

## The Role of Meaning in Life in Adjustment to a Chronic Medical Condition: A Review

Umair Majid<sup>1,2\*</sup> and Jeffrey Ennis<sup>2,3</sup>

<sup>1</sup>Department of Health Research Methods, Evidence, and Impact, McMaster University, Canada

<sup>2</sup>Ennis Centre for Pain Management, Canada

<sup>3</sup>Department of Psychiatry and Behavioural Neurosciences, McMaster University, Canada

\*Corresponding Author: Umair Majid, Ennis Centre for Pain Management, Hamilton, Ontario, Canada.

Received: October 27, 2018; Published: December 01, 2018

### Abstract

Being diagnosed with a chronic disease can cause significant distress. Such an event can disrupt an individual's 'meaning in life'; their purpose in living. This can initiate an active search for a new purpose to reduce psychological, physical, and social distress, and improve adjustment to a medical disease. The objectives of this review are to describe the life changes that occur after the diagnosis of a chronic medical condition and to offer a framework, the Meaning in Life-Adjustment Framework, depicting the relationship between meaning in life and variables associated with health, wellness, and adjustment. A literature search using keywords and subject headings was performed in five databases. After sorting according to predetermined criteria, 46 papers were included in this review. An analysis of these papers suggests that adjustment to a chronic medical condition consists of psychological, physical, and social changes that occur after the diagnosis of a medical condition. A diagnosis may cause psychological, physical and/or social distress for patients, which may cause a loss of purpose in life. For some patients, this diagnosis may prompt an active search for meaning to acquire or restore their sense of purpose in life. The processes of searching for and finding meaning in life is associated with positive health outcomes. However, searching for meaning in life without finding it may hurt health and quality of life.

**Keywords:** Chronic Illness; Chronic Medical Condition; Meaning in Life; Meaning-Making Process; Psychological Adjustment; Physical Adjustment

### Abbreviations

MIL: Meaning in Life; PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses; PTG: Post-Traumatic Growth

### Introduction

Illness, bereavement, domestic abuse, and surviving a natural disaster are some of the many examples of traumatic events that may cause significant physical and psychological distress [1]. These traumatic events may cause one to search for meaning in life to make sense of their situation and reflect upon the causes of their condition [2,3]. For example, patients with incurable medical conditions may question their purpose in life because of impending mortality [4]. These patients may engage in an active search for the silver-lining of their incurable medical condition [5]. Some patients may not resolve the discrepancy between the meaning they attribute to a traumatic event and their purpose in life that guides their perspectives, attitudes, and behaviours [2]. This may cause psychological and social distress that may adversely influencing quality of life, well-being, and life satisfaction [6].

The way traumatic events are perceived can influence one’s physical and psychological health significantly. This paper reviews the literature on meaning in life (MIL) and psychological, physical, and social functioning in clinical populations with chronic medical conditions. The objectives of this exploratory review are to describe the life changes that occur after the diagnosis of a chronic medical condition and to offer a framework, the Meaning in Life-Adjustment Framework, depicting the relationship between meaning in life and variables associated with health, wellness, and adjustment to a chronic medical condition. In this paper, MIL follows the definition by Steger and associates (2006) as consisting of two components: search and presence [6]. Search for MIL is an active process that patients may engage in after experiencing a traumatic event to reduce their physical, psychological, or social distress. Presence of MIL is an outcome of searching for MIL indicated by higher coherence in life and better understanding of oneself and the traumatic experience. Similarly, finding MIL is an active process where the outcome is the presence of MIL. Although the authors recognize that a traumatic event may lead to both positive and negative life changes, this paper focuses on how the positive changes may be increased and the negative changes avoided.

**Materials and Methods**

A literature search was performed on November 1, 2016, in PsycINFO (1806-, MEDLINE (1996-), Healthstar (1966-), Health and Psychosocial Instruments (1985-), and Embase (1974-), all via Ovid, for studies published from the beginning of the databases to November 1, 2016. Using keywords and subject headings relevant to meaning in life and psychological, physical, and social adjustment, the search yielded 1661 results after eliminating 1336 duplicates. The authors screened the articles and excluded those that did not discuss meaning in life or similar constructs. This included meaning in/of life, purpose in/of life, post-traumatic growth, meaningfulness, value of life, sense making, meaning making, and meaning made in the title or abstract. Then, the authors excluded articles that were not primary, quantitative research studies or those did not aim to measure quantitatively meaning in life or related variables and any physical, psychological, and health variables (e.g. quality of life). Finally, the authors excluded articles that focused on non-clinical populations (e.g. practitioners). This sorting process yielded 46 articles included in this analysis (Figure 1).

