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Individual Conceptions of Well-Being Predict Psychological and Subjective Well-Being: Beyond the Big Five (Book Chapter)

Ethan A. McMahan
Western Oregon University, mcmahane@wou.edu

Maggie D. Renken
Georgia State University, mrenken@gsu.edu

Andre Kehn
University of North Dakota, andre.kehn@email.und.edu

Martina Nitkova
Georgia State University

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INDIVIDUAL CONCEPTIONS OF WELL-BEING PREDICT PSYCHOLOGICAL AND SUBJECTIVE WELL-BEING: BEYOND THE BIG FIVE

Ethan A. McMahan, Maggie D. Renken, Andre Kehn, and Martina Nitkova

1 Western Oregon University
2 Georgia State University
3 University of North Dakota

ABSTRACT

Lay conceptions of well-being are multidimensional cognitive representations of the nature and experience of well-being and an important component of individuals’ worldview. Previous research indicates that these lay conceptions are composed of both hedonic (i.e., pleasure-focused) and eudaimonic (i.e., virtue- and meaning-focused) dimensions, and the degree to which one conceptualizes well-being in hedonic and eudaimonic terms has been found to be associated with multiple indicators of experienced well-being. Previous research is limited, however, in that it has often defined and operationalized experienced well-being using indicators of subjective well-being (SWB) and has not addressed associations between lay conceptions of well-being and psychological well-being (PWB). Additionally, previous research is further limited in that it has not considered more complex relationships between conceptions of well-being and general personality traits, specifically the Big Five, in predicting well-being. To address these limitations, this chapter presents research examining (1) whether hedonic and eudaimonic dimensions of individual conceptions of well-being predict both PWB and SWB and (2) whether individual conceptions of well-being predict unique variance in PWB and SWB beyond that predicted by the Big Five personality traits. Correlational analyses indicated more numerous and typically more robust associations between eudaimonic dimensions, compared to hedonic dimensions, and both PWB and SWB. Further, individual conceptions of well-being predicted unique variance in several dimensions of PWB and SWB when controlling for the Big Five, with eudaimonic dimensions being positively associated with well-being and hedonic dimensions being negatively associated with well-being. These findings thus complement a growing body of literature suggesting that eudaimonic approaches to well-being may be particularly important for positive psychological functioning.

Keywords: well-being, happiness, lay conceptions, hedonics, eudaimonia, personality

* Correspondence: Ethan A. McMahan. Psychology Division, Western Oregon University, 345 N. Monmouth Ave., Monmouth OR 97361. Email: mcmahane@wou.edu
INTRODUCTION

The recent scholarly interest in positive psychology has greatly expanded the body of theoretical and empirical literature devoted to the study of happiness and well-being and, correspondingly, has increased knowledge about the nature and experience of these states (Kashdan & Steger, 2011; Seligman, Steen, Park, & Peterson, 2005). In particular, researchers have increasingly recognized the importance of distinguishing between hedonic and eudaimonic components of well-being (e.g., Ryan & Deci, 2001). Hedonic components of well-being involve positively experienced psychological outcomes revolving around the experience of pleasure (e.g., positive affect) and the avoidance of pain. Eudaimonic components involve engagement in behaviors that are good for the individual and are focused toward the cultivation of one’s potential, benefiting others, and the experience of meaning. Taking into account both hedonic and eudaimonic components of well-being thus provides a rich and comprehensive conceptualization of positive psychological functioning that includes both positive subjective states and adaptive behaviors (see Waterman, 2008), and many formal conceptions of well-being advocated by researchers and scholars now include both hedonic and eudaimonic components. As described in more detail below, laypersons seem to hold similarly rich and comprehensive conceptions of well-being, a psychological construct referred to here as lay conceptions of well-being.

The Structure and Correlates of Lay Conceptions of Well-Being

Lay conceptions of well-being are cognitive representations of the nature and experience of well-being and an important component of individuals’ worldviews. Importantly, lay conceptions of well-being are similar in content and structure to the formal conceptions, definitions, and theories of well-being provided by professional scholars (see McMahan & Estes, 2011a). A key distinction between formal conceptions of well-being and lay conceptions of well-being is that the former is provided by an individual with specialized academic training on the topic of well-being (e.g., a philosopher, a economist, etc.), while the latter is provided by an individual with no specialized academic training in this area (i.e., a lay person).

