

What Matters to the Rich and the Poor? Subjective Well-Being, Financial Satisfaction, and Postmaterialist Needs Across the World

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This study explored the importance of financial satisfaction versus postmaterialist needs for subjective well-being (SWB). Using the Gallup World Poll, we examined whether financial satisfaction and postmaterialist needs (pertaining to autonomy, social support, and respect) were universal predictors of the different components of SWB across the world, and whether their effects were moderated by national affluence. Results showed that financial satisfaction was the strongest predictor of life evaluation, whereas respect was the strongest predictor of positive feelings. Both measures predicted negative feelings to some extent. Multilevel analyses also revealed moderating effects of societal wealth. The association between financial satisfaction and SWB and that between postmaterialist needs and SWB were stronger in richer nations compared with poorer ones. This suggests that developed economies should continue to focus on both material and psychological aspects, and not disregard economic gains, as both measures are essential to well-being.

Keywords: subjective well-being, financial satisfaction, postmaterialist needs, respect, autonomy

Interest in subjective well-being (SWB)/happiness has generated a multitude of research on issues concerning the different types of well-being and what the predictors of SWB are. SWB refers to the broad concept of happiness/well-being that is defined by different facets such as life satisfaction (a cognitive, global evaluation of one's life), domain satisfaction, and an affective component represented by positive affect and low negative affect (Diener, Suh, Lucas, & Smith, 1999). A question that has captured immense attention from psychologists, economists, and policy makers is whether pecuniary factors (e.g., money and material concerns) or psychological variables (e.g., personality, needs, and values), or both, are the key determinants of SWB.

One of the theoretical models of SWB distinguished these determinants as bottom-up or top-down influences. A bottom-up approach posits that external events, objective life circumstances, and demographics influence SWB, whereas a top-down/dispositional perspective emphasizes the influence of personality on SWB—that is, higher order global features influence how a person reacts to, thinks, or feels about external events. Early research showing that demographic factors (e.g., income, health) accounted for little variance in SWB seems to indicate that dispositional factors instead play a bigger role in influencing SWB (Diener et al., 1999; Heller, Watson, & Ilies, 2004). Indeed, heritability studies and evidence of neurophysi-

ological correlates of affect underscore that personality and affective SWB have strong genetic bases and share common biological underpinnings (see Steel, Schmidt, & Shultz, 2008, for a review). Recent meta-analytic findings, however, also revealed that domain satisfactions (e.g., job satisfaction, health satisfaction) were substantially linked to life satisfaction (Heller et al., 2004), suggesting that evaluations of individual situations/events do sum up to influence global happiness. Hence, effects of SWB correlates may act via different processes, resulting in their differential relations to different SWB facets. For instance, external factors like income could exert strong effects on life satisfaction, with the effect acting via financial satisfaction, whereas external factors influence affect weakly; instead, positive and negative affect are strongly determined by personality (neuroticism and extraversion).

Links Between Material Wealth, Psychological Needs, and SWB at the Individual and Nation Levels

Studies examining the relation between wealth and SWB revealed clear evidence of a strong association between log-transformed income and life evaluation at the individual level (Diener, Ng, Harter, & Arora, 2010). People with higher incomes report higher life evaluation. Using data from the Gallup-Healthways Well-being Index, Kahneman and Deaton (2010) found that higher income continues to improve life evaluation even beyond U.S. \$120,000. However, income–life evaluation associations are lower at higher income levels, demonstrating that there is diminishing marginal utility. Material wealth also exhibits divergent patterns of associations with different components of well-being. Material factors are strongly related to the cognitive component of SWB but are weaker predictors of emotional well-being (Diener et al., 2010; Diener, Kahneman, Tov, & Arora, 2010). Conversely, positive

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and negative feelings are more strongly related to the fulfillment of psychological needs such as social support, respect, mastery, and autonomy (Diener, Ng, et al., 2010). Furthermore, income did not explain any variance in positive and negative feelings in addition to that explained by social, respect, and autonomy needs (Tay & Diener, 2011). It is thus germane to examine the importance of psychological (e.g., social needs, values) versus material determinants of various types of SWB.

Research focusing on values has also obtained robust empirical evidence indicating that postmaterialist values such as freedom are crucial to happiness. The extent to which a society allows free choice has a major impact on happiness (Inglehart, Foa, Peterson, & Welzel, 2008). Data from the World Values Survey (WVS) and European Values Survey from 1981 to 2007 showed that the feeling of free choice and control over one's life explained substantial variance in the change in SWB over time (Inglehart et al., 2008). Furthermore, life satisfaction is linked to agency (as measured by freedom of choice and locus of control) not only in Western societies but also across cultures, suggesting that this association is universal (Welzel & Inglehart, 2010). Findings from the WVS also indicated that freedom predicted life satisfaction even better than other factors such as health, income, or employment (Verme, 2009).

Similar patterns showing how psychological versus material factors predict various types of SWB are obtained at the nation level. Log-transformed gross domestic product (GDP) is strongly associated with life satisfaction of nations—high-GDP nations show higher average life satisfaction than low-GDP nations (Deaton, 2008). Furthermore, richer nations are not only higher in life satisfaction but also happier than poorer nations (Inglehart et al., 2008). Rises in GDP are also associated with rises in life satisfaction, whereas rises in national household income are associated with increases in life satisfaction and positive feelings, and a decrease in negative feelings (Diener, Tay, & Oishi, 2013; Stevenson & Wolfers, 2008).

