



## Short Communication

## Conceptions of happiness and life satisfaction: An exploratory study in 14 national groups



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## ABSTRACT

This study examined the relationship between 4 conceptions of happiness and life satisfaction in a sample of 2715 university students across 14 national groups. The 4 conceptions were self-transcendence, self-directed hedonism, conservation, and self-enhancement, which emerged from a principal component analysis of a 19-item scale generated for the purpose of the present study. Results of multi-level modeling showed that self-transcendence and conservation predicted life satisfaction positively and significantly. In addition, we found that self-directed hedonism and self-enhancement interacted in their effects on life satisfaction.

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## 1. Introduction

Conceptions of happiness are individuals' notions and beliefs about human happiness, including beliefs about the determinants of happiness (Joshanloo, 2014a). To date, these conceptions have not received enough attention in the psychological literature. To expand this line of research, we generated a comprehensive list of potentially important

determinants of happiness and asked our participants to rate the importance of each in determining individual happiness. To guide our selection of the potential determinants of happiness, we used the 19 values identified in the refined theory of human values (Schwartz et al., 2012). This theory provides a comprehensive categorization of commonly pursued goals and ideals by individuals across cultures (for a complete list of the 19 values see the Supplementary material). Values are “abstract desirable goals that guide individuals throughout their lives” (Sagiv, Roccas, & Oppenheim-Weller, 2015, p. 103). Actions people take in pursuit of values have consequences for objective and subjective aspects of life. Research shows that one's subjective well-being partly depends upon the set of values that one endorses (Sagiv &

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Schwartz, 2000). For example, people for whom extrinsic and material values are especially important tend to have relatively low levels of subjective well-being (Sagiv et al., 2015). Research on personal values suggests that values tend to group together and form a small number of higher order value domains (Schwartz et al., 2012). Thus, we used principal component analysis (PCA) to identify the smallest number of interpretable factors that explained the correlations among the 19 items.

Previous research indicates that endorsing certain conceptions of happiness has some impact on people's levels of subjective well-being (Joshanloo et al., 2015; Lu & Gilmour, 2004). Hence, we also probed the relationships between the emerging conceptions of happiness and participants' sense of life satisfaction. Life satisfaction is a broad judgment of one's overall life that constitutes the cognitive component of subjective well-being (Diener, Inglehart, & Tay, 2013).

We used a large sample of university students from 14 national groups. Considering that independence of observations (which is an assumption of single-level regression analysis) is violated with nested data (Hox, 2010), we used multi-level modeling to obtain more accurate estimates.

## 2. Methods

### 2.1. Participants

An attempt was made to include as many countries from all continents as possible. A total of 2715 university students from 14 nations took part in this study. The demographic characteristics of the samples are summarized in Table 1. More information about the sample and procedure can be found in the Supplementary material.

### 2.2. Measures

#### 2.2.1. The conceptions of happiness scale

This scale was developed for the purpose of the present study. Nineteen factors and a short description for each were presented to the participants. The respondents were asked to indicate how important each of the factors was in determining the happiness of an individual from their perspective (from 1 = *not at all important* to 9 = *very important*). The 19 factors were drawn from the refined theory of values (Schwartz et al., 2012). The scale is provided in the Supplementary material

#### 2.2.2. Life satisfaction

The Satisfaction With Life Scale (SWLS) was used to measure general life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985). Each of the

five items is rated on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). This scale is among the most widely used scales of subjective well-being. Its validity and reliability have been supported across various cultural contexts (Diener et al., 2013).

### 2.2.3. Control variables

In addition to gender and age, national individualism was included as a contextual variable to control for nations' general cultural orientation (Hofstede & Hofstede, 2005).

## 3. Results

### 3.1. Principal component analysis

Using the whole sample across all the nations, we ran a PCA with promax rotation to identify the smallest number of interpretable factors underlying the responses to the 19 items. This analysis resulted in four components with eigenvalues over 1. Although the scree plot suggested three factors, we decided to maintain four components, because in the three-component solution, traditional values (e.g., obeying the rules) and values related to self-transcendence (e.g., concern for all people) loaded strongly on a single component. In contrast, in the four-component solution, these two groups of items loaded on different components. Hence, the four-component solution provided a more sensitive and intuitive representation of the data. These four components represent four broad conceptions of happiness that we used in the multi-level analysis. Factor loadings and eigenvalues are reported in Table 2. The components were named as *self-transcendence*, *self-directed hedonism*, *conservation*, and *self-enhancement* based on their content. The components collectively explained 56.57% of the variance in the responses. Means and internal consistencies of each component are presented in Table 1.

