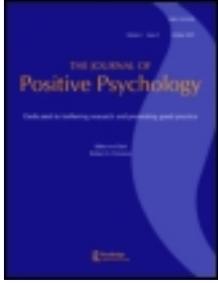


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Pursuit of pleasure, engagement, and meaning: Relationships to subjective and objective measures of well-being

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Pleasure, engagement, and meaning are all unique predictors of individuals' well-being. We explored the relationship between the pursuit of each of these pathways and well-being. Participants ($N = 13,565$) visited a website and completed a measure about their orientation toward pleasure, engagement, and meaning as a pathway to happiness as well as measures of subjective and objective well-being (OWB). All three pathways correlated with higher levels of subjective well-being (SWB). Pursuing engagement and meaning, however, were more strongly related to SWB than pursuing pleasure. Objective indicators of well-being, including measures of occupational and educational attainment, displayed a similar pattern, with engagement and meaning positively related, whereas pleasure was negatively related. Although these results are merely correlational, it suggests that engaging and meaningful activities may have stronger influences on well-being than pursuing pleasure.

Keywords: well-being; happiness; meaning; engagement; pleasure; authentic happiness

Introduction

People aim to increase their well-being in different ways: some seek challenges, others try to make the world a better place, and others just try to have fun. Yet these strategies may not all work equally well and some specific strategies may work better for producing well-being (Tkach & Lyubomirsky, 2006). Seligman (2002) noted three distinct pathways to well-being: pleasure, engagement, and meaning. Behaviors that fall under each pathway contribute to individual's well-being, but often people must make trade-offs between activities (e.g., the most meaningful activity may not be the most pleasurable) or rely on one pathway and neglect another.

Seligman (2002) argues that the pursuit of all the three pathways is important to live the 'full life'. Indeed, research supports that the 'full life' leads to an increased satisfaction with life above and beyond the independent contributions of each pathway (Peterson, Park, & Seligman, 2005). Well-being, however, is more than just satisfaction with life. Instead, researchers often combine both assessments of affective states as well as cognitive evaluations to develop a more nuanced view of an individual's well-being (Keyes & Magyar-Moe, 2003). This construct is often referred to as subjective well-being (SWB; Diener, 1984; Ong & van Dulmen, 2006). Still other theorists focus on objective well-being (OWB) leaning on more objective indicators of well-being and success, such as education,

achievement, and freedom from mental disorder (e.g., Keyes, 2005; Sen, 1993). Both conceptions provide a partial picture of an individual's well-being whereas combining the approaches provides a more complete view. We further investigate the independent relationships of these three pathways of pleasure, engagement, and meaning to different components of well-being, expanding on previous studies by examining not just the relationship to SWB but OWB (educational and occupational achievement) as well.

Pathways to the good life

Not all theorists agree with Diener's view that well-being is a sum of pleasant feelings and positive evaluations about one's life. Ryff (1989), for example, argues that well-being comes from achieving a sense of mastery over the environment, creating meaningful lasting relationships, achieving personal growth, acting autonomously, finding purpose, and living in accordance with one's true nature (see also, Jahoda, 1958; Schlegel, Hicks, Arndt, & King, 2009). These conceptions align with the notion that well-being flows from living well or realizing one's potential. Such eudaimonic approaches focus on becoming a better person by leading a virtuous life and achieving important goals. Objective indicators, furthermore, provide additional information about individual's well-being.

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Seligman's (2002) authentic happiness theory combines hedonic and eudaimonic approaches. He posits three distinct pathways to well-being: pleasure, engagement, and meaning. Each pathway is neither sufficient nor redundant; therefore necessitating cultivation of each to achieve the full life. Empirical work has demonstrated that these pathways are indeed distinct, as each pathway is a unique predictor of life satisfaction, and that the presence of all the three is associated with the highest levels of life satisfaction (Peterson et al., 2005; Peterson, Ruch, Beerman, Park, & Seligman, 2007). This supports Seligman's (2002) notion that a 'full life' consists of experiencing positive emotions, pursuing engagement, and obtaining meaning. A further finding in these studies is that an orientation toward pleasure does not predict life satisfaction as strongly as either an orientation to engagement or to meaning. We will now give a brief overview of each of these pathways and how they may contribute to well-being.

