, Mosquerio et al. (2015) found that resilience was significantly related to three types of religiosity: with organizational religiosity, such as attending religious services, (2 = 0.20, p = 0.02), non-organizational religiosity, such as prayer or meditation, (r = 0.27, p = 0.02), and intrinsic religiosity, subjective beliefs and motivation related to religious involvement, the most similar to spirituality (r = 0.44, p = 0.00). Patients high in intrinsic religiosity reported more social support, fewer suicide attempts, and greater quality of life scores, despite having greater symptomatology at admission compared to low intrinsic religiosity patients. Mosquerio et al. (2015) note that the literature suggests that religiosity benefits depressive disorder through mechanisms of positive coping, meaning and purpose in life, forgiveness, positive emotions, healthy behaviour, and religious environment support. Although the religious affiliation of participants was not recorded, Brazil is a majority Catholic country; Ozawa et al. (2017) note that most of the studies on religiosity and resilience to depression were conducted in Judeo-Christian countries, thus they looked at the impact of religion/ spirituality in Japan, where Buddhism and Shintoism are common but practitioner are relatively secular compared to Christians in Wester countries. Sampling from ten psychiatric hospitals and clinics, 100 outpatients, aged 21 to 90 (mean age = 50.8, SD = 14.5; 44% male) were recruited; the religious denomination of the sample was 79% Buddhist, 14% Atheist, 4% Christian, 1% Shintoist, and 2% unknown. Ozawa et al. (2017) found that attendance at religious/ spiritual services had positive associations with resilience, and thus the authors suggest that positive association between religiosity/ spirituality and resilience in patients with depression may be universal, regardless of particular religious beliefs. Supporting this claim, in another Japanese sample, Mizuno et al. (2016) found that spirituality was positive correlated to resilience in patients with schizophrenia (n = 60, mean age = 45.9, SD

= 10, range = 25-70, 36.7% male), bipolar disorder (n = 60, mean age = 50.2, SD = 13.8, range = 19-75; 46.7% male) and a control group with no history or presence of psychiatric disorders (n = 60, mean age = 41.0, SD = 17.6, range = 18-77; 50% male).

This relationship between spirituality and resilience has also been found in Indian populations. Looking at the transitional stage of life university students experience and the stressors of the academic life, Archana et al. (2014) sampled 186 students from a university in Haryana, Inida (94 men, 92 women, aged range 21 to 24, mean = 22.4). Archana et al. (2014) found a significant correlation between spirituality and resilience, and that spirituality and resilience significantly predicted psychological well-being in university students.

de la Rosa et al. (2015) looked at spirituality and resilience in Hispanic survivors of Intimate Partner Violence (IPV). Hispanic women in the U.S. are disproportionally affected by IPV, and de la Rosa et al. (2015) suggests that religion and spirituality can provide coping strategies and help restore beliefs that the world is safe, predictable, and controllable following traumatic situations. Using a community-based sample of 54 women residing in three domestic violence shelters located near the U.S. border (47% Roman Catholic and 30% Evangelical Christian; 47% born in Mexico), de la Rosa et al. (2015) defined spirituality as a sense of meaning or purpose from a transcendent source and looked specifically as self-efficacy and life-scheme. de la Rosa et al. (2015) found that spirituality was significantly related to resilience after controlling for marital status, education, income, and years of abuse; 71% of the variance in resilience scores was explained by spirituality. Higher levels of spirituality were also associated with fewer types of abuse experienced (de al Rosa et al., 2015).

Manning (2013) conducted a qualitative study with older women on the relationship between spirituality and resilience in advanced age. Manning (2013) claims that growing old presents inherent challenges, furthermore, she defines resilience as not only coping with adversity, but learning, growing, and being positively transformed by adversity. She claims that "spirituality in later life consists of finding core meaning in life, responding to meaning, and being in relationship with God/Other" (Manning, 2013, p. 569). Manning (2013) interviewed each of her 6 participants 5 times; the final interview consisted of joint analysis and member checking so that all participants agreed with her conclusions. Her participants were women aged 81 to 94, residing in the Midwestern region of the U.S. Manning (2013) found through her interviews that spirituality was a pathway to resilience, ultimately leading to subjective well-being for these women. Her participants were explicit about how their spirituality served as a way of negotiating hardship and bouncing back from adversity; they saw spirituality as a framework for helping them cope with the painful events associated with aging and facilitating positive growth. They accredited their spirituality with helping them reach their advanced age, and they described how their spirituality, religion, or faith were central to what they understood as their well-being, a feeling of contentment with life (Manning, 2013).

Conflicting Evidence

Although the literature generally extolls the relationship between meaning-making and resilience, as noted in Park's (2010) model and Park and Folkman's (1997) original model, the meaning making process is not in and of itself purely beneficial. Aligning situational and global meaning following a trauma so that the global meaning adopts beliefs that the world is malevolent and that others are unjust, hostile, and untrustworthy can result in negative outcomes. Similarly, there is some evidence that religious coping can result in negative outcomes.

Pargament and Cummings (2010) describe how some, when faced with major life stressors, experience religious turmoil and struggle. They describe three types of spiritual struggle: interpersonal struggles that include doctrinal disputes between church members or when an individual feels rejected by a religious community; intrapsychic struggle, which include religious doubts; and a troubled relationship with the divine, which includes becoming angry with God to perceived injustice or feeling abandoned or punished by God. This last struggle is also described by Park (2016), where following a natural or technological disaster, people may either question their religious faith or appraise the situation as a punishment form God, which is associated with higher distress and poorer adjustment. Finally, Park (2016) notes that there are also findings failing to connect religiosity to resilience. Park (2016) concludes from the literature that, "religious coping is sometimes associated with better functioning after a range of stressors, but often it is unrelated or even inversely related" (p. 1240).

Case Studies

Case studies are a good way of examining how the meaning-making process can contribute to resilience in a variety of adverse situations. Following are two case studies by Theron and Theron (2014) of South African university students who show resilience in their studies despite setbacks and socioeconomic difficulties. Then, Ryff (2014) presents three cases studies of public figures that she defines as exemplary cases of resilience.

Theron and Theron (2014) relate the case studies of Ntando and Sipho, two South African university students who faced early deprivation yet showed resilience, defined as academic success, and self-identifing as resilient. The stories show process of intrapersonal, interpersonal, and cultural processes of meaning making.

When he was a child, Ntando was orphaned and went to live with his grandmother, along with his five siblings. They had very little to eat and his grandmother could not afford their school fees. However, Ntando's family informed his meaning-making process, as "Ntando's grandmother and brother supported him to reappraise the challenges of being poor" (Theron & Theron, 2014, p. 26). Furthermore, his brother's Christianity taught him to think of God as a stable source of support and this helped Ntando find benefit in his adversity. As Theron and Theron (2014) describe, "he found benefit in being orphaned at a young age by

interpreting this as God's plan to force him to become stronger: 'even losing my mom – like I said, God wanted me to be out of the comfort zone'." (p. 27). Ntando interpreted the stressors in his life as challenges from God, saying "I think God will never give you challenges which are bigger than you" (Theron & Theron, 2014, p. 27).

