Eudaimonic Conceptions of Well-being, Meaning in Life, and Self-Reported Well-Being: Initial Test of a Mediational Model

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Abstract

The current study examined relationships between eudaimonic dimensions of individual conceptions of well-being (e.g., self-development, contribution), meaning in life, and self-reported well-being, and whether meaning in life mediates associations between eudaimonic conception dimensions and well-being. A sample of 275 adult volunteers completed several instruments assessing the above constructs. Results from structural equation modeling (SEM) indicated that eudaimonic conception dimensions were positively associated with both meaning in life and well-being. Further, the relationship between eudaimonic conception dimensions and self-reported well-being was found to be partially mediated by meaning in life. The findings of the current study thus suggest that the experience of meaning in life is one route through which eudaimonic conception of well-being dimensions are associated with self-reported well-being.

*Keywords*: well-being, eudaimonia, beliefs, meaning in life, happiness, mediation
1. Introduction

Numerous personality traits have been found to be associated with well-being (Diener & Lucas, 1999; DeNeve & Cooper, 1998). Recently, researchers working within the broad field of positive psychology have identified several other personality-related characteristics that also seem to be associated with well-being, including character strengths (Peterson & Seligman, 2004), optimism (Carver, Scheier, Miller, & Fulford, 2009), meaning in life (Mascaro & Rosen, 2008), conceptions of well-being (McMahan & Estes, in press a, b), and orientations to happiness (Peterson, Park, & Seligman, 2005). Less research has focused on how these constructs may work together in accounting for well-being. It was therefore the purpose of the current study to address this limitation by examining associations between well-being and two of the above constructs: (1) conceptions of well-being and (2) meaning in life. Specifically, we addressed whether meaning in life mediates associations between eudaimonic dimensions of individual conceptions of well-being and self-reported well-being.

1.1. Conceptions of Well-Being and Experienced Well-Being

Contemporary research on well-being has increasingly recognized the importance of differentiating between hedonic and eudaimonic perspectives on well-being. From a hedonic perspective, well-being is equated with pleasure (Ryan & Deci, 2001). Alternatively, the eudaimonic perspective views well-being as the cultivation of personal strengths, living virtuously, and contribution to the greater good (Ryan & Deci, 2001; Steger, Kashdan, & Oishi, 2008). Defined as a fundamental cognitive representation of the nature of well-being, lay persons’ conceptions of well-being have been found to include both hedonic and eudaimonic dimensions (King & Napa, 1998; Tseng, 2007). McMahan and Estes (in press a) further found
stable individual differences in the degree to which hedonic and eudaimonic dimensions are emphasized in lay persons’ conceptions of well-being.

It is becoming clear that a eudaimonic approach to well-being may be particularly important for several aspects of positive psychological functioning. For example, eudaimonic dimensions of individual conceptions of well-being have been found to be more robustly associated with self-reported well-being than hedonic dimensions (McMahan & Estes, in press a, b). Similarly, empirical work from diverse areas of inquiry, including research on intrinsic versus extrinsic goals (Kasser & Ryan, 1996), orientations to happiness (Peterson et al., 2005), personally-expressive activities (Waterman, 2005; Waterman, Schwartz, & Conti, 2008), and daily eudaimonic behavior (Steger et al., 2008a), support the notion that eudaimonic approaches to well-being are particularly beneficial for positive functioning.

1.2. Meaning in Life and Well-Being

Meaning in life is defined as the extent to which people comprehend and see significance in their lives, as well as the degree to which they perceive themselves to have a purpose or overarching aim in life (Steger, 2009). Meaning in life is assumed to be primarily cognitive in nature, including beliefs related to purpose in life and moral beliefs, and involves perceptions that everyday experience is causally, thematically, and temporally coherent and organized (Heine, Proulx, & Vohs, 2006). Individual perceptions that life is meaningful are influenced by a number of situational factors, yet previous research indicates stable individual differences in the degree to which people feel their lives are meaningful (e.g., Steger, Frazier, Oishi, & Kaler, 2006).