Pleasure

The link between pursuing pleasure and well-being is clear using a hedonic definition of well-being. More experienced pleasure is equivalent to higher well-being. Experiencing frequent positive emotions is related to long-term levels of positive emotions as well as other aspects of well-being. Daily experiences of positive emotions correlate strongly with reflections of how much positive emotion was experienced during that time period (Schimmack, Oishi, Diener, & Suh, 2000). Indeed, the relationship between mean state positive affect and general mood positive affect are large (e.g., $r = 0.70$, Watson, Clark, & Tellegen, 1988). Frequent experience of positive emotions is also related to higher levels of life satisfaction (Diener, Colvin, Pavot, & Allman, 1991; Diener, Sandvik, & Pavot, 1991; Kuppens, Realo, & Diener, 2008). Pursuing pleasure, therefore, is a viable option for increasing long-term well-being.

Engagement

An alternative route to well-being is through engaging in activities that are engrossing and absorbing, a state that Csikszentmihalyi (1990) has deemed 'flow'. Although the subjective experience during these states is void of emotion, on reflection, people report that these situations are enjoyable (Carli, Delle Fave, & Massimini, 1988). Flow also transforms important yet mundane tasks into interesting activities. For example, creating a game from one's math homework by seeing how many problems one could solve in 30 min makes the assignment feel less bothersome and increases intrinsic motivation. Flow

states, therefore, may lead to long-term well-being through promoting positive resources – such as nurturing talents, cultivating interest, and honing skills. These resources may lead to an upward spiral of both increased SWB and OWB. We would therefore expect that individuals who endorse frequently entering flow are more productive and achieve higher levels of success. Some preliminary evidence supports this as those who frequently experience flow persistent longer on tasks and therefore achieve better outcomes (Csikszentmihalyi, 1990).

Meaning

The final pathway suggested by Seligman (2002) is to pursue happiness through meaning. Theorists and researchers have often proposed that finding meaning in one's life is an important determinant of psychological well-being (Frankl, 1997; Steger, Kashdan, Sullivan, & Lorentz, 2008). Meaning allows one to transcend oneself, either through promoting positive social relationships or connecting to a higher power or purpose (Seligman, 2002). An individual achieves meaning in life when his or her life is experienced as purposeful, significant, and understandable (Steger, 2009). This sense of purpose provides individuals with goals that guide action and promote well-being (Baumeister & Vohs, 2002).

Measurement of SWB

Although researchers from various fields differ in their definitions of well-being, psychologists most often adopt a subjective approach, analyzing self-reports of the frequency and intensity of emotional experiences (Andrews & Withey, 1976; Bradburn, 1969; Campbell, Converse, & Rodgers, 1976; Diener, 1984). In this view, individuals achieve happiness and well-being through both the frequent experience of positive emotions and a lack of negative emotions. In addition, SWB contains a cognitive evaluation of one's life as good (Ong & van Dulmen, 2006).

We call this view of well-being 'hedonic'. The hedonic approach uses self-report measures. Hedonic approaches are useful because they allow each individual to be the ultimate judge of his or her own happiness (Myers & Diener, 1995). Facets of SWB, furthermore, link to higher levels of objective achievement, and predict future behavior and success (Lyubomirsky, King, & Diener, 2005). Despite their subjective nature, these self-report measures also strongly correlate with observer ratings (Lepper, 1998; Sandvik, Diener, & Seidlitz, 1993).

Measurement of OWB

In objective approaches, well-being is achieved through satisfaction of needs which can be listed *a priori* (Nussbaum, 2003; Sen, 1993). Objective approaches highlight certain things that are intrinsically valuable to well-being, irrespective of the subjective value assigned to them. A list could include several elements, such as education, relationships, career success, democracy, beauty, and material comforts (Seligman & Royzman, 2003). In this study, we use two indicators of life achievements as measures of OWB: education and occupational attainment. These are good indicators of OWB because they are highly valued contributing to our sense of self and representing how well we function. Work provides financial security and opportunities for generativity. Education provides a pathway for developing knowledge and securing better employment. Both of these indicators build psychological, social, and physical resources that enhance well-being and promote flourishing.

Current study

We attempt to understand how the pursuit of pleasure, engagement, and meaning relates to both SWB and OWB. Despite a variety of studies that link either pleasure, engagement, or meaning to measures of well-being, few studies have analyzed all three at the same time. Of those that are analyzed, none have used measures of SWB other than life satisfaction or any measures of OWB. This is a worthwhile for several reasons. First, although these paths have been linked to well-being, the relative importance of each pathway is unknown. Measures of SWB, such as life satisfaction, happiness, and positive affect have different methodological limitations and so should be teased apart (Diener, 2006). Second, the use of hedonic approaches has dominated psychological accounts of well-being (Diener, 1984; Lyubomirsky, 2001; cf. Ryff, 1989). More recent reviews have emphasized the importance of broadening the measurement of well-being to include other conceptualizations as well (Deci & Ryan, 2008). We intend to investigate whether this combined approach contributes to greater levels of SWB and OWB. Specifically, we hypothesize that pursuing engagement and meaning should be more beneficial than pleasure because they build long-term positive resources, such as relationships, mastery, and purpose and so individuals who engage in behaviors related to engagement and meaning should have even greater levels of SWB and OWB compared to those who pursue pleasure as a route to happiness. We also expect that we will see the highest levels of SWB in those individuals who show high levels of each pathway and that these effects

will be more than just the sum of the benefits of the individual pathway.