Similarly, the importance of psychological needs for emotional well-being extends to the societal level. Oishi and Schim-mack (2010) found that nations with strong social support were higher in life evaluation, and national social support even predicted national life evaluation beyond material wealth and religion. Societies with higher levels of agency also have higher life satisfaction (Welzel & Inglehart, 2010). The impact of societal freedom on the SWB of nations is even greater than the impact of individual freedom on individual-level SWB (Inglehart et al., 2008). In support of the notion that societal values impact SWB, a meta-analysis revealed that greater individualism is associated with higher well-being. It also revealed that individualism (which reflects autonomy because individualistic societies allow individuals more autonomy and freedom in their choices and lives) is a better predictor of low negative well-being than wealth (Fischer & Boer, 2011). This highlights the fact that providing individuals with more freedom helps reduce negative psychological symptoms more than providing them with more money. Therefore, at both individual and nation levels, material factors and psychological values/needs are both closely linked to SWB.

Universality Versus Culture Specificity of Predictors: The Moderating Role of National Wealth

Are material factors and psychological needs universal or culture-specific causes of SWB? The universalist approach posits that there are universal causes of SWB (e.g., needs) that correlate with SWB across cultures (Diener, Oishi, & Lucas, 2003). The self-determination theory by Ryan and Deci (2000) posits that there are three universal innate psychological needs— competence, autonomy, and relatedness—that are essential for personal well-being, social functioning, and psychological growth. Defining the needs as universal means that satisfaction of these psychological needs is associated with enhanced well-being in all cultures, but does not suggest that their relative salience or the avenues for need satisfaction are the same in all cultures. Instead, their importance and the ways of satisfying or expressing these needs may vary across cultures because of the different values and goals held in various cultures (Deci & Ryan, 2000; Ryan & Deci, 2000). Another universalist approach proposed six basic universal psychological needs—self-acceptance, personal growth, purpose in life, environmental mastery, autonomy, and positive relations with others—that define psychological well-being (Ryff, 1989). Psychological well-being taps into the eudaimonic conception of happiness and reflects positive functioning and personal strengths. In contrast to the universalist approach, the cultural approach emphasizes culture-specific predictors of SWB, whereby the correlates of SWB vary according to culture. As diverse cultures emphasize disparate values and norms, what matters to well-being may be different. For instance, satisfaction with self was more strongly correlated with life satisfaction in individualistic than in collectivistic countries (Diener & Diener, 1995).

However, the determinants of SWB may not necessarily follow a purely universalist or culture-specific approach, but may characterize a mixed approach. That is, certain variables may be universal in the sense that they manifest as correlates of SWB in all cultures. But that does not mean that they are equally important to SWB across all cultures. Consistent with the definition of universal needs in the self-determination theory, the importance of these “universal” predictors may vary across cultures, allowing for societal factors to play a moderating role. Hence, in this sense, these predictors are also culture specific as the strength of their associations with SWB may vary across cultures.

Key societal characteristics that may moderate the influences of SWB, and which have been extensively studied, include individualism-collectivism and societal affluence. In the present research, we focus on national wealth. Empirical evidence affirms that autonomy is closely linked to happiness, but is autonomy a universal predictor of happiness, or would its impact be contingent on the society's level of economic development? According to the theory of value change, when societies have attained a certain level of economic development and affluence, there will be a societal shift from materialist to postmaterialist values (Inglehart, 1997). This societal-level shift also influences individual-level values. Therefore, Inglehart's theory argues that societies of economic scarcity are more focused on survival needs, leading people to place more importance on materialist needs. But as material concerns diminish in importance, people shift their emphasis toward self-expression values and free choice. Correspondingly, this value change would affect the determinants of SWB.

An early study revealed evidence that people in poor societies indeed valued materialist needs more strongly. Data from college students from 31 countries showed that financial satisfaction correlated more strongly with life satisfaction in poor nations than in rich nations (Diener & Diener, 1995). An explanation that coheres with this finding is that money is more critical for fulfilling basic survival needs such as food, clothing, and shelter in low-income than in prosperous countries (Howell & Howell, 2008). Hence, achieving material security (rather than autonomy) would be more important to life satisfaction in those nations.

The human development model explains more fully how this value change affects happiness. Inglehart and colleagues argued that economic scarcity constrains people's freedom of choice and sense of control over their lives, whereas living in prosperous or economically fast-developing countries contributes to a sense of greater freedom. Because perceived control over one's life is closely linked to happiness, living in such wealthy and democratic societies should be more conducive to happiness (Inglehart et al., 2008; Johnson & Krueger, 2006). This implies that in prosperous societies where economic security is assured, fulfillment of post-materialist needs matters more to happiness than material concerns (Delhey, 2010; Inglehart, 1997). In accord with this, Delhey (2010) found that national wealth moderates the effects of materialist versus postmaterialist values on well-being. Specifically, postmaterialist values (e.g., autonomy and job creativity) are more important to life satisfaction than materialist values (e.g., financial satisfaction) in affluent societies, whereas financial satisfaction is more important in poorer nations. However, recent research has also revealed that income exerts a stronger effect on life evaluation in richer nations than in poorer nations (Diener, Ng, et al., 2010; Diener, Tay, & Oishi, 2013; Tay, Morrison, & Diener, 2013).