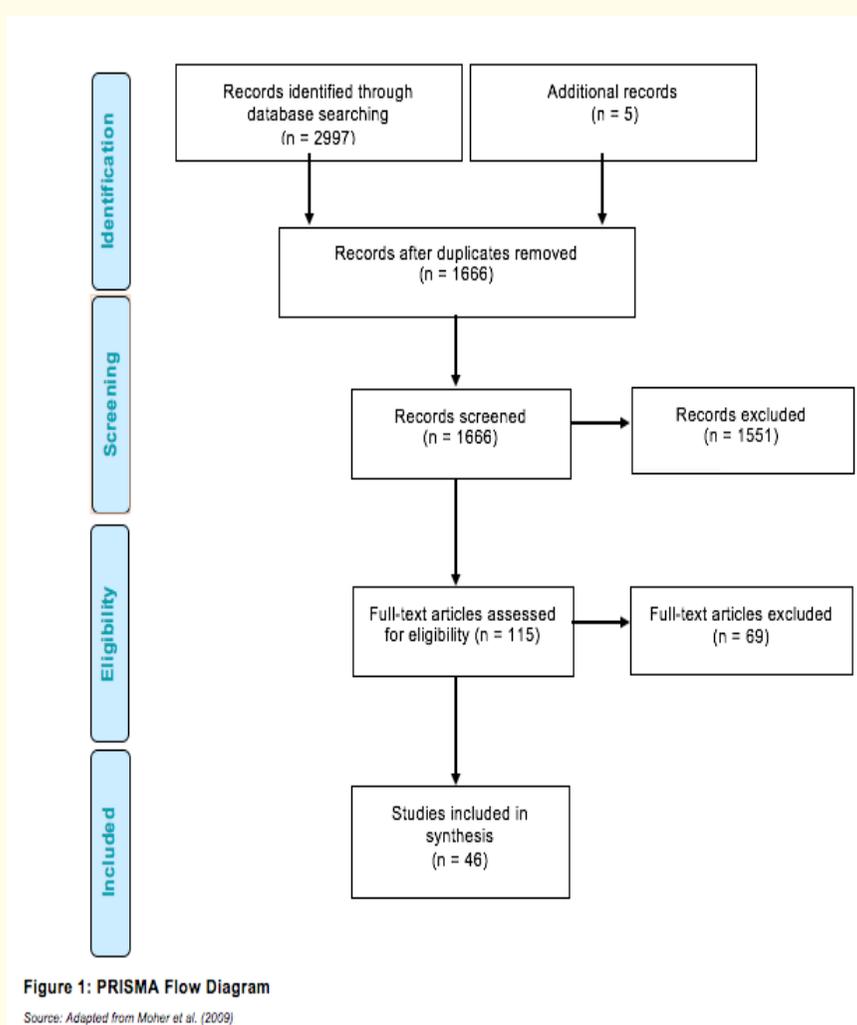


Figure 1: PRISMA Diagram

## Results and Discussion

### Defining 'adjustment'

Adjustment consists of psychological, physical and social domains. Psychological adjustment as post-traumatic growth (PTG) is defined by Tedeschi and Calhoun (2004) as a positive psychological change due to challenging life events [8]. This concept originates from the bereavement literature [9] but it has been applied to survivors of life-threatening events [10] and survivors of physical illness [11]. Psychological adjustment may enable individuals to gain an improved level of personal understanding (i.e. about one’s personal life plans, values and beliefs, and priorities) that is higher than before the traumatic experience, which increases their awareness in life and psychological well-being [9]. Based on the measures and outcomes used in the 46 papers in this review, psychological adjustment in this article may refer to an increase in psychological well-being, subjective well-being, mental health, coping strategies, life satisfaction, or quality of life, or a decrease in psychological distress, depression, or anxiety.