Sipho also grew up in hardship and had large expectations placed on her by her parents to succeed educationally and career-wise. During her first year of university, Sipho became pregnant and even though she was excited about the baby, her parents were very hard on her. Her parents and extended family continued to support her practically but cut her off emotionally and Sipho had to drop out of university. Despite these difficulties, Sipho had a strong religious faith that supported her interpretation that "one day everything's gonna be fine!" (Theron & Theron, 2014, p. 28). Sipho described her interpretation that it was up to her to make her life better and that she just had to cope, one way being by prioritising educational goals. Theron and Theron (2014) describe how "she re-interpreted her 'failure' as an opportunity to set and follow goals that would help her to redesign her identity and future, and provide a better life for her sons" (p. 28). Sipho was able to return to university utilizing financial assistance, which helped begin to bridge the relationship with her parents and extended family.

Theron and Theron (2014) claim that both stories show constructive meanings made, which by Park's (2010) model leads to resilience. Both stories illustrate facets of the meaning-making process, such as acceptance of stressors, reappraisal of challenges as opportunities, hope, future orientation, and altered identities. Both Ntando and Sipho demonstrate a matter-of-fact understanding of hardship and the perception that such hardship can be transcended. For both, meaning-making was personally constructed as their perception of challenges as opportunities, future-orientation, and constructive reappraisals were all tied to personal strengths and their senses of themselves. However, meaning making was also socially constructed in both stories. Ntando's grandmother and brother supported him in understanding that poverty can be survived and taught him to value interdependence. Sipho knew the example of her grandmother whose industriousness allowed her family to survive, and her cousin's success applying for financial aid inspired her to do the same to re-enter university education; as well, her boyfriend and a profession therapist supported her in dismissing suicide as a solution to her struggles. Thus, in both these stories, social support helped Ntando and Sipho create constructive meaning from their adverse situations. Finally, their meaning-making aligned with "Africentric values of spirituality, harmony with others and the self, and a profound belief that for those who lead respectfully interdependent lives, life will work out well" (Theron & Theron, 2014, p. 29). Both drew strength from religious faith and both valued familial bonds, accepting the struggles that came with their families and working to keep those relationships strong. Ntando's grandmother would beat him if he disappointed her and he would sometimes go hungry. Sipho's family and community rejected her due to her pre-marital pregnancy. Yet neither one allocated blame for their hardships to their families, they

accepted what they could not change, and used culturally aligned goal setting (i.e. valuing education) to work through the challenges that could be changed.

Drawing on published autobiographies, Ryff (2014) details the lives of three extraordinary people: Mark Mathabane, Ben Mattlin, and Victor Frankl. Mathabane grew up in extreme poverty during the apartheid era in South Africa, enduring police violence and racism, and yet, excelled in school and went to college on a tennis scholarship. Ryff (2014) notes that important role his mother and grandmother played as social resources, encouraging his scholasticism and co-construction the meaning structure that school was important and the poverty of his current situation escapable. Ryff (2014) also points out the intrapersonal meaning-making, as "inside Mathabane, however, were great personal resources as well, such as the capacity to extract meaning from his ordeal, including the appreciation of the good that can follow from suffering as well as his powerful drive to speak other languages and make the most of his talents" (p. 7). Ben Mattlin was born with spinal muscular atrophy and not expected to survive childhood; he went on to become a writer, disabilities activist and have a loving family. From his autobiography, Ryff (2014) uses the passage, "Regardless, from an early age I refuse to think of myself as fragile. Sure, I'm floppy and I do bump my head a lot, but I always bounce back. I'm tough, resilient. I'm a survivor. The labors of my disability strengthen my character" (p. 3)" (p. 7), to illustrate how Mattlin's meaning-making process resulted in an altered, resilient identity. Finally, Ryff (2014) turns to the example of Victor Frankl, who spent three years in Nazi concentration camps. Frankl is often quoted when discussing meaning making and resilience for the book he wrote following his liberation from the camps, "Man's Search for Meaning," and his development of logotherapy, or meaning-focused therapy. Frankl describes his work as "an expression of the misery of our time and the need to find meaning in the face of it (Ryff, 2014, p. 8). Ryff (2014) sums up the impact of Frankl's work by saying, "Frankl's enormous gift and immense legacy was to help all who followed see something that had never before been so perfectly articulated, when confronted with a hopeless situation, what matters most is to transform it into something with meaning. We can always determine our stance toward hopelessness: "It is not freedom from conditions, but is the freedom to take a stand toward the conditions" (p. 132)" (p. 10). These examples illustrate meaning making and resilience under the extreme adversity.

Interventions

Logotherapy

One of the best known and most widely used interventions focused on meaning-making is logotherapy. Logotherapy was created by Victor Frankl based on the philosophy of existentialism and three philosophical and psychological concepts: freedom of will, will to meaning, and meaning in life (Sarashathi, 2013; Schulenberg et al., 2008). Freedom of will refers to the ability of an individual to autonomous, meaningful action within the limits of any

given situation. Will to meaning is the idea that the search for meaning in life is a primary motivation for all people. Meaning in life is fairly self-explanatory; Sarashathi (2013) claims that logotherapy is a meaning-centred psychotherapy based on the assumption that meaning fulfilment in life is the best protection against "emotional instability" (p. 37). The term "logotherapy" comes from the Greek word "logos" as meaning, chosen by Frankl based on his perspective that it is the unique capacity of human beings to perceive meaning (Schulenberg et al., 2008). Schulenberg et al. (2008) makes a case for logotherapy as meaning has a clear significance to the human condition and has been linked with well-being in multiple studies and reviews. Logotherapy is intended to be collaborative and used as an addition to other therapies, it has been shown to work well with many specific therapies, such as rational emotive behaviour therapy and acceptance and commitment therapy (Schulenberg et al., 2008). Logotherapy has been useful in the treatment of drug and alcohol problems, depression, anxiety, psychoses, and the despair associated with major illnesses (Schulenberg et al., 2008). It has also begun to be applied to areas of developmental disabilities work, aging, family therapy, relationship counselling, and daily life/ work-related issues (Schulenberg et al., 2008). Logotherapy works by helping clients to detect their individual meaning, realize meaningful goals in their lives, and recognize and remove obstacles to pursuing those goals; logotherapy offers techniques for coping with symptoms to regain control and self-determination, discover room for autonomous action even in the face of somatic or psychological illness, and guides in increasing openness and flexibility to shape clients' day-to-day lives in a meaningful manner (Sarashathi, 2013).

Schulenberg et al. (2008) sets out some guiding principles of logotherapy, such as the basic tenants, the role of the therapist, the phases through which logotherapy typically progresses, the central techniques, and some activities commonly used.

Schulenberg et al. (2008) claims that the basic tenant of logotherapy is a tri-dimensional ontology, that is, seeing human beings along three overlapping dimensions: the physical, psychological and spiritual (or meaning-orientated). Humans often respond with conditioned or automatic reactions in the first two dimensions of physical behaviours, thoughts, or emotions. In logotherapy, the third dimension of spirituality, or meaning making, is emphasized as what distinguishes humans from other animals. The other basic tenants Schulenberg et al. (2008) outline are updated versions of Frankl's founding concepts: that human life has meaning (meaning in life), human beings long to experience their own sense of personal meaning (will to meaning), and that human beings have the potential to experience life meaning under all circumstances (freedom of will).

