

Affective and motivational predictors of perceived meaning in life among college students

Üniversite öğrencilerinde algılanan yaşamda anlamın duyuşsal ve motivasyonel yordayıcıları

Luz M. Garcini¹, Mary Short², & William D. Norwood²

Abstract

Meaning in life has been associated with well-being, optimal functioning, and positive psychotherapeutic outcomes. Meaning is best understood in terms of relationships between its three different structural components: cognitive, affective, and motivational. Using Reker and Wong's (1988) model as theoretical background, the present study investigated the associations between trait affect, values structure, and sense of meaning. Participants included 383 college students from diverse ethnic and religious backgrounds. Multiple regression analysis explored the associations between affect, value structure and sense of meaning. Results indicated affect and value structure were significant predictors of meaning, with positive affect being the strongest predictor. Results are consistent with third-wave cognitive-behavioral therapies (e.g., Acceptance and Commitment Therapy) and their emphasis on positive emotional experiences and values as important to the development of meaning and well-being.

Keywords: Meaning in life, values, trait affect, meaning process, meaningfulness

Özet

Yaşamın anlamı, iyi oluş, optimal işlevsellik ve pozitif psikoterapötik sonuçlarla ilişkilendirilmiştir. Anlam, bilişsel, duyuşsal ve motivasyonel olmak üzere üç farklı yapısal bileşen arasında en iyi ilişkiler açısından anlaşılır. Teorik arka plan olarak Reker ve Wong'un (1988) modelinin kullanıldığı bu çalışmada, karakter etkisi, değerler yapısı ve anlam algısı arasındaki ilişkiler incelenmiştir. Katılımcıları, farklı etnik ve dinsel gruplardan gelen 383 üniversite öğrencisini oluşturmaktadır. Çalışmada çoklu regresyon analizi ile, duygu, değer yapısı ve anlam algısı arasındaki ilişkileri araştırılmıştır. Araştırma bulguları, duygu ve değer yapısının anlamın önemli yordayıcıları olduğunu ve olumlu duygunun en güçlü yordayıcı olduğunu ortaya koymuştur. Sonuçlar, üçüncü dalga bilişsel davranış terapileriyle (Kabullenme ve Gerçekleştirme Terapisi) tutarlı olup, anlam ve iyi oluşun gelişimi açısından önemli olduğundan olumlu duyuşsal deneyimler ve değerler vurgulanmıştır.

Anahtar Kelimeler: Yaşamda anlam, değerler, karakter etkisi, anlam süreci, anlamlılık

¹ SDSU/UCSD Joint Doctoral Program in Clinical Psychology, San Diego, CA

² University of Houston- Clear Lake, shortmb@uhcl.edu

Received: 11.02.2013 Accepted: 02.08.2013

© The Journal of Happiness & Well-Being (JHW)

Introduction

The meaning construct has a long history in philosophy and phenomenological psychology as a relevant and necessary life component aimed at answering questions about existence, purpose and life itself (Frankl, 1962, 2006; Maddi, 1967; Maslow, 1968; Yalom, 1980). For the past two decades, the meaning construct has become increasingly relevant in empirical research particularly in terms of its association to well-being, optimal functioning, and positive psychotherapy outcomes (Hong, 2006; Reker, Peacock, & Wong, 1987; Ryff & Singer, 1998; Wong, 2012; Zika & Chamberlain, 1992).

Using this meaning construct, there currently has been widespread research that supports the association between meaning and different mental health constructs such as depression, anxiety, hope, and life satisfaction (Kleifaras & Psarra, 2012; Mascaro & Rosen, 2008; Reker, et. al., 1987; Ryff, 1989; Steger & Frazier, 2005). In addition, meaning has been found to be a predictor of well-being (Ju, Shin, Kim, Hyun, & Park, 2013; Wong, 1993; Zika & Chamberlain, 1987), a moderator to the effects of stress (Boyarz & Lightsey, 2012; Fife, 2005; Krause, 2007), a factor in the prevention of illness (Shek, 1992), a factor in coping with trauma (Davis, Wortman, Lehman & Silver, 2000; Emmonds & Hooker, 1992; Janoff-Bulman & Berg, 1998; Ulmer, Range & Smith, 1991), and a contributor to promote health behavior (Brassai, Piko, & Steger, 2011; Philips, Moc, Bopp, Dudgeon, & Hand, 2006; Westling, Garcia, & Mann, 2007). In contrast, deficits in meaning have been associated with psychopathology including neurosis, depression, suicidal behavior, drug abuse, and alcohol dependence (Harlow, Newcomb & Bentler, 1986; Maddi, 1967; Nicholson et al., 1994; Phillips, 1980; Ruffin, 1984; Vehling, Lehmann, Oechsle, Bokemeyer, Krull, Koch, et al., 2010; Waisberg & Porter, 1994).