Psychological adjustment is only a part of the picture when clarifying the relationship between MIL and adjustment after a traumatic event. The way individuals reflect on their traumatic experience, use their physical and social resources to increase or restore their MIL, and use MIL to improve how they deal with a traumatic experience are other areas important for clarifying the relationship between MIL and adjustment. Danhauer and colleagues (2013), for example, found an association between MIL and higher scores on the PTG Inventory (estimate = 1.46, SE = 0.22, p < 0.0001) [12], a validated self-report measure of PTG in clinical populations [13] [14]. In another study, researchers found that the significant relationship between PTG and life satisfaction was mediated by MIL [15].

The literature is unclear about the role of MIL in improving physical adjustment to a medical condition. However, some research links these two concepts [16-18]. In this article, physical adjustment may refer to a decrease in the duration or severity of the chronic medical condition and its symptoms, decrease in pain, or an increase in physical functioning. Social adjustment is the least studied aspect of adjustment in the studies included in this review with some evidence linking it to MIL [19-21]. In this article, social adjustment refers to the quality and quantity of an individual’s social network or an increase in social functioning.

### The meaning in life-adjustment framework

Research has found that searching for and the presence of MIL results in better adjustment to chronic medical conditions. This section offers a framework, the Meaning in Life-Adjustment Framework, depicting how patients may search for or find MIL after the diagnosis of a chronic medical condition (Figure 2).

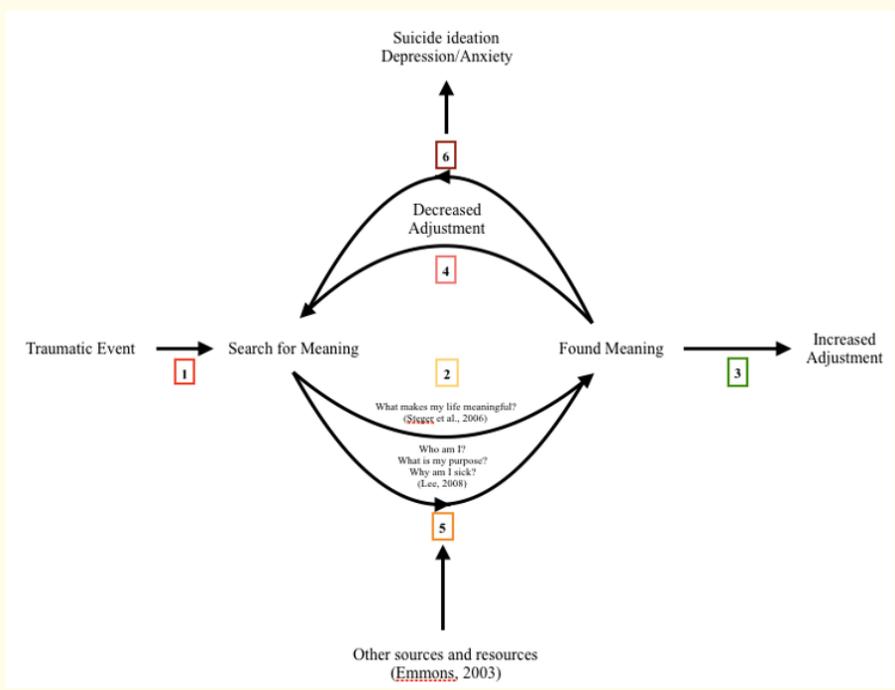


Figure 2: The Meaning in Life-Adjustment Framework

### Traumatic experience

A traumatic experience may heighten a patient's feelings of vulnerability, perceptions of the world, self-views, and value systems [3,22]. For some patients, the diagnosis of a chronic medical condition may be perceived as a traumatic experience that may cause a decrease of MIL [19]. This decrease may cause some patients' psychological distress to increase [23], which may also initiate their search for MIL to make sense of their medical condition and reduce distress (Figure 2; Step 1) [5]. However, other patients may not feel the tendency to engage in this search for MIL process; this observation is discussed in more depth in a later section. For patients searching for MIL, they may build their MIL by reflecting on the aspects of their lives they consider satisfying, purposeful, and significant (Figure 2; Step 2) [6]. These patients may reflect on the causes and progression of their medical condition, compare it to past events, and consider alternative situations such as a lifestyle without their chronic medical condition [24].