Given that previous research has examined the moderating role of national wealth, but has not arrived at any conclusive consensus, it seems pertinent to continue the investigation to clarify the moderating role of national wealth. The socioecological perspective emphasizes the reciprocal interactions between social ecology and human mind and behavior (Oishi & Graham, 2010). This means that economic conditions at the societal level (e.g., GDP) can exert influence on individual-level psychological characteristics (e.g., postmaterialist needs). Broadening the scope of well-being research to investigate how macrolevel factors can interact with "universal" individual-level correlates of SWB would provide a more inclusive and integrated perspective that complements the strictly universalist and cultural perspectives.

Furthermore, determining whether national wealth moderates the effects of material concerns and postmaterialist values on SWB would contribute to a fuller understanding of the theory of value change (Inglehart, 1997) and illustrate the interplay between economic systems and well-being. Do values and needs become important only after countries have attained a certain level of affluence (i.e., postmaterialist status), beyond which material concerns become unimportant? Or, are material concerns and needs pivotal to well-being across cultures? Or, do these predictors reflect a mixed approach, serving as key determinants of SWB panculturally, but whose impact is influenced by societal wealth? One of the key contributions of the present research thus is that it simultaneously examines both moderation and universality.

The Present Research

In this study, we used the Gallup World Poll (GWP), one of the most extensive and representative surveys. The GWP sample included most of the world's countries (and omitted only a few, e.g., North Korea and the small nations such as the Vatican and Andorra). Having many diverse nations in the sample is crucial in enabling us to validly examine our research questions, as one may otherwise get a skewed picture if nations in certain regions are lacking (e.g., poor nations in Africa). The survey also included measures of both life satisfaction and affect (positive and negative affect), allowing us to examine other components beyond life satisfaction, which is the focus of the vast majority of studies. Additionally, the GWP included various measures of postmaterialist values and needs (and not only autonomy, which has always been the focus), hence we can extend on the existing work. Finally, indirectly assessing the importance of certain values via their correlations with SWB could be useful—due to potential social desirability problems, it may more accurately assess people's actual values, as compared with directly asking people about them (e.g., "How important is money to you?").

Our first aim was to examine the universality of material concerns and postmaterialist values in predicting different types of SWB across the world. Our second aim was to investigate whether the wealth of a country would moderate their effects. Would the impact of postmaterialist values (or material concerns) on well-being depend on the affluence of the country? *Material concerns* refer to focusing on material factors such as income and material goods/possessions, whereas *postmaterialist values* refer to people prioritizing self-expression values, needs such as self-actualization, or issues pertaining to quality of life. In this study, we focused on the postmaterialist needs of autonomy, respect, and social support, as well as financial satisfaction¹ (which serves as an indicator for material concerns).

Using the GWP, we examined the two competing hypotheses regarding the moderating effects of societal wealth. On the one hand, previous findings indicated that postmaterialist needs matter more to happiness in prosperous societies, whereas material wealth is more important in poor nations (Delhey, 2010). This should be expected if economic growth brought about a straightforward, linear shift in cultural strategies toward happiness (e.g., from an economic emphasis to a postmaterialist emphasis). On the other hand, findings that the income–happiness relation is stronger in richer nations compared with poorer ones suggest that changing cultural strategies might involve a greater degree of complexity. Haller (2002) argued that in modern, affluent capitalist societies, prevalence of consumerism has increased the relevance and im-

¹ Items assessing how satisfied respondents are with their financial situation have been variously termed *materialist concerns*, *financial satisfaction*, and *subjective monetary saturation* (Delhey, 2010; Diener & Diener, 1995; Welzel & Inglehart, 2010). As these various labels reflect a common construct representing people's material concerns, we had also used financial satisfaction as an indicator of material concerns. However, we should clarify that we are not equating material concerns to materialism, which is characterized by the pursuit of wealth and acquisition of material goods. Hence, although materialism is inversely associated with SWB (Diener & Oishi, 2000; Kashdan & Breen, 2007), financial satisfaction has been found to be associated with higher life satisfaction (Delhey, 2010; Diener & Diener, 1995).

portance of material goods and needs. In other words, material wealth should matter more to happiness in affluent societies. Hence, we predicted that the relation between financial satisfaction and SWB should be stronger in richer nations than poorer nations.

Such a prediction would also be in line with the person-culture match hypothesis, which postulates that the individual-level relation between a certain attribute (e.g., a personality trait) and SWB is stronger in cultures characterized by high levels of that attribute (Fulmer et al., 2010). Although the person-culture match hypothesis relates specifically to the match between individual-level personality characteristics and aggregate personality at the cultural level, the theoretical basis for this matching hypothesis originally stems from Higgin's (2000) work examining how the fit between goal pursuit means and regulatory orientation increases value. As this matching hypothesis has been applied to factors (e.g., personality traits) beyond regulatory foci, one assumption is that it can extend to other psychological attributes. Thus, it is possible that the matching hypothesis is applicable to financial satisfaction² and postmaterialist needs (such as autonomy, respect, or social support). Previous research has also documented that agency has a stronger effect than financial satisfaction on life satisfaction for people in societies with high levels of agency (Welzel & Inglehart, 2010). This suggests a "confirmation mechanism" at play, where people following strategies/values that the society emphasizes would feel confirmed in doing so, thereby enabling that attribute to exert a stronger effect. Hence, the second prediction is that the relation between (individual-level) postmaterialist needs and SWB would be stronger in cultures with high levels of postmaterialist needs.