Additionally, meaning is associated with positive psychotherapeutic outcomes in that it has been found to be strongly related to adjustment, successful coping with chronic illness (Lukas, 1998; Reig-Ferrer, Arenas, Ferrer-Cascales, Fernandez-Pascual, Albaladejo-Blazquez, Gil, et al., 2012), and enhanced sense of responsibility (Wong, 2012). In a study with distressed patients receiving standardized, non - meaning centered psychotherapy, Debats (1996) found that individuals with higher levels of meaning profited from psychotherapy significantly more than those with lower meaning levels. Results showed that those patients with higher initial meaning levels experienced greater symptom relief, more positive emotions, greater degree of self-esteem, and a reduction in psychological distress. Given that meaning is a contributor to well-being and positive psychotherapeutic outcome, empirical research to identify affective and motivational factors that may enhance a sense of meaning is necessary.

With regard to meaning, limited research has focused on identifying the conditions associated with an individual's perceptions that life is meaningful. Meaning is an abstract and complex construct that is hard to define; therefore, there is a lack of consistent, adequate and precise definitions of meaning. In addition, the number of valid and reliable measures to assess meaning is limited. More specifically, measures differ significantly on the aspects of meaning being assessed depending on different theoretical orientations. However, a recent trend is to define meaning as multidimensional (Baumaister, 1991; Reker & Wong, 1988; Thompson & Janigian, 1988) consisting of several components that are in constant interaction with each other (Reker & Wong, 1988).

Theoretical Framework: Reker and Wong Model of Meaning

Reker and Wong (1988) proposed a model that approaches meaning as a multidimensional construct with three mutually related components: a cognitive, a motivational and an affective component. In this model, the *cognitive component* of meaning refers to perceptions of life as meaningful along two

dimensions: sense of purpose and sense of coherence. A perception of purpose implies that an individual has life goals, as well as a mission and direction in life, which makes life worth living. A sense of coherence involves having an integrated and consistent understanding of self, others and life. In other words, while purpose provides a reason for living, coherence gives life consistency and order. When in combination, both of these constructs provide insight as to how individuals perceive their existence in terms of life mission and logic.

The *affective component* of meaning refers to feelings of satisfaction and fulfillment with one's life (Reker & Wong, 1988). The affective component is distinguished by positive feelings including satisfaction, happiness, and optimism; whereas, a poor affective component is manifested by feelings of dissatisfaction, unhappiness, depression and anxiety (Halama, 2005).

Finally, the *motivational component* of meaning refers to sources from which individuals draw meaning in life (e.g., values, goals) (Reker & Wong, 1988). More specifically, it is having an adequate number of important values that are used as guiding principles to motivate behavior. A characteristic of a developed motivational component includes having a well-structured value system; whereas an underdeveloped motivational component means having a limited number of meaningful values (Halama, 2002). Reker and Wong (1988) defined values as guides for living that are determined by one's needs, beliefs and culture. Values dictate the goals one is to pursue and how to live one's life (Hayes & Smith, 2005; Reker, 2000), and they may be studied in terms of density, breadth and/or content. Studies have found that regardless of their content or breadth, the overall density of value systems may be a better indicator of a well-structured value system (Debats, 2000). According to Reker (1996), density of values refers to having a large and diverse number of important values at a particular point in time. It is possible that due to the holistic evaluation of an individual's value system, density of values may provide insight into some of the motivational factors that enhance sense of meaning.

Reker and Wong's (1988) model further suggested that meaning is experienced as a result of mutual interactions between its three components. Although the three components interact and provide feedback to each other, the cognitive component is emphasized as most important, because it facilitates the integration and processing of information that is paramount to the understanding and integration of human experience (Bering, 2003). From this perspective, it seems possible that an enhanced sense of meaning may result from the processing and integration of certain affective experiences and motivational cues.

Frederickson (2002) investigated the association between affect and perceptions of meaning and suggested that perceiving life as meaningful influences how one feels, which influences how one perceives life. Extensive research has provided support to the cognitive enhancing effects of affect (Fredrickson, 1998; Frederickson, 2006; Isen, 1999). Positive affect has been found to facilitate creative problem solving (Isen, 1999), increase cognitive flexibility, facilitate the processing of new information (Fredrickson, 1998), foster attention (Frederickson, 2006), and facilitate global rather than local focus (Fredrickson & Branigan, 2004; Gasper & Clore, 2002; Kimchi & Palmer, 1982). From this perspective, if positive affect helps people think broadly, then it also may help broaden a person's perspectives to better appreciate how different experiences give life purpose and coherence, which makes life meaningful. On the other hand, research has shown that negative emotions contribute to the narrowing of attention and analytical focus (Clore, 1994). Therefore, it may be possible that individuals experiencing a high degree of negative emotions (e.g., distress, fear) may have difficulty shifting their attention away from their mood and into other stimuli such as values or goals that could provide them with purpose, direction, and meaning. Prior research supports the association between

meaning and positive affect (Bower et al., 2005; Hicks, & King, 2007; King, Hicks, Krull & Del-Gaiso, 2006), but little is known about the role of negative emotions on meaning-making.

