

# 17

## Meaning-in-Life Measures and Development of a Brief Version of the Personal Meaning Profile

MARVIN J. MACDONALD

*Trinity Western University*

PAUL T. P. WONG

*Trent University*

DANIEL T. GINGRAS

Inquiry into the meaning of life goes back to antiquity from Lao Tzu (trans. 1913) to King Solomon (Ecclesiastes, New International Version). There is also a long and venerable tradition in psychology of exploring the meaning of human existence (Adler, 1931/1958; Frankl, 1963/1985; James, 1902; Jung, 1933; May, 1958) and self-actualization (Maslow, 1962; Rogers, 1980). However, empirical studies of meaning have been very recent (Wong & Fry, 1998). Psychologists have long theorized about the functions of meaning in human adaptation and flourishing, but the development of instruments to measure meaning in life has been hampered by the difficulty of operationally defining the meaning construct.

### **Personal Meaning Defined**

Reker and Wong (1988) define personal meaning as the “cognizance of order, coherence and purpose in one’s existence, the pursuit and attainment of worthwhile goals, and an accompanying sense of fulfillment” (p. 221). Wong (1989) defines personal meaning as an individually constructed cognitive system, which endows life with personal significance. This meaning system, according to Wong’s (1998) implicit theories research, consists of five components: affective, motivational, cognitive, relational, and personal (i.e., personal characteristics and status in life). Dittmann-Kohli (1991) made a compelling case that the personal meaning system is most important with respect to one’s overall functioning. He states:

It is a dynamic, centralized structure with various sub-domains. It is conceived as a cognitive map that orients the individual in steering through the life course. The personal meaning system comprises the categories (conceptual schemes) used for self and life interpretation. It is a cognitive-affective network containing person-directed and environment-directed motivational cognitions and understandings, like goal concepts and behavior plans, conceptions of character and competencies, of internal processes and mechanisms, various kinds of standards and self-appraisals. (as cited in Wong & Fry, 1998, p. 368)

Frankl (1963) emphasizes the motivational dimension of meaning. He asserts that the “will to meaning” is a significant and universal human motive. Human are not merely biological, social, and psychological beings but also spiritual beings capable of transcending physical limitations through meaning and spirituality (Chapter 28, this volume). Frustration of the will to meaning leads to an “existential vacuum” characterized by a sense of meaninglessness, boredom, apathy, or indifference.

Other motivational perspectives encompass broader psychological needs (Baumeister, 1991) and intrinsic goals (Emmons, 2005). Needs contribute to a sense of meaning when these needs are related to hope and purpose in future-oriented goal striving. Baumeister’s major needs related to subjective fulfillment—purpose, value, self-efficacy, and self-worth—map well on Wong’s four components of meaning: purpose, understanding, responsibility, and enjoyment.

Goals reflect a concrete plan to meet certain needs through action, commitment, and engagement. Emmons (2005) conceptualizes meaning in people’s lives in terms of pursuits of personally significant goals: “Development of goals that allow for a greater sense of purpose in life is one of the cornerstones of well-being” (p. 734). Emmons’s four areas of meaningful pursuit are work, intimacy, spirituality, and transcendence, which cover much of the same terrain as Wong’s (1998) seven sources of meaning. According to Emmons (2005), personal goals are the units of a meaningful life. He further suggests that it is not just the attainment of goals but also the pursuit of them that makes life meaningful. However, a goal approach to meaning is incomplete because philosophical views, personal beliefs, and self-knowledge are also important for one’s sense of meaning. Wong’s seven sources of meaning incorporate needs, goals, and cognitive components of meaning systems.

The struggle to discover and realize meaning continues throughout life. From the life-span perspective, values shift and so do the sources of meaning (Baumeister, 1991; Erickson, 1963; Jung, 1971; Thurnher, 1975). The task of rebuilding a meaning subsystem is never-ending because of the ever-changing self and dwindling opportunities. Individuals not only try to maintain a sense

of continuity and coherence in the face of change but also attempt to compensate multiple losses that come with advancing age.

### Sources of Meaning

Individuals may differ in what makes life meaningful; but on the basis of prior research, Reker and Wong (1988) have identified the following major sources of meaning: (a) meeting such basic needs as food, shelter, and safety; (b) leisure activities or hobbies; (c) creative work; (d) personal relationships (family or friends); (e) personal achievement (education or career); (f) personal growth (wisdom or maturity); (g) social and political activism (e.g., the peace movement or antipollution campaigns); (h) altruism; (i) enduring values and ideals (truth, goodness, beauty, and justice); (j) traditions and culture, including heritage or ethnocultural associations; (k) legacy (leaving a mark for posterity); and (l) religion. These sources of meaning encompass different levels of needs, from basic biological needs to transcendental, spiritual needs.

According to Schnell (2010), “Sources of meaning represent generalized and relatively stable orientations towards life ... [S]ources of meaning motivate commitment, give direction to life, and increase its significance” (pp. 353–354). They do so because each source reflects basic needs, corresponding life goals, and the four components of the meaning structure: purpose, understanding, responsible action, and enjoyment (Chapter 1, this volume). Thus, 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.

According to Westerhof, Bohlmeijer, and Valenkamp (2004), sources of meaning can come from (a) within the person (character traits, personal growth and achievement, self-acceptance, pleasure, fulfillment, tranquility), (b) relationships (sense of connectedness, intimacy, quality relationships, altruism, service, communal consciousness), (c) physical integrity (functioning, health, appearance), (d) activities (work, leisure, hedonistic activities), and (e) material needs (possessions, financial security, meeting basic needs). Beyond these five general sources of meaning, however, there is also a need for a holistic, philosophical view of life consisting of values and beliefs, ideals, humanistic concerns, religion, culture, and existential themes.

### Personal Meaning Scales

The Purpose in Life (PIL) Test was developed by Crumbaugh and Maholick (1964) and inspired by Frankl’s logotherapy. It is a 20-item, 7-point attitude scale that assesses the degree to which an individual experiences a sense of meaning or purpose in life. Although it has been widely used, it has been criticized for blending a few distinct factors (Dyck, 1987; Yalom, 1980).

The Seeking of Noetic Goals (SONG; Crumbaugh, 1977) and the Life Attitude Profile (LAP; e.g., Reker & Peacock, 1981; Reker, Peacock, & Wong,

1987) were also designed to measure meaning in life. The SONG is a 20-item attitude scale that focuses on the motivation to find meaning in life. The LAP is a 49-item multidimensional measure of life attitudes, assessing both the presence and absence of positive meaning and purpose. Both instruments are based on Frankl's conceptions of will to meaning and the existential vacuum.

The Sense of Coherence (SOC) Scale was developed by Antonovsky (1983), a medical sociologist who challenged the pathogenic orientation (i.e., the disease model) and advocated the salutogenic orientation. The SOC is a 29-item, 7-point Likert scale consisting of three subscales: Comprehensibility, Manageability, and Meaningfulness. Sense of coherence as measured by these three subscales has been shown to be important in predicting health and well-being (Korotkov, 1998). The SOC focuses on the cognitive component of meaning.

The Life Regard Index (LRI) was developed by Battista and Almond (1973). The LRI is a 28-item Likert scale designed as a measure of personal meaning independent of a priori conceptions of the "true nature" of personal meaning. Battista and Almond take the relativistic perspective that everyone has his or her own beliefs regarding what is meaningful. The LRI consists of two subscales: The Framework subscale measures whether an individual has the framework for developing a personal meaning system or a set of life goals. The Fulfillment subscale indicates the extent to which these goals are fulfilled; this scale may, however, be confounded with the outcome measure of life satisfaction.