In logotherapy, the role of the therapist is to help clients recognize the freedom that they have even in constricting situations and to respond to that freedom through behaviours, experiences, and attitudes that feel meaningful and adaptive to the client (Schulenberg, 2008). Schulenberg et al. (2008) emphasizes that "the therapeutic relationship is one of equality and offering opportunities to clients rather than one of superiority and "fixing" clients. As such, the

therapist helps clients to clarify and work toward actions, experiences, and attitudes in which clients experience personal life meaning" (p. 451).

There are four guiding phases of logotherapy when used in a clinical mental health setting. First is the differentiation of clients from their symptoms. Second is attitude modification about symptoms, this requires a shift away from an overfocus on one's symptoms and towards an awareness of remaining options and freedoms that are in line with what the individual perceives as their personal life meaning. The third phase is reduction, which often occurs automatically following the second step, but can also require specific techniques for symptom reduction (e.g., coping skills, self-efficacy techniques). Finally, is the maintenance of mental health through future orientation and a continued awareness of personal life meaning, purpose, and goals in life.

Schulenberg et al. (2008) describe four central logotherapy techniques. Socratic dialogue is a technique whereby the therapists engages in a series of questions with the client to facilitate an internal exploration to discover personal life meaning, to explore how they may be actualized, and to foster recognition that choices towards these ends are always available. Paradoxical intention comes from behavioural therapists, in logotherapy the use of humor is used to facilitate self-distancing from symptoms to allow attitude change and then behaviour change. Dereflection is the technique of reorienting a client's attention away from a problem or stressor and focusing their attention instead on related, motivating areas of personal life meaning, including the client's strengths and things they have control over. Finally, logoanalysis is used when people lack a sense of personal life meaning, it is a systematic process involving mental and written exercises to help individuals find a sense of meaning, set a life direction, and subsequent achievable goals based on their personal life meaning. Schulenberg et al. (2008) suggest the Meaning in Life Evaluation scale (MILE; Crumbaugh & Henrion, 2004; Henrion, 2001) as a tool to heighten an individual's sense of personal life meaning as the scale asks individuals to rank a set of meaningful values.

Other activities used in logotherapy as described in Schulenberg et al. (2008):

- Mountain Range Exercise – noted by Frankl and developed as an activity by Ernzen (1990)
    - "A mountain range is drawn, and the person completing the exercise places people of importance to him or her (such as friends or family members, authors, musicians, and the like) on the various peaks. Participants are asked what they share in common with the individuals on their peaks, as well as whose mountains they would like to be a part of. The activity assists individuals in identifying positives in their lives, as well as in values clarification" (Schulenberg et al., 2008, p. 453)
        - The activity is useful in either individual or group therapeutic settings.
        - It has been used with a variety of populations and treatment contexts, including people with alcohol-related problems, psychiatric inpatients,

and meaningful living groups (Ernzen, 1990). It has also been used with adolescent male sex offenders with or developmental disabilities and sexual behavior problems as a means of building rapport and discussing important treatment issues, such as values and sexual offense histories (Schulenberg, 2003)

- Movies Exercise (Schulenberg, 2003b; Welter, 1995)
    - "The first component prompts an individual to develop a movie of his or her life, focusing on the past up to the present time. The second component is a movie from the present into the future. These creative activities afford opportunities to develop various movie aspects. (Who will be in them? What actor or actors will play the lead roles? What are the movies' titles? What kind of budgets will be available? What will the movies be about, and what genre will typify each film?) These various aspects are discussed in terms of the participant's personally meaningful values hierarchy, identity formation, interpersonal relationships, and key experiences in order to help clarify the participant's sense of personal life meaning" (Schulenberg et al., 2008, p. 453)
- Family Shoebox Game (Lantz, 1993)
    - "The therapist presents a family with a shoebox, tape, scissors, and magazines; the task is to adhere magazine pictures to the shoebox to represent family values and meanings. The outside of the box is used for values and meanings that are presented to people outside of the immediate family, while the inside of the box is used for values and meanings of particular importance to the members of the immediate family. Lantz (1993) argued that such tasks help families in two primary ways: first, it gives family members a clear task that requires communication about values and meanings that are important to the family experience, and second, it provides the family therapist with a means of observing family interaction patterns that may help or hinder a family's search for meaning and direction" (Schulenberg et al., 2008, p. 453)
- Value Auction (Fabry, 1988)
    - "Individuals are invited to consider various values that are auctioned off and how much they wish to "bid" on them from their limited pool of 'funds'" (Schulenberg et al., 2008, p. 454)
- Self-Appraisal exercise
    - "People are encouraged to participate in answering questions such as those relating to descriptions of themselves, whom they and others wish themselves to be, and their views as to their potentials. Such exercises prompt reflection on the consistencies between the individual's internal and external behaviors and their sense of personal life meaning" (Schulenberg et al., 2008, p. 454)
- Stories, metaphors and examples are also used (e.g. Frankl's own life)

Meaning Therapy – Updated Logotherapy

Wong (2015) has created a recent extension of logotherapy called Meaning Therapy (MT). Wong's (2015) MT incorporates cognitive-behavioural therapy (CBT), narrative therapy, and positive psychotherapy, as well as the original foundation of existential-humanistic therapy. Wong (2015) claims that MT adds positive, integrative, and empirical approaches to traditional logotherapy. By taking a positive approach, Wong (2015) claims that MT represents the application of existential positive psychology, essentially taking the positive aspects of logotherapy, such as a focus on shifting clients' attention from personal struggles to "the prospect of a more rewarding life" (p. 156). Since meaning is a holistic construct, involving spiritual, cognitive, and behavioural dimensions, Wong's (2015) integrative approach uses both CBT and phenomenological methods, combining mechanists thinking and philosophical questioning to adopt a flexible, tailor-made approach to suit different individuals. Finally, by taking an empirical approach, MT conforms to the American Psychological Association's standard for Evidence-Based Practice in Psychology (Wong, 2015). MT places the emphasis on evidence-based psychological practice rather than on existential philosophy (Wong, 2015). Wong's (2015) semi-structured approach aims to "take the mystery out of existential therapy" (p. 157), make MT more accessible to all therapists, and make it easier to study via randomized control trials.