Furthermore, in terms of the association between motivational cues (value systems) and perceptions of meaning, motivated behavior is driven by cognitive representations of desired states aimed at satisfying particular needs (Emmons, 1997). In other words, behavior is motivated and guided by an individual's perception of what is valuable and rewarding. From this perspective, it seems possible to suggest that value systems may provide cognitive frameworks to help identify, organize and prioritize that which is valuable and desirable, which then provides a guide to direct and/or motivate behavior that may be perceived as purposeful, coherent and meaningful.

Finally, the association between affective experiences and motivational cues (value systems) is important. Numerous theories have suggested that positive affect facilitates approach behavior (Watson, Wiese, Vaidya, & Tellegen, 1999) and continued action (Carver & Scheier, 1990; Clore, 1994). In terms of meaning, these theories suggest it is possible that affect, particularly positive emotions, may prompt individuals to engage with their environment in order to pursue meaningful values and attain significant goals (Carver & Schier, 1990, 1998; Koester, 2008; Moors & De Hower, 2001). Moreover, Carver and Scheier (1990, 1998) have suggested that affect serves as feedback about a person's progress in valued areas of life. That is, as individuals move towards the achievement of meaningful values and goals, it is possible that they will experience more lasting positive emotions. On the other hand, more negative emotions would be experienced when departing from one's values and goals.

Empirical research to better understand specific affective experiences and motivational cues associated with sense of meaning is scant. This may be due to the challenges involved in the empirical study of meaning (e.g., inconsistencies in defining the construct, lack of adequate measures), as well as the fact that the focus has been on studying its association to well-being rather than factors involved in meaning-making. Research to help identify specific affective and motivational factors associated with an enhanced sense of meaning would lead to refinements in the development of meaning-related assessments, as well as the improvement of effective interventions to enhance meaning and purpose in life (Auhagen, 2000). Further, it is also important to explore whether meaning is experienced similarly across ethnic groups. Frankl (2006) suggested that the experience of meaning is a universal process across ethnic and cultural divides. However, there is limited research exploring whether or not this is a universal process. Therefore, research exploring ethnic differences in terms of sense of meaning is needed.

The present study used Reker and Wong's (1988) multidimensional model as theoretical background to investigate the association between the variables of meaning, including affective component (trait affect), motivational component (values structure) and cognitive component (sense of meaning), including the ability of trait affect and values structure to predict sense of meaning. The present study also aimed to explore the universality of meaning, which was examined by conducting a preliminary exploration of perceived meaning across ethnic groups, gender and religious affiliations.

Method

Participants

Participants included 487 undergraduate college students enrolled at a large, metropolitan public university in the south. Participants were recruited via online, as well as in-person from university classes. Due to technical problems with the secure online database used to collect data, 104 participants had more than 50% data missing. These participants were excluded from participation, and

383 participants were retained and included in this study. Table 1 summarizes demographic characteristics of this sample.

Table 1. *Study participant characteristics (N = 383)*

Age (<i>M, SD</i>)	23.87 (4.2)
Gender	<i>N</i> %
% Female	243 (63.4)
% Male	140 (36.6)
Ethnicity	
% Caucasian	140 (36.6)
% Asian	110 (28.7)
% Hispanic	64 (16.7)
% African American	53 (13.8)
% Other	16 (4.2)
Religion	
% Christian	230 (60.1%)
% Non-Religious or Other	88 (23.0%)
% Islamic	28 (7.3%)
% Buddhist	21 (5.5%)
% Jewish	9 (2.3%)
% Hindu	7 (1.8%)
Residency (<i>N, %</i>)	
% Lived in US since birth	262 (68.3%)
% Lived in US for more than 10 yrs	75 (19.7%)
% Lived in US between 1 and 10 yrs	46 (12.0%)

Procedure

The present study consisted of a one-time online self-report assessment. Data were collected using a secured online database. To access the study, participants were given personalized links and ID numbers assigning them to one of three randomized conditions containing different orders of the measures used. Upon accessing the link, participants were asked to check a box saying they have read and understand the informed consent. Once they agreed to participate, they completed the questionnaire. If they did not consent to participate, the study ended. As compensation for participation, participants received course credit.

Measures

The participants were asked about basic demographic information, including age, gender, ethnicity, language, college year and department, grade point average, marital status, and religious preference. As mentioned previously, three components of meaning were measured. These include affective component (trait affect), motivational component (value structure) and cognitive component (sense of meaning).

Cognitive Component: Sense of Meaning.

The Personal Meaning Index (PMI; Reker, 1996) is one of the two composite scales of the Life Attitude Profile Revised (LAP-R), a multidimensional questionnaire to assess various meaning-related constructs. The PMI is comprised of 16 items (8 assess purpose, 8 assess coherence), and participants rate responses on a 7-point Likert scale ranging from 1 (*strongly agree*) to 7 (*strongly disagree*). Test-retest reliability is .90, and the internal consistency coefficients for the PMI range from .89 to .91 across age groups and gender. In the current study, the Cronbach alpha coefficient was .87. The PMI demonstrates adequate validity (Reker, 2000).