Recent research exploring the structure of lay conceptions of well-being suggests that this construct likely includes both hedonic and eudaimonic components (King & Napa, 1998). For example, the degree to which individuals experience pleasure and meaning has been found to impact judgments of the desirability and moral goodness of life (e.g., King & Napa, 1998; Tseng, 2007). In addition, several independent investigations using content analyses of participants’ responses to open-ended questions concerning the nature of well-being and happiness (e.g., “What is happiness to you?”) indicate that laypeople consider numerous hedonically-oriented factors (e.g., “being in a good mood”) and eudaimonically-oriented factors (e.g., “being who I want to be”) to be indicative of well-being (e.g., Bronk, 2008; Lu & Gilmour, 2004; Pflug, 2009). More recent research using factor analytic approaches found that lay conceptions of well-being can be described generally by the degree to which (1) the experience of pleasure, (2) avoidance of negative experience, (3) self-development, and (4) contribution are emphasized, with the former two factors being representative of the hedonic approach and the latter two factors representative of the eudaimonic approach (McMahan & Estes, 2011a). The above findings are thus complementary in suggesting that lay conceptions of well-being are strikingly similar to the formal conceptions of well-being provided by researchers and scholars and include both hedonically-oriented and eudaimonically-oriented dimensions.
Lay conceptions of well-being are considered to be functionally similar to a lay theory (see Hong, Levy, & Chiu, 2001; Kruglanski, 1990) and thus expected to exert a pervasive effect on cognition, goals, and behavior within well-being-relevant domains (Ryan & Deci, 2001; McMahan, Dixon, & King, 2012). In result, the degree to which one conceptualizes well-being in hedonic and eudaimonic terms likely has many implications for positive psychological functioning. Empirical evidence supports this general prediction and indicates consistent associations between individual conception of well-being dimensions and several indicators of experienced well-being, typically with more robust associations observed between eudaimonic conception dimensions and well-being (e.g., McMahan & Estes, 2011a, 2011b; McMahan et al., 2012). These findings are in accord with a larger body of research indicating that eudaimonic approaches to well-being seem to be particularly beneficial for positive psychological functioning relative to hedonic approaches (e.g., Huta, Pelletier, Baxter, Thompson, in press; Peterson, Park, & Seligman, 2005; Steger, Kashdan, & Oishi, 2008).

Limitations of Existing Research

Although multiple studies indicate associations between lay conceptions of well-being and experienced well-being, this research is limited in that it has often defined and operationalized experienced well-being using indicators of subjective well-being (SWB; Diener, 1984) and has not addressed associations between lay conceptions of well-being and psychological well-being (PWB; Ryff, 1989; Ryff & Keyes, 1995). Importantly, SWB is a hedonically-oriented indicator of well-being, including measures of positive affect, negative affect, and life satisfaction. In contrast, PWB is conceptualized as a eudaimonically-oriented indicator of well-being, including measures of personal growth, environmental mastery, self-acceptance, positive relations, autonomy, and purpose in life. While related, SWB and PWB address distinct aspects of well-being that have different antecedents and correlates (Waterman, 1993). This raises the possibility that previous empirical research regarding associations between conceptions of well-being and experienced well-being may have defined experienced well-being too narrowly, and resultant findings may not generalize when operationalizing well-being in PWB terms. To address this possibility, the current chapter reports research investigating associations between individual conceptions of well-being and PWB.

Previous research also has not considered the relationship between conceptions of well-being and personality factors in predicting well-being. In particular, the Big Five traits of extraversion, neuroticism, agreeableness, conscientiousness, and openness represent personality at its most general level (Goldberg, 1993; John & Srivastava, 1999), and include dimensions that conceptually overlap with the primary dimensions of lay conceptions of well-being, specifically the experience of pleasure, avoidance of negative experience, self-development, and contribution. For example, extraversion includes dimensions related to positive emotions and excitement-seeking that seemingly overlap with the experience of pleasure dimension of lay conceptions of well-being. It is thus possible that individuals who are more extroverted emphasize the experience of pleasure in their conceptions of well-being to a greater degree than their more introverted counterparts. Conscientiousness and openness to experience include dimensions related to self-development (e.g., achievement-oriented and exploration, respectively), and it is possible that more conscientious and open individuals emphasize self-development as indicative of well-being. Both agreeableness and conscientiousness include dimensions related to contribution (e.g., altruism and duty, respectively), suggesting that individuals who score high on these dimensions of the Big Five may be more likely to emphasize contribution in their conceptions of well-being. Finally, neuroticism seems to
conceptually overlap with avoidance of negative experience, suggesting that individuals who score high on neuroticism may place relatively greater emphasis on avoidance and/or a lack of negative life experiences as indicative of well-being.