Wong (2015) outlines 5 intervention strategies based on major theoretical concepts of MT:

- Cultivation of intrinsic self-worth
    - Relationships – asking clients about who they matter to most
    - Singularity – emphasizing that they are singular, irreplaceable, and capable of making a unique contribution
    - Growth – demonstrating that a growth mindset can help one to learn and grow
    - Spirituality – exploring clients' worldviews, core beliefs, ultimate concerns, ideals, and life goals
- The double-vision strategy – the idea is to empower clients to look beyond their immediate concerns to the big picture. This strategy can normalize a problem by making what is personal universal and can highlight areas that may require advocacy by the therapist on behalf of the client
    - Techniques include: "taking a long-range view to provide a proper perspective for the present predicament, looking at personal problems from the perspective of universal problems (existential givens), looking at relevant macro forces such as global economic recession and systemic discrimination, stepping out of the situation and lifting up one's eyes to the sky and the horizon, and looking at the problem from a historical perspective" (Wong, 2015, p. 159-160)

- The PURE intervention strategy (Wong, 2012) – a conceptual framework for goal setting and goal striving, incorporates the major components and functions of meaning: purpose, understanding, responsibility, and enjoyment
    - Techniques to enhance clients' awareness of their life purpose: "(a) For each situation ask: 'What purpose does this serve?' If it doesn't serve any useful function, then don't proceed. (b) Reflect on the big questions: 'What should I do with my life?' 'What really matters in life?' (c) Behavioural experiments: Have you ever unfairly blamed your friend in order to get out of a difficult situation? Have you ever sacrificed your self-interest in order to help others or serve society? Have you found something for which you are willing to work hard and sacrifice?" (Wong, 2015, p. 160)
    - Techniques to activate awareness of responsibility: "(a) Ask yourself how your action will affect your loved ones and friends. (b) Write down instances when you have broken a promise and let people down in the past month. (c) Describe an instance in which you assumed personal responsibility at great cost" (Wong, 2015, p. 160)
- The ABCDE intervention strategy (Wong, 2012) – a conceptual framework for coping with all the negative aspects of life and existential anxieties
    - ABCDE stands for Acceptance, Belief, Commitment, Discovery, and Evaluation
- The duel-systems strategy – the duel employment of PURE and ABCDE interventions – targeting both positive and negatives

Meaning Therapy (MT) also uses traditional logotherapy techniques such as Socratic dialogue and dereflection (Wong, 2015). Other techniques Wong (2015) describes are:

- Perspective Taking – taking the perspective of an unbiased observer, of the person you're in conflict with, of your future ideal self)
- Fast-forward Techniques – questions to help clients see the consequences of their behaviours, such as "what will happen to you 5 years down the road, if you don't make any changes in your life?" and the deathbed test – on your deathbed, what would be your biggest regrets?
- Daily exercise in the Fivefold Path to Positive Mental Health – used to maintain mental health:
    - Looking back for lessons learned in life.
    - Looking at present opportunities to learn and serve.
    - Looking forward to fulfilling future life goals.
    - Looking inward in mindful meditation.
    - Looking downward to extend a helping hand to those who need it.
- Self-affirmation mantras
- Gratitude exercises

Meaning Making Intervention for Cancer Patients

Lee (2004) developed a meaning making intervention (MMi) specifically for those diagnosed with cancer. Existential distress is the sense that life has little or no meaning, a state of powerlessness that arises from a confrontation with one's own mortality and can result in feelings of disappointment, futility, and remorse (Lee et al., 2006). Many serious illnesses, especially cancer, evoke such existential distress. Lee et al. (2006) claim that "the meaning-making coping process includes the attempt to reconcile shattered assumptions about the extent to which one is considered a worthy individual, and the extent to which good versus bad outcomes can be controlled or justifiably distributed in the world in light of one's diagnosis of cancer" (p. 3134), which aligns with Park's (2010) model whereby the situational meaning of a cancer diagnosis creates a discrepancy with one's global meaning.

Lee et al. (2006) describes a meaning making intervention (MMi) that is standardized in a manual to allow for replication and evaluation of treatment adherence. Lee et al.'s (2006) MMi includes a broad definition of meaning that can encompass but does not emphasize religion. The intervention includes up to 4 individualized sessions, of up to 120 minutes, in either their home or the clinic, based on patient preference. The central activity of the intervention is a "lifeline" exercise that is used to guide participants through a review of their cancer experience using a narrative, story-telling approach intended to embed the cancer experience within the historical context of other important life events (Lee et al., 2006). The influence of old and new assumptions (global and situational meaning) related to patients' perceptions of self-worth, the controllability of events, and the distribution of good and bad outcomes in the world are discussed considering the cancer diagnosis. Further activities of MMi include an appraisal of current emotional and cognitive responses to the diagnosis, an exploration of past significant life events and the influence of past coping strategies on the present cancer experience, and a discussion of life priorities within the context of an acknowledged mortality (Lee et al., 2006).

A detailed break down of the specific tasks used in MMi is presented by Lee et al. (2006):

1. Task I: *Acknowledge the present*

- Objective: To provide a secure context to revisit events since the cancer diagnosis
- Rationale:
  - Telling one's story allows the patient to slowly accommodate and assimilate new and possibly material
  - Telling one's story allows the patient to selectively revisit disturbing aspects in a controlled rather than random manner
  - Understanding what happened to the self reestablishes a sense of order in the present

- Grieving one's losses initiates the process of acceptance and growth

2. Task II: *Contemplate the past*

- Objective: To embed the new cancer experience within a familiar framework of past challenges
- Rationale:
  - Reflection upon one's life acknowledges what was previously perceived as improbable and incompatible with one's understanding of the self and the world
  - Intrusive thoughts and avoidant behaviors reflect the mind's way of challenging the natural tendency to resist change and maintain a sense of stability
  - Reflecting on how past challenges were overcome may allow one to realize similarities and strengths that can be applied to the present challenge of living with the cancer

3. Task III: *Commit to the present, for the future*

- Objective: To re-establish a sense of commitment towards meeting attainable goals in the context of one's mortality
- Rationale:
  - Acknowledging one's mortality often serves as an impetus towards living or maintaining a meaningful life in the present
  - Acknowledging one's mortality helps rearrange life priorities
  - Acknowledging one's mortality allows personal decisions to be made with more clarity

Lee et al. (2006) conducted a randomized control trial (RCT) with 74 adult patients from four university teaching hospitals in Montreal Canada who had been diagnosed with either breast or colorectal cancer within the last 6 months of the study. There were equal number of breast and colorectal cancer patients in each treatment group, however, there were more patients with breast cancer than colorectal cancer overall. The treatment arm received MMi plus usual care (n = 35, mean age = 56.4, SD = 9.8; 80% women, majority of the sample (62%) was Catholic). The control arm received care as usual (n = 39, mean age = 56.9, SD = 10.1; 82% women, majority of the sample (46%) was Catholic, with the second largest religious denomination being Jewish (23%)).

At the end of Lee et al.'s (2006) study, participants in the treatment group significantly improved on scores of self-efficacy (effect size of 0.22), optimism (effect size of 0.24), and self-esteem (effect size of 0.26). Lee et al. (2006) claim that although the effect sizes are small, this is consistent with other cancer studies, and that furthermore, their results show that "positive outcomes can follow from negative events through the ability to derive a sense of meaning from the situation" (p. 3141). Another significant finding was that, by the end of the study, the frequency of reported use of external psychological support services had doubled in the control

group and tripled in the experimental group (Lee et al., 2006). The authors suggest the intervention supported experimental group participants in accessing further support because they felt more prepared to assess their own needs, reach out to the appropriate resources, and had more confidence in their ability to deal with difficult issues. Lee et al. (2006) identifying this a "positive/ confronting" coping style which has been shown to be helpful for cancer patients.