Motivational Component: Values Structure.

The Sources of Meaning Profile-Revised (SOMP-R; Reker, 1992) is a questionnaire to assess values in terms of density, breadth and content. It contains a list of 17 value categories that are rated on a 7-point Likert scale from 1 (*not at all meaningful*) to 7 (*extremely meaningful*). For this study, an overall score was used to assess a more global concept of meaning. This is done by summing the ratings across items. Internal consistency coefficients range from .71 to .80. In this study, the Cronbach alpha coefficient was .83.

Affective Component: Trait Affect.

The Positive and Negative Affect Scale-Trait (PANAS; Watson, Clark & Tellegen, 1988) is a 20-item questionnaire to assess trait affect (10 positive affectivity (PA) items and 10 negative affectivity (NA) items). Items are rated using a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*extremely*). Two scores can be obtained: one for PA and one for NA. Internal consistency coefficients range from .84 to .90. In the current study, the Cronbach alpha coefficient was .89. Test-retest reliabilities range from .39 to .71, with the higher coefficients reported for the longer durations.

Results

Analyses

Preliminary analyses indicated that assumptions of normality, homoscedasticity and multicollinearity were met. Standard multiple regression was used to examine the associations between trait affect, values structure, and sense of meaning, after controlling for gender, ethnicity, and religious affiliations. Table 2 displays the correlations between the study variables.

Table 2 .Correlations (*r*) among study variables

Variables	PMI (DV)	1	2	3	4	5
1. Ethnicity	.09					
2. Gender	-.07	-.06				
3. Religious affiliation	-.16***	.01	-.13*			
4. Positive trait affect	.52***	.12*	-.07	-.08		

5. Negative trait affect	-.29***	-.09*	.02	.03	-.37***	
6. Values structure	.35***	.12*	.10*	-.05	.43***	-.10*

PMI= Perceived Meaning Index; DV=Dependent variable

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Results showed an increased sense of meaning was associated with higher levels of positive trait emotions (e.g., being enthusiastic, determined, interested, proud, alert) ($r = .51, p < .001$) and lower levels of negative trait emotions (e.g., being afraid, nervous, hostile, distressed, ashamed) ($r = -.29, p < .001$). Further, results also showed that having an increased sense of meaning was associated with having a large number of diverse and meaningful values ($r = .35, p < .001$). Results also showed that having a large number of diverse and meaningful values was associated with experiencing increased lasting positive emotions ($r = .42, p < .001$), but not necessarily lower levels of lasting negative emotions ($r = .10, p < .05$).

With regard to the regression model, gender, ethnicity, and religious affiliations were entered in step 1 as covariates, with trait affect and values structure entered at step 2 to assess for their independent association with sense of meaning. Table 3 summarizes results for the sequential regression model.

Table 3. Sequential multiple regression model (Step 2) of trait affect and values structure on perceived meaning (PMI) after controlling for gender, ethnicity and religious affiliation.

	B	95% CI	Adjusted R ²
Correlates			Step 1 = 0.04
Ethnicity	0.09	[-0.14, 2.34]	
Gender	-0.09	[-5.07, 0.38]	
Religious Affiliation	-0.18	[-7.40, -2.05]***	
Meaning Components			
Positive Trait Affect	0.38	[0.53, 0.92]***	
Negative Trait Affect	-0.13	[-0.42, -0.07]**	
Values structure	3.71	[0.08, 0.27]***	

PMI= Perceived Meaning Index; DV=Dependent variable

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

In the regression model, gender, ethnicity and religious affiliation entered at step 1 resulted in $R^2 = .04, F(3, 379) = 5.66, p = .001$. Adding positive trait affect, negative trait affect and values system at step 2 significantly increased the explained variance, with almost a third of the variability in sense of meaning being predicted by having the ability to experience lasting positive and negative emotions, as well as by having a well-structured value system after controlling for gender, ethnicity and religious affiliation ($R^2 = .32, F(3, 376) = 51.12, p < .001$).

Total variability attributed to significant and unique sources was 15.4%, with positive trait affect uniquely explaining 9.8% of the variance in sense of meaning ($\beta = .30, p < .001$), followed by values structure which explained 2.5% of the variance ($\beta = 3.71, p < .001$), negative affect which explained 1.4% of the variance ($\beta = -.13, p = .005$), and religious affiliation which explained 1.7% of the variance ($\beta = -.18, p = .002$). Moreover, the size and direction of the relationships suggest that an

increased sense of meaning is associated primarily with experiencing lasting positive emotions and a well-developed value system, and to a lesser extent with the experiencing of negative emotions.

Important to note is that in the regression model, there was no significant association of gender and ethnicity with sense of meaning, but that religious affiliation (Christian versus other religions/non-religious) was found to be significantly associated with sense of meaning ($\beta = -.132, p < .01$). Specifically, participants reporting a Christian religious affiliation scored significantly higher in overall sense of meaning as measured by the PMI ($M = 82.8, SD = 12.3$) when compared to those reporting other religious affiliations or no religious affiliation ($M = 78.3, SD = 13.9$) ($t(381) = 3.25, 95\% CI = 1.74, 7.08, p = .001$).