Method

Sample and Procedure

The Gallup Organization administered surveys to 838,151 respondents from 158 countries, which represented about 95% of the world's population, from 2005 to 2011. Representative sampling of the resident population 15 years of age and older was undertaken within each nation, covering both rural and urban areas. In nations where telephone coverage represented at least 80% of the population, telephone surveys based on random-digit dialing or a nationally representative list of phone numbers were used. In many developing nations, including Central and Eastern Europe, Latin America, Asia, the Middle East, and Africa, face-to-face surveys were conducted using an area frame design. First, primary sampling units were identified through stratification by population size or geography. Next, random route procedures were used to select households (where interviewers make up to three attempts to survey the sampled household). Finally, respondents within the households were randomly selected using the Kish grid technique.

The questionnaire was translated into the major languages of each country. The translation process started with an English, French, or Spanish version, depending on the region. A translator who was proficient in the original and target languages translated the survey into the target language. A second translator reviewed the language version against the original version and recommended refinements.

Measures

SWB. The cognitive and affective components of SWB were assessed (Diener, 2000). The cognitive component, global life evaluation, was assessed using the Cantril's Self-Anchoring Striving Scale (Cantril, 1965) that asked respondents to evaluate their current life on a ladder scale, ranging from 0 (*worst possible life*) to 10 (*best possible life*). Affective SWB was assessed by two measures—positive feelings and negative feelings—that asked whether respondents experienced certain emotions a lot in the previous day (positive = "enjoyment" and "smile/laugh"; negative = "worry," "sadness," and "anger"). Items were measured using a dichotomous scale (1 = yes, 0 = no), and the "yes" responses to the two positive items were averaged into a positive feelings score (Cronbach's $\alpha = .61$), and the "yes" responses to the three negative items were averaged into a negative feelings score (Cronbach's $\alpha = .61$). Across the 158 nations, reliabilities of positive feelings ranged from .29 to .81 (although alpha was not available for one nation, Oman), whereas the reliabilities of negative feelings ranged from .43 to .77.

Wealth indicators. Two economic measures were examined, as indicators of individual and nation wealth. The GWP included a measure of annual household income (in international dollars, based on the World Bank purchasing power parities), and this was used as an indicator of individual-level income. National wealth was assessed using the 2005 GDP per capita (in purchasing power parity) data of each nation in current international dollars, computed by the World Bank (International Comparison Program database). GDP data were not available for eight of the nations (Cuba, Kosovo, Myanmar, Palestine, Puerto Rico, Somaliland, Taiwan, and Zimbabwe) in the World Bank. Because of the diminishing marginal utility of money, both measures were log-transformed (Log 10). This has the effect of compressing scores as one moves progressively up the income/GDP ladder. Although the variation in log household income ranged from 1.26 to 3.99 across the nations, this range of income variation was not correlated with the wealth of the nations (GDP: $r = .03$; national household income: $r = .07$; both *ns*).

Material concerns (i.e., financial satisfaction) and postmaterialist needs. As an indicator of material concerns and desires, two items from the survey were included as measures of financial satisfaction. "Satisfaction with standard of living" assessed whether the respondents were satisfied with their standard of living, and all the things they could buy or do (1 = satisfied, 0 = dissatisfied). The second item asked how respondents felt about their household income these days on a 4-point scale, with 1 = "living comfortably on present income," 2 = "getting by . . .," 3 = "finding it difficult . . ." and 4 = "finding it very difficult . . ." Responses were recoded into a dichotomous scale (1 = satisfied, 0 = dissatisfied), as responses of 1 and 2 indicated that respondents were satisfied with their income and material well-being, whereas responses of 3 and 4 indicated that they were dissatisfied. A score reflecting financial satisfaction was obtained by averaging the number of satisfied responses to the two items (Cronbach's $\alpha = .54$). For three of the nations (Cuba, Puerto Rico, and

² *Financial satisfaction* refers to an individual's subjective evaluation of his or her financial situation and is more akin to a psychological attribute rather than an objective economic indicator.

Jamaica), the two items were not asked, and reliabilities of financial satisfaction across the remaining 155 nations³ ranged from .12 to .66.

To examine whether people valued or had attained the postmaterialist needs of being respected, having social support, and autonomy, three items from the survey were included. As an indicator of respect, respondents reported whether they were “treated with respect” the previous day. The second item asked whether the respondent had family or friends they could count on in an emergency. Both items were measured on a dichotomous scale (1 = yes, 0 = no). To assess autonomy, respondents were asked whether they were satisfied with their freedom to choose what to do with their lives (1 = satisfied, 0 = dissatisfied).

Data Analysis

The two main goals of this study were to (a) examine the universality of financial satisfaction versus postmaterialist needs in predicting the different components of SWB and (b) examine whether national wealth moderated the effects of material and postmaterialist predictors on SWB. We used hierarchical linear modeling (HLM) to examine how SWB varied as a function of individual-level and nation-level variables (Raudenbush & Bryk, 2002). We controlled for individual-level income⁴ (log income) and examined how individual-level factors (financial satisfaction and postmaterialist needs) and nation-level factors (log GDP, societal financial satisfaction, and societal postmaterialist needs) affected each SWB component. Societal financial satisfaction and societal postmaterialist needs were included because previous research indicated that societal-level values may impact individual-level happiness (Inglehart et al., 2008). We also examined whether the individual-level effects were moderated by national wealth (log GDP); however, as prior research had not examined whether societal postmaterialist needs would play a moderating role, they were not included as moderators. The three postmaterialist needs (autonomy, social support, and respect) were included individually. As an illustration, the final HLM model for life evaluation is shown below:

Level 1:

$$\begin{aligned} \text{Life evaluation}_{ij} = & \beta_{0j} + \beta_{1j}(\text{Financial satisfaction}) \\ & + \beta_{2j}(\text{Autonomy}) + \beta_{3j}(\text{Respect}) \\ & + \beta_{4j}(\text{Social support}) + \beta_{5j}(\text{Log income}) \\ & + e_{ij} \end{aligned}$$

Level 2:

$$\begin{aligned} \beta_{0j} = & \gamma_{00} + \gamma_{01}(\text{Log GDP}) + \gamma_{02}(\text{Societal financial satisfaction}) \\ & + \gamma_{03}(\text{Societal autonomy}) + \gamma_{04}(\text{Societal respect}) \\ & + \gamma_{05}(\text{Societal social support}) + u_{0j} \\ \beta_{1j} = & \gamma_{10} + \gamma_{11}(\text{Log GDP}) + u_{1j} \\ \beta_{2j} = & \gamma_{20} + \gamma_{21}(\text{Log GDP}) + u_{2j} \\ \beta_{3j} = & \gamma_{30} + \gamma_{31}(\text{Log GDP}) + u_{3j} \\ \beta_{4j} = & \gamma_{40} + \gamma_{41}(\text{Log GDP}) + u_{4j} \\ \beta_{5j} = & \gamma_{50} + \gamma_{51}(\text{Log GDP}) + u_{5j} \end{aligned}$$

The individual-level predictors were all centered on each nation's mean for that variable, whereas the nation-level predictors were all centered on the grand mean (the average of all nations).

Results

Descriptive Statistics

The basic descriptive statistics (means and standard deviations) for the different SWB components and the predictors at the individual level are presented in Table 1. As shown, across the world, the average person was satisfied with his or her current financial state and would likely have attained the postmaterialist needs of autonomy, respect, and social support. However, there was substantial variability between wealthy and poor countries. Examining the 15 richest and 15 poorest nations in the world, we found that rich nations were higher not only in GDP and income but also in financial satisfaction, fulfillment of postmaterialist needs, and SWB (though they did not differ in negative feelings). The Appendix shows these wealthy and poor countries and their GDP. Table 2 presents the correlations between the key variables. Financial satisfaction and postmaterialist needs were all linked to higher SWB. Higher financial satisfaction and fulfillment of postmaterialist needs were associated with higher life evaluation, more positive feelings, and lower negative feelings. Countries with higher societal financial satisfaction and postmaterialist needs were also higher in national SWB.

Relative importance of predictors. To determine the strength of materialist factors versus postmaterialist needs in predicting SWB, we conducted dominance analysis to assess the proportion of variance accounted for by the different variables in predicting SWB (Azen & Budescu, 2003; Budescu, 1993). Table 3 presents for each SWB component the proportion of explained variance attributed to each predictor, whereas model R^2 shows the total amount of variance explained in the model with all the predictors.

³ Preliminary checks showed a significant correlation between GDP and the reliability of financial satisfaction across the 149 nations (which had data for both measures). Specifically, poorer nations had lower reliabilities, whereas richer nations had higher reliabilities. Because measurement attenuation affects the associations between variables (Spearman, 1904), we conducted additional analyses correcting for attenuation. However, as the correction for low reliability (e.g., dividing the outcome measure by the square root of the reliability) yielded corrected effect sizes that are larger than the originally observed effect sizes (Hox & de Leeuw, 2003), we had reported the results of the original analyses because they were more conservative. A different approach to correct this artifact—the variation of the reliability with national wealth—is to include the reliability as a covariate in the multilevel regression analyses (Hox & de Leeuw, 2003). Hence, we also conducted additional HLM analyses that included the reliability of financial satisfaction (for each nation) as a nation-level moderator to examine whether it moderates the effect of financial satisfaction. As these additional sets of analyses yielded exactly the same patterns of results as the original analyses, we reported the original analyses, which provided more conservative estimates.

⁴ In another set of HLM analyses, we also examined the effects of financial satisfaction and postmaterialist needs without controlling for individual-level income. These supplementary analyses for life evaluation, positive feelings, and negative feelings yielded the same patterns of results as the original analyses—the extent and direction of the effects of all the predictors remained the same.

Table 1
*Descriptive Statistics of Key Variables at the Individual Level
Across the World and in the Richest and Poorest Regions*

Measure	World		15 richest nations		15 poorest nations	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Life evaluation	5.45	2.18	7.07	1.77	4.20	1.79
PA	.70	.39	.78	.36	.64	.40
NA	.25	.32	.21	.30	.23	.32
Financial satisfaction	.60	.42	.86	.30	.37	.40
Autonomy	.71	.45	.88	.32	.67	.47
Respect	.87	.34	.91	.28	.80	.40
Social support	.81	.39	.92	.27	.67	.47
Log household income	3.86	.55	4.58	.36	3.25	.47
Log GDP per capita (PPP)	3.79	.54	4.64	.11	2.83	.13

Note. PA = positive affect; NA = negative affect; GDP = gross domestic product; PPP = purchasing power parity.

In general, across the world, financial satisfaction, followed by income, were the strongest predictors of life evaluation. Respect was the strongest predictor of positive feelings, whereas both financial satisfaction and respect were the strongest predictors of negative feelings. Similar patterns were obtained with separate analyses conducted for the world's richest and poorest regions. In both regions, financial satisfaction was the strongest predictor of life evaluation, whereas respect was the strongest predictor of positive feelings. However, although respect accounted for the majority of the explained variance in negative feelings among the poorest nations (59%), financial satisfaction was the most important predictor among the richest nations (42%).