### Development of the Personal Meaning Profile

The PMP is a 57-item instrument intended to measure people's perceptions of personal meaning in their lives. The construction of the PMP began by studying people's own understanding of what constitutes a meaningful life by employing an implicit theories approach (Wong, 1998). Implicit theories are "laypeople's conceptions and beliefs about various psychological constructs as compared to more formal models developed by psychologists" (p. 111). This bottom-up approach allows researchers to understand people's ideas without imposing on them the researchers' own theoretical biases.

Participants were drawn from various walks of life. They were asked to describe what, in their minds, constituted an ideally meaningful life or ideally good life if money were not an issue. Their written responses were analyzed, condensed, and catalogued into a list of 102 items. Content analysis of these items revealed that they could be grouped into five categories of psychological functions: cognitive, motivational, affective, relational, and personal.

The next step in the development of the PMP was to determine how many of the 102 items identified in the previous study were characteristic of (a) an ideally meaningful life and (b) of themselves. The participants rated each item on a scale ranging from 1 (*extremely uncharacteristic*) to 9 (*extremely characteristic*), with 5 indicating undecided for both the ideal and self-ratings. Items

that were rated less than 6.0 were considered not to be characteristic of an ideally meaningful life. Using this standard, a total of eight items fell below the cut-off point, most of which had to do with religious beliefs and practices (e.g., "Seeks to glorify God"), though two items related to hedonic pursuits (i.e., "Satisfies all one's wants" and "Seeks pleasures") also fell below the cut-off point. Participants were also asked to complete an eight-item Perceived Personal Meaning (PPM) Scale developed by Wong (1998) to serve as a criterion measure. Steger, Frazier, Oishi, and Kaler's (2006) Presence of Meaning subscale is very similar to Wong's PPM. The PPM includes such items as "My life as a whole has meaning," "My entire existence is full of meaning," and "I led a meaningful life in the past." Self-ratings were significantly correlated with ideal ratings as well as the PPM.

A third study was then conducted to determine whether people from different age groups have differing implicit theories of meaning as well as to determine the prototypical structure of ideal ratings through exploratory factor analysis. This study used a sample of 289 subjects divided into three age groups. The young adult group (18–29) consisted of 96 participants (46 males, 50 females), the middle-age group (30–59) consisted of 107 participants (49 males, 58 females), and the elderly group (60+) consisted of 86 participants (43 males, 43 females). A total of 43 redundant and unrepresentative items from the original list of 102 were dropped for having low item–total correlations or falling below the cut-off point of 6.0 in any age group. Many of these items were such personal characteristics as "Has intelligence," "Has talents," and "Has a good education"; these items were too general to load on any unique factor. Principle components extraction and varimax rotation of the remaining items resulted in a nine-factor solution, consisting of Achievement striving, Religion, Relationship, Fulfillment, Fairness, Self-confidence, Self-integration, Self-transcendence, and Self-acceptance.

A fourth study was performed using a sample of 335 participants (153 males, 182 females). Principle components analysis with varimax rotation resulted in eight factors: Achievement striving, Religion, Fulfillment, Relationship, Self-transcendence, Intimacy, Self-acceptance, and Fair treatment, with a total of 58 items. Following this study, the Fulfillment factor and all affect-related items were eliminated to avoid confounding with outcome measures.

One weakness of the original PMP was that the Intimacy, Self-acceptance, and Fair treatment subscales did not have enough items to achieve acceptable Cronbach's alpha. Therefore, new items were added to the three factors, resulting in a 57-item version. Preliminary research on this version of the PMP resulted in a seven-factor solution, with Intimacy once again being separate from Relationship. In addition, some stylistic changes were made to improve the clarity of some items, and some alterations to the instructions were made.

Preliminary studies showed encouraging reliability for the 57-item PMP. The overall Cronbach's alpha coefficient was .93. The alpha values of the

subscales were as follows: Achievement (.91), Religion (.89), Self-transcendence (.84), Relationship (.81), Intimacy (.78), Fairness (.54), and Self-acceptance (.54). Test-retest reliability over a three-week period was .85.

### Use of the Personal Meaning Profile in Research

Since 1998, the PMP has been used in a variety of settings and with different populations. For example, it has been used in research on organizational-industrial psychology (Du Buisson-Narsai, 2009; Markow & Klenke, 2005; McConnell, 1998; Wilk, 2000), career and vocational counseling (Kernes & Kinnier, 2008; Stolte, 2006), populations suffering from physical disabilities (Emmons, 2005), stress and trauma (Gall, Basque, Damasceno-Scott, & Vardy, 2007; Leung, Vroon, & Steinfort, 2003; Pan, Wong, Chan, & Joubert, 2008; Pan, Wong, Joubert, & Chan, 2008; Weibe, 2001), depression (Mascaro & Rosen, 2008; Mascaro, Rosen, & Morey, 2004), substance abuse and addiction (Corner, 2003; Jappy, 2001; Robertson, 1997), and aging (Weiler, 2001), as well as in high school settings (DeLazzari, 2000; Rathi & Rastogi, 2007), on populations of various religious and spiritual orientations (Crosby, 2000; Emmons, 2005; Gall et al., 2007; Gallant, 2001; Klaassen & McDonald, 2002), and cross-culturally (Corner, 2003; Pan, Wong, Chan, et al., 2008; Pan, Wong, Joubert, & Chan, 2007; Pan, Wong, Joubert, et al., 2008; Rathi & Rastogi, 2007). The main reason for the broad appeal of the PMP is that it incorporates all major sources of meaning. Therefore, some subscales, such as Self-transcendence (Markow & Klenke, 2005) and Self-acceptance (Gall et al., 2007), are used in their own rights.

### *Correlations With Positive and Negative Effects*

The PMP has been used to examine a wide variety of associations with positive and negative constructs of health and well-being. DeLazzari (2000) found that scores on the PMP were better than emotional intelligence at predicting life satisfaction among high school students. Working in the context of spiritual leadership, Markow and Klenke (2005) found that the self-transcendence source of meaning was significantly correlated with a sense of calling and that a sense of calling was predictive of organizational commitment. A Dutch translation of the PMP administered to cancer patients was found to be positively correlated with psychological well-being and negatively correlated to distress (Jaarsma, Pool, Ranchor, & Sanderman, 2007). Hope (2006) examined secondary traumatic stress in the caregivers of persons who suffered trauma and found that meaning in life contributed to higher levels of well-being in caregivers.

Simms (2005) investigated the contribution of personal meaning, hardiness, and optimism to mental health and well-being. Results showed that 239 participants completed the PMP, Maddi and Khoshaba's (2001) Personal Views Survey III-Revised (PVS-III-R), Scheier, Carver, and Bridges's (1994)

Life Orientation Test–Revised (LOT-R), the Scales of Psychological Well-Being (SPWB; Ryff, 1989), and Diener, Emmons, Larsen, and Griffin’s (1985) Satisfaction With Life Scale (SWLS). An exploratory principle components analysis obtained a five-factor solution of mental health and well-being, accounting for 67% of the total variance. The five factors were Subjective well-being, Personal growth, Hardiness, Personal meaning, and Positive relationship.