Method

Participants

Participants visited the Authentic Happiness website (www.authentichappiness.org) between October 1, 2005 and October 1, 2008. Only participants who completed all five of the main outcome measures were included in this study. The total number of participants in this sample was $N=13,565$. Participants were predominantly female (66.5%) and highly educated with 89.5% reporting attending at least some college and 31% of the sample completing post-college education. Demographic data regarding age was collected using nine intervals (13–15, 16–17, 18–20, 21–24, 25–34, 35–44, 45–54, 55–64, and 65+). The median and modal participants were aged 35–44. Less than 10% of the sample was below the age of 20. Although a majority of the participants were residents of US (67.3%), 112 different countries were represented in this sample (Australia 8.8%, the UK 7.8%, Canada, 6.0%, New Zealand 1.2%, and all other countries were less than 1% each). No information was available with regard to the ethnic diversity of the sample.

Design and procedures

Participants accessed the questionnaires via a web portal available online. This web portal contains links to several questionnaires which are provided free of charge. Individuals can return to the site to complete questionnaires multiple times or complete different questionnaires. If a participant completed a measure multiple times, only the first response was included in this study.

Measures

Demographics

Each participant also answered demographic questionnaires including age, country of origin, and gender as well as their occupational and educational achievements. These measures were grouped and ranked based on skill level of the professions. The highest ranked jobs included professionals, such as chief executives, doctors, lawyers, dentists, professors, and owners of large businesses. Further categories included skilled laborers, manual laborers, and students.

Orientations to Happiness Scale

The Orientations to Happiness scale is an 18-item measure of the different strategies that individuals use

to promote well-being (Peterson et al., 2005). These items tap three pathways: pleasure (i.e., 'I go out of my way to feel euphoric. '), engagement (i.e., 'I seek out situations that challenge my skills and abilities. '), and meaning ('In choosing what to do, I always take into account whether it will benefit other people. '). Participants responded to each item on a 5-point scale that rated whether each item was characteristic of their behavior ('1 = very much unlike me' through '5 = very much like me'). Scores for each subscale provide an assessment of to what degree each pathway is important to that individual. The reliabilities of each subscale were $\alpha = 0.81$ for pleasure, $\alpha = 0.74$ for engagement, and $\alpha = 0.84$ for meaning. Items for this measure demonstrate considerable face validity as independent experts contributed items to this measure and each factor correlates highly with other measures of pleasure, engagement, and meaning (Peterson et al., 2005).

Subjective Happiness Scale

This scale (shortly SHS) is a 4-item measure of subjective, chronic happiness (Lyubomirsky & Lepper, 1999). The first item asks participants to rate to what degree they are a happy person (1 = not a very happy person, 5 = a very happy person). The second question asks participants to compare themselves to their peers and determine their relative happiness (1 = less happy, 5 = more happy). The third question describes a chronically happy person and asks participants the extent to which the description characterizes them (1 = not at all, 5 = a great deal). Finally, the fourth question describes a chronically unhappy person; it is reverse coded and uses the same scale as the previous question. Higher scores reflect higher levels of chronic happiness. This scale had a reliability of $\alpha = 0.91$.

Satisfaction with Life Scale

This scale (shortly SWLS) is a 5-item measure of general life satisfaction (e.g., 'I am satisfied with my life', 'If I could live my life over, I would change almost nothing' Diener, Emmons, Larsen, & Griffin, 1985). The participants rated themselves on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree). Higher scores represent higher levels of general life satisfaction. This scale had a reliability of $\alpha = 0.90$.

Positive and Negative Affect Schedule Scale

This scale (shortly PANAS) consists of 20 adjectives, 10 related to positive affect (e.g., 'interested', 'enthusiastic', and 'determined') and 10 related to negative affect (e.g., 'afraid', 'nervous', and 'guilty' Watson, 1988). Participants rate each adjective using a 5-point

Likert-type scale (1 = very slightly or not at all, 5 = extremely) to represent the extent that the adjective described them. Participants responded to a prompt which asked them to rate the degree to which they feel this way 'right now, that is at the present moment'. The positive affect subscale had an $\alpha = 0.92$, whereas the negative affect subscale had an $\alpha = 0.89$.