Frankl (1963) suggested that the experience of meaning in life is crucial for well-being, and, consistent with this notion, numerous studies indicate that meaning in life is associated with
several aspects of psychological health. For example, meaning in life has been found to be positively associated with happiness (Debats, van der Lubbe, & Wezeman, 1993) and satisfaction with life (Steger, Kashdan, Sullivan, & Lorentz, 2008). The experience of meaning is also negatively associated with negative affect (Chamberlain & Zika, 1988), depression and anxiety (Debats et al., 1993), and substance use (Harlow, Newcomb, & Bentler, 1986). In general, individuals who believe their lives are meaningful tend to indicate better psychological health than those who believe their lives are meaningless.

1.3. Meaning in Life as a Mediator of Eudaimonic Conceptions of Well-Being and Experienced Well-Being

The experience of meaning in life is central to the eudaimonic approach (Peterson et al., 2005; Ryan & Deci, 2001) and has been found to result from activities related to self-development and contribution to others. For example, previous research and theorizing has described several factors related to self-development that lead to increased meaning in life, including developing a sense of self-efficacy (Baumeister & Vohs, 2002), achievement (Emmons, 2003), personal growth (Ebersole & DeVogler, 1981; Steger et al., 2008b), and developing one’s unique individual potentials (Waterman et al., 2008). Additional research and theorizing has described several factors related to contributions that lead to increased meaning in life, including generativity (Emmons, 2003), self-transcendence (Emmons, 2003; Reker & Wong, 1988), and, assuming a certain degree of contribution is involved, developing and maintaining close relationships (Bar-Tur, Savaya, & Prager, 2001). Thus, conceptualizing well-being in these distinctly eudaimonic terms is likely associated with greater assessments that one’s life is meaningful. Accordingly, previous research has found eudaimonic conception of well-being dimensions to be associated with meaning in life (McMahan & Estes, in press b).
Thus, the association between eudaimonic conception of well-being dimensions and experienced well-being is likely mediated by meaning in life.

1.4. Current Study

The purpose of the current study was to examine whether meaning in life mediates the association between eudaimonic dimensions of individual conceptions of well-being and experienced well-being. Following the guidelines provided by Baron and Kenny (1986) on the demonstration of mediation, we tested three main hypotheses. First, it was hypothesized that eudaimonic conception of well-being dimensions would be positively associated with self-reported well-being. Second, it was hypothesized that eudaimonic conception of well-being dimensions would be positively associated with meaning in life. Third, our primary hypothesis stated that meaning in life would mediate the association between eudaimonic conception of well-being dimensions and self-reported well-being.

2. Method

2.1. Participants

Participants were 275 adult volunteers (186 women). Mean age was 37.86 years ($SD = 14.23$ years; age range = 18-84). The sample was primarily Caucasian (80.4%), with 9.1% identifying as African-American, 3.6% identifying as Asian-American, 1.8% identifying as Hispanic, and 5.1% were of other ethnicities. Participants were recruited through email invitation and professional networking websites. Participation was completely voluntary, and participants were not compensated for participating.

2.2. Materials and Procedure

All participants completed a multi-section questionnaire distributed using an online testing system. Participants could respond to the questionnaire at their own pace and typically
took about 20 minutes to complete all sections. Included in the questionnaire were a brief demographics survey, a self-report measure of conceptions of well-being, a self-report measure of meaning in life, and several self-report measures of experienced well-being.