### Finding MIL

Patients who search for MIL after the diagnosis of a chronic medical condition may find MIL, which increases their adjustment to the medical condition [25,26] (Figure 2; Step 2 and 3). Some scholars have identified that MIL may be an inevitable outcome for individuals who search for it [27,28]. Research has found a relationship between positive adjustment variables and the presence of MIL. Other research has linked a search for MIL to negative adjustment variables [29,30]. For example, in two studies of patients with chronic pain, researchers found that patients searching for MIL but had not found it, reported the highest levels of pain intensity, use of pain medication, depressive symptoms, and lower life satisfaction, and patients who had found MIL and were not searching for it reported the lowest levels of the same variables [31,32]. These two studies indicate that the presence of MIL, absent searching for it, results in the most optimal adjustment to a medical condition [33,34]. These findings may also suggest that searching for and the presence of MIL are mutually exclusive concepts. The premise underlying this reasoning is that if a patient is searching for MIL, then the patient has not found it, and if a patient has found MIL, then the patient cannot be searching for it.

However, some research has found that searching for and the presence of MIL are *not* mutually exclusive. Frankl (1972) posited that it is possible for an individual to continue to search for MIL despite having found it [35]. On the one hand, a patient who reports a higher presence of MIL must have searched for it after the diagnosis of their medical condition. A patient who has found MIL may still search for it because the patient may feel satisfied, purposeful, and significant with their MIL in a particular life domain (e.g. social) but not in another (e.g., work). Similarly, two groups of researchers found that a group of patients with a higher presence of MIL were also searching for it [31,36]. These patients may continue to search for new MIL from other sources (e.g. social support) [37], enhance their existing MIL in different ways (e.g. changing their perceptions of the world) [35], search for MIL currently missing in their life (e.g. in the professional work domain), or satisfy their intellectual curiosity [32].

### Not finding MIL

Some research has found that patients who search for MIL and do not find it may report decreased adjustment to their chronic medical condition (Figure 2; Step 4) [25,26]. For example, Eton and colleagues (2005) found that patients who continued to search for MIL without finding it reported higher physical distress compared to patients who had found MIL and were not searching for it [38]. Other studies have found that a continued search for MIL without finding it predicts a decrease in quality of life [33], higher depression and anxiety [29], and higher negative affect [30]. Although the presence of MIL is associated with better adjustment, a prolonged and unsuccessful search for it is associated with lower adjustment to a medical condition. Not finding MIL after a prolonged and unsuccessful search for it is also linked to an increased risk of more adverse outcomes such as suicide ideation (Figure 2; Step 6) [39,40].

### To search or not to search?

Some research suggests that some patients do not search for MIL after the diagnosis of a chronic medical condition [5,30]. These patients appear to report higher adjustment to their medical condition compared to patients whose search for MIL is prolonged and unsuccessful [5,30]. Davis and colleagues (2008) hypothesized that an attitude of acceptance may serve as a substitute for the search of MIL

and it may buffer the adverse effects associated with not finding MIL [5]. It is possible there are patients whose MIL is not disrupted by a diagnosis of a chronic medical condition. For example, Dezutter and colleagues (2013) found that a group of patients had low presence and search for MIL and also showed low adjustment to their medical condition [31]. Since adjustment may be considered a shift in the psychological, physical or social health outcomes associated with a medical condition, these patients' MIL may not have been disrupted by their medical condition in the first place or an attitude of acceptance may have substituted the adverse effects of a low presence of MIL. Whereas impending death may prompt an active search for MIL, physical impairment from a chronic medical condition may not result in the more serious consideration of its consequences because of the lack of urgency and lower severity of the medical condition. However, it may be the case that some patients, despite the urgency and extreme severity of their medical condition, may still not engage in the search for MIL process because they are satisfied with their MIL, maintain MIL in other domains of life fulfilled, or adopt a passive orientation to resolving existential issues.