Fordyce Emotions Questionnaire

The Fordyce Emotions Questionnaire is a 4-item measure of one's average emotional state (Fordyce, 1988). Participants rated their general level of positive emotions by responding to a question regarding 'In general, how happy or unhappy do you usually feel? 0 = extremely unhappy (utterly depressed, completely down to 10 = extremely happy (feeling ecstatic, joyous, and fantastic)'. Participants also rated the percent of time on an average they feel happy, unhappy, or neutral.

Authentic Happiness Inventory

This scale (shortly AHI) is a 24-item measure of achievement of happiness and success in various life domains (Seligman, Steen, Park, & Peterson, 2005). For the purpose of this study, only items related to achievement of positive emotions were included to further assess more enduring positive emotions compared to the transient positive emotions assessed by the PANAS. Participants indicated which statement best described their experience in the past week. Questions included to assess positive emotions included: 1 = 'I am usually in a bad mood' to 5 = 'I am usually in an unbelievably great mood', 1 = 'I have sorrow in my life' to 5 = 'My life is filled with joy', 1 = 'I have little or no enthusiasm' to 5 = 'I have so much enthusiasm that I feel I can do most anything', and 1 = 'I experience more pain than pleasure' to 5 = 'My life is filled with pleasure'. We summed these items to create a measure of average emotional experience in the past week. This 4-item composite had an $\alpha = 0.86$.

Center for Epidemiologic Studies Depression Scale

This scale (shortly CES-D) is a 20-item measure which indicated the amount of depressive symptoms the respondent has experienced over the past week (Radloff, 1977). Participants rated how often they experienced each symptom ranging from rarely or none of the time (less than 1 day) to most or all of the time (5-7 days). Sample items include 'I felt that everything I did was an effort', 'My sleep was restless', and 'I felt that people dislike me'. This scale had a reliability of $\alpha = 0.93$.

Table 1. Intercorrelations of orientations to happiness.

	Pleasure	Engagement
Pleasure		
Engagement	0.33	
Meaning	0.24	0.50

Notes: $N = 13,565$. All correlations are significant at $p < 0.001$ level.

Results

We found that the three pathways are distinguishable and all correlated positively with SWB. Engagement and meaning correlated more strongly with each component of SWB compared to pleasure. Those who pursue engagement and meaning have higher educational and occupational achievements, whereas pursuing pleasure correlates negatively with educational and occupational attainment. Pursuit of all the three pathways leads to the most life satisfaction, positive affect, and general happiness.

Three pathways

Table 1 displays the intercorrelations between the different pathways to happiness as indicated by the orientations to happiness test. We find that these pathways are distinct approaches due to correlations which although high are not near a perfect correlation of $r = 1.00$. Previous studies have verified this by factor analysis (Peterson et al., 2005). We verified these factors by running a confirmatory factor analysis positing the three factors. We ran both correlated and uncorrelated solutions and compared these models. In order to evaluate if one model is a better fit than the other we calculated a chi-squared difference test. In this case, the $\chi^2_D(3) = 4959.48$, $p < 0.001$ indicating a statistically significant difference in fit between these two models favoring the correlated factors solution (the uncorrelated factors model had a $\chi^2(135, N = 13,565) = 17,052.55$, $p < 0.001$ and the correlated factors model a $\chi^2(132, N = 13,565) = 12,093.08$, $p < 0.001$. Since there is currently no consensus as to which fit index provides the best estimation of fit, researchers have recommended that multiple indices be reported for a single model. These indices should include both absolute fit indices which are derived from the discrepancy between the observed and implied covariance matrices, and relative or incremental fit indices which compare the chi-squared value for the tested model to a null or independence model in which all measures are uncorrelated. We looked at several measures of fit, both absolute and relative to assess the fit of the model. The first fit index we examined was the chi-squared statistic, which tests the discrepancy between the sample covariance and the model-implied covariance matrix; a non-significant

Table 2. Descriptive statistics.