### 3.2. Multi-level modeling

An intercept-only model (Hox, 2010) was first tested. The results of this analysis showed that there was statistically significant variability in life satisfaction at the individual ( $b = 37.108$ , Wald  $Z = 36.063$ ,  $p$  [one-sided]  $< 0.001$ ) and national ( $b = 4.520$ , Wald  $Z = 2.445$ ,  $p$  [one-sided]  $= 0.007$ ) levels. In a second analysis, all of the predictors were added to the model, as well as the control variables, and all possible interaction terms between the four conceptions ( $N = 6$ ). However, considering that five of the interaction terms were not significant, they were removed from the model. The intercept and the slopes of gender,

**Table 1**  
Descriptive statistic and alphas.

	N	% female	Age	Survey language	Data Collection Mode	Transcendence	Conservation	Hedonism	Enhancement	Satisfaction	Individualism
New Zealand	169	63.7%	22.03	English	O	6.42	6.07	7.46	5.54	21.68	79
Iran	220	54.5%	23.18	Persian	PAP	6.68	6.57	6.77	6.73	21.56	41
Singapore	221	51.9%	21.51	English	O	6.82	6.34	7.11	6.26	21.98	20
Hong Kong	183	68.1%	20.88	English	PAP	6.80	6.66	7.37	6.60	20.03	25
Malaysia	219	51.9%	19.44	English	PAP	7.35	6.85	7.55	6.82	21.26	26
Japan	270	44.8%	19.31	Japanese	O	6.89	6.64	7.78	6.60	18.25	46
Korea	150	39.3%	22.05	Korean	PAP	6.57	6.55	7.46	6.44	18.94	18
Taiwan	207	64.1%	20.48	Chinese	PAP	6.76	6.33	7.23	6.06	19.66	17
India	150	58.7%	20.42	English	PAP	6.60	6.56	6.99	5.62	24.67	48
Russia	150	67.3%	20.28	Russian	PAP	6.13	5.90	7.46	6.09	22.28	39
Brazil	136	64.0%	30.40	Portuguese	PAP	7.58	6.49	7.94	5.55	22.49	38
Pakistan	208	58.3%	21.93	English	PAP	7.21	6.97	7.18	6.45	23.17	14
Netherlands	178	56.7%	20.98	Dutch	O	6.73	6.10	7.38	4.72	25.17	80
USA	254	83.4%	18.79	English	O	7.49	6.95	7.99	6.04	24.93	91
Total	2715	57	21.29	–	–	6.88	6.52	7.41	6.15	21.80	42.05
Alpha (whole sample)	–	–	–	–	–	0.82	0.75	0.76	0.73	0.85	–
Alpha range across nations (N = 14)	–	–	–	–	–	0.73–0.87	0.68–0.81	0.62–0.86	0.46–0.83	0.71–0.88	–

Note. O = online; PAP = paper and pencil.

**Table 2**  
The results of principal component analysis.

	Self-transcendence	Self-directed hedonism	Conservation	Self-enhancement
17-Concern for all people	<b>0.835</b>	−0.030	−0.015	0.002
16-Being caring	<b>0.774</b>	0.160	−0.041	−0.017
18-Concern for nature	<b>0.747</b>	−0.079	0.070	−0.020
19-Tolerance	<b>0.649</b>	0.172	−0.038	−0.119
14-Humility	<b>0.562</b>	−0.177	0.198	0.058
15-Dependability	<b>0.556</b>	0.220	0.036	−0.027
2-Freedom of action	−0.053	<b>0.822</b>	0.026	−0.101
1-Freedom of thought	0.022	<b>0.776</b>	0.088	−0.178
3-Stimulation	0.086	<b>0.663</b>	−0.049	0.141
4-Hedonism	0.073	<b>0.650</b>	−0.086	0.142
10-Societal security	−0.097	0.196	<b>0.796</b>	−0.063
9-Personal security	−0.190	0.288	<b>0.748</b>	−0.005
12-Obeying the rules	0.184	−0.216	<b>0.679</b>	0.053
11-Tradition	0.144	−0.165	<b>0.611</b>	0.061
13-Interpersonal conformity	0.196	−0.060	<b>0.547</b>	−0.009
6-Dominance	0.014	−0.038	−0.102	<b>0.879</b>
7-Resources	−0.138	−0.028	0.036	<b>0.841</b>
8-Face	0.009	0.023	0.265	<b>0.571</b>
5-Achievement	0.104	0.439	−0.042	<b>0.478</b>
Eigenvalue	5.658	2.145	1.858	1.087
% of variance explained	29.781	11.292	9.777	5.721