The PMP has also been found to be positively correlated with measures of perceived well-being (Reker & Wong, 1984), spiritual well-being (Lang, 1994; Robertson, 1997), hope (Mascaro & Rosen, 2005), meaning of work (Giesbrecht, 1997), affective and normative organizational commitment (Du Buisson-Narsai, 2009), and reduced impact of childhood sexual abuse in adulthood (Gall et al., 2007, using Self-acceptance subscale). Gingras (2009) found significant positive correlations between all subscales of the PMP and Flanagan’s Quality of Life Scale (Burckhardt, Anderson, Archenholtz, & Hagg, 2003). Mascaro (2006) found that whereas meaning had a positive influence on depression over a two-month period, people who scored low in meaning suffered from greater increases in depressive symptoms in response to increased stress levels. The PMP has also been found to be negatively correlated with depression and depressive symptoms (Mascaro & Rosen, 2008; Wong, 1998), job stress measures (Giesbrecht, 1997), and Derogatis and Melisaratos’s (1983) Brief Symptom Inventory (Robertson, 1997). Research with the PMP also shows that meaning of life is related to reduced impact of acculturative stress on positive affect (Pan, Wong, Chan, et al., 2008) and increased life satisfaction (Pan, Wong, Joubert, et al., 2008) and, further, that it mediates the relationship between acculturative stressors and negative affect (Pan et al., 2007). In addition, Rempel (2005) found that the PMP was related to various perceptions of God in older adults.

#### *Correlates With Other Meaning Measures*

The psychometric properties of PMP continue to accumulate. PMP correlates positively with such other major measurements of meaning as Reker and Peacock’s (1981) LAP (Wong, 1998), Crumbaugh and Maholick’s (1969) PIL (Robertson, 1997), Mascaro et al.’s (2004) Spiritual Meaning Scale (SMS; Mascaro, 2006), and Battista and Almond’s (1973) LRI (Mascaro, 2006).

The most complete study of the correlates of PMP with other meaning measures was conducted by Mascaro (2006). He investigated the relationships between the PMP, the Framework subscale of the LRI-Revised, and the SMS with depressive symptoms as measured with the Beck Depression Inventory–II, the Depression Anxiety Stress Scales (DASS) depression scale, and the Personality Assessment Inventory (PAI) depression scale. Mascaro (2006) also investigated hope as measured with the Herth Hope Scale, the Adult State Hope Scale, and the Beck Hopelessness Scale. Participants were given these measures at the initial assessment, at the one-month interval, and again at the



**TABLE 17.1** Concurrent Correlations Between the PMP and Other Scales

Scale	<i>r</i>
Spiritual Meaning Scale	0.76***
Revised Life Regard Index	0.65***
Undergraduate Stress Questionnaire	-0.09
DASS-depression	-0.56***
PAI-depression	-0.64***
Beck Depression Inventory-II	-0.58***
Beck Hopelessness Scale	-0.62***
Adult State Hope Scale	0.70***
Herth Hope Scale	0.81***
Internal Locus of Control	0.43***

\*\*\* $p < .001$ .

two-month interval. Table 17.1 summarizes the Pearson correlations between the various measures and the PMP reported in the final assessment (Mascaro, 2006, p. 34).

### Recent Measures on Meaningful in Life

Since 1998, several new measures have been published. This section examines how these newer tests are related to the PMP. Bellin (in press) has provided a helpful review of the literature on meaning measures.

#### *Multidimensional Life Meaning Scale*

Recently, Edwards (2007) developed the Multidimensional Life Meaning Scale (MLMS) based on factor analysis of several existing meaning measures, including the PIL Scale (Crumbaugh & Maholick, 1969), the LRI (Battista & Almond, 1973), the PMP (Wong, 1998), the LAP-R (Reker & Peacock, 1981), and the Sources of Meaning Profile (SOMP; Reker & Wong, 1988). She discovered 10 “super” factors: Achievement, Framework/Purpose, Religion, Death acceptance, Interpersonal satisfaction, Excitement/Fulfillment, Giving to the world, (Lack of) Existential vacuum, Intimacy, and Control. PMP items accounted for all seven Achievement items, five of six Religion items, all seven Interpersonal satisfaction items, all three Intimacy items, and one item from PMP’s Self-transcendence subscale in the Giving to the world factor.

#### *The Sources of Meaning and Meaning in Life Questionnaire*

The Source of Meaning and Meaning in Life (SoMe) Questionnaire was developed by Schnell (2009, 2010; Schnell & Becker, 2006). It includes 26 sources of meaning (ultimate meanings), which can be categorized into four dimensions: (a) Self-transcendence, (b) Self-actualization, (c) Order, and (d) Well-being and communality. It is of interest that the 26 factors overlap with the PMP;



for example, Religiosity and Spirituality are the same as the PMP's Religion subscale. In fact, SoMe covers six of the seven sources of meaning of the PMP, excluding only the Fair treatment subscale. In addition to the sources of meaning, SoMe incorporates two independent scales that measure Meaningfulness and a Crisis of Meaning. Schnell (2009) defines the term *meaningfulness* as "a fundamental sense of meaning, based on an appraisal of one's life as coherent, significant, directed, and belonging" (p. 487). *Crisis of meaning* is "judgement of one's life as empty, pointless and lacking meaning" (p. 487). The main contribution of SoMe is that it can measure presence of meaning and the search for meaning separately.

### *Spiritual Meaning Scale*

Mascaro et al. (2004) conceptualized meaning in terms of three related constructs: personal meaning, implicit meaning, and spiritual meaning. They believed that the former two were measured by the LRI Framework and PMP respectively, while spiritual meaning required a new measuring instrument. They defined spiritual meaning as, "the extent to which an individual believes that life or some force of which life is a function has a purpose, will, or way in which individuals participate" (p. 847). They developed the 14-item Spiritual Meaning Scale (SMS). They demonstrated that the SMS, LRI Framework, and PMP were able to predict mental health variables (i.e., hope, depression, anxiety, and antisocial features) beyond the Big Five personality factors. The three measures of meaning were also significantly correlated with each other.

Our initial reaction to Mascaro et al. (2004) was that the three meaning constructs may not clearly differentiate the conceptual and empirical levels because the PMP was developed as a measure of personal meaning, although it used implicit theories methodology. Also, PMP contains a religious and spiritual source of meaning.

Edwards (2007) points out the problem of confound or overlap between the SMS and the other two measures of meaning. She observes that the items included in the SMS are quite similar to the items used in the other two measures (e.g., "Life is inherently meaningful," "I see a special purpose for myself in this world"). She concludes that "it may be difficult to truly parcel out spiritual meaning from one's overall sense of meaning in life" (2007, p. 61). In spite of the aforementioned limitations, the SMS comes close to capturing Frankl's (1963/1985) concept of suprameaning. Mascaro (2006) implies that it is something transcendental, transpersonal, and independent of the individual. Thus, spiritual meaning implies that a complete personal framework about the meaning of life cannot be limited to a system of goals:

Spiritual meaning is not conceptualized as a mere construct of the individual but as something that inheres in existence itself. It is a capital "M" Meaning around which one can form a small "m", personal meaning...