In sum, the relative importance of material and postmaterialist predictors clearly differed for the different SWB components. For life evaluation, material factors (financial satisfaction and income) accounted for 84% of the variance, whereas postmaterialist needs (autonomy, respect, and social support) only accounted for 16% of the variance. In contrast, for positive feelings, postmaterialist needs explained 64% of the variance, whereas material factors explained only 36% of the variance. Both postmaterialist needs (56%) and material factors (44%) explained negative feelings to some extent. This highlights that these SWB components are different and separate constructs.

To further illustrate how the components of life evaluation and positive feelings are separate constructs, we plotted the average national positive feelings against average national life evaluation across all the nations. Figure 1 identifies some nations that were low in life evaluation but high in positive feelings (e.g., Tanzania, Philippines), although none of the nations that were high in life evaluation were low in positive feelings. This implies that happy nations (as reflected by positive feelings) can be satisfied or dissatisfied, whereas unhappy nations must necessarily be also dissatisfied. In other words, positive affect is necessary, but not sufficient, for life satisfaction. Conversely, life satisfaction is not necessary, but is sufficient, for positive affect.

HLM: SWB as a function of financial satisfaction, postmaterialist needs, and national wealth. At the individual level, financial satisfaction predicted all types of SWB. A person who was higher in financial satisfaction had higher SWB—higher life evaluation, more positive feelings, and less negative feelings (see Table 4 for coefficients of γ_{10}). Similarly, someone who had met the postmaterialist needs of autonomy, respect, or social support was higher in SWB (see γ_{20} , γ_{30} , γ_{40} , coefficients). Individual-

Table 2
Zero-Order Correlations Between Types of Well-Being and Predictors

Variable	1	2	3	4	5	6	7	8
Individual level								
1. Life evaluation								
2. PA	.24							
3. NA	-.17	-.35						
4. Financial satisfaction	.45	.25	-.21					
5. Autonomy	.17	.15	-.12	.21				
6. Respect	.13	.27	-.20	.14	.13			
7. Social support	.23	.15	-.12	.23	.10	.11		
8. Log household income	.42	.13	-.07	.41	.10	.09	.22	
9. Log GDP per capita (PPP)	.38	.07	.01	.28	.12	.09	.20	.68
Nation level								
1. Mean national life evaluation								
2. Mean national PA	.62***							
3. Mean national NA	-.12	-.41***						
4. Societal financial satisfaction	.87***	.54***	-.17*					
5. Societal autonomy	.57***	.65***	-.33***	.59***				
6. Societal respect	.47***	.42***	.11	.34***	.46***			
7. Societal social support	.74***	.48***	-.20*	.66***	.42***	.36***		
8. Log national household income	.84***	.38***	-.03	.80***	.46***	.36***	.70***	
9. Log GDP per capita (PPP)	.81***	.36***	.06	.73***	.45***	.43***	.70***	.92***

Note. PA = positive affect; NA = negative affect; GDP = gross domestic product; PPP = purchasing power parity.

At the individual level: $p < .001$ for all correlations; at the nation level: * $p < .05$. *** $p < .001$.

Table 3

Relative Importance of Predictors in the World and the Wealthiest and Poorest Regions

Predictor	All (World)	15 richest nations	15 poorest nations
DV: Life evaluation			
Financial satisfaction	44	54	54
Autonomy	5	7	5
Respect	3	6	2
Social support	9	13	18
Log income	40	20	21
Model R^2	.285	.167	.13
DV: Positive feelings			
Financial satisfaction	33	30	23
Autonomy	9	8	5
Respect	44	49	63
Social support	11	11	9
Log income	3	3	0
Model R^2	.127	.087	.112
DV: Negative feelings			
Financial satisfaction	33	42	26
Autonomy	8	16	4
Respect	34	28	59
Social support	13	6	7
Log income	11	8	3
Model R^2	.08	.104	.086

Note. Model R^2 represents the total amount of variance accounted for in the model for each dependent variable (ladder, positive feelings, negative feelings). Relative importance values represent the proportion of explained variance attributed to each predictor and sum up to 100%. DV = dependent variable.

level income also had a strong effect on SWB, especially life evaluation. Consistent with previous studies (Diener, Ng, et al., 2010; Lucas & Schimmack, 2009), rich people were happier than poor people—they had higher life evaluation and positive feelings, and less negative feelings (see γ_{50} coefficients).

At the nation level, GDP was a significant predictor of SWB. In accordance with previous findings (Deaton, 2008; Diener & Biswas-Diener, 2002), people living in richer nations were higher in life evaluation (see γ_{01} coefficient), although they also experienced more negative feelings (see Ng, Diener, Arora, & Harter, 2009, for an explanation). People living in nations with high financial satisfaction and strong social support were also happier—higher life evaluation, more positive feelings, and less negative feelings (see γ_{02} and γ_{05} coefficients, respectively). People in nations with a high level of autonomy were higher in affective well-being (see γ_{03} coefficient) but not life evaluation, whereas those in nations with high levels of respect reported not only greater life evaluation and positive feelings but also greater negative feelings (see γ_{04} coefficient).