Note. Factor loadings >0.45 are shown in boldface.

self-transcendence, and self-enhancement were allowed to vary across the nations. Yet, for the sake of model identification, the slopes of the rest of the individual-level variables were specified as fixed. Following Enders and Tofghi (2007), continuous individual-level variables were group-mean centered, and national individualism was grand-mean centered.

Adding all of the variables to the model reduced the unexplained individual- and national-level variability in life satisfaction by about 5.5% and 16%, respectively. The remaining amount of unexplained variance at the individual and national levels was significant ( $b = 35.116$ , Wald  $Z = 35.737$ ,  $p$  [one-sided] < 0.001, and  $b = 3.799$ , Wald  $Z = 2.212$ ,  $p$  [one-sided] = 0.013, respectively). Fixed effects are presented in Table 3. Among the four conceptions, self-transcendence and conservation were significant positive predictors. The interaction between self-directed hedonism and self-enhancement was also a significant predictor. This interaction is shown in Fig. 1 (Preacher, Curran, & Bauer, 2006). As evident from the figure, the correlation between hedonism and life satisfaction is positive at lower levels of self-enhancement, and is negative at higher levels of self-enhancement. Simple slopes for high and low levels of self-enhancement were  $−0.288$  ( $p = 0.066$ ) and  $0.343$  ( $p = 0.003$ ), respectively.

#### 4. Discussion

This study sought to identify broad conceptions of happiness from a list of 19 specific items, and to investigate the relationship between the conceptions and life satisfaction. The results indicated that the 19 specific items can be categorized into four major conceptions of happiness:

self-transcendence (viewing happiness as connected to concern for others and nature), self-directed hedonism (viewing happiness as connected to autonomy and pleasure), conservation (viewing happiness as connected to tradition, security, and conformity), and self-enhancement (viewing happiness as connected to extrinsic values such as power, resources, and face). The results of PCA are largely consistent with the categorization provided by human values theory (Schwartz et al., 2012), in that all the values that usually group together in value research turned out to form broader categories in the present study.

The emergence of these four conceptions of happiness would also be expected given the existing empirical and theoretical literature on the ways lay people, philosophers, and social scientists conceptualize well-being. For example, researchers have distinguished between the hedonic and eudaimonic aspects of well-being (e.g., Jochanloo, 2014b), have shown that perusing extrinsic (vs intrinsic) values undermines subjective well-being (e.g., Kasser, 2015), and have emphasized the distinction between self-focused and other-focused understandings of happiness (e.g., Ford et al., 2015). These three distinctions are related to our self-centered hedonism, self-enhancement, and self-transcendence conceptions, respectively. Hence, many of the conceptual distinctions emphasized by well-being researchers are reflected in our empirically-based categorization. Accordingly, the present findings contribute to the development of a comprehensive framework with which to probe questions about conceptions of happiness. Nevertheless, because the four factors emerged from an exploratory analysis in the present study, additional confirmatory investigations will be required to further validate the Conceptions of Happiness Scale.