[S]piritual meaning as belief that life or some force of which life is a function has a purpose, will, or way in which individuals participate. (Mascaro, 2006, pp. 8–9)

In their study, Mascaro et al. (2004) used a longitudinal design and structural equation modeling with a sample of 574 undergraduate students in order to predict depression by the multidimensional existential meaning composed of the SMS, the LRI Framework subscale, and the PMP. They reported that existential meaning was negatively correlated to levels of depression over a two-month period. Given the moderate to large correlations between the three measures of meaning, the composite measure seems to be a more reliable and valid measure of existential meaning than either measure alone.

#### *The Meaning in Life Questionnaire*

Steger et al. (2006) define the term *meaning* as “the sense made of, and significance felt regarding, the nature of one’s being and existence. This definition allows respondents to use their own criteria for meaning” (p. 81). Their Meaning in Life Questionnaire (MLQ) is a 10-item scale that is composed of two relatively orthogonal five-item subscales: Presence (MLQ-P) and Search (MLQ-S). The Presence subscale measures a subjective sense that one’s life is meaningful, whereas “Search for Meaning measures the drive and orientation toward finding meaning in one’s life” (p. 85).

Based on the content of the Search subscale, it indeed reflects Frankl’s idea of will to meaning as a primary motivation, but it falls short of affirming the belief that there is always meaning to be found in life regardless of the circumstances. As Wong pointed out in Chapter 1, this volume, it is difficult to interpret the score of the Search subscale without knowing which search stage the person is in because the score could be related to a crisis in meaning as measured by Schnell’s (2010) SoMe, and it could also reflect the human tendency to continue to make sense of life and seek deeper significance even when the individual already enjoys a meaningful life.

#### *The Schedule for Meaning in Life Evaluation*

Fegg, Kramer, L’hoste, and Borasio (2008) developed a respondent-generated instrument for the assessment of individual meaning in life. In the Schedule for Meaning in Life Evaluation (SMiLE), respondents are asked to list three to seven areas that provide meaning to their lives before rating the current level of importance and satisfaction of each area. Then, “the listed MiL areas were assigned to a posteriori categories” (p. 360). It is not clear, however, how the final list of categories was created based on participants’ answers; nor is it clear how individually generated responses were sorted into these fixed categories. The categories of meaning in life, such as Family, Friends, Work, Religiosity, and Altruism, are similar to Intimacy, Relationship, Achievement, and

Religion of the PMP. The main limitation of this schedule is that it demands too much cognitive effort for respondents, especially when they are in palliative care, to generate areas of meaning in life and rate their importance and satisfaction in each area.

#### *Meaningful Life Measure*

Morgan and Farsides (2009) developed a new meaning measure, the Meaningful Life Measure (MLM), based on selected items from three existing popular meaning measures: LRI, PIL, and Ryff's Psychological Well-Being Purpose subscale (SPWB-P). Factor analysis yielded five factors: Exciting life, Accomplished life, Principled life, Purposeful life, and Valued life. These five factors resemble the PURE component of meaning (Wong, 2010). The purpose component is represented by Purposeful life and Valued life; understanding is represented by Principled life; responsibility represented by Accomplished life; and enjoyment represented by Exciting life. The MLM is useful for examining the antecedents and consequences of *specific* components of personal meaning. For example, the Principled life seems to capture the importance of having a philosophy of life and personal value system in living the good life. However, MLM does not seem to be a comprehensive measure of the meaning construct because it focuses almost exclusively on the purpose dimension of the meaning.

#### **Comparison Groups for the Personal Meaning Profile and Development of the Personal Meaning Profile B**

The PMP has been used in a variety of research over the last decade, proving to be useful internationally and in many different fields of investigation. Descriptive information is first provided in this section for comparison purposes in future research. To further extend the usefulness of the PMP, a short-form was developed. The PMP-B, the short form, contains the same seven subscales as the original, but each subscale now contains only three items for a total of 21 items. From a research and clinical perspective, a shorter version of the PMP is desirable for circumstances in which the long version is either inappropriate or impractical (e.g., severe time constraints or participants who are ill or enfeebled). Developers of the short form hope that with the availability of a quick, effective assessment tool, the PMP-B, scholars will be encouraged to engage in further research involving personal meaning in life.

Table 17.2 summarizes 12 theses and dissertations that used the PMP over the last decade and whose data was made available to the authors for the present analyses. These samples were combined to provide responses from a range of participants from different backgrounds, ages, and outlooks. As noted in Table 17.2, a subgroup of the combined sample ( $N = 1,212$ ) provided comparable information on age and gender. Table 17.3 summarizes demographic information for the combined group.

**TABLE 17.2** The Sources of Samples for the PMP-B

Source	Sample Size	Sample Description
1. Corner (2003)	472	Young adults in Australia between the ages of 18 and 24, including participants in treatment for substance dependence ( $n = 59$ ) and university students ( $n = 398$ ) from diverse backgrounds
2. Crosby (2000)	56	Adults in an online study on mystical experiences
3. Daum & Wiebe (2003)	168	First-semester university students surveyed three times during one term
4. DeLazzari (2000)	154	Private high school students in Grades 9 and 12
5. Gallant (2001)	393	University students from private and public institutions
6. Haag (2000)	29	University students who took a stress management course
7. Klaassen & McDonald (2002)	160	University students in a private institution in a study on identity achievement
8. Leung, Vroon, & Steinfors (2003)	30	Adults in an online study on attitudes toward suffering
9. McConnell (1998)	44	Women working in clerical positions, including ministry-oriented employment ( $n = 18$ ) and secular employment ( $n = 22$ )
10. Weibe (2001)	67	Professional counselors in a study of vicarious traumatization
11. Weiler (2001)	118	Seniors living in the community in British Columbia
12. Wilk (2000)	192	Clergy ( $n = 94$ ) and managers ( $n = 97$ ) in a study of occupational stress

The combined sample size was 1,883. Information on gender and/or age was unavailable for Samples 1, 4, and 8 and for 15 additional cases scattered among the remaining samples. If these cases are omitted, the combined sample totalled 1,212. Other than Sample 1, all the samples consisted largely of Anglophone Canadians. The online studies also included a substantial proportion of participants from the United States.

Analyses of relationships between gender and age for PMP scores in the composite sample were conducted to explore possible relationships between important personal background features and the PMP. Table 17.4a summarizes significant effects for PMP subscales overall, showing small effects for the overall group (2% to 6% effect size). For descriptive purposes, Table 17.5

**TABLE 17.3** Demographics

Subcategories	Frequency
<b>Relationship status</b>	
Single	404
Married	291
Widowed	32
Divorced	30
Cohabiting	10
Separated	5
Remarried	10
Other	10
Subtotal	792
Missing	420
Total	1,212
Subcategories	Frequency
<b>Education</b>	
University student	213
Less than university	621
BA/BSc	151
Postbachelor's	148
Other	14
Subtotal	1,147
Missing	65
Total	1,212

presents the mean scores of each gender for each of the seven subscales of the PMP. Very small gender (<1%) and age (1%) differences (and a Gender × Age interaction is 1%) in PMP total scores were statistically significant because of the large sample size, but the total score shows substantially smaller correlations than the subscales scores, because subscale distinctiveness is washed out in the total score.