	<i>M</i>	<i>SD</i>	<i>N</i>
Pleasure	3.22	0.88	13,565
Engagement	3.10	0.77	13,565
Meaning	3.43	0.97	13,565
Life satisfaction	21.88	7.98	13,565
Happiness	4.48	1.57	13,565
Positive affect	29.40	9.01	13,565
Negative affect	15.88	6.85	13,565
Depression	16.38	12.56	13,565
Fordyce emotions	6.41	2.32	8134
Fordyce – percent of time happy	49.78	27.71	8134
Authentic happiness inventory – emotion items	11.23	3.39	9248

result indicates good model fit. For this model, $\chi^2(132, N = 13,565) = 12,093.08$, $p < 0.001$; however, given the size of the sample, a significant chi-squared statistic is unremarkable. The next fit index we considered was the Standardized Root Mean Squared Residual (SRMR), which is a standardized summary of the average covariance residuals. SRMR values less than 0.08 are typically used to indicate good model fit, whereas values greater than 0.10 indicate poor fit (Hu & Bentler, 1998). For this model, $SRMR = 0.0737$, which indicates reasonable fit. We also considered the Root Mean Square Error of Approximation (RMSEA), which is a parsimony-adjusted index which takes into account model complexity. The RMSEA compares the chi-squared value to the degrees of freedom of the model. An RMSEA less than 0.05 indicates close approximate fit; an RMSEA less than 0.08 indicates good fit and a RMSEA greater than 0.10 indicates poor fit (Hu & Bentler, 1998). For this model, $RMSEA = 0.08$ which is just on the border of good fit. Lastly, we looked at the index of relative fit. The specific relative fit index we used was the Comparative Fit Index (CFI), which is a relative fit index that compares the χ^2_B (the χ^2 of the baseline or null model) to the χ^2_M (the χ^2 of the researcher's model). Goodness-of-fit is indicated by a CFI of greater than 0.95. For this model, the $CFI = 0.86$, which suggests that the model is not fitting well compared to a null or baseline model. Given the discrepancy in fit indices, it could be possible that another factor structure would fit this data especially because the selected relative fit index indicated poor fit of the model. The good and meaningful life, however, overlap more with each other than with the pleasant life as indicated by a higher correlation of $r = 0.50$.

Each pathway and SWB

Our first aim was to determine the relationships between each pathway and different components of

Table 3. Correlations between orientation to happiness and measures of SWB.

	Life satisfaction	Happiness	Positive affect	Negative affect	Depression
Pleasure	0.28	0.35	0.29	-0.09	-0.23
Engagement	0.44	0.44	0.51	-0.22	-0.35
Meaning	0.46	0.47	0.49	-0.20	-0.34

Notes: $N = 13,565$. All correlations are significant at $p < 0.001$ level.

Table 4. Disattenuated correlations between orientation to happiness and measures of SWB.

	Life satisfaction	Happiness	Positive affect	Negative affect	Depression
Pleasure	0.31	0.41	0.34	-0.10	-0.26
Engagement	0.54	0.54	0.62	-0.27	-0.42
Meaning	0.52	0.54	0.53	-0.23	-0.38

Notes: $N = 13,565$. All correlations are significant at $p < 0.001$ level.

SWB. The different components of SWB were happiness, life satisfaction, positive affect, negative affect, and depression. Table 2 shows the means and SDs of all dependent and independent variables. All the three pathways were positively and significantly related to all the components of SWB. Table 3 shows the correlations of each orientation with different components of SWB.¹ Based on the large sample of 13,565 respondents, differences in Fisher's Z transformed r as small as 0.024 are statistically different at the $p = 0.05$ level. Comparing the magnitude of the correlations rather than statistical significance, therefore, is more useful to see how these correlations differ. An orientation to meaning and engagement was more strongly related to each facet of SWB than an orientation to pleasure. In fact, for measures related to positive aspects of well-being (life satisfaction, happiness, and positive affect), pleasure is only moderately related to each facet; whereas, engagement and meaning have large relationships. One would predict if any of the facets were uniquely related to the pursuit of pleasure it would be positive emotions, but surprisingly, the pursuit of pleasure does not even correspond to a greater experience of positive emotions than the pathways of engagement and meaning ($r = 0.29$ compared to $r = 0.51$ and $r = 0.49$ for engagement and meaning, respectively). A plausible alternative explanation for these findings is that the measure of positive emotions only assesses present emotions and does not capture long-term emotional experience, which would be enhanced by an orientation to pleasure. Given the surprising nature of this finding, we confirmed this pattern across two other measures of positive emotions. Although of smaller magnitudes, findings were consistent across measures with an orientation to pleasure less strongly related to positive emotions assessed by how happy one usually feels ($r = 0.31$, 0.38, and 0.42, for pleasure, meaning, and engagement, respectively), percent of time happy on an

average ($r = 0.31$, 0.37, and 0.42, for pleasure, meaning, and engagement, respectively), and items drawn from the AHI that tap positive emotions ($r = 0.31$, 0.46, and 0.45, for pleasure, meaning, and engagement, respectively). All these correlations were significant at the $p < 0.001$ level. This pattern of findings suggests that orientation to engagement and meaning are more strongly related to both short-term (in this moment) and long-term (average or in general) measures of positive emotions.