Spirituality-orientated Psychotherapy

Allen et al. (2017) summarizes the literature on spirituality-orientated psychotherapy following trauma. Allen et al. (2007) note that trauma can shatter the basic assumptions that life is safe, people can be trusted, and that justice exists, that is, common global meaning beliefs. Trauma can also challenge fundamental religious beliefs and existential well-being, defined as having a clear sense of personal meaning and direction in life; the disruption of either religious or existential beliefs can increase the likelihood of psychological distress (Allen et al., 2017). However, there is also plentiful evidence that religious faith and spiritual practices can help trauma survivors cope and recover as they are sources of meaning, and Allen et al. (2017) identify finding meaning in the experience as the most important coping skill for trauma survivors. Considering the ability for religion/ spirituality to confer resilience, and that fact that many people's global meaning includes some religious or spiritual framework that they turn to in times of adversity, incorporating religion or spirituality into psychotherapy could be useful (Allen et al., 2017; Kim & Esquivel, 2011; Pargament & Cummings, 2010). Spirituality-orientated psychotherapy encourages clinicians to use interventions that respect the healing potential of their clients' faith traditions (Allen et al., 2017). This approach has been used with various cultural groups and special populations, including African Americans, Asian Americans, Latinos(as), Native Americans, and sexual minorities (Allen et al., 2017). It has mainly been used in individual psychotherapy with adults, but there has been some application to group therapy, couple and family therapy, and child and adolescent therapy (Allen et al., 2017). Spirituality-orientated psychotherapy has been applied to various clinical issues, including trauma and disorders that may have their roots in traumatic experiences, such as depression, anxiety, addictions, eating disorders, and dissociative disorders (Allen et al., 2017). Allen et al. (2017) finds general support in the literature for the effectiveness of spirituality-orientated treatment approaches.

Allen et al. (2017) outlines some general guidelines of spirituality-orientated psychotherapy and then explores recommendations for implementing spirituality-orientated psychotherapy with religious ethnic minorities in the U.S.

General Guidelines:

- The therapist must be open to diverse spiritual perspectives and must make an effort to learn more about the spiritual beliefs and cultures of their clients

- The therapist should establish a spiritually safe and open therapeutic relationship with their clients by letting them know it is permissible and appropriate to explore spiritual issues if they wish, and that spirituality is a potential resource in treatment
- The therapist should ask questions, and communicate their interest and respect
- Allen et al. (2017) recommends using spiritual assessment measures to help both the patient and the therapist understand the patient's spiritual framework

Recommendations for working with religious ethnic minorities in the U.S.:

- The therapist should acknowledge the reality and the reaction of the client to working with a psychotherapist of a different ethnic background. Allen et al. (2017) suggests an example statement of ""When clients are assigned to a therapist who is culturally different than the client, the client could feel uncomfortable about this? Is this something that may prevent us from working together?"
- It is important to determine the client's worldview, expectations and values, as well as how the client perceived the trauma and potential pathways of meaning making
- The therapist must establish an egalitarian relationship with the client, potentially by making a personal connection through self-disclosure and describing that psychotherapists are facilitators of healing who can help guide the client to improved mental health but may not have all the answers or solutions clients seek
- The therapist should explore culturally adapted and empirically supported psychotherapies with the client
- Religious and spiritual interventions for trauma that are culturally specific should be discussed with clients early on and throughout psychotherapy
- It is helpful to determine what positive resources, such as social, familial, and environmental supports are available to the client and if traumatic issues have been positively dealt with in the past based on their cultural values
- As there are many ethnic minority cultures that emphasize the body-mind connection, assessing the severity of physical symptoms due to the trauma may also be important
- The therapist should seek to be aware of family structure, dynamics, and the role that the family unit plays in the client's life
- Depending on acculturation levels, sometimes a translator may be needed for both a language barrier and personal comfort with the native language when discussing potential intimate and private traumatic experiences

Kim and Esquivel (2011) suggest that spirituality-orientated interventions can also be incorporated into schools. Although the integration of religious education into public schools is a controversial issues, especially in the U.S., there is some evidence that spiritual education, independent of religious affiliation, has shown positive influences on students (Kim & Esquivel, 2011, see Joffee, 2006). The Renaissance Charter School (TRCS) is a New York charter school where spirituality, meaning making and ethical action are its core founding values (Joffee, 2006). The focus on spiritual education shows positive effects on the students, such that the

high school students are more engaged in learning and show higher academic achievement than their peers (Joffee, 2006). Students also report higher satisfaction with their school experiences, especially in the realm of their relationships with peers and teachers, and students report becoming more aware of social issues through their school (Joffee, 2006). Kim and Esquivel (2011) suggest that possible public school-based interventions could include character education programs designed to teach common values and virtues while showing respect for diverse religious and spiritual traditions, or programs focused on social-emotional learning; however, there are no current studies showing whether these programs increase adolescent spirituality. Given the impact of spirituality on positive adolescent development, Kim and Esquivel (2011) suggest that schools could be an important resource where youth can develop their own understanding about who they are within a religious and spiritual context, be exposed to various religious and spiritual narratives of others, and be encouraged to reflect critically and respectfully on similarities and differences across religious.

Assessment

Meaning-Making Measures

The Meaning in Life Questionnaire (MLQ; Steger & Frazier, 2006; Appendix A)

- One of the most widely used measures of meaning. Defines meaning in life as "the sense made of, and significance felt regarding, the nature of one's being and existence" (Steger & Frazier, 2006, p. 81).
- 10-item measure with two subscales composed of 5-items each: Presence of Meaning and Search for Meaning subscales.
    - The Presence subscale (MLQ-P) measures the subjective sense that one's life is meaningful.
    - The Search subscale (MLQ-S) measures the drive and orientation towards finding meaning in one's life.
    - The subscales are relatively independent, such that someone high in meaning may still search for additional meaning, and someone may not be searching for meaning despite lacking a sense of meaning.
- In the confirmatory factor analysis study with 154 undergraduate participants (mean age = 21.8, SD = 3.9, 70% women, 79% Caucasian), the Presence subscale had an internal consistency coefficient of .86 and the Search subscale of .87. Factor loadings were above .60. The Presence subscale positively correlated with life satisfaction, positive emotions, intrinsic religiosity, extraversion, and agreeableness; it negatively correlated with depression, negative emotions, and neuroticism. However, the Presence subscale shares less than 25% of its variance with other measures, suggesting it is measuring a unique construct. The Search subscale seemed overall unrelated to these constructs, although as predicted, it was positively correlated with neuroticism,

depression, and several negative emotions. Both subscales were not related to extrinsic religiosity, which the authors took as evidence of discriminant validity (Steger & Frazier, 2006).

- In a validating study with 400 undergraduate students (59% women, 77% Caucasian), factor loadings were robust (between .65 and .83 on their intended factors), and fit indices indicated a good fit of the model to the data. Cronbach's alpha was .86 for both subscales (Steger & Frazier, 2006).
- In a third study aimed at comparing the MLQ with other meaning measures (the MLQ Presence subscale, the PIL, The LRI), a community and university sample of 70 participants (mean age = 21.1, SD = 5.2; 62% women, 75% Caucasian; 34% Protestant and 30% Catholic, all other religious less than 6%) were also asked to have people who knew them well (informants) fill out the questionnaires as if they were them, making the total sample 401 participants (mean age = 24.4, SD = 10.4; 61% female).
    - Factor loadings were between .55 to .84 and fit indices were acceptable.
    - Internal consistency alphas were .82 for Presence and .87 for Search subscale.
    - One-month test-retest stability coefficients were .70 for Presence and .73 for Search subscale.
    - There was significant correlations between self- and informant reports on the MLQ-P, and between MLQ-P and other measures of meaning (.61-.74), establishing convergent validity. The MLQ-P also discriminated from other types of well-being among both self- and informant-reports.
    - There was significant correlation between self- and informant reports on the MLQ-S at both Times, supporting convergent validity. The MLQ-S also showed good discriminant validity.