2.2.1. Conceptions of well-being

Conceptions of well-being were measured using the Beliefs about Well-Being Scale (BWBS; McMahan & Estes, in press a), a 16-item instrument that asks participants to rate the degree to which (1) the experience of pleasure, (2) avoidance of negative experience, (3) self-development, and (4) contribution are included in their conception of well-being. Responses are recorded using a 7-point Likert-type scale (1 = Strongly Disagree through 7 = Strongly Agree). The self-development (BWBS-SD) and contribution (BWBS-CO) subscales, representing eudaimonic aspects of well-being, were the primary predictor variables of interest in the current study. This scale has previously shown evidence of adequate reliability and validity (see McMahan & Estes, in press a).

2.2.2. Meaning in life

Meaning in life was measured using the Meaning in Life Questionnaire (MLQ; Steger et al., 2006), which is a 10-item face-valid instrument measuring participants’ appraisals that life is purposeful and meaningful. This scale contains two subscales: (1) presence of meaning, and (2) search for meaning. Participants respond on a 7-item Likert-type scale (1 = absolutely untrue through 7 = absolutely true), where higher scores reflect greater presence or search for meaning in life. Only the presence subscale (MLQ-P) was used in the current study to assess the degree to which participants felt their lives were meaningful. The psychometric properties of this scale have been shown to be acceptable (see Steger et al., 2006).
2.2.3. Well-being

To assess experienced well-being, participants were given a number of instruments intended to tap multiple aspects of well-being. First, participants completed the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larson, & Griffin, 1985), which is a 5-item instrument measuring participants’ cognitive assessments of general satisfaction with their life. Participants respond on a 7-point Likert-type scale (1 = strongly disagree through 7 = strongly agree), where higher scores reflect greater satisfaction with one’s life. This measure has been shown to have excellent psychometric properties and is widely used to measure cognitive assessments of life satisfaction (see Diener, Suh, Lucas, & Smith, 1999; Lucas, Diener, & Larson, 2003).

Second, the Intensity and Time Affect Scale (ITAS; Diener, Smith, & Fujita, 1995) was used to measure participants’ affective well-being. This is a 24-item instrument measuring how frequently or intensely participants have experienced different positive and negative emotions in the past. Participants respond on a 7-point Likert-type scale, where higher scores reflect more frequent or intense experiences with the given emotion (e.g., affection, shame, pride, etc.). This scale can be altered to measure either frequency or intensity of emotional experiences, and the time-frame within which the participant is reporting these emotional experiences (e.g., past month, past week, past day) can also be modified. The present study examined how frequently participants have experienced positive (ITAS-P) and negative (ITAS-N) emotions in the past month. This instrument has previously exhibited strong evidence of validity (see Lucas et al., 2003).

Finally, the Subjective Vitality Scale (SVS; Ryan & Frederick, 1997) is a 7-item scale measuring feelings of mental and physical vitality, aliveness, and vigor. Participants respond on a 7-point Likert-type scale (1 = Not at all through 7 = Very true), where higher scores indicate
greater feelings of vitality. This scale has also been found to display good psychometric properties (see Ryan & Frederick, 1997).

2.3. Data Analyses

Structural equation modeling (SEM) was used to address the hypotheses of the current study. All models were constructed and tested using Amos 18.0 (Arbuckle, 2009). Eudaimonic conception of well-being, meaning in life, and well-being were assumed to be latent variables. The manifest variables of eudaimonic conception of well-being were scores on the BWBS-SD and BWBS-CO. The manifest variables for well-being were scores on the SWLS, ITAS-P, ITAS-N (reverse-coded), and the SVS. Since meaning in life was measured using one global scale, each of the five items of the MLQ-P was used as a manifest indicator of meaning in life.

Multiple fit indices were used to evaluate each model, including chi-square, the root-mean-square error of approximation (RMSEA), the comparative fit index (CFI), goodness of fit index (GFI), and the normed-fit index (NFI). An adequate fit to the proposed model is indicated by a nonsignificant chi-square, values less than or equal to .08 for the RMSEA, and values greater than or equal to .90 for the CFI, GFI, and NFI (Jöreskog & Sörbom, 1993).