**Table 3**  
Multi-level modeling predicting life satisfaction.

	<i>b</i>	St. error	<i>df</i>	<i>t</i>	<i>p</i>	95% CI	
						Lower bound	Upper bound
Intercept	21.781	0.555	12.5	39.241	0.000	20.578	22.984
Female	0.394	0.300	11.4	1.312	0.215	−0.263	1.050
Age	0.005	0.032	2183.5	0.160	0.873	−0.058	0.069
Self-transcendence	0.600	0.143	21.2	4.189	0.000	0.302	0.897
Self-directed hedonism	0.027	0.116	2560.6	0.235	0.815	−0.201	0.255
Conservation	0.332	0.110	2406.1	3.024	0.003	0.117	0.548
Self-enhancement	−0.041	0.104	15.9	−0.394	0.699	−0.261	0.179
Individualism	0.033	0.019	11.1	1.780	0.102	−0.008	0.074
Hedonism × self-enhancement	−0.219	0.052	1423.9	−4.208	0.000	−0.321	−0.117

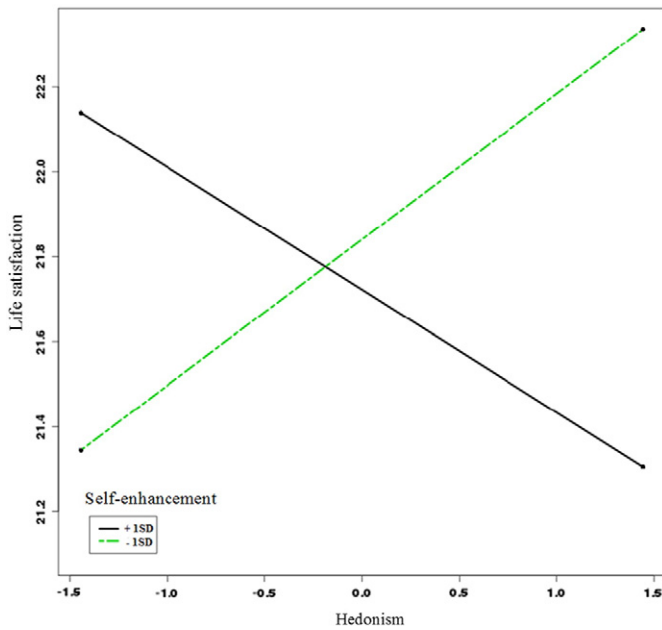


Fig. 1. The relationship between self-directed hedonism and life satisfaction as moderated by self-enhancement.

Consistent with previous empirical research, we found that a self-transcendent conception of happiness was positively related to life satisfaction. Self-transcendence involves an emphasis on intrinsic values such as benevolence, which have been found to boost subjective well-being (e.g., Bobowik, Basabe, Páez, Jiménez, & Bilbao, 2011). Conservation was positively correlated with life satisfaction, which is consistent with findings from some prior research on values (e.g., Karabati & Cemalcilar, 2010), and inconsistent with some others (e.g., Joshanloo & Ghaedi, 2009). But it should not be forgotten that prior studies have measured conservation as a value, not as a determinant of happiness. Conservation seems to be related to general religiosity, which may explain its positive relationship with life satisfaction in the present study (Diener, Tay, & Myers, 2011).

The results indicate that hedonism is positively related to life satisfaction at lower levels of self-enhancement. But if hedonism is accompanied by a strong emphasis on self-enhancing factors (e.g., dominance) in defining happiness, it can become a negative predictor of life satisfaction. This finding supplements the general finding that hedonism is weakly but positively correlated with subjective well-being across nations (e.g., Joshanloo & Jarden, 2016). This finding can alternatively be interpreted as evidence that at high levels of hedonism, the relationship between self-enhancement and life satisfaction will become negative. Thus, our results suggest that any of these two conceptions on its own does not undermine life satisfaction, if it is not accompanied by high levels of the other.

This study is exploratory and the findings are preliminary. The sample consisted solely of university students, which may limit the generalizability of the findings to other populations. Considering the small number of nations in the present study, cross-level interactions (e.g., interactions between conceptions of happiness and individualism) could not be reliably examined. Therefore, for a more complete understanding of the contribution of conceptions of happiness to well-being, these findings will need to be replicated in various age and cultural contexts. Prior studies have found that both values (Sagiv et al., 2015) and conceptions of happiness (Huta & Ryan, 2010) have differential patterns of relationship with various aspects of well-being, and thus future

research on conceptions of happiness should include other aspects of well-being (e.g., psychological and social well-being) as outcomes. Bearing these caveats in mind, this study provided a novel empirically-based categorization of conceptions of happiness that is initially supported in a large number of nations. We found that endorsing these conceptions influences levels of life satisfaction, and that these conceptions can interact with each other in predicting actual levels of well-being.

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## Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.paid.2016.06.065>.

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