Are these observed differences due to measurement error based on reliability of individual questionnaires (Table 4)? In order to address this concern, we also calculated the disattenuated correlations, which adjust for the reliability of each of the measures. The pattern of correlations is identical using the disattenuated correlations, suggesting that the measurement reliability does not contribute to the reduced relationships with orientation to pleasure.

Each pathway and OWB

We also examined relationships between the orientations to happiness and objective indicators of well-being. We used educational and occupational attainments as objective indicators of success and well-being. The demographic questionnaires required participants to respond to education and occupation on a rank-ordered scale (e.g., chief executives, business managers, administrative personnel, assistants and technicians, skilled manual laborers, and manual laborers), so we calculated Spearman's ρ for each of these relationships. Table 5 shows Spearman's ρ for relationships between orientations to happiness and educational and occupational achievements. Orientation to pleasure was negatively related to both educational and occupational attainments ($\rho = -0.13$ and -0.09 , respectively). In contrast, both an orientation to engagement and to meaning were positively

Table 5. Spearman's ρ for orientation to happiness and measures of OWB.

	Education	Occupation	Occupation (excluding students and retirees)
Pleasure	-0.13	-0.09	-0.04
Engagement	0.13	0.09	0.13
Meaning	0.13	0.08	0.15

Notes: $N = 13,565$. All correlations are significant at $p < 0.01$ level.

related to higher educational attainment ($\rho = 0.13$ and 0.13 for engagement and meaning, respectively) and occupational attainment ($\rho = 0.08$ and 0.09 for engagement and meaning, respectively).² Controlling for occupation led to only small changes in the relationships between the orientations and educational attainment ($\rho = -0.11$ for pleasure, 0.11 for engagement, and 0.11 for meaning). Controlling for education, however, led to large drops in the relationships between the orientations and occupational attainment ($\rho = -0.02$ for pleasure, 0.01 for engagement, and 0.01 for meaning). These findings suggest that pursuing engagement and meaning may lead to obtaining more advanced education, which then leads to higher job attainment.

All three pathways

Lastly, we tested the hypothesis that suggests that individuals high in all the three pathways would have the highest levels of well-being. We tested this hypothesis by creating a composite measure of SWB by calculating the standardized scores of each measure (satisfaction with life, happiness, positive affect, and negative affect) and summing the standardized scores. Each measure received equal weight in this composite to balance out the contributions of cognitive (satisfaction and happiness) and affective (positive and negative affect) components. Although some researchers weigh these aspects differently, no consensus of theoretical or empirical support favors a particular measurement model (Schimmack, 2008). We ran a hierarchical linear regression to determine if the interactions of the different pathways predicted SWB also controlling for demographic factors. The overall regression was significant $F(11, 13,553) = 548.96$, $p < 0.001$ and explained 31% of the variance in SWB. Similar to the results of the correlational analysis, the regression weights for engagement and meaning were much larger than pleasure (Table 6). This again supports that an orientation to meaning and engagement is a better predictor of SWB than an orientation to pleasure. The three-way interaction of pleasure, engagement, and meaning was not significant ($p = 0.054$). We also computed a hierarchical linear

Table 6. Hierarchical linear regression predicting SWB composite.

	<i>B</i>	SE	β
Gender	0.04	0.02	0.01
Age	0.09	0.01	0.10***
Education	0.01	0.01	0.01
Occupation	0.00	0.00	0.02**
Pleasure	0.27	0.02	0.14***
Engagement	0.55	0.02	0.26***
Meaning	0.49	0.01	0.29***
Pleasure \times engagement	-0.08	0.02	-0.04***
Pleasure \times meaning	0.00	0.02	0.00
Engagement \times meaning	-0.04	0.02	-0.02*
Pleasure \times engagement \times meaning	-0.03	0.02	-0.02

Note: * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$.

Table 7. Hierarchical linear regression predicting well-being composite (positive measures only).

	<i>B</i>	SE	β
Gender	0.14	0.04	0.02***
Age	0.11	0.01	0.07***
Education	-0.02	0.01	-0.01
Occupation	0.02	0.00	0.03***
Pleasure	0.55	0.02	0.18***
Engagement	1.00	0.03	0.30***
Meaning	0.95	0.02	0.38***
Pleasure \times engagement	-0.09	0.03	-0.03**
Pleasure \times meaning	0.00	0.02	0.00
Engagement \times meaning	-0.04	0.02	-0.01
Pleasure \times engagement \times meaning	-0.06	0.02	-0.02**

Note: * $p < 0.05$, ** $p < 0.01$, and *** $p < 0.001$.

regression excluding from the SWB composite measures of negative affect and including only facets related to the presence of positive aspects (i.e., satisfaction with life, happiness, and positive affect), this regression was again significant $F(11, 13,553) = 892.74$, $p < 0.001$ and explained 42% of the variance in the composite of these positive measures. Table 7 shows the results of this regression analysis. In this analysis, the three-way interaction of pleasure, engagement, and meaning was significant, suggesting that having high levels of all pathways contributes to SWB above and beyond the main effects of each pathway. This provides support for the authentic happiness theory that although engagement and meaning may be more related to higher levels than pleasure, a total absence of pleasure is detrimental to well-being.