3. Results

The means, standard deviations, internal consistency coefficients, and bivariate correlations of each of the measures used in the current study are presented in Table 1. We included the hedonic subscales of the BWBS in this analysis because previous empirical evidence has found an association between positive hedonic experiences and evaluations of meaning in life (e.g., Hicks & King, 2009). It was therefore possible that the hedonic subscales of the BWBS may also be associated with meaning in life which, in turn, is associated with well-being. Given the lack of associations found between the hedonic subscales, meaning in life, and
well-being, however, no further analyses addressing the nature of the relationship between these variables were conducted.

Three path analyses were performed to address whether meaning in life mediates associations between eudaimonic conceptions of well-being and experienced well-being. These path analyses tested (1) a direct effect model, where eudaimonic conception of well-being predicts experienced well-being (Model A), (2) a mediational model, where meaning in life mediates the relationship between eudaimonic conception of well-being and experienced well-being (Model B), and (3) a similar mediational model with the direct path between eudaimonic conception of well-being and experienced well-being omitted. The fit indices for each model are displayed in Table 2. Each model achieved an acceptable fit to the data as indicated by the RMSEA, GFI, CFI, and NFI.

As shown in Figure 1, eudaimonic conception of well-being was positively associated with experienced well-being ($\beta = .42, p < .01$) in Model A, providing support for the current study’s first hypothesis. In Model B (mediational model), eudaimonic conception of well-being was positively associated with meaning in life ($\beta = .37, p < .01$), providing support for the current study’s second hypothesis. Additionally, meaning in life was positively associated with well-being ($\beta = .71, p < .01$), and the relationship between eudaimonic conception of well-being and experienced well-being was lower than in the direct effect model and still significant ($\beta = .15, p < .05$). Sobel tests indicated that including meaning in life in the model significantly reduced the association between eudaimonic conception of well-being and experienced well-being ($z = 3.90, p < .01$), providing support for the current study’s third hypothesis by indicating that meaning in life partially mediates this association. Finally, we tested Model C (not pictured), in which the direct path between eudaimonic conception of well-being and experienced well-
being was omitted. Although Model C achieved an acceptable fit (see Table 2), a chi-square difference test indicated that Model B was a better fit to the data than Model C, $\Delta \chi^2 (1) = 4.93, p < .05$. Thus, with respect to the guidelines provided by Baron and Kenny (1986) for the investigation of mediation effects, these findings indicate that meaning in life partially mediates the association between eudaimonic dimensions of individual conceptions of well-being and self-reported experienced well-being.

To cross-validate the above results, multigroup analyses were used to test for equivalence of the mediational model between males and females and younger (<38 years) and older (>38 years) participants. These analyses indicated that the mediating role of meaning in life did not differ across each of these subgroups.

4. Discussion

The results of the current study suggest that meaning in life partially mediates the association between eudaimonic dimensions of individual conceptions of well-being and self-reported well-being. We discuss these findings in more detail below.

Based on previous research examining associations between eudaimonic approaches to well-being and experienced well-being (e.g., McMahan & Estes, in press b; Steger et al., 2008a; Waterman et al., 2008), we first hypothesized that eudaimonic dimensions of conceptions of well-being would be positively associated with self-reported well-being. The current study’s findings supported this hypothesis. It is possible that engaging in activities that reflect a eudaimonic approach builds personal resources that increase the quality of one’s life (see also Steger et al., 2008a). For example, contribution to the welfare of others likely increases social connections and friendships, resources that have been consistently found to be associated with well-being (see Myers, 2004). Although not examined in the current study, this raises the
possibility that the degree to which one conceptualizes well-being in eudaimonic terms influences the degree to which one engages in eudaimonic behaviors and, in result, builds personal resources and experiences increased well-being.