Importantly, numerous studies have documented associations between the Big Five and both SWB and PWB, with extraversion, agreeableness, openness, and conscientiousness being positively associated with well-being, and neuroticism being negatively associated with well-being (e.g., DeNeve & Cooper, 1998; Schmutte & Ryff, 1997). Given the above described overlap between the Big Five and conceptions of well-being, it is possible that these more general personality constructs may account for associations between conceptions of well-being and experienced well-being, thus throwing into question the significance of conceptions of well-being for positive psychological functioning. For example, the consistent positive associations found between eudaimonic conception of well-being dimensions and self-reported well-being (e.g., McMahan & Estes, 2011b; McMahan et al., 2012) may actually be an artifact of the relationship between self-reported well-being and the broader personality traits of conscientiousness, agreeableness, and openness. If this is the case, then any associations between conceptions of well-being and experienced well-being should be negligible when controlling for these broader personality characteristics. Alternatively, if conceptions of well-being continue to predict well-being when controlling for the Big Five, this suggests that conceptions of well-being may be influential for well-being even after taken into account personality traits. To address this issue, the current chapter also reports research examining whether individual conceptions of well-being predict unique variance in multiple indicators of experienced well-being beyond that already predicted by the Big Five.

Primary Objectives of the Current Research

This chapter presents research addressing the above listed limitations by examining associations between conceptions of well-being, the Big Five, and multiple self-report indicators of experienced well-being (both PWB and SWB). As previously indicated, the primary objectives of the current research were as follows: (1) investigate associations between hedonic and eudaimonic conception dimensions and PWB, and (2) address whether conceptions of well-being predict unique variance in self-reported well-being beyond that predicted by the Big Five. Although the current research uses PWB as the main outcome variable, we also included measures of SWB (i.e., life satisfaction, positive affect, and negative affect) and meaning in life. This chapter thus provides initial evidence concerning associations between conceptions of well-being and PWB, while also qualifying previous research by addressing the role of the Big Five in associations between conceptions of well-being, SWB, and meaning in life.

METHOD

Participants

Participants were 464 students (301 female) sampled from the undergraduate populations of three public universities in the United States ($M_{age} = 21.36; SD_{age} = 5.67; \text{range}_{age} = 18-58$). Ethnicity was predominantly Caucasian (66%), followed by African American (11%), Hispanic (9%), Asian American or Pacific Islander (8%), and those reporting other ethnicities (6%). All participants were remunerated with partial course credit.
Materials and Procedure

The current study was part of a larger project examining well-being in college-aged populations. All participants completed a multi-section questionnaire administered using an online testing system. Participants could respond to the questionnaire at their own pace and typically took about 30 minutes to complete all sections. As described in detail below, the questionnaire included several self-report instruments assessing conceptions of well-being, the Big Five personality traits, and experienced well-being. Descriptive statistics for each of these instruments are presented in Table 1.

Beliefs about Well-Being Scale (BWBS). Conceptions of well-being were measured using the BWBS (McMahan & Estes, 2011a), a 16-item instrument that asks participants to rate the degree to which (1) the experience of pleasure (e.g., “Experiencing euphoria and pleasure”), (2) avoidance of negative experience (e.g., “A lack of painful experiences”), (3) self-development (e.g., “The exertion of effort to meet life’s challenges”), and (4) contribution (e.g., “Being a positive influence within the community”) are included in their conception of well-being. The experience of pleasure and avoidance of negative experience subscales assess hedonic dimensions of individual conceptions of well-being, whereas the self-development and contribution subscales assess eudaimonic dimensions. Responses are recorded using a 7-point Likert-type scale (1 = Strongly Disagree through 7 = Strongly Agree). This scale has previously shown evidence of adequate reliability and validity (see McMahan & Estes, 2011a).