Some studies have found that searching for MIL is related to the time since diagnosis or injury [28,41]. After diagnosis of a chronic medical condition, patients may show signs and symptoms of their medical condition and undergo different clinical procedures for treatment, rehabilitation, and recovery. For patients searching for MIL, clinical procedures may serve as constant reminders of their traumatic experience, which could be a source of discouragement for resolving their search for MIL. These patients may engage in a prolonged search for MIL resulting in lower adjustment to their medical condition [26]. Resolving their search for MIL for these patients, either by finding it or foregoing a search for it, may be crucial to better adjustment to their medical condition. Patients who have known their diagnosis for a period of time may not be searching for MIL because they have resolved existential questions about their medical condition and accepted the life changes that follow diagnosis, treatment, recovery, and impending death. The presence of MIL, however, does not mean that an individual will stop searching for it nor does searching for MIL determines better adjustment. For some patients, searching for MIL is a risky process that might result in the presence of MIL and better adjustment.

The adverse effects that accompany an unsuccessful search for MIL may not apply to patients who do not engage in a search for MIL. This observation may reflect the cognitive differences between patients with distinct levels of global MIL (i.e. an individual's baseline level of MIL that remains largely stable over circumstances, events, and situations) [2,42], and those who attribute different levels of importance to spirituality in their diagnosis, treatment, and recovery [41]. However, the literature is unclear on the cognitive and personality differences between patients who search for MIL and those who do not.

### Discussion

This review offers the Meaning in Life-Adjustment Framework that depicts the relationship between MIL and adjustment to a chronic medical condition. A diagnosis of a medical condition may be considered a traumatic event, which may prompt a patient to search for MIL. This process results in either higher or lower adjustment to the medical condition depending on whether MIL was found. The literature shows that patients can either search for MIL or report having found it; both cannot occur together. However, some research provides greater clarity for this finding by elaborating on (1) a group of patients who continue to search for MIL despite having found it and (2) another group who does not engage in a search for MIL but still have higher adjustment to their medical condition compared to patients who do not resolve their search for it. For other patients, however, a prolonged and unsuccessful search for MIL may cause more extreme, negative adjustment outcomes such as suicide ideation, depression, and anxiety.

The framework is informed by research into various medical conditions including chronic pain, tinnitus, fibromyalgia, rheumatoid arthritis, breast cancer, colorectal cancer, gastrointestinal cancer, spinal cord injury, amyotrophic lateral sclerosis, multiple sclerosis, HIV, acquired brain injury, congestive heart failure, stroke, and schizophrenia. Although the exact mechanism of MIL and adjustment may be distinct between these medical conditions [43], the framework described in this review emphasizes the variables and relationships independent of the type or severity of medical conditions. Therefore, the framework may be applied to clinical populations beyond the ones represented in this review.

### Limitations of the Study

This review has limitations. First, due to the nature of the topic and the inconsistency of the definitions of meaning-related constructs, the authors chose not to use a comprehensive search strategy and the calculation of effect sizes. Instead, the search strategy was developed iteratively by reflecting on the diversity and inconsistency in the literature. Second, this study is an exploratory review of the MIL literature. A synthesis of primary quantitative and qualitative studies may be necessary for a more systematic examination of the relationships between meaning-related constructs and health variables.

The authors encourage future research to focus on how individual variables such as personality and demographic traits, environment variables, and the specific medical condition influence the relationship between searching for MIL, the presence of MIL, and adjustment to a chronic medical condition. It may be advantageous for clinicians to routinely measure their patients' MIL because it can influence multiple psychological, physical and social health outcomes. In this way, clinicians can determine whether their patients are searching for MIL or not, and refer such patients to meaning-focused interventions that increase MIL and adjustment to chronic medical conditions. Future research should also investigate how meaning in life and related variables may be applied to clinical practice.

### Conclusion

This review explores the relationship between meaning in life and adjustment to a chronic medical condition. This paper offers a framework, the Meaning in Life-Adjustment Framework, that conceptualizes how patients resolve their search for meaning in life, and how this process may influence or determine health outcomes. This review also explores how searching for and the presence MIL are two concepts that link MIL, and adjustment to a chronic medical condition.