Importantly, the analyses showed that national wealth moderated the effects of financial satisfaction and postmaterialist needs. GDP moderated the effects of financial satisfaction on life evaluation and negative feelings (significant γ_{11}); specifically, financial satisfaction had stronger effects on both well-being components in wealthier nations. Effects of postmaterialist needs on all three SWB components were also moderated by national wealth—autonomy, respect, and social support had stronger effects on life evaluation and negative feelings in wealthier nations (significant γ_{21} , γ_{31} , γ_{41}). GDP also moderated the effects of autonomy and social support (but not respect) on positive feelings. The effect of individual-level income on life evaluation (but not the effects on positive and negative feelings) was also moderated by the wealth of the country. Having a higher income increases life evaluation for all, but it matters more for those living in richer than in poorer nations. To illustrate the moderation effects of national wealth on life evaluation, we plotted the life evaluation of people who are low (-1 SD) and high ($+1$ SD) in financial satisfaction and living in poor (-1 SD) and rich ($+1$ SD) nations (see Figure 2). As shown in Figure 2, richer nations have steeper slopes than poorer nations.

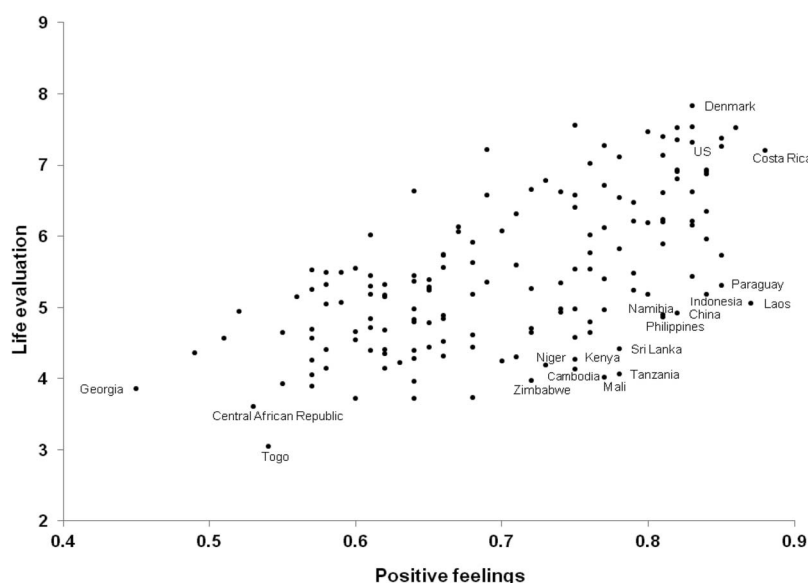


Figure 1. Plot of average national life evaluation versus average national positive feelings across nations.

Table 4

Hierarchical Linear Modeling: Predicting SWB (Life Evaluation, PA, or NA) From Individual-Level Postmaterialist Needs and Income, and National Postmaterialist Needs and GDP

Fixed effects	Coefficient	SE	T ratio
Life evaluation			
Between-nation effects			
For intercept, β_0			
Intercept, γ_{00}	5.46	.04	153.98***
Log GDP, γ_{01}	.47	.10	4.89***
Societal financial satisfaction, γ_{02}	3.05	.33	9.23***
Societal autonomy, γ_{03}	-.12	.34	-.35
Societal respect, γ_{04}	1.25	.45	2.81**
Societal social support, γ_{05}	1.72	.42	4.11***
Within-nation effects			
For financial satisfaction, β_1			
Intercept, γ_{10}	1.42	.03	50.81***
Log GDP, γ_{11}	.36	.05	7.68***
For autonomy, β_2			
Intercept, γ_{20}	.24	.01	16.62***
Log GDP, γ_{21}	.12	.03	4.77***
For respect, β_3			
Intercept, γ_{30}	.25	.02	15.20***
Log GDP, γ_{31}	.17	.03	6.21***
For social support, β_4			
Intercept, γ_{40}	.46	.01	30.73***
Log GDP, γ_{41}	.19	.03	7.21***
For log income, β_5			
Intercept, γ_{50}	.81	.03	27.59***
Log GDP, γ_{51}	.16	.05	3.03**
Random effects			
	Variance	df	χ^2
Intercept, u_{0j}	.19	140	29,155.01***
Financial satisfaction slope, u_{1j}	.10	144	2,103.54***
Autonomy slope, u_{2j}	.02	144	727.80***
Respect slope, u_{3j}	.03	144	551.81***
Social support slope, u_{4j}	.02	144	553.57***
Log income slope, u_{5j}	.11	144	2,015.66***
Level 1, e_j	3.02		
Positive feelings			
Between-nation effects			
For intercept, β_0			
Intercept, γ_{00}	.71	.006	121.21***
Log GDP, γ_{01}	-.03	.01	-1.74
Societal financial satisfaction, γ_{02}	.12	.04	3.08**
Societal autonomy, γ_{03}	.17	.04	3.73***
Societal respect, γ_{04}	.17	.08	2.18*
Societal social support, γ_{05}	.19	.06	2.98**
Within-nation effects			
For financial satisfaction, β_1			
Intercept, γ_{10}	.16	.005	33.79***
Log GDP, γ_{11}	-.007	.009	-.80
For autonomy, β_2			
Intercept, γ_{20}	.05	.003	17.65***
Log GDP, γ_{21}	.01	.006	2.68**
For respect, β_3			
Intercept, γ_{30}	.25	.006	45.46***
Log GDP, γ_{31}	-.009	.009	-.99
For social support, β_4			
Intercept, γ_{40}	.07	.003	22.39***
Log GDP, γ_{41}	.03	.006	5.61***
For log income, β_5			
Intercept, γ_{50}	.06	.005	12.51***
Log GDP, γ_{51}	.01	.007	1.48

Table 4 (continued)