Ten Item Personality Inventory (TIPI). The Big Five personality traits were assessed using the TIPI (Gosling, Rentfrow, & Swann, 2003). This measure is comprised of 10 items, each consisting of a pair of descriptors related to extraversion (e.g., ‘Extraverted, enthusiastic’), agreeableness (e.g., ‘Sympathetic, warm’), conscientiousness (e.g., ‘Dependable, self-disciplined’), openness to experience (e.g., ‘Open to new experiences, complex’), and neuroticism (e.g., ‘Anxious, easily upset’). Responses are recorded using a 7-point Likert-type scale (1 = Strongly Disagree through 7 = Strongly Agree). This scale has previously shown evidence of acceptable reliability and convergent validity with longer measures of the Big Five, but internal consistency estimates are typically below conventional levels due to the small number of items in each subscale (Gosling et al., 2003; Muck, Hell, & Gosling, 2007).

Ryff Scales of Psychological Well-Being. The 42-item version of the Ryff Scales of Psychological Well-Being (see Abbott, Ploubidis, Huppert, Kuh, Wadsworth, & Croudace, 2006; Ryff, 1989) includes six subscales measuring autonomy (e.g., ‘I have confidence in my opinions, even if they are contrary to the general consensus’), environmental mastery (e.g., ‘I am quite good at managing the many responsibilities of my daily life’), positive relations (e.g., ‘Most people see me as loving and affectionate’), personal growth (e.g., ‘I have the sense that I have developed a lot as a person over time’), purpose in life (e.g., ‘I enjoy making plans for the future and working to make them a reality’), and self-acceptance (e.g., ‘The past had its ups and downs, but in general I wouldn’t want to change it’). Responses are recorded on a 6-point Likert-type scale (1 = disagree strongly through 6 = agree strongly).

The Satisfaction with Life Scale (SWLS). The SWLS (Diener, Emmons, Larson, & Griffin, 1985) is a 5-item instrument measuring participants’ cognitive assessments of general satisfaction with their life (e.g., ‘The conditions of my life are excellent’). 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 of life satisfaction (see Diener, Suh, Lucas, & Smith, 1999; Lucas, Diener, & Larson, 2003).
Positive and Negative Affective Schedule (PANAS). The PANAS (Watson, Clark, & Tellegen, 1988) was used to measure the affective component of well-being. This 20-item scale asks participants to report the degree to which they are experiencing both positive (e.g., interested, proud, alert) and negative (e.g., disinterested, upset, irritable) emotions on a 5-point Likert-type scale (1 = very slightly or not at all through 5 = extremely), with higher scores reflecting greater emotional experience. This is one of the most widely used measures of positive and negative affect and has previously demonstrated strong evidence of validity (Lucas et al., 2003).

Meaning in Life Questionnaire – Presence Subscale (MLQ-P). The MLQ-P (Steger, Frazier, Oishi, & Kaler, 2006) is a 5-item face-valid instrument measuring participants’ appraisals that life is purposeful and meaningful (e.g., ‘I have a good sense of what makes my life meaningful’). Participants respond on a 7-point Likert-type scale (1 = absolutely untrue through 7 = absolutely true), where higher scores reflect greater presence of meaning in life. The psychometric properties of this scale have been shown to be acceptable (see Steger et al., 2006).

Analytic Strategy

Bivariate correlations between the BWBS subscales, the Big Five, the Ryff Scales, the SWLS, positive affect, negative affect, and the MLQ-P were calculated. Next, several hierarchical regressions were conducted with BWBS subscales and the Big Five as covariate predictors of well-being. Each well-being indicator was included as the outcome variable in separate models. In all models, the Big Five were entered in the first step, and the BWBS subscales were entered in the second step. The $R^2$ estimate for the first step indicates the amount of variance in the well-being indicator that is explained by the Big Five, thus addressing the degree to which these broad personality factors predict well-being. A significant increase in explained variance at the second step, as determined by the presence of a statistically significant $\Delta R^2$ estimate, indicates that the BWBS subscales predict unique variance in the well-being indicator beyond that predicted by the Big Five. In the case of a significant increase in explained variance, regression coefficients for each of the BWBS subscales and the well-being indicator were examined to address the direction and strength of the association between the individual BWBS subscales and the well-being indicator in question. All variables were standardized to ensure normality (Aiken & West, 1991).