The Purpose in Life Test (PIL; Crumbaugh & Maholick, 1964, 1969; Appendix B)

- A widely used measure of meaning. Measures the amount of meaning in life a person feels.
- Composed of 3 parts, Part A includes 20 items using a Likert-type response format with a range of 1 to 7. High scores suggest greater sense of purpose in life.
    - Based on the original norms (n = 1,151):
        - Scores of 113 and above = definite purpose in life
        - Scores between 92-112 = indeterminate
        - Scores 91 and below = a lack of life purpose
    - Part B includes 13 incomplete sentences and Part C asks the respondent to compose a paragraph.
    - When used in quantitative studies, Part A is the focus.
- In study of rural (n = 198) and metropolitan-area (n = 659) high school students, the coefficient alphas of the PIL were .88 for the rural sample and .86 for the metropolitan-

area sample; an 8-week follow up showed test-retest reliabilities of .66 and .78 respectively (Sink et al., 1998).

- In Schulenberg's (2004) study, the PIL had an internal consistency coefficient of .91
- Correlates with constructs such as happiness, emotional stability, and extroversion, and negatively with constructs such as boredom proneness, anxiety, and depression (Schulenberg, 2004).
- Some criticize the measure for actually measuring concepts of depression rather than meaning in life (Schulenberg, 2004). In Seger and Frazier's (2006) study, the PIL displayed large overlap with other measures of well-being.

The Purpose in Life Test-Short Form (PIL-SF; Schulenberg et al., 2011; Appendix C)

- A 4-item form of the PIL that combines items 3 (presence of clear life goals), 4 (life being meaningful), 8 (life goal completion), and 20 (presence of goals/ life purpose).
- In a sample of 298 undergraduate students from a midsized U.S. university (aged 18 to 48, mean age = 19.67, SD – 2.27; 36.6% men and 63.3% women; 71.9% self-identified as White, 20.9% as Black, 3.4% as Asian/ Pacific Islander, 1.7% as Hispanic, .3% as American Indian/ Alaskan native, and 1.7% as "other") the PIL-SF was supported via confirmatory factor analysis, was reliable and validated (Schulenberg et al., 2011).
    - The internal consistency coefficient alpha was .86 and the reliability was .84.
- In Steger and Frazier's (2006) sample of 401 university and community college participants, the internal consistency coefficient was .86 and one-month test-retest reliability coefficient was .88.
- Results from hierarchical regression analysis indicated that the PIL-SF accounted for a significant variance after controlling for the LPQ and the Meaning in Life Questionnaire. Schulenberg et al. (2011) suggest that the PIL-SF is an appropriate and psychometrically sound measure of meaning/ purpose and associated goal progress.

The Life Purpose Questionnaire (LPQ; Hablas & Hutzell, 1982; Hutzell, 1989)

- This measure was designed to be a more easily administered measure of purpose in life, comparable to the PIL.
- It is a 20-item measure with an Agree/Disagree dichotomous response format. Higher scores suggest greater meaning in life.
- A one-week test-retest correlation of .90 was found with the initial validation sample of 36 elderly neuropsychiatric patients (Hablas & Huzell, 1982).
- In the original sample of geriatric neuropsychiatric inpatients, scores of 0-11 = lack of life meaning, scores of 12-16 = indeterminate, and scores of 17-20 = definitely sense of life meaning (Hablas & Huzell, 1982).
    - In a sample of adults with alcoholism, scores of 0-9 = lack of life meaning, scores of 10-16 = indeterminate, and scores of 17-20 = definitely sense of life meaning (Hutzell & Peterson, 1986).

  - Using the adolescent version (Hutzell & Finick, 1994), which is an 18-item measure, scores of 0-9 = lack of life meaning, scores of 10-15 = indeterminate, and scores of 16-18 = definitely sense of life meaning.
- In Schulenberg's (2004) sample of 341 undergraduate students from a midsized U.S. university (34% men and 66% women, mean age = 19.5, SD = 1.6, range = 18 to 29; 84% self-identified as Caucasian, 14% as African American, 1% as Asian American, 1% as Hispanic, and 1% as other), participants tended to favour the LPQ or were relatively neutral. However, many participants felt the PIL was more interesting and relevant to their current life circumstances (Schulenberg, 2004).
- In Schulenberg's (2004) study, the LPQ had an internal consistency coefficient of .82.

Personal Meaning Profile (PMP; Wong, 1998) and Personal Meaning Profile Short Form (& PMP-B; Macdonald, Wong & Gingras, 2012; Appendix D)

- Macdonald et al., (2012) claim that "the Personal Meaning Profile (PMP) represents a comprehensive assessment of one's meaning in life rather than a global subjective assessment of life as meaningful" (p. 359). The PMP measures sources of meaning in life.
- The PMP is a 57-item measure, developed from an implicit theories approach whereby Wong (1998) asked people to describe their own understandings of what makes life meaningful. It has a seven-factor structure: Achievement striving, Religion, Self-transcendence, Relationship, Intimacy, Self-acceptance, and Fair treatment.
  - The overall measure has a Cronbach's alpha of .93, the subscales have alphas as follows: Achievement (.91), Religion (.89), Self-transcendence (.84), Relationship (.81), Intimacy (.78), Self-acceptance (.54), and Fair treatment (.54).
  - The test-retest reliability over a three-week period was .85.
  - The PMP has been used cross-culturally with adults and high school populations and in the study of stress and trauma, depression, substance abuse and addition, and aging.
- The PMP-B is a 21-item short form version that contains the same seven scales as the original.
  - Total alpha of the scale is .84; subscale alphas as follows: Achievement (.75), Religion (.92), Self-transcendence (.76), Relationship (.75), Intimacy (.80), Self-acceptance (.66), and Fair treatment (.78).
  - Test-rest for a five-week period was .73.
  - The correlation between PMP and PMP-B total scores was .95; the correlations between corresponding subscales ranged from .84 to .95.
- In Pan's (2011) study of Chinese postgraduate students, a short form of the Chinese Personal Meaning Profile (Lin, 2001) was used with 41 items and a seven factor structure (factors included: self-development, achievement, acceptance and

contentment, relationship, pursuit of purpose, family, being close to nature, and authenticity). This measure had a Cronbach's alpha of .97.