Our second hypothesis that eudaimonic conception of well-being dimensions would be associated with meaning in life was supported. As stated previously, research indicates that several factors related to a eudaimonic approach to well-being are positively associated with meaning in life (e.g., Baumeister & Vohs, 2002; Ebersole & DeVogler, 1981; Emmons, 2003; Reker & Wong, 1988; Steger et al., 2008a). The findings of the current study are complementary, indicating that the degree to which individuals conceptualize well-being in eudaimonic terms is similarly associated with meaning in life. Perhaps emphasizing eudaimonic dimensions as indicative of well-being is associated with a higher frequency of behaviors that facilitate the experience of meaning. It is also possible that defining well-being in eudaimonic terms more readily facilitates the organization of everyday experience into an ordered and coherent whole, an important component of the experience of meaning (Heine et al., 2006; Steger, 2009). For example, conceptualizing well-being in terms of self-development likely requires considering one’s current level of functioning relative to how one has developed previously and how one wishes to develop in the future, providing a temporally organized sequence of events that define the nature of well-being. Additional research will have to address these possibilities by more specifically examining associations between eudaimonic dimensions of conceptions of well-being and meaning in life.

The primary goal of the current study was to address whether meaning in life mediated associations between eudaimonic conception of well-being dimensions and experienced well-being. To this end, results suggested that meaning in life partially mediated this association. This
suggests that meaning in life is likely an important route through which eudaimonic conceptions of well-being are associated with positive psychological functioning.

Meaning in life only partially mediated this relationship, however, indicating that other factors may also be involved. Previous research suggests that many eudaimonic activities give rise to what are termed “higher pleasures”, including both meaning in life and positive subjective experiences (Waterman, 2005), and it would intuitively seem that eudaimonic approaches to well-being would lead to positive subjective experiences that are not directly the result of increased meaning in life. For example, activities that foster self-development (e.g., physical exercise) are often enjoyable in their own right and associated with increased positive affect. Conceptualizing well-being in eudaimonic terms may thus lead to behaviors that are directly associated with both increased meaning in life, which in turn leads to higher well-being, and positive subjective experiences, which are an important component of well-being (Diener & Lucas, 1999).

4.1 Future Directions and Conclusion

Several limitations of the current research should be noted and addressed in future research on the associations between conceptions of well-being, meaning in life, and experienced well-being. First, the current study relied solely on online sampling techniques and survey completion. Although the use of online sampling techniques and surveys provides an excellent way to efficiently recruit large samples (Birnbaum, 2004), some criticize the use of online techniques because of the special characteristics of respondents (e.g., must have access to a computer). Additionally, participants self-selected to participate in the study, increasing the
probability of sampling bias. Future research should therefore address the generalizability of the current results using, for example, probability sampling techniques. Second, the current investigation relied solely on self-report measures of well-being as outcome indicators of positive psychological functioning, and future research should examine the relationship between conceptions of well-being, meaning in life, and psychological health using a diverse set of methodologies and outcome measures, including the use of daily diaries and experience-based sampling methods and informant reports. Third, the current study used self-report assessments of conceptions of well-being and meaning in life, which prevents issues of causality from being conclusively addressed. We have interpreted the current findings to indicate that conceptions of well-being influence meaning in life and experienced well-being. However, it is possible that the experience of well-being influences assessments of meaning in life, which in turn influence one’s conception of well-being. This alternative causal model is certainly plausible in light of previous research indicating that evaluations of well-being are associated with aspects of personality (e.g., extroversion) and are thus, to some degree, heritable (see Lucas & Diener, 2009). The use of experimental methodologies would address this limitation of the current study, and future empirical work should therefore employ these methodologies to more specifically address the causal nature of this relationship.