Discussion

Orientations to pleasure, engagement, and meaning do not contribute equally to well-being – both subjective and objective. Specifically, we found that individuals

with an orientation to engagement and/or to meaning report higher levels of SWB and OWB than individuals with an orientation to pleasure. Interestingly, all the three pathways were positively related to SWB; for OWB, however, only engagement and meaning showed small positive relationships whereas pleasure was negatively related. Surprisingly, an orientation to pleasure had only a small correlation to levels of positive affect.

Building resources

Activities that increase engagement and meaning may have the strongest impact on an individual's well-being. Pursuing engagement and meaning may increase social and psychological resources, whereas pursuing pleasure may not build resources. Engagement leads individuals to seek out activities that challenge their skills and develops their talents and interests (Csikszentmihalyi, 1990). Pursuing meaningful activities helps build social connections as well as provide purpose and self-relevant goals (Baumeister & Vohs, 2002). These boosts in psychological and social resources may lead to further boosts in well-being and positive emotions. Indeed, the broaden-and-build theory of positive emotions suggests that resources and positive emotions relate to each other in a positive feedback loop with increase in one leading to subsequent increase in the other (Fredrickson & Joiner, 2002).

Although all three pathways were related to SWB, the relationships were almost twice as large for engagement and meaning compared to pleasure. For measures of OWB, pleasure was actually negatively related. These two findings may actually be linked. Positive emotions are indications that one's life is going well and often flow from living a positive and rewarding life (Lucas, Diener, & Larsen, 2003). Engagement and meaning, however, as stated earlier, may help orient individuals to goals that are valuable through the skills and resources they build. Education is a prime example of a resource builder that may not be great fun. In this study, engagement and meaning were related to higher levels of educational attainment. In the case of pleasure, people may subjectively feel that they are getting something out of pleasurable activities, but this does not translate into further resources. For example, eating a piece of chocolate cake indulges one's taste buds and produces pleasure but may interfere with long-term goals of living healthy and losing weight. Many pleasurable activities represent a compromise between short-term and long-term goals. Engaging in more than just the occasional pleasure can therefore sabotage one's long-term goals.

The relationships between engagement, meaning, and SWB were large, illustrating the big influence these

orientations may have on how one thinks and feels about one's life. Relationships between these orientations and OWB were much smaller. This is not surprising, given the range of factors that contribute to educational and occupational attainments (such as intelligence, socio-economic status, and motivation; Tomlinson-Keasey & Little, 1990). Small, but consistent, relationships between the orientations and OWB, however, illustrates the notion that engagement and meaning are consistently related to OWB, whereas pleasure is not.

The full life

This study did support Seligman's (2002) notion that each pathway is important for well-being. Indeed, for the positive aspects of SWB, such as life satisfaction, positive affect, and general happiness, those individuals who are high on all the three factors showed the highest levels of SWB and this effect was more than an additive combination of each pathway. This same pattern was not found, however, for a composite that included depressive symptoms and negative affect. Instead, the interaction term was not a significant trend due to a lack of relationship between living a full life and depressive symptoms or negative affect. This is not surprising given that these are approaches to happiness and not approaches to reducing negative emotions and psychopathology. This is consistent with theoretical traditions of positive psychology that call for unique theories of happiness and positive emotions that differ from theories of unhappiness and negative emotions (i.e., Fredrickson's broaden-and-build theory of positive emotions is different from theories of negative emotions). Similarly, Seligman's authentic happiness theory can help guide choices to achieve lasting happiness but may not provide an adequate account of how to decrease negative experiences and emotions. Creating a balanced life of seeking pleasure, engagement, and meaning, therefore, may be important to increasing one's well-being but not necessary for alleviating distress.