Table 17.4b summarizes the small differences in effects of PMP by gender, age group, and Gender × Age interactions for separate subscales. Subscale comparisons showed small main effects for gender (Relationship: female > male, 3% effect size) and for age (Self-acceptance: older adults high and young adults low, 5%; Fair Treatment: middle-aged adults low and older adults high, 3%). Small interactions for Intimacy (3%) and Religion (4%) were similar: Males reported higher meaning levels in older cohorts, whereas females reported fairly high levels at each of the different ages. See Figures 17.1, 17.2, 17.3, and 17.4 for graphic descriptions of the interaction between

**TABLE 17.4a** Significant Effects for PMP Subcategories

		<i>F</i>	<i>p</i>	$\eta^2$
Gender	Wilks's lambda	8.08	< .001	0.045
Age group	Wilks's lambda	10.62	< .001	0.058
Gender by age group interaction	Wilks's lambda	2.95	< .001	0.017

**TABLE 17.4b** Significant Differences in Effects of PMP

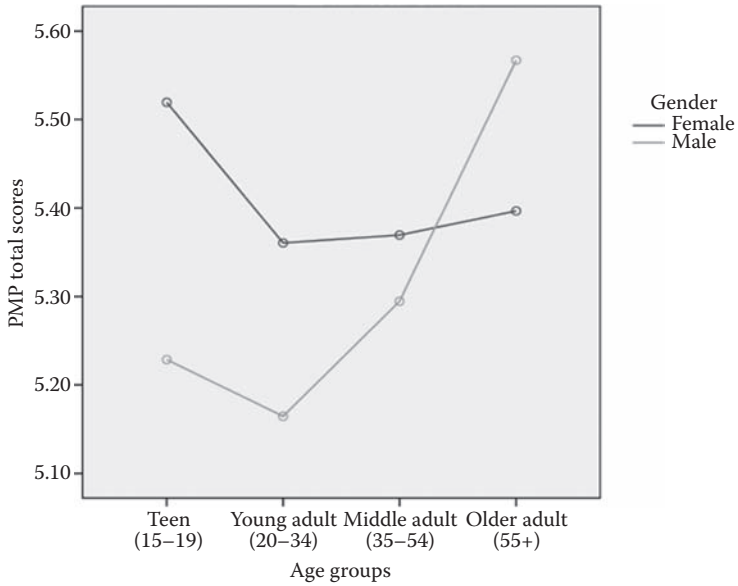
		<i>df</i>	<i>F</i>	<i>p</i>	$\eta^2$
Gender	Religion	1	1.07	0.301	0.001
	Relationship	1	36.44	0.000	0.029
	Intimacy	1	7.45	0.006	0.006
	Total	1	4.29	0.039	0.004
Age groups	Achievement	3	4.28	0.005	0.011
	Self-transcendence	3	3.95	0.008	0.010
	Self-acceptance	3	22.58	0.000	0.053
	Religion	3	8.15	0.000	0.020
	Intimacy	3	4.94	0.002	0.012
	Fair treatment	3	10.59	0.000	0.026
	Total	3	4.87	0.002	0.012
Age group by gender interaction	Self-transcendence	3	3.91	0.009	0.010
	Religion	3	7.75	0.000	0.019
	Intimacy	3	5.67	0.001	0.014
	Total	3	4.04	0.007	0.010

All effect sizes greater than 1% are presented. Intimacy, Religion, and Total effects for gender are listed to help clarify the results reported for age and interaction effects.

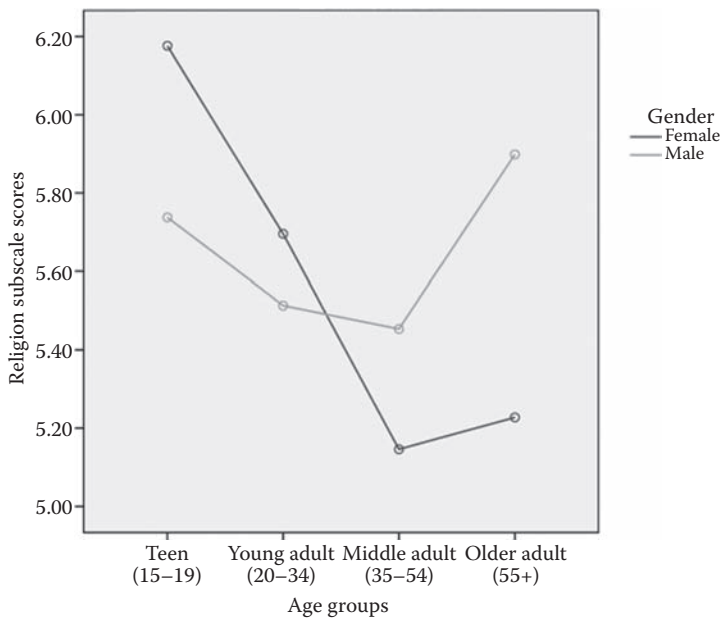
gender and age for selected PMP scores. Although these small effects are not theoretically significant for many applications, they are presented here for comparison purposes when potentially subtle patterns might be important for specific research or clinical projects or when selected populations are being addressed.

**TABLE 17.5** Gender Mean Differences for Mean Subcategories

	Gender Means	
	Female	Male
Achievement	5.241	5.083
Relationship	5.209	4.918
Self-transcendence	5.427	5.314
Self-acceptance	5.243	5.228
Religion	5.561	5.651
Intimacy	5.557	5.315
Fair treatment	5.316	5.283