With respect to the above listed limitations, the current study provides strong evidence indicating that meaning in life mediates associations between eudaimonic conceptions of well-

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1 However, previous research found similar descriptive statistics for each of the variables assessed in the current investigation (McMahan & Estes, in press a, b). This statistical similarity across multiple studies thus suggests that the current sample was not biased.
being and self-report experienced well-being. Research on conceptions of well-being is in its infancy, however, and a number of additional questions concerning this construct’s role in promoting the experience of meaning in life and psychological health remain. Future research will attempt to address these questions by more specifically examining the nature of associations between conceptions of well-being, meaning in life, and positive psychological functioning.
References


Table 1

Means, Standard Deviations, Internal Consistency Coefficients, and Bivariate Correlations between the BWBS, MLQ-P, and Measures of Well-being (n = 275)

<table>
<thead>
<tr>
<th>Measure</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. BWBS-EP</td>
<td>5.24</td>
<td>1.00</td>
<td>.83</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. BWBS-AN</td>
<td>4.21</td>
<td>1.36</td>
<td>.85</td>
<td>-.18*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. BWBS-SD</td>
<td>5.71</td>
<td>.80</td>
<td>.74</td>
<td>.51**</td>
<td>-.01</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. BWBS-CO</td>
<td>5.45</td>
<td>1.03</td>
<td>.83</td>
<td>.35**</td>
<td>.05</td>
<td>.65**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. MLQ-P</td>
<td>4.76</td>
<td>1.22</td>
<td>.87</td>
<td>-.02</td>
<td>.31**</td>
<td>.33**</td>
<td>1</td>
<td></td>
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<tr>
<td>6. SWLS</td>
<td>4.64</td>
<td>1.27</td>
<td>.82</td>
<td>.01</td>
<td>.03</td>
<td>.15*</td>
<td>.15*</td>
<td>.60**</td>
<td>1</td>
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<td></td>
<td></td>
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<tr>
<td>7. ITAS-P</td>
<td>4.86</td>
<td>1.10</td>
<td>.89</td>
<td>.05</td>
<td>.15*</td>
<td>.31**</td>
<td>.33**</td>
<td>.54**</td>
<td>.51**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. ITAS-N(rev)</td>
<td>5.27</td>
<td>.91</td>
<td>.92</td>
<td>.07</td>
<td>.03</td>
<td>.15*</td>
<td>.10</td>
<td>.48**</td>
<td>.52**</td>
<td>.39**</td>
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<td></td>
</tr>
<tr>
<td>9. SVS</td>
<td>4.89</td>
<td>1.02</td>
<td>.82</td>
<td>.10</td>
<td>.13</td>
<td>.33**</td>
<td>.28**</td>
<td>.60**</td>
<td>.50**</td>
<td>.53**</td>
<td>.42**</td>
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</table>


* p < .05. ** p < .01.
Table 2

*Fit Indices for the Three Models (n = 275)*

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>GFI</th>
<th>CFI</th>
<th>NFI</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>28.75**</td>
<td>8</td>
<td>3.59</td>
<td>.08</td>
<td>.96</td>
<td>.96</td>
<td>.94</td>
</tr>
<tr>
<td>B</td>
<td>112.02**</td>
<td>41</td>
<td>2.73</td>
<td>.08</td>
<td>.93</td>
<td>.95</td>
<td>.92</td>
</tr>
<tr>
<td>C</td>
<td>116.95**</td>
<td>42</td>
<td>2.79</td>
<td>.08</td>
<td>.92</td>
<td>.94</td>
<td>.91</td>
</tr>
</tbody>
</table>

*Note.* Model A = Direct effect model. Model B = Mediated model. Model C = Mediated model with the direct path between the eudaimonic dimension and well-being omitted. RMSEA = Root mean square error of approximation. GFI = Goodness-of-fit index. CFI = Comparative fit index. NFI = Normed fit index.

** $p < .01.$
Figure 1. Path diagrams representing a direct relationship between the eudaimonic conception of well-being dimension and experienced well-being (Model A; above) and the relationship mediated by meaning in life (Model B; below). All parameters are standardized. BWBS-EUD = Eudaimonic dimension of the BWBS. M1-M5 = Individual items from the MLQ-P.

* p < .05. ** p < .01.