Discussion

The present study hoped to identify specific affective experiences and motivational cues associated with an increased sense of meaning. Results indicated trait affect and values structure were significantly associated with perceptions of life as meaningful, and this relationship was consistent across gender and ethnic groups, but not religious affiliation. Overall, these results emphasize the importance of trait affect and values structure as components of meaning, which do not seem to differ across gender and ethnicity. Nonetheless, the differences found in sense of meaning across religious affiliation groups highlight the need for additional research to better understand variations in sense of meaning among individuals differing in religious preferences.

Several conclusions regarding the associations of trait affect, values structure and sense of meaning are supported by findings in this study. First, the association between trait affect and sense of meaning, regardless of the direction of influence, was found to be significant. This suggests that affect, particularly lasting positive emotion, is an important construct in the meaning making process. The association between positive trait affect and sense of meaning was stronger than that found in previous studies (e.g., Hicks & King, 2007; King et al., 2006). It is possible the stronger association resulted from the assessment of trait affect, as compared to state affect, which has been previously done. By assessing lasting rather than transient emotional experiences, respondents may have provided a global and more direct estimate of their perceived degree of life satisfaction (Carver & Schier, 1990, 1998; Greenberg & Pascual-Leone, 1997) which, according to Reker and Wong (1988), is an adequate cognitive predictor of sense of meaning.

Moreover, results from this study provided supporting evidence to suggest that positive trait emotions play a more important role in the meaning making process than negative emotions. For example, because positive affect has been found to facilitate the broadening of attention, cognition and action (Frederickson, 2001), it is possible that through these cognitive processes, positive affect may help to build personal resources that may make life meaningful. In other words, it is possible that positive emotions facilitate meaning by making one more likely to, (a) be alert towards that which may be valuable or meaningful, (b) feel more driven to pursue valuable goals which may help feel that life has a purpose, and (c) be more capable of integrating information to make sense of one's life which may help one feel that life is coherent. Moreover, although findings from this study support that lasting positive emotions may be more influential in meaning-making than negative emotions, findings from this study do not necessarily support that negative emotions hinder the meaning process. In fact, given the results from this study, future research should focus on studying the aforementioned associations to better understand specific contributions of each component to the meaning making process.

Results on the association between values structure and meaning showed values structure to be positively associated to sense of meaning. Results supported values structure to be a significant predictor of meaning. It is possible that value systems may provide cognitive frameworks to help

identify, organize and prioritize valuable and desirable goals, which provides a guide to direct and/or motivate congruent and purposeful behavior. For example, by endorsing a large and diverse number of important values, individuals could have multiple avenues that help (a) lead the way to achieve that which is valuable, (b) feel as though one has greater life purpose, (c) organize one's actions as being congruent with one's multiple values. Additional studies are needed to better understand how value structure specifically contributes to meaning making.

Results also indicated values structure was not related to negative trait affect. This suggests that positive and negative trait affect may be distinct and independent constructs rather than merely opposite poles of emotional valence. Visual inspection of trait affect items on the PANAS scale and a review of its manual (Watson, Clark & Tellegen, 1988) suggested this may be possible. This assumption also is supported by the findings previously discussed on the more salient role of positive trait emotions in meaning than that of negative trait emotions; however, no extant studies have explored the association between specific positive trait emotions and value systems.

In addition, although results from the present study supported an association between values structure and positive trait affect, results do not suggest a specific direction of influence between these constructs. Perhaps, having a large and diverse number of values helps guide behavior towards that which is meaningful which may make one more likely to experience positive emotions such as feeling attentive, interested, jovial and self-assured.

In addition, positive trait affect was a much stronger predictor of meaning than values structure. Given the strong association of positive emotions to meaning, it is possible that other value constructs (e.g., degree of value accomplishment or value fulfillment), may increase the predictive utility of meaningful values. It is possible that not all values that are identified as meaningful may lead to positive emotions and/or to an increased sense of meaning. Additional research is needed to better understand the contribution of value systems in the development of specific emotions, as well as how these emotions may influence the building of value systems.

Given these results, it is important that future studies explore several aspects of the relationship between value systems, positive trait affect and meaning, including (a) the specific positive trait emotions that may be important to the development of value systems and meaning, (b) the cause and effect relationships between specific positive trait emotions, values and meaning, (c) the mediating processes that facilitate the association between these constructs, (d) the predictive utility of value constructs not assessed in this study in terms of meaning and positive affect (value fulfillment). This information would be valuable to clinicians in that it will help them develop a better understanding of the role of specific positive emotions and value features in the meaning making process.