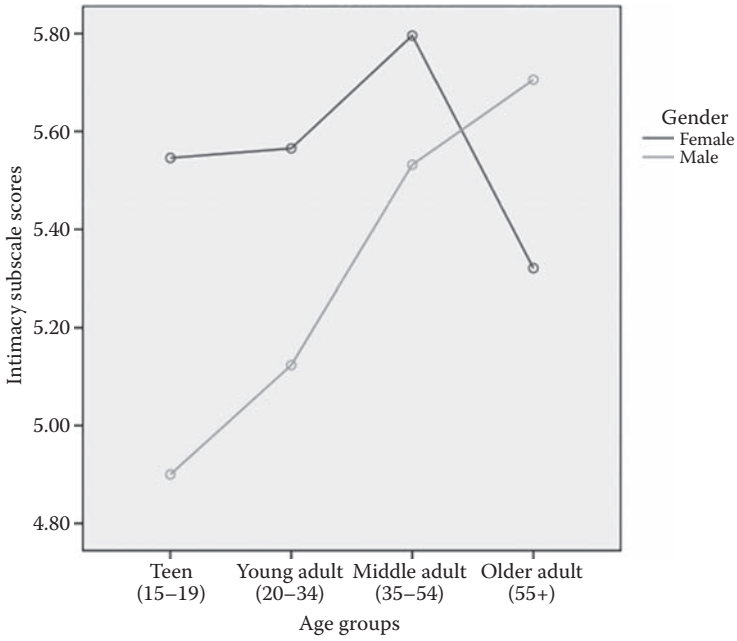


**Figure 17.1** Interaction of age and gender for total PMP scores. Scores range from 1.0 to 7.0.

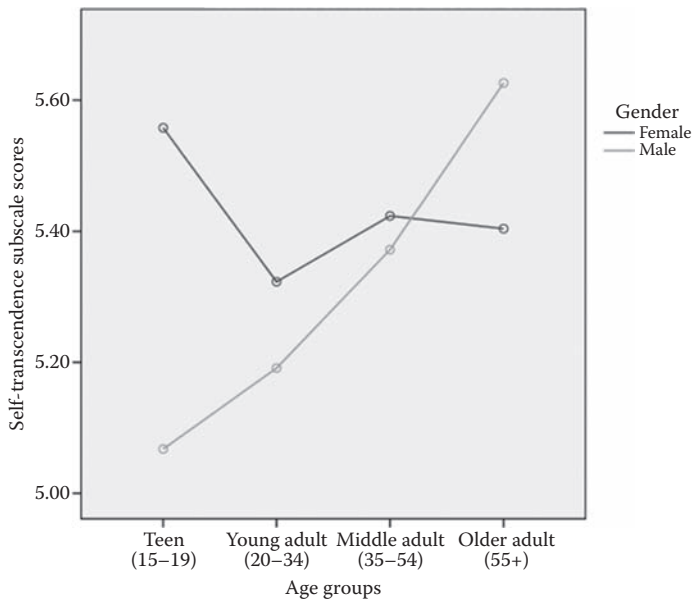


**Figure 17.2** Age and gender interactions for PMP religion subscale. Scores range from 1.0 to 7.0.





**Figure 17.3** Age and gender interactions for Intimacy subscale scores. Scores range from 1.0 to 7.0.



**Figure 17.4** Age and gender interactions for self-transcendence subscale scores. Scores range from 1.0 to 7.0.

*Development of the Personal Meaning Profile B*

An item-level principle components analysis (PCA) was employed in the composite data set to select items for a brief version of the PMP (PMP-B). Several criteria were used to confirm the proper number of dimensions to be retained: Eigen values before and after oblique rotation, percentage of total variance accounted for by each component and by the overall set of components, item communality after extraction, presence of at least three items that loaded primarily on a specific component, and conceptual relationships among the items. The PMP yields correlated subscales, so oblique rotations (Promax) were obtained and loading patterns in the pattern and structure matrices were examined. When items were deleted, close approximations to simple structure emerged that showed strong cross-loadings among the subscales. The extraction of seven components for a reduced subset of 21 items yielded a clear subscale structure for the PMP-B and accounted for 72% of the total variance of those items. The results are presented in the pattern matrix shown in Table 17.6.

A strong approximation to simple structure is evident in Table 17.6, with only one item, Item 57, showing a minor cross-loading on another subscale. The structure matrix showed the same clear pattern of primary loadings of items while also reflecting correlations among the subscales. The correlation matrix among the subscales for the combined group of 1,212 respondents is presented in Table 17.7, demonstrating clear discrimination among the subscales. Also shown in Table 17.7, the internal consistency (Cronbach's alpha) of the subscales is excellent for three-item subscales, with only one subscale yielding a reliability coefficient below .70. The corresponding alpha for the 21-item PMP-B total score is .84. Test-retest reliability for a five-week period showed stability for each subscale (see Table 17.7) and for the total score of the PMP-B,  $r(123) = .73$ . The correlation between the PMP and PMP-B total scores was .95; the correlations between corresponding subscales ranged from .84 to .95.

A PCA was conducted on a combined group (Samples 1, 4, and 8 from Table 17.2) to check for the stability of the component structure of the PMP-B. This combined sample includes high school students in Canada and university students in Australia, including a large proportion of immigrants from diverse backgrounds. The results demonstrated clear stability of the subscale structure for the PMP-B.

**Concluding Discussion**

Past studies on theory-based dimensions of the meaning in life (Reker & Peacock, 1981; Reker & Wong, 1988) have been limited to psychologists' own theoretical ideas. Studies on respondents' self-reports of what makes life meaningful (see Ebersole, 1998) are also limited by the constraints of the

**TABLE 17.6** Pattern Matrix of the PMP-B

Item No.	Component						
	Religion	Intimacy	Fair Treatment	Relationship	Self-Transcendence	Achievement	Self-Acceptance
33	.919						
52	.911						
20	.906						
43		.923					
38		.833					
11		.762					
56			.845				
35			.830				
55			.778				
28				.859			
42				.824			
27				.780			
15					.887		
2					.824		
49					.743		
21						.910	
24						.755	
47						.668	
46							.876
36							.818
57						.334	.554

All loadings less than .30 have been omitted.

**TABLE 17.7** Correlations and Reliabilities of the Subscales of the Personal Meaning Profile—Brief Form

Subscale	1	2	3	4	5	6	7
1. Achievement	—	.39	.07	.50	.29	.26	.35
2. Relationship		—	.14	.39	.28	.34	.43
3. Religion			—	.29	.18	.11	.13
4. Self-transcendence				—	.26	.26	.30
5. Self-acceptance					—	.17	.36
6. Intimacy						—	.27
7. Fair treatment							—
Cronbach's alpha	.75	.75	.92	.76	.66	.80	.78
Test-retest	.63	.78	.86	.73	.62	.78	.64
Correlations between PMP and PMP-B subscales	.84	.89	.93	.87	.87	.95	.92

Subscale intercorrelations are all statistically significant,  $p < .001$ ,  $N = 1,212$ . Test-retest reliability coefficients were obtained over a five-week period from first-year university students in a variety of courses (Sample 3 in Table 17.2,  $n = 125$ ).

respondents' present life circumstances. The implicit theories approach is able to minimize the aforementioned limitations and provides a rich and comprehensive picture of what makes life worth living.

The major factors of the PMP, such as Religion, Relationship, Achievement, and Self-transcendence, have been identified by prior research (e.g., Ebersole, 1998; Reker & Wong, 1988). Self-acceptance has been identified by Ryff and Singer (1998) as one of the components of psychological well-being. Wong's prior research identified Self-acceptance as one of the two components of existential coping (Wong, 1993; Wong, Reker, & Peacock, 2006). Self-acceptance is a necessary attitude to soften the blow of negative events and avoid unnecessary frustration when achievement striving fails to materialize because of one's deficiency. One may conclude that accepting what one cannot change is a sign of wisdom necessary for meaningful living. Another interesting finding is that Fair treatment has emerged as an important source of personal meaning. This finding highlights society's responsibility to promote justice, fairness, and equal opportunities. It seems warranted to conclude that it would be very difficult for individuals to enjoy a fully meaningful life in an unjust, discriminating, and oppressive society.

Everybody is seeking something to make life better. The key is to know what people are after. Their pursuit may lead to disillusion; or worse still, they may be driven by fatal desires. Therefore, for both practical and theoretical purposes, we need to know whether people are striving for something that indeed makes life worth living. The main advantage of the PMP is that it identifies the sources of meaning seeking, which have been scientifically linked to well-being.

Another advantage of the PMP is that it provides at least four different indices of meaning seeking: magnitude, breadth, depth, and balance. The total PMP score is an index of magnitude—the greater the score, the more successful a person is in approximating the ideally meaningful life. The number of sources involved indicates the breadth of meaning seeking; thus, individuals who seek meaning from all the sources of the PMP have a broader basis than those who derive meaning from only one or two of these sources. The relative difference in factor scores reflects balance. For example, if individuals score extremely high in Achievement but very low in all other factors, they lack balance in meaning seeking. The depth factor measures the level of meaning to which one moves from the basic level of self-seeking to higher levels of values that transcend the personal self (Reker, Peacock, & Wong, 1987).