### Bibliography

1. Davis Christopher G., *et al.* "Making sense of loss and benefiting from the experience: two construals of meaning". *Journal of Personality and Social Psychology* 75.2 (1998): 561-574.
2. Park Crystal L. "Making sense of the meaning literature: an integrative review of meaning making and its effects on adjustment to stressful life events". *Psychological Bulletin* 136.2 (2010): 257-301.
3. Taylor Shelley E. "Adjustment to threatening events: A theory of cognitive adaptation". *American Psychologist* 38.11 (1983): 1161-1173.
4. Lee Virginia. "The existential plight of cancer: meaning making as a concrete approach to the intangible search for meaning". *Supportive Care in Cancer* 16.7 (2008): 779-785.
5. Davis Christopher G and Melinda S Morgan. "Finding meaning, perceiving growth, and acceptance of tinnitus". *Rehabilitation Psychology* 53.2 (2008): 128-138.
6. Steger Michael F., *et al.* "The meaning in life questionnaire: Assessing the presence of and search for meaning in life". *Journal of Counseling Psychology* 53.1 (2006): 80-93.
7. Blinderman Craig D., *et al.* "Symptom distress and quality of life in patients with advanced congestive heart failure". *Journal of Pain and Symptom Management* 35.6 (2008): 594-603.
8. Tedeschi RG and Calhoun LG. "Posttraumatic growth: Conceptual foundations and empirical evidence". *Psychological Inquiry* 15.1 (2004): 1-18.
9. Michael Christina and Mick Cooper. "Post-traumatic growth following bereavement: A systematic review of the literature". *Counseling Psychology Review* 28.4 (2013): 18-33.

10. Hefferon Kate, *et al.* "Post-traumatic growth and life threatening physical illness: A systematic review of the qualitative literature". *British Journal of Health Psychology* 14.2 (2009): 343-378.
11. Barskova Tatjana and Rainer Oesterreich. "Post-traumatic growth in people living with a serious medical condition and its relations to physical and mental health: A systematic review". *Disability and Rehabilitation* 31.21 (2009): 1709-1733.
12. Danhauer Suzanne C., *et al.* "Predictors of posttraumatic growth in women with breast cancer". *Psycho-oncology* 22.12 (2013): 2676-2683.
13. Brunet Jennifer, *et al.* "The Posttraumatic Growth Inventory: An examination of the factor structure and invariance among breast cancer survivors". *Psycho-Oncology* 19.8 (2010): 830-838.
14. Tedeschi Richard G and Lawrence G Calhoun. "The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma". *Journal of Traumatic Stress* 9.3 (1996): 455-471.
15. Triplett Kelli N., *et al.* "Posttraumatic growth, meaning in life, and life satisfaction in response to trauma". *Psychological Trauma: Theory, Research, Practice, and Policy* 4.4 (2012): 400-410.
16. Smith Bruce W and Alex J Zautra. "Purpose in life and coping with knee-replacement surgery". *The Occupational Therapy Journal of Research* 20.1 (2000): 96S-99S.
17. Meraviglia Martha. "Effects of spirituality in breast cancer survivors". *Oncology Nursing Forum* 33.1 (2006): E1-E7.
18. Park Crystal L., *et al.* "Coping, meaning in life, and quality of life in congestive heart failure patients". *Quality of Life Research* 17.1 (2008): 21-26.
19. Jim Heather S and Barbara L Andersen. "Meaning in life mediates the relationship between social and physical functioning and distress in cancer survivors". *British Journal of Health Psychology* 12.3 (2007): 363-381.
20. Verduin Pieter JM., *et al.* "Purpose in life in patients with rheumatoid arthritis". *Clinical Rheumatology* 27.7 (2008): 899-908.
21. Haugan Gørill. "The relationship between nurse-patient interaction and meaning-in-life in cognitively intact nursing home patients". *Journal of Advanced Nursing* 70.1 (2014): 107-120.
22. Habermas Tilmann and Susan Bluck. "Getting a life: the emergence of the life story in adolescence". *Psychological Bulletin* 126.5 (2000): 748-769.
23. Vickberg Suzanne M Johnson., *et al.* "Intrusive thoughts and psychological distress among breast cancer survivors: Global meaning as a possible protective factor". *Behavioral Medicine* 25.4 (2000): 152-160.
24. Silver Roxane L., *et al.* "Searching for meaning in misfortune: Making sense of incest". *Journal of Social Issues* 39.2 (1983): 81-101.
25. Thompson Nancy J., *et al.* "Purpose in life as a mediator of adjustment after spinal cord injury". *Rehabilitation Psychology* 48.2 (2003): 100-108.
26. Davis Christopher G and Danay C Novoa. "Meaning-making following spinal cord injury: Individual differences and within-person change". *Rehabilitation Psychology* 58.2 (2013): 166-177.
27. Park Crystal L., *et al.* "Meaning making and psychological adjustment following cancer: the mediating roles of growth, life meaning, and restored just-world beliefs". *Journal of Consulting and Clinical Psychology* 76.5 (2008): 863-875.