Limitations

Despite identifying relevant associations between trait affect, value systems, and sense of meaning, this study has several limitations. First, only college students were included so it is possible that the experience of meaning may be different from those at a different developmental stage (e.g., middle age adults, elderly), or those facing less favorable circumstances (e.g., discrimination, extreme poverty, clinical or medical populations or severe/traumatic events). Similar studies with non-college populations must be conducted prior to assessing the generalizability of the findings. Second, given the correlational nature of the findings, cause and effect relationships cannot be made. Third, this study only included an exploratory analysis of specific aspects of the different components of meaning, and it is possible some aspects of meaning may have been excluded, including content of values, fulfillment and value satisfaction, specific content of positive trait emotions. Further, one particular component that may have been limiting is the affective component. As stated previously, life

satisfaction is often associated with affective component of meaning; however, the study examined more direct affect, which may limit our understanding of the how affect and life satisfaction affects meaning. Future studies need to explore the relationships between other meaning-related constructs, as well as their predictive abilities in terms of sense of meaning.

Also, significant differences in sense of meaning were found among participants varying in religious affiliation; however, there was a predominance of Christians in this sample, and this may not accurately reflect true differences in sense of meaning across existing religions. Additional studies with more religiously diverse samples are needed prior to generalizing the findings of this study. Finally, this study relied exclusively on quantitative measures, and it is possible that studies using other assessment methodologies (i.e., qualitative measures) may provide more detailed and comprehensive information regarding the associations between cognitive, motivational and affective constructs involved in the meaning experience.

Conclusion

The findings emphasized the importance of positive trait emotions and well-developed value systems in the meaning process. Opposite to the customary trend in research and clinical practice to focus on psychopathology and negative traits (Csikszentmihalyi & Csikszentmihalyi, 2006), these findings suggest the need to focus on more positive aspects of personality and behavior in order to better understand the meaning process. Similarly, these findings suggest that assisting clients in exploring, reflecting and developing lasting positive emotions (e.g., feeling interested, attentive, confident, inspired) could be a valuable focus of interventions. Findings in this study are important in that they provide support to the recent trend among third-wave cognitive-behavioral therapies to include the assessment and development of positive emotional experiences and value systems, since these are important components that facilitate adjustment and promote well-being (Vowles & McCracken, 2008).

This study was intended to promote interest among researchers and clinicians regarding the empirical study of the different components of meaning, as well as their assessment and inclusion in research and clinical practice. Although the empirical study of meaning has been neglected in psychology, the present study provides evidence as to how the meaning construct may be explored and conceptually defined in order to help better understand the meaning experience. Greater knowledge of how individuals experience meaning may lead to refinements in theories of meaning, the development of meaning-related assessments, and effective clinical techniques and interventions which will make the experience of meaning more relevant to clinical practice.

References

- Auhagen, A. E. (2000). On the positive psychology of meaning in life. *Swiss Journal of Psychology, 59*(1), 34-48.
- Baumeister, R. (1991). *Meanings of Life*. New York: Guilford.
- Bering, J. M. (2003). Towards a cognitive theory of existential meaning. *New Ideas in Psychology, 21*, 101-120.
- Bower, J. E., Meyerowitz, B. E., Desmond, K.A., Bernaards, C. A., Rowland, J. H., & Ganz, P. A. (2005). Perceptions of positive meaning and vulnerability following breast cancer: Predictors and outcomes among long-term breast cancer survivors. *Annals of Behavioral Medicine, 29*(3), 236-245.
- Boyratz, G., & Lightsey, O. R. (2012). Can positive thinking help? Positive automatic thoughts as moderators of the stress-meaning relationship. *American Journal of Orthopsychiatry, 82* (2), 267-277.