In sum, the seven sources of meaning of the PMP, in addition to the initial Fulfillment/Positive affect factor, cover all the components of well-being and happiness (Ryff & Singer, 1998; Seligman, 2011). Furthermore, these sources of meaning can also be understood in terms of the PURE structure and functions of meaning (Wong, 2010). Therefore, PMP-B can be employed for research and clinical purposes if one is interested in discovering the key components of meaning systems and their psychological correlates in different populations. For example, meaning in life has recently become a central theme in palliative care (Breitbart & Heller, 2003), and the results of the PMP-B can be effectively explored to enhance the appropriate areas of patients' personal meaning and well-being.

### Appendix: Personal Meaning Profile B

This 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. The 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*

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

**References**

Adler, A. (1958). *What life should mean to you*. New York, NY: Capricorn Books. (Originally published 1931)

Antonovsky, A. (1983). The sense of coherence: Development of a research instrument. *Newsletter and Research Report of the W. S. Schwartz Research Center for Behavioral Medicine*, 1, 11–22.

Battista, J., & Almond, R. (1973). The development of meaning in life. *Psychiatry*, 36, 409–427.

- Baumeister, R. F. (1991). *Meanings of life*. New York, NY: Guilford Press.
- Bellin, Z. (in press). The quest to capture personal meaning in psychology. *International Journal of Existential Psychology and Psychotherapy*.
- Breitbart, W., & Heller, K. (2003). Reframing hope: Meaning-centered care for patients near the end of life. *Journal of Palliative Medicine*, 6, 979–988.
- Burckhardt, C. S., Anderson, K. L., Archenholtz, B., & Hagg, O. (2003). The Flanagan Quality of Life Scale: Evidence of construct validity. *Health and Quality of Life Outcomes*, 1(53). doi:10.1186/1477-7525-1-59
- Corner, T. L. (2003). *Personal meaning and youth substance use* (Unpublished doctoral dissertation). Macquarie University, Sydney, Australia.
- Crosby, J. M. (2000). *Mystical experiences, depression, well-being, and meaning* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Crumbaugh, J. C. (1977). The Seeking of Noetic Goals Test (SONG): A complementary scale to the Purpose in Life Test (PIL). *Journal of Clinical Psychology*, 33, 900–907.
- Crumbaugh, J. C., & Maholick, L. T. (1964). An experimental study on existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200–201.
- Crumbaugh, J. C., & Maholick, L. T. (1969). *Manual of instructions for the Purpose in Life Test*. Munster, IN: Psychometric Affiliates.
- Daum, T. L., & Wiebe, G. (2003). *Locus of control, personal meaning, and self-concept before and after an academic critical incident* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- DeLazzari, S. A. (2000). *Emotional intelligence, meaning, and psychological well being: A comparison between early and late adolescence* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Derogatis, L. R., & Melisaratos, N. (1983). The brief symptom inventory: An introductory report. *Psychological Medicine*, 13, 595–605.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality and Social Psychology*, 47, 1105–1117.
- Dittmann-Kohli, F. (1991, July). *Dimensions of change in personal meaning in young and elderly adults*. Paper presented at the 11th Biennial Meeting of the International Society for the Study of Behavioural Development (ISSBD).
- Du Buisson-Narsai, I. (2009). *The relationship between personal meaning, sense of coherence and organisational commitment* (Unpublished doctoral dissertation). University of South Africa, Pretoria, South Africa.
- Dyck, M. J. (1987). Assessing logotherapeutic constructs: Conceptual and psychometric status of the Purpose in Life and Seeking of Noetic Goals tests. *Clinical Psychology Review*, 7, 439–447.
- Ebersole, P. (1998). Types and depth of written life meaning. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical application* (pp. 237–259). Mahwah, NJ: Erlbaum.
- Edwards, M. J. (2007). *The dimensionality and construct valid measurement of life meaning* (Unpublished doctoral dissertation). Queen's University, Kingston, ON, Canada.
- Emmons, R. A. (2005). Striving for the sacred: Personal meaning, life meaning, and religion. *Journal of Social Issues*, 61(4), 731–745.
- Erikson, E. H. (1963). *Childhood and society*. New York, NY: Norton.
- Fegg, M. J., Kramer, M., L'hoste, S., & Borasio, G. D. (2008). The Schedule for Meaning in Life Evaluation (SMiLE): Validation of a new instrument for meaning-in-life research. *Journal of Pain and Symptom Management*, 35(4), 356–364.



- Frankl, V. E. (1985). *Man's search for meaning*. New York, NY: Pocket Books. (Originally published 1963)
- Gall, T., Basque, V., Damasceno-Scott, M., & Vardy, G. (2007). Spirituality and the current adjustment of adult survivors of childhood sexual abuse. *Journal for the Scientific Study of Religion*, 46(1), 101–117.
- Gallant, C. M. (2001). *Existential expeditions: Religious orientations and personal meaning* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Giesbrecht, H. A. (1997). *Meaning as a predictor of work stress and job satisfaction* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Gingras, D. T. (2009). *Living well in spite of chronic pain: Meaning in life and quality of life in a sample of chronic pain sufferers* (Unpublished honor's thesis). Tyndale University College, Toronto, ON, Canada.
- Haag, A. M. (2000). *The contribution of existential coping to stress management* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Hope, N. L. (2006). *When caring hurts: The significance of personal meaning for well-being in the presence of secondary traumatic stress* (master's thesis). Trinity Western University, Langley, BC, Canada.
- Jaarsma, T. A., Pool, G., Ranchor, A. V., & Sanderman, R. (2007). The concept and measurement of meaning in life in Dutch cancer patients. *Psycho-Oncology*, 16, 241–248.
- James, W. (1902). *The varieties of religious experience: A study of human nature*. London, England: Longmans, Green.
- Jappy, A. J. (2001). *Christian vs. eclectic spiritual intervention in alcohol and drug addiction recovery* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Jung, C. G. (1933). *Modern man in search of a soul* (W. S. Dell & C. F. Baynes, Trans.). San Diego, CA: Harcourt Brace Jovanovich.
- Jung, C. G. (1971). The stages of life. In R. F. C. Hill (Ed. and Trans.), *The portable Jung*. New York, NY: Viking.
- Kernes, J. L., & Kinnier, R. T. (2008). Meaning in psychologists' personal and professional lives. *Journal of Humanistic Psychology*, 48(2), 196–220.
- Klaassen, D. W., & McDonald, M. J. (2002). Quest and identity development: Re-examining pathways for existential search. *International Journal for the Psychology of Religion*, 12, 189–200.
- Korotkov, D. (1998). The sense of coherence: Making sense out of chaos. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical application* (pp. 237–259). Mahwah, NJ: Erlbaum.
- Lang, J. M. (1994). *Does religiosity provide a buffer against uncontrollable life stress?* (Unpublished honor's thesis). Trent University, Peterborough, ON, Canada.
- Lao Tzu. (1913). *Tao Te Ching "The Canon of Reason and Virtue"* (D. T. Suzuki & Paul Carus, Trans.). Retrieved from <http://www.yellowbridge.com/general/invoke.php?u=http://www.sacred-texts.com/tao/crv/>
- Leung, M., Vroon, E. J., & Steinfors, T. (2003). *Life Attitudes Scale: Development and validation of a measurement of the construct of tragic optimism* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Maddi, S. R., & Khoshaba, D. M. (2001). *Personal Views Survey III-R: Internet instruction manual*. Newport Beach, CA: Hardiness Institute.
- Markow, F., & Klenke, K. (2005). The effects of personal meaning and calling on organizational commitment: An empirical investigation of spiritual leadership. *International Journal of Organizational Analysis*, 13, 8–27.