28. Yanez Betina, *et al.* "Facets of spirituality as predictors of adjustment to cancer: relative contributions of having faith and finding meaning". *Journal of Consulting and Clinical Psychology* 77.4 (2009): 730-741.
29. Nordin Karin, *et al.* "Discrepancies between attainment and importance of life values and anxiety and depression in gastrointestinal cancer patients and their spouses". *Psycho-Oncology* 10.6 (2001): 479-489.
30. Kernan William David and Stephen J Lepore. "Searching for and making meaning after breast cancer: Prevalence, patterns, and negative affect". *Social Science and Medicine* 68.6 (2009): 1176-1182.
31. Dezutter Jessie, *et al.* "Meaning in life: An important factor for the psychological well-being of chronically ill patients?". *Rehabilitation Psychology* 58.4 (2013): 334-341.
32. Dezutter Jessie, *et al.* "Meaning in life in chronic pain patients over time: associations with pain experience and psychological well-being". *Journal of Behavioral Medicine* 38.2 (2015): 384-396.
33. Tomich Patricia L and Vicki S Helgeson. "Five years later: a cross-sectional comparison of breast cancer survivors with healthy women". *Psycho-oncology* 11.2 (2002): 154-169.
34. Dobříková Patricia, *et al.* "The Effect of Social Support and Meaning of Life on the Quality-of-Life Care for Terminally Ill Patients". *American Journal of Hospice and Palliative Medicine*® 32.7 (2015): 767-771.
35. Frankl Viktor Emil. "The doctor and the soul" (1972).
36. G Davis, *et al.* "Searching for meaning in loss: Are clinical assumptions correct?" *Death Studies* 24.6 (2000): 497-540.
37. Emmons Robert A. "Striving for the sacred: Personal goals, life meaning, and religion". *Journal of Social Issues* 61.4 (2005): 731-745.
38. Eton David T, *et al.* "Psychological distress in spouses of men treated for early-stage prostate carcinoma". *Cancer* 103.11 (2005): 2412-2418.
39. Kleiman Evan M and Jenna K Beaver. "A meaningful life is worth living: Meaning in life as a suicide resiliency factor". *Psychiatry Research* 210.3 (2013): 934-939.
40. Heisel Marnin J, *et al.* "Reasons for living, meaning in life, and suicide ideation: investigating the roles of key positive psychological factors in reducing suicide risk in community-residing older adults". *Aging and Mental Health* 20.2 (2016): 195-207.
41. Fegg Martin Johannes, *et al.* "Meaning in life in patients with amyotrophic lateral sclerosis". *Amyotrophic Lateral Sclerosis* 11.5 (2010): 469-474.
42. Anagnostopoulos Fotios, *et al.* "Intrusive thoughts and psychological adjustment to breast cancer: Exploring the moderating and mediating role of global meaning and emotional expressivity". *Journal of Clinical Psychology in Medical Settings* 17.2 (2010): 137-149.
43. Aspinwall Lisa G and Richard G Tedeschi. "The value of positive psychology for health psychology: Progress and pitfalls in examining the relation of positive phenomena to health". *Annals of Behavioral Medicine* 39.1 (2010): 4-15.

**Volume 7 Issue 12 December 2018**

**©All rights reserved by Umair Majid and Jeffrey Ennis.**