RESULTS

Correlations between Conceptions of Well-Being, the Big Five, and Experienced Well-Being

Correlations between the BWBS subscales, the Big Five, and each well-being indicator are presented in Table 2. For simplicity, we note only those correlations that are significant at $p < .01$ for this set of analyses. As shown, the experience of pleasure subscale of the BWBS was significantly associated with extraversion and openness, as well as autonomy, personal growth, self-acceptance, life satisfaction, and positive affect. The avoidance of negative experience subscale of the BWBS was not associated with any of the Big Five and negatively associated with personal growth and purpose in life. The self-development subscale of the BWBS was positively associated with agreeableness, conscientiousness, and openness, as well as all of the Ryff Scales of PWB, positive affect, and meaning in life. The contribution subscale of the BWBS was positively associated with agreeableness, conscientiousness, and openness, as well as personal
growth, positive relations, purpose in life, self-acceptance, life satisfaction, positive affect, and meaning in life. These findings indicate that conception of well-being dimensions are significantly associated with multiple indices of well-being, including those constituting PWB. Furthermore, the associations between eudaimonic dimensions and well-being are more numerous and robust than those between hedonic dimensions and well-being. Notably, each of the Big Five was also associated with each well-being indicator.

**Variance in Well-Being predicted by the Big Five and the BWBS**

Table 3 displays the results of the ten hierarchical regression analyses examining whether the BWBS subscales predict unique variance in well-being beyond that predicted by the Big Five. In Step 1 of these analyses, the Big Five predicted a significant amount of variance in each outcome indicator of well-being ($R^2 = .11-.41$). Scores on each of the BWBS subscales were then simultaneously entered in Step 2. Scores on the BWBS predicted unique variance in autonomy ($\Delta R^2 = .05$), environmental mastery ($\Delta R^2 = .02$), personal growth ($\Delta R^2 = .08$), purpose in life ($\Delta R^2 = .05$), positive affect ($\Delta R^2 = .03$), and meaning in life ($\Delta R^2 = .06$).

Examinations of the regression coefficients for each BWBS subscale and well-being indicator in Step 2 suggested a different pattern of associations for hedonic and eudaimonic subscales of the BWBS. Specifically, experience of pleasure was negatively associated with environmental mastery and meaning in life, as well as positively associated with negative affect. Avoidance of negative experience was negatively associated with personal growth, purpose in life, and self-acceptance. Self-development was positively associated with autonomy, personal growth, purpose in life, and meaning in life. Finally, contribution was negatively associated with autonomy and positively associated with positive affect and meaning in life. In general, these findings indicate that conceptions of well-being predict unique variance in well-being beyond the Big Five, with hedonic dimensions of individual conceptions of well-being being negatively associated with experienced well-being after controlling for the Big Five and eudaimonic dimensions being for the most part positively associated with experienced well-being after controlling for the Big Five.

**CONCLUSION**

This chapter presents initial research examining associations between lay conceptions of well-being and a full range of both PWB and SWB variables. Correlational analyses indicated more numerous and often more robust associations between eudaimonic conception dimensions and well-being, a finding consistent with previous research on lay conceptions of well-being in specific (e.g., McMahan & Estes, 2011b; McMahan et al., 2012) and research on hedonic and eudaimonic approaches to well-being in general (Huta et al., in press; Peterson et al., 2005). Importantly, the current study is the first to find evidence of associations between individual conceptions of well-being and PWB. These findings suggest that individual conceptions of well-being predict not only hedonically-oriented indicators of well-being (e.g., positive affect), but also eudaimonically-oriented indicators of well-being (e.g., environmental mastery, personal growth).

The current research also provides initial empirical evidence that individual conceptions of well-being predict unique variance in experienced well-being beyond that predicted by the Big Five. Indeed, while the Big Five explained a large amount of
variance in each of the well-being indicators used in the current study, conceptions of
well-being predicted an additional 2-8% of the variance in several of these indicators
(corresponding Rs = .14-.28). Although this would seem to be only a modest increase in
explained variance, it should be noted that incremental validity estimates represent only
the unique contribution of the variable of interest, whereas conventional definitions of
effect size for zero-order correlations assume that estimates include both the unique
contribution of the variable of interest and contribution due to third variables.
 Accordingly, the above-mentioned increases in explained variance meet or exceed that
which is considered to be a reasonable contribution by conventional standards for
incremental validity estimates (see Hunsley & Meyer, 2003).