The Meaning-Focused Coping Questionnaire (MFCQ; Gan et al., 2013)

- A 26-item measure with eight dimensions: changes in situational beliefs, changes in global beliefs, changes in goals, meaning making, long-term prevention strategies, rational use of resources, acceptance, and heuristic thinking.
- The measure was developed based on Park and Folkman's (1997) model of meaning and the idea that discrepancy between global and situational meaning causes distress and prompts a process of meaning making that attempts to change either, or both, meanings.
- The MFCQ was developed through structured interviews with middle school and university students who had experienced a critical illness, natural disaster, or the loss of a family member. It was validated with two samples of middle school students (the equivalent of North American high school age students). The first sample was from the Guangdong Province and included 660 students (217 girls, mean age = 17.62, SD = 1.46); the second sample included 339 students (160 girls, mean age = 16.52, SD = 0.80) from Mianyang City, an area that had been most affected by the Sichuan earthquake 2 years prior. The authors chose this sample to look at long-term adaptation to the extreme stress caused by a natural disaster that would still be affecting daily life years afterwards.
- The overall scale reliability was 0.859.
- Although the dimensions can be summed to derive a total MFCQ score, the correlation results suggest that each dimension has a different function, for example, changes in situational meaning were found to better predict psychological adjustment than changes in global meaning.
- The measure is suitable both for high-stress-exposure groups and the general population.
- This measure was validated with adolescents aged 14 to 20 years old, but it has also been used with adult cancer patients (mean age = 58.35, SD = 11.32) (Gan et al., 2018).

Spirituality measures

The Daily Spiritual Experience Scale (DSES; Underwood and Teresi, 2002; Appendix E)

- A measure of spirituality focusing on a person's perception of the transcendent (the divine, God) in daily life. It aims to measure experiences rather than beliefs or behaviours.
- Underwood and Teresi (2002) claim that, "although developed for the predominately Judeo-Christian U.S. population, it is intended to transcend the boundaries of particular religions" (p. 22). Furthermore, they claim that although the word "God" is used throughout the questionnaire, that it "can be interpreted by a person responding to a

questionnaire to include various notions of the divine or a transcendent aspect of life, without losing its meaning to those for whom it has significance" (Underwood & Teresi, 2002, p. 23). In the initial development of the scale, interviews with those outside the Judeo-Christian orientation, including Muslims, people from Indigenous religious perspectives, and agnostics, were generally comfortable with the word and were able to "translate" it to their concept of the divine (Underwood & Teresi, 2002, p. 24). The only group for whom the use of the word "God" did not translate well were Buddhists, however, Underwood and Teresi (2002) claim there are other items that do address Buddhist spiritual experience. They also note that the introduction instructions were subsequently designed to "encourage people who are not comfortable with the word *God* to 'substitute another idea which calls to mind the divine or holy for you'" (Underwood & Teresi, 2002, p. 24).

- Originally designed as a 16-item measure, a 6-item version was also developed for incorporation into larger surveys, such as the Brief Multidimensional Measure of Religiosity and Spirituality; it was also used in the General Social Survey (GSS) for 1997-1998.
    - The 6-item version includes items 1, 4 and 5 combined, 6, 9 and 10 combined, 11, and 15.
- The validation data comes from a number of health surveys done across the U.S., including the GSS (Underwood & Teresi, 2002).
    - The 6-item version used in the Brief Multidimensional Measure of Religiousness/ Spirituality had good response stability (Pearson product-moment correlation = .85; intraclass correlation coefficient = .73). Cronbach's alpha was .88 for the initial test and .92 for the retest.
    - For the 16-item version, Cronbach's alpha was .95.
    - For the 6-item version used in the GSS, Cronbach's alpha was .91.
    - A version with a dichotomous response format was created and had a Cronbach's alpha of .93 (16-items).
    - The measure (both 16-item and 6-item) negatively correlated with anxiety, depression, stress, and alcohol consumption and positively correlated with optimism, perceived social support, and positive affect.
- The 16-item version was used in Archana et al.'s (2014) study of spirituality and resilience in university students.
- This measure aims to assess spirituality as an experience instead of a sense of meaning or purpose from spiritual or religious belief systems, thus it measures a completely separate concept from the measures of meaning discussed above.

Other Notes

Meaning making is a complex process with many different facets that can be studied and measured. The most often spoke of faucet of the meaning-making process is the sense that life is meaningful, whether this is part of one's global meaning or a product of the meaning making process (Park, 2010). A sense that life is meaningful is the main target of logotherapy (Sarashathi, 2013; Schulenberg et al., 2008). It is the concept measured by the Meaning in Life Questionnaire (Steger & Frazier, 2006) and the Purpose in Life Test and its derivatives (Schulenberg, 2004). Spirituality or religion can be a source for the belief that life is meaningful (Kim & Esquivel, 2011; Pargament & Cummings, 2010). The concept of "meaning-in-life" has been positively associated with post-traumatic growth and challenge appraisals of stressors (Pan, 2011). But meaning making cannot be entirely encapsulated by the idea that life is meaningful. Global meaning can also encompass goals (Park, 2010; Wong, 2015) that are culturally meaningful (Theron & Theron, 2014). Global meaning also includes ideas of self-efficacy and controllability (Park, 2010), which also contribute to challenge appraisals and resilience to stressors (Park, 2016), and can come from a sense of spirituality (de la Rosa et al., 2015). Other aspects of global meaning or possible correlates of meaning made include high life engagement, agency, self-acceptance, and positive relationships with others, which Ryff (2014) finds to protect against common life stressors and the Personal Meaning Profile (PMP) measures as sources of meaning (MacDonal et al., 2012). Then there is the active process of making meaning, which at best can be represented by Gan et al's (2013) idea of meaning-focused coping and the Meaning Focused Coping Questionnaire. In sum, the concept of meaning making encompasses many salient concepts that can be used as measures, however the full concept of meaning making is much more complex.

For more on the concept of meaning in life as a specific faucet of meaning-making, see Michael Steger's website: http://www.michaelfsteger.com/

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Appendix A: The Meaning in Life Questionnaire

Seger & Frazier (2006)

Please take a moment to think about what makes your life feel important to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are no right or wrong answers. Please answer according to the scale below:

1 = Absolutely Untrue
2 = Mostly Untrue
3 = Somewhat Untrue
4 = Can't Say True or False
5 = Somewhat True
6 = Mostly True
7 = Absolutely True

1. _____ I understand my life's meaning
2. _____ I am looking for something that makes my life feel meaningful
3. _____ I am always looking to find my life's purpose
4. _____ My life has a clear sense of purpose
5. _____ I have a good sense of what makes my life meaningful
6. _____ I have discovered a satisfying life purpose
7. _____ I am always searching for something that makes my life feel significant
8. _____ I am seeking a purpose or mission for my life
9. _____ My life has no clear purpose
10. _____ I am searching for meaning in my life

MLQ syntax to create Presence and Search subscales:
Presence = 1, 4, 5, 6, & 9-reverse-coded
Search = 2, 3, 7, 8, & 10

Appendix B: The Purpose in Life Test (PIL)

Crumbaugh & Maholick (1964, 1969)

Instructions: Write the number (1 to 5) next to each statement that is most true for you right now.