- Mascaro, N. (2006). *Longitudinal analysis of the relationship of existential meaning with depression and hope* (Doctoral dissertation). Texas A&M University, College Station, Texas.
- Mascaro, N., & Rosen, D. H. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of Personality, 73*(4), 985–1014.
- Mascaro, N., & Rosen, D. H. (2008). Assessment of existential meaning and its longitudinal relations with depressive symptoms. *Journal of Social and Clinical Psychology, 27*(6), 576–599.
- Mascaro, N., Rosen, D. H., & Morey, L. C. (2004). The development, construct validity, and clinical utility of the Spiritual Meaning Scale. *Personality and Individual Differences, 37*(4), 845–860.
- Maslow, A. (1962). *Toward a psychology of being*. New York, NY: Van Nostrand.
- May, R. (1958). The origins and significance of the existential movement in psychology. In R. May, E. Angel, & H. F. Ellenberger (Eds.), *Existence* (pp. 3–36). Northvale, NJ: Jason Aronson.
- McConnell, K. J. (1998). *The role of meaning and ministry in job satisfaction* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Morgan, J., & Farsides, T. (2009). Measuring meaning in life. *Journal of Happiness Studies, 10*(2), 197–214.
- Pan, J., Wong, D. F. K., Chan, C. L. W., & Joubert, L. (2008a). Meaning of life as a protective factor of positive affect in acculturation: A resilience framework and a cross-cultural comparison. *International Journal of Intercultural Relations, 32*(6), 505–514.
- Pan, J., Wong, D. F. K., Joubert, L., & Chan, C. L. W. (2007). Acculturative stressor and meaning of life as predictors of negative affect in acculturation: A cross-cultural comparative study between Chinese international students in Australia and Hong Kong. *Australian and New Zealand Journal of Psychiatry, 41*(9), 740–750.
- Pan, J., Wong, D. F. K., Joubert, L., & Chan, C. L. W. (2008b). The protective function of meaning of life on life satisfaction among Chinese students in Australia and Hong Kong: A cross-cultural comparative study. *Journal of American College Health, 57*(2), 221–231.
- Rathi, N., & Rastogi, R. (2007). Meaning in life and psychological well-being in pre-adolescents and adolescents. *Journal of the Indian Academy of Applied Psychology, 33*(1), 31–38.
- Reker, G. T., & Peacock, E. J. (1981). The Life Attitude Profile (LAP): A multidimensional instrument for assessing attitudes toward life. *Canadian Journal of Behavioural Science, 13*, 64–73.
- Reker, G. T., Peacock, E. J., & Wong, P. T. (1987). Meaning and purpose in life and well-being: A life span perspective. *Journal of Gerontology, 42*, 44–49.
- Reker, G. T., & Wong, P. T. P. (1984). Psychological and physical well-being in the elderly: The Perceived Well-Being Scale (PWB). *Canadian Journal on Aging, 3*, 23–32.
- Reker, G. T., & Wong, P. T. P. (1988). Aging as an individual process: Toward a theory of personal meaning. In J. E. Birren & V. L. Bengtson (Eds.), *Emergent theories of aging* (pp. 214–246). New York, NY: Springer.
- Rempel, E. J. (April, 2005). Concept of God and personal meaning: Investigating the perspective of older adults. *Proceedings of the National Conference on Undergraduate Research (NCUR), 2005*. Washington and Lee University, Virginia Military Institute, Lexington, Virginia. Retrieved from [http://www.newtonchannel.com/academics/undergrad\\_research/files/63/Elizabeth\\_Rempel2005.pdf](http://www.newtonchannel.com/academics/undergrad_research/files/63/Elizabeth_Rempel2005.pdf)

- Robertson, C. R. (1997). *The role of meaning, purpose in life and spiritual well being in the process of addiction recovery & treatment* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Rogers, C. R. (1980). *A way of being*. New York, NY: Houghton Mifflin.
- Ryff, C. D. (1989). Scales of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069–1081.
- Ryff, C. D., & Singer, B. (1998). The role of purpose in life and personal growth in positive human health. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 237–259). Mahwah, NJ: Erlbaum.
- Scheier, M. F., Carver, C. S., & Bridges, M. W. (1994). Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem): A re-evaluation of the Life Orientation Test. *Journal of Personality and Social Psychology*, 67, 1063–1078.
- Schnell, T. (2009). The Sources of Meaning and Meaning in Life Questionnaire (SoMe): Relations to demographics and well-being. *Journal of Positive Psychology*, 4(6), 483–499.
- Schnell, T. (2010). Existential indifference: Another quality of meaning in life. *Journal of Humanistic Psychology*, 50(3), 351–373.
- Schnell, T., & Becker, P. (2006). Personality and meaning in life. *Personality and Individual Differences*, 41(1), 117–129.
- Seligman, M. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Free Press.
- Simms, S. M. (2005). *Making lemonade out of life's lemons: Factors of mental health and well-being* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Steger, M. F., Frazier, P., Oishi, S., & Kaler, M. (2006). The Meaning in Life Questionnaire: Assessing the presence of and search for meaning in life. *Journal of Counseling Psychology*, 53, 30–93.
- Stolte, M. (2006). Assets and barriers to finding employment. *Canadian Journal of Counselling*, 40(2), 96–109.
- Thurnher, M. (1975). Continuities and discontinuities in value orientation. In M. F. Lowenthal, M. Thurnher, & D. Chiriboga (Eds.), *Four stages of life* (pp. 176–200). San Francisco, CA: Jossey-Bass.
- Weibe, R. L. (2001). *The influence of personal meaning on vicarious traumatization in therapists* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Weiler, P. D. (2001). *Aging with success: Theory of personal meaning as a model of understanding death attitudes* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Westerhof, G. J., Bohlmeijer, E., & Valenkamp, M. W. (2004). In search of meaning: A reminiscence program for older persons. *Educational Gerontology*, 30(9), 751–766.
- Wilk, D. A. (2000). *An exploratory study of meaning and occupational stress experienced by clergy and managers* (Unpublished master's thesis). Trinity Western University, Langley, BC, Canada.
- Wong, P. T. P. (1989). Personal meaning and successful aging. *Canadian Psychology*, 30(3), 516–525.
- Wong, P. T. P. (1993). Effective management of life stress: The resource-congruence model. *Stress Medicine*, 9, 51–60.
- Wong, P. T. P. (1998). Implicit theories of meaningful life and the development of the Personal Meaning Profile (PMP). In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 111–140). Mahwah, NJ: Erlbaum.

- Wong, P. T. P. (2010). Meaning therapy: An integrative and positive existential psychotherapy. *Journal of Contemporary Psychotherapy*, 40(2), 85–93.
- Wong, P. T. P., & Fry, P. S. (Eds.). (1998). *The human quest for meaning: A handbook of psychological research and clinical applications*. Mahwah, NJ: Erlbaum.
- Wong, P. T. P., Reker, G. T., & Peacock, E. (2006). The resource-congruence model of coping and the development of the Coping Schemas Inventory. In P. T. P. Wong & L. C. J. Wong (Eds.), *Handbook of multicultural perspectives on stress and coping* (pp. 223–283). New York, NY: Springer.
- Yalom, I. D. (1980). *Existential psychotherapy*. New York, NY: Basic Books.