Examination of regression coefficients for associations between each of the BWBS
subscales and well-being when controlling for the Big Five indicated a different pattern
of associations for the hedonic (i.e., experience of pleasure, avoidance of negative
experience) and eudaimonic (i.e., self-development, contribution) subscales of the
BWBS. In general, the hedonic subscales were negatively associated with well-being
when controlling for the Big Five, whereas the eudaimonic subscales were positively
associated with well-being when controlling for the Big Five. These findings are again
consistent with previous research suggesting beneficial effects of conceptualizing well-
being in eudaimonic terms (e.g., McMahan et al., 2012). Notably, while previous
research typically indicates that hedonic approaches to well-being are unrelated or
positively, albeit weakly, associated with experienced well-being (e.g., Peterson et al.,
2005), these findings suggest that conceptualizing well-being in hedonic terms may
actually be detrimental for positive psychological functioning after taking into account
more general personality characteristics.

Limitations and Future Directions

The above findings must be interpreted with the following limitations in mind. First,
our samples were composed entirely of undergraduate students, and the current study’s
findings may not generalize to other populations. Future research should thus attempt to
address the current findings in larger, non-student populations. Second, the current study
was correlational in nature and relied entirely on self-report measures, and future research
should attempt to corroborate the current findings using more diverse methodological
approaches. A third limitation concerns our measurement of the Big Five. Personality is
best conceptualized as hierarchical, with more specific facets underlying the Big Five
traits (McCrae & Costa, 1992), and recent research indicates that facet-level analyses
account for a higher amount of variance in well-being than traits-level analyses (e.g.,
Quevedo & Abella, 2011; Steel, Schmidt, & Schultz, 2008). Because we used an
instrument that measures the Big Five at only the trait level, a facet-level analysis was
impossible in the current study. To address this, future research should examine whether
individual conceptions of well-being predict unique variance in psychological
functioning beyond the facets of the Big Five.

With respect to the above limitations, this chapter provides initial empirical evidence
suggesting that individual differences in conceptions of well-being predict dimensions of
both PWB and SWB after taking into account the broader Big Five personality traits. The
study of individual conceptions of well-being is a relatively new area of inquiry,
however, and additional research is needed to fully explore the nature of the relationships
between this construct and positive psychological functioning.
AGKNOWLEDGEMENTS

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REFERENCES


Table 1

*Descriptive statistics for BWBS dimensions, Big Five dimensions, and well-being indices (n = 464)*

<table>
<thead>
<tr>
<th>Measure</th>
<th>α</th>
<th>M</th>
<th>SD</th>
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<tbody>
<tr>
<td>BWBS-EP</td>
<td>.82</td>
<td>5.32</td>
<td>.96</td>
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<tr>
<td>BWBS-AN</td>
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<tr>
<td>Extroversion</td>
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<tr>
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<td>4.99</td>
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<td>Conscientiousness</td>
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<tr>
<td>Meaning in life</td>
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<td>5.19</td>
<td>1.24</td>
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Note: α = Internal consistency estimate of scale/subscale. M = Sample mean of scale/subscale. SD = Sample standard deviation of scale/subscale. BWBS-PL = BWBS Experience of Pleasure subscale. BWBS-AN = BWBS Avoidance of Negative Experience subscale. BWBS-SD = BWBS Self-development subscale. BWBS-CO = BWBS Contribution to Others subscale.
### Table 2

**Bivariate correlations between BWBS dimensions, Big Five dimensions, and well-being indices (n = 464)**

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
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<tr>
<td>3. BWBS-SD</td>
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Note: All correlations greater than or equal to ± .12 are significant at the $p < .01$ level. BWBS-PL = BWBS Experience of Pleasure subscale. BWBS-AN = BWBS Avoidance of Negative Experience subscale. BWBS-SD = BWBS Self-development subscale. BWBS-CO = BWBS Contribution subscale.
Table 3

*Regression coefficients for Big Five dimensions, BWBS dimensions, and well-being indices (n = 464)*

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Note: BWBS-PL = BWBS Experience of Pleasure subscale. BWBS-AN = BWBS Avoidance of Negative Experience subscale. BWBS-SD = BWBS Self-development subscale. BWBS-CO = BWBS Contribution subscale.

***p < .001. **p < .01. *p < .05. +p < .10.