1. I am usually:	Bored	**1**	**2**	**3**	**4**	**5**	Enthusiastic
2. Life to me seems:	Completely routine	**1**	**2**	**3**	**4**	**5**	Always exciting
3. In life, I have:	No goals or aims	**1**	**2**	**3**	**4**	**5**	Clear goals and aims
4. My personal existence is:	Utterly meaningless, without purpose	**1**	**2**	**3**	**4**	**5**	Purposeful and meaningful
5. Every day is:	Exactly the same	**1**	**2**	**3**	**4**	**5**	Constantly new and different
6. If I could choose, I would:	Prefer never to have been born	**1**	**2**	**3**	**4**	**5**	Want 9 more lives just like this one
7. After retiring, I would:	Loaf completely the rest of my life	**1**	**2**	**3**	**4**	**5**	Do some of the exciting things I've always wanted to do
8. In achieving life goals, I've:	Made no progress whatever	**1**	**2**	**3**	**4**	**5**	Progressed to complete fulfilment
9. My life is:	Empty, filled only with despair	**1**	**2**	**3**	**4**	**5**	Running over with exciting things
10. If I should die today, I'd feel that my life has been:	Completely worthless	**1**	**2**	**3**	**4**	**5**	Very worthwhile
11. In thinking of my life, I:	Often wonder why I exist	**1**	**2**	**3**	**4**	**5**	Always see reasons for being here

12: As I view the word in relation to my life, the world:	Completely confuses me	**1**	**2**	**3**	**4**	**5**	Fits meaningfully with my life
13. I am a:	Very irresponsible person	**1**	**2**	**3**	**4**	**5**	Very responsible person
14. Concerning freedom to choose, I believe humans are:	Completely bound by limitations of hereditary and environment	**1**	**2**	**3**	**4**	**5**	Totally free to make all life choices
15. With regard to death, I am:	Unprepared and frightened	**1**	**2**	**3**	**4**	**5**	Prepared and unafraid
16. Regarding suicide, I have:	Thought of it seriously as a way out	**1**	**2**	**3**	**4**	**5**	Never given it a second thought
17. I regard my ability to find a purpose or mission in life as:	Practically none	**1**	**2**	**3**	**4**	**5**	Very great
18. My life is:	Out of my hands and controlled by external factors	**1**	**2**	**3**	**4**	**5**	In my hands and I'm in control of it
19. Facing my daily tasks is:	A painful and boring experience	**1**	**2**	**3**	**4**	**5**	A source of pleasure and satisfaction
20. I have discovered:	No mission or purpose in life	**1**	**2**	**3**	**4**	**5**	A satisfying life purpose

Appendix C: The Purpose in Life Test – Short Form

Schulenberg et al. (2011)

1. In life, I have:	No goals or aims	**1**	**2**	**3**	**4**	**5**	Clear goals and aims
2. My personal existence is:	Utterly meaningless, without purpose	**1**	**2**	**3**	**4**	**5**	Purposeful and meaningful
3. In achieving life goals, I've:	Made no progress whatever	**1**	**2**	**3**	**4**	**5**	Progressed to complete fulfilment
4. I have discovered:	No mission or purpose in life	**1**	**2**	**3**	**4**	**5**	A satisfying life purpose

Appendix D: The Personal Meaning Profile Short Form

Macdonald et al. (2012) © Paul T. P. Wong

Th is questionnaire measures people's perception of personal meaning in their lives. Generally, a meaningful life involves a sense of purpose and personal significance. However, people often differ in what they value most, and they have different ideas as to what would make life worth living. Th e following statements describe potential sources of a meaningful life. Please read each statement carefully and indicate to what extent each item characterizes your own life. You may respond by circling the appropriate number according to the following scale:

1	2	3	4	5	6	7
Not at all			Moderately		A great deal	

For example, if going to parties does not contribute to your sense of personal meaning, you may circle 1 or 2. If taking part in volunteer work contributes quite a bit to the meaning in your life, you may circle 5 or 6.

It is important that you answer honestly on the basis of your own experiences and beliefs.

1. I believe I can make a difference in the world.	1 2 3 4 5 6 7
2. I have someone to share intimate feelings with.	1 2 3 4 5 6 7
3. I strive to make this world a better place.	1 2 3 4 5 6 7
4. I seek to do God's will.	1 2 3 4 5 6 7
5. I like challenge.	1 2 3 4 5 6 7
6. I take initiative.	1 2 3 4 5 6 7
7. I have a number of good friends.	1 2 3 4 5 6 7
8. I am trusted by others.	1 2 3 4 5 6 7
9. I seek to glorify God.	1 2 3 4 5 6 7
10. Life has treated me fairly.	1 2 3 4 5 6 7
11. I accept my limitations.	1 2 3 4 5 6 7
12. I have a mutually satisfying loving relationship.	1 2 3 4 5 6 7
13. I am liked by others.	1 2 3 4 5 6 7
14. I have found someone I love deeply.	1 2 3 4 5 6 7
15. I accept what cannot be changed.	1 2 3 4 5 6 7
16. I am persistent and resourceful in attaining my goals.	1 2 3 4 5 6 7
17. I make a significant contribution to society.	1 2 3 4 5 6 7
18. I believe that one can have a personal relationship with God.	1 2 3 4 5 6 7
19. I am treated fairly by others.	1 2 3 4 5 6 7
20. I have received my fair share of opportunities and rewards.	1 2 3 4 5 6 7
21. I have learned to live with suffering and make the best of it.	1 2 3 4 5 6 7

Scoring Key

Achievement: 5, 6, 16
Relationship: 7, 8, 13
Religion: 4, 9, 18
Self-transcendence: 1, 3, 17
Self-acceptance: 11, 15, 21
Intimacy: 2, 12, 14
Fair treatment: 10, 19, 20

Appendix E: The Daily Spiritual Experience Scale

Underwood and Teresi (2002)

The list that follows includes items which you may or may not experience, please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word God. If this word is not a comfortable one for you, please substitute another idea which calls to mind the divine or holy for you.

	Many Times a Day	Everyday	Most Days	Some Days	Once in a While	Never or Almost Never
1. I feel God's presence	1	2	3	4	5	6
2. I experience a connection to all life	1	2	3	4	5	6
3. During worship, or at other times when connecting with God, I feel joy, which lifts me out of my daily concerns	1	2	3	4	5	6
4. I find strength in my religion or spirituality	1	2	3	4	5	6
5. I find comfort in my religion or spirituality	1	2	3	4	5	6
6. I feel deep inner peace or harmony	1	2	3	4	5	6
7. I ask for God's help in the midst of daily activities	1	2	3	4	5	6
8. I feel guided by God in the midst of daily activities	1	2	3	4	5	6
9. I feel God's love for me, directly	1	2	3	4	5	6

10. I feel God's love for me, through others	1	2	3	4	5	6
11. I am spiritually touched by the beauty of creation	1	2	3	4	5	6
12. I feel thankful for my blessings	1	2	3	4	5	6
13. I feel a selfless caring for others	1	2	3	4	5	6
14. I accept others even when they do things I think are wrong	1	2	3	4	5	6
15. I desire to be closer to God or in union with Him	1	2	3	4	5	6

	Not Close at all	Somewhat Close	Very Close	As Close as Possible
In general, how close do you feel to God?	1	2	3	4

R2

For more information about R2 or to discover how you can bring the program to your organization, business or educational setting, please contact us.

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