This study replicates that past studies that find pleasure, engagement, and meaning correlate with well-being. All the pathways are significantly related to life satisfaction, albeit with pleasure again having the smallest relationship (Peterson et al., 2005). The presence of meaning in one's life is significantly correlated with happiness, life satisfaction, and positive affect across the lifespan (Steger, Oishi, & Kashdan, 2009). Consistent participation in engaging activities also contributes strongly to well-being. Findings suggest that individuals who spend more time in flow experience higher levels of well-being (Csikszentmihalyi, 1997). In a daily diary study, researchers found that eudaimonic activities, such as

volunteering or progressing toward one's goals, provided larger levels of daily SWB than hedonic activities, such as sex for pleasure or partying (Steger, Kashdan, & Oishi, 2008). These findings are consistent with the results of this study and suggest that daily engaging and meaningful activities do produce more well-being in our lives.

Limitations

This study has several limitations. First, the sample included individuals who chose to respond to these questionnaires available via the Internet. The sample was predominately female, highly educated, and between the age of 35 and 44. Although this sample is not likely representative of the world's population, it may be less biased than a sample of college undergraduates. Ours has considerable strengths, however. One advantage is sheer numbers and ease of data collection. Another is the breadth of the sample: we obtained responses from individuals representing 112 different countries. These strengths allowed us to control for demographic variables and we found no differences in the effects.

A second limitation is that all data was based on cross-sectional administration of the questionnaires. We cannot therefore conclude the direction of causality for our findings. It could be that those higher in SWB and OWB tend to pursue engagement and meaning more other than pleasure or that engaging and meaningful activities actually lead to increased SWB. It could be that an orientation toward meaning and engagement, and away from pleasure, leads to more education and better occupation, or vice versa. A longitudinal study will help untangle direction of causality.

Future directions

Despite these limitations, this study provides initial evidence that can guide future research endeavors. Positive psychotherapy aims to increase individual's well-being using interventions that are designed to increase aspects of pleasure, engagement, and meaning (Seligman, Rashid, & Parks, 2006). Developing a better understanding of the ways in which each of these pathways contribute to well-being could be important to developing future intervention efforts. Specifically, longitudinal or experimental methods are needed to examine causal links between pleasurable, engaging, and meaningful activities and well-being. Although all the three pathways are the key determinants of a full life, the current data suggest that engaging or meaningful activities may lead to more well-being and also increase psychological and material resources. Engagement and meaning are also related to a host

of other positive psychological concepts, such as enhanced self-efficacy, mastery, and social connections (see Seligman, 2002, for a review). Future research should focus on identifying what behaviors promote each of these three pathways and examining the consequences of increasing these activities to establish the ways in which individuals may achieve long-term well-being.

Conclusions

Overall we found that all the three pathways are reliably linked to more SWB; however, taking the pathways of engagement and meaning were more strongly related to well-being than taking the pathway of pleasure. Although all three measures correlated positively with SWB, only engagement and meaning were positively related to OWB and the pursuit of pleasure actually had negative correlations with education and occupation. This suggests that engagement and meaning may be important pathways for a good and successful life as evidenced by increased OWB.

Focusing on what people do to promote their well-being is an important area of research. Behavioral strategies are major determinants of individual differences in happiness (Tkach & Lyubomirsky, 2006). Consequently, these behaviors provide an important point of intervention for increasing happiness (Lyubomirsky, Sheldon, & Schkade, 2005). Learning more about which strategies correspond most strongly to well-being can provide an important insight for attempts to become happier. For example, we suggest that focusing on finding meaning or engagement may work better than focusing on pleasure. Focusing on pleasure provides an immediate boost in mood just as eating a satisfying dessert or watching an enjoyable television program, but nothing is built.

Engaging and meaningful activities often are steps to long-term goals. Achieving goals feels good, enhances skills, and increases resources; in other words, the successful attainment of long-term goals is likely an important source of long-term well-being. Indeed, setting and achieving one's goal is a robust predictor of individual happiness as measured by higher life satisfaction, higher self-esteem, and lower depressive symptoms (King, Richards, & Stemmerich, 1998; see King (2008), for a review). Engagement and meaning may enhance SWB through this process of goal pursuit, providing self-relevant goals and enhancing the motivation to achieve these goals. Engagement and meaning, therefore, can clue people in to what is truly valuable and important in life and lead to increased well-being – both subjective and objective – more so than merely pursuing transient positive emotions.

Notes

1. We also computed correlations for controlling demographic factors. This led to no differences in the pattern of the relative sizes of the correlations. In this article, we reported the non-controlled for correlations but controlled for demographic variables in a further regression analysis.
2. Spearman's ρ was also calculated after excluding students and retirees because these groups are coded in the same category but represent different types of professions. These analyses demonstrated a similar pattern of results with nearly no relationship between a pursuit of pleasure and level of occupation, but with small positive relationships with engagement and meaning.

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