- Brassai, L., Piko, B. F., & Steger, M. F. (2011). Meaning in life: Is it a protective factor for adolescents' psychological health? *International Journal of Behavioral Medicine, 18*, 44 - 51.
- Carver, C.S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Bulletin, 97*, 19-35.
- Carver, C.S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press.
- Clore, G. L. (1994). Why emotions are felt? In P. Ekman & R. J. Davidson (Eds.), *nature of emotion: Fundamental questions* (pp.103-111). New York: Oxford University Press.
- Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (Eds.). (2006). *A life worth living: Contributions to Positive Psychology*. Oxford, NY: Oxford University Press.
- Davis, C. G., Wortman, C. B., Lehman, D. R., & Silver, R. C. (2000). Searching for meaning in loss: Are clinical assumptions correct? *Death Studies, 24*, 497-540.
- Debats, D. L. (1996). Meaning in life: Clinical relevance and predictive power. *British Journal of Clinical Psychology, 35*, 503-516.
- Debats, D. L. (2000). An inquiry into existential meaning: Theoretical, clinical, and phenomenal perspectives. In G. T. Reker & K. Chamberlain (Eds.) *Exploring Existential Meaning: Optimizing Human Development across the Life-span* (pp. 93-106). Thousand Oaks, CA: Sage Publications.
- Emmons, R. A. (1997). Motives and goals. In R. Hogan, J. Johnson, & S. R. Briggs (Eds.), *Handbook of Personality Psychology* (pp. 485-507). San Diego, CA: American Press.
- Emmons, S., & Hooker, K. (1992). Perceived changes in life meaning following bereavement. *Omega: Journal of Death and Dying, 25*, 307-318.
- Fife, B. (2005). The role of constructed meaning in adaptation to the onset of life-threatening illness. *Social Science and Medicine, 61*(10), 2132-2143.
- Frankl, V. E. (1962). *Man's search for meaning*. New York, NY: Pocket Books.
- Frankl, V. E. (2006). *Man's search for meaning*. Boston, MA: Beacon Press.
- Frederickson, B. L. (1998). What good are positive emotions? *Review of General Psychology, 2*, 300-319.
- Frederickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist, 56*, 218-226.
- Frederickson, B. L. (2002). Positive emotions. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 120-134). New York, NY: Oxford University Press.
- Frederickson, B. L. (2006). The broaden-and-build of positive emotions. In M. C. Csikszentmihalyi and I. S. Csikszentmihalyi (Eds.) *A Life Worth Living: Contributions to Positive Psychology* (pp. 85-103). New York: Oxford University Press.
- Frederickson, B. L., & Branigan, C. (2004). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion, 19*, 313-332.
- Gaspar, K., & Clore, G. L. (2002). Attending the big picture: Mood and global versus local processing of visual information. *Psychological Science, 13*, 34-40.
- Greenberg, L. S., & Pascual-Leone, J. (1997). Emotion in the creation of personal meaning. In M. J. Power, & C. R. Brewin (Eds.), *The transformation of meaning in psychological therapies: Integrating theory and practice* (pp. 157-173). Hoboken, NJ: John Wiley & Sons.

- Halama, P. (2002). From establishing beliefs through pursuing goals to experiencing fulfillment: Examining the three-component model of personal meaning in life. *Studia Psychologica, 44*(2), 143-154.
- Halama, P. (2005). Relationship between meaning in life and the big five personality traits in young adults and the elderly. *Studia Psychologica, 47*(3), 167-178.
- Harlow, L. L., Newcomb, M. D., & Bentler, P. M. (1986). Depression, self-derogation, substance abuse and suicide ideation: Lack of purpose in life as a mediational factor. *Journal of Clinical Psychology, 42*, 5-21.
- Hayes, S. C., & Smith, S. (2005). *Get out of your mind & into your life: The new acceptance and commitment therapy*. Oakland, CA: New Harbinger Publications.
- Hicks, J. A., & King, L. A. (2007). Meaning in life and seeing the big picture: Positive affect and global focus. *Cognition and Emotion, 21*(7), 1577-1584.
- Hong, L. (2006). Self-transcendence meaning in life moderates the relation between college stress and psychological wellbeing. *Acta Psychologica Sinica, 38*(3), 422-427.
- Isen, A. M. (1999). On the relation between affect and creative problem solving. In S.R. Russ (Ed.), *Affect, creative experience, and psychological adjustment* (pp. 3-17). Philadelphia, PA: Taylor& Francis.
- Janoff-Bulman, R., & Berg, M. (1998). Disillusionment and the creation of value: From traumatic losses to existential gains. In J. Harvey (Ed.), *Perspectives on Loss: A Sourcebook* (pp. 35-47). Philadelphia, PA: Brenner-Mazel.
- Ju, H., Shin, J. W., Kim, C. W., Hyun, M. H., & Park, J. W. (2013). Mediational effect of meaning in life on the relationship between optimism and well-being in community elderly. *Archives of Gerontology and Geriatrics, 56*(2), 309-313.333
- Kimchi, R., & Palmer, S. E. (1982). Form and texture in hierarchically constructed patterns. *Journal of Experimental Psychology: Human Perception and Performance, 8*, 521-535.
- King, L. A., Hicks, J. A., Krull, J. L., & Del-Gasio, A. K. (2006). Positive affect and the experience of meaning in life. *Journal of Personality and Social Psychology, 90*(1), 179-196.
- Kleftaras, G. & Psarra, E. (2012). Meaning in life, psychological well-being and depressive symptomatology: A comparative study. *Psychology, 3*, 337-345.
- Koester, R. (2008). Reaching one's personal goals: A motivational perspective focused on autonomy. *Canadian Psychology, 49*(1), 60-67.
- Krause, N. (2007). Evaluating the stress-buffering function of meaning in life among older adults. *Journal of Aging and Health, 19*(5), 792-812.
- Lukas, E. (1998). The meaning of life and the goals in life for chronically ill people. In P. T. P.Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical application* (pp. 307-316). Mahwah, NJ: Lawrence Erlbaum Associates.
- Maddi, S. R. (1967). The existential neurosis. *Journal of Abnormal Psychology, 72*, 311-325.
- Mascaro, N., & Rosen, D. M. (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. M. (2005). Existential meaning's role in the enhancement of hope and prevention of depressive symptoms. *Journal of Personality, 74*, 985-1014.
- Maslow, A. M. (1968). *Toward a psychology of being*. Princeton, NJ: D. Van Nostrand.
- Moors, A., & De Hower, J. (2001). Automatic appraisal of motivational valence: Motivational affective priming and Simon effects. *Cognition and Emotion, 15*, 749-766.

- Nicholson, T., Higgins, W., Turner, P., James, S., Stickle, F., & Pruitt, T. (1994). The relation between meaning in life and the occurrence of drug abuse: A retrospective study. *Psychology of Addictive Behaviors*, 8, 24-28.
- Phillips, W. M. (1980). Purpose in life, depression, and locus of control. *Journal of Clinical Psychology*, 36, 661-667.
- Philips, K. D., Mock, K. S., Bopp, C. M., Dudgeon, W. A., & Hand, G. A. (2006). Spiritual well-being, sleep disturbance, and physical and mental health status in HIV infected individuals. *Issues in Mental Health Nursing*, 27(2), 125-129.
- Reig-Ferrer, A., Arenas, M. D., Ferrer-Cascales, R., Fernandez-Pascual, M. D., Albaladejo-Blazquez, N., Gil, M. T., et al. (2012). Evaluation of spiritual well-being in haemodialysis patients. *Nefrologia*, 32(6), 731-742.
- Reker, G. T. (1992). *Manual of the Life Attitude Profile-Revised (LAP-R)*. Peterborough, OH: Student Psychologists Press.
- Reker, G. T. (1996). *Manual of the Sources of Meaning Profile-Revised (SOMP-R)*. Peterborough, ON: Student Psychologists Press.
- Reker, G. T. (2000). Theoretical perspectives, dimensions and measurement of existential meaning. In G. T. Reker & K. Chamberlain (Eds.), *Exploring Existential Meaning: Optimizing Human Development across the Life-span* (pp. 39- 55). Thousand Oaks, CA: Sage Publications
- Reker, G. T., Peacock, E. J., & Wong, P. T. P. (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. (1988). Aging as an individual process: Toward a theory of personal meaning. In J. Birren & V. Bengtson (Eds.), *Emergent theories of aging* (pp. 214-246). New York: Springer.
- Ruffin, J. E. (1984). The anxiety of meaninglessness. *Journal of Counseling and Development*, 63, 40-42.
- Ryff, C.D. (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-1081.
- Ryff, C.D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9, 1-28.
- Shek, D. T. L. (1992). Meaning in life and psychological well-being: An empirical study using the Chinese version of the Purpose in Life Questionnaire. *Journal of Genetic Psychology*, 153, 185-200.
- Steger, M. F., & Frazier, P. (2005). Meaning in life: One link in the chain of religion to well-being. *Journal of Counseling Psychology*, 52, 57-582.
- Thompson, S. C., & Janigian, A. S. (1988). Life schemes: A framework for understanding the search for meaning. *Journal of Social and Clinical Psychology*, 7, 260-280.
- Ulmer, A., Range, L. M., & Smith, P. C. (1991). Purpose in life: A moderator of recovery from bereavement. *Omega: Journal of Death and Dying*, 23, 279-289.
- Vehling, S., Lehmann, C., Oechsle, K., Bokemeyer, C., Krull, A., Koch, U., et al. (2011). Global meaning and meaning-related life attitudes: Exploring the road in predicting depression, anxiety, and demoralization in cancer patients. *Support Care Cancer*, 19(4), 513-520.
- Vowles, K. E., & McCracken, L. M. (2008). Acceptance and values based action in chronic pain: A study of treatment effectiveness and process. *Journal of Consulting and Clinical Psychology*, 76(3), 397-407.
- Waisberg, J. L., & Porter, J. E. (1994). Purpose in life and outcome of treatment for alcohol dependence. *British Journal of Clinical Psychology*, 33, 49-63.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scale. *Journal of Personality and Social Psychology*, 54, 1063-1070.

- Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76, 820-838.
- Westling, E., Garcia, K., & Mann, T. (2007). Discovery of Meaning and adherence to medications in HIV infected women. *Journal of Health Psychology*, 12(4), 627-635.
- Wong, P. T. P. (1993). Effective management of life stress: The resource-congruence model. *Stress Medicine*, 9, 51-60.
- Wong, P. T.P. (1998). Meaning-centered counseling. In P. T. P. Wong & P. S. Fry (Eds.), *The human quest for meaning: A handbook of psychological research and clinical application* (pp. 395-435). Mahwah, NJ: Lawrence Erlbaum Associates.
- Wong, P. T. P. (Ed.) (2012). *The human quest for meaning: Theories, research, and applications* (2nd ed.). New York, NY: Routledge.
- Zika, S., & Chamberlain, K. (1987). Relation of hassles and personality to subjective well-being. *Journal of Personality and Social Psychology*, 53, 155-162.
- Zika, S., & Chamberlain, K. (1992). On the relation between meaning in life and psychological well-being. *British Journal of Psychology*, 83, 133-145.
- Yalom, Y. D. (1980). *Existential Psychotherapy*. New York: Basic Books.