Random effects	Variance	df	χ^2
Intercept, u_{0j}	.006	140	20,963.72***
Financial satisfaction slope, u_{1j}	.003	144	1,328.86***
Autonomy slope, u_{2j}	.001	144	681.12***
Respect slope, u_{3j}	.004	144	1,693.13***
Social support slope, u_{4j}	.001	144	603.29***
Log income slope, u_{5j}	.003	144	1,135.73***
Level 1, e_j	.12		
Negative feelings			
Between-nation effects			
For intercept, β_0			
Intercept, γ_{00}	.25	.005	51.82***
Log GDP, γ_{01}	.05	.01	4.09***
Societal financial satisfaction, γ_{02}	-.08	.04	-2.14*
Societal autonomy, γ_{03}	-.22	.04	-5.31***
Societal respect, γ_{04}	.21	.05	4.19***
Societal social support, γ_{05}	-.10	.06	-1.75
Within-nation effects			
For financial satisfaction, β_1			
Intercept, γ_{10}	-.14	.004	-36.11***
Log GDP, γ_{11}	-.03	.006	-5.16***
For autonomy, β_2			
Intercept, γ_{20}	-.04	.003	-15.51***
Log GDP, γ_{21}	-.03	.005	-5.88***
For respect, β_3			
Intercept, γ_{30}	-.19	.006	-32.34***
Log GDP, γ_{31}	-.04	.01	-3.53***
For social support, β_4			
Intercept, γ_{40}	-.05	.002	-21.88***
Log GDP, γ_{41}	-.02	.005	-3.41***
For log income, β_5			
Intercept, γ_{50}	-.03	.003	-8.94***
Log GDP, γ_{51}	-.002	.004	-.50
Random effects			
	Variance	df	χ^2
Intercept, u_{0j}	.003	140	18,498.27***
Financial satisfaction slope, u_{1j}	.002	144	1,239.25***
Autonomy slope, u_{2j}	.001	144	884.28***
Respect slope, u_{3j}	.005	144	3,129.29***
Social support slope, u_{4j}	.001	144	532.02***
Log income slope, u_{5j}	.001	144	771.89***
Level 1, e_j	.09		

Note. SWB = subjective well-being; PA = positive affect; NA = negative affect; GDP = gross domestic product.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Using random-coefficient models as the base reference models and comparing the variance estimates with those from our fitted models, we calculated that a substantial proportion of the variance in nation's mean SWB ($\text{Var}[\beta_0]_{\text{life evaluation}} = 83\%$, $\text{Var}[\beta_0]_{\text{positive feelings}} = 46\%$, and $\text{Var}[\beta_0]_{\text{negative feelings}} = 25\%$) was explained by the nation-level predictors (log GDP, societal financial satisfaction, and societal postmaterialist needs). Nation wealth (GDP), as a moderator, also explained considerable variation in the financial satisfaction–life evaluation slope (29%) and the financial satisfaction–negative feelings slope (17%). The association between financial satisfaction and positive feelings, however, did not vary with GDP. GDP also strongly moderated the associations between postmaterialist needs and life evaluation, explaining considerable variance in their slopes (autonomy = 18%; respect = 26%; social support = 37%). It also accounted for some variance

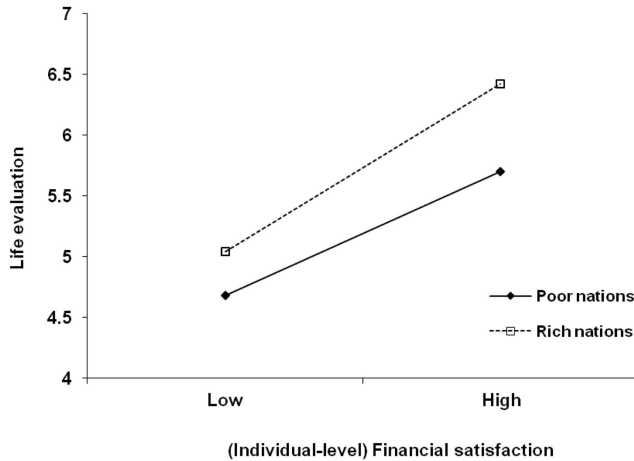


Figure 2. Life evaluation of people who are low or high in financial satisfaction, in poor and rich nations.

in the slopes between postmaterialist needs and negative feelings (autonomy = 29%; respect = 9%; social support = 11%). However, GDP was a weaker moderator of the associations between postmaterialist needs and positive feelings—it explained only 8% and 27% of the variation in the autonomy and social support slopes, respectively, whereas the respect–positive feelings slope did not vary with GDP.

The variance estimates from the random analysis of variance (base) models were also compared with the fitted models. The analyses indicated that individual financial satisfaction, postmaterialist needs, and income together explained 19% of the individual-level variance in life evaluation. They also explained some variance in emotional well-being ($\text{Var}[e]_{\text{positive feelings}} = 17\%$, and $\text{Var}[e]_{\text{negative feelings}} = 12\%$).

Discussion

The key findings from this study not only highlighted that certain attributes are universal predictors of well-being but also demonstrated the moderating effects of societal wealth. First, material concerns and postmaterialist needs were universal predictors of well-being, but for different SWB components. Across nations of varying affluence levels, financial satisfaction strongly predicted life evaluation, whereas respect strongly predicted positive feelings. This means that postmaterialist needs are more akin to fundamental psychological needs and are not postmaterialist in the sense that people value them only after they have attained financial security. Instead, our findings suggest that people across the world always value these postmaterialist needs to some extent, although these needs are more important in societies that are high in them.

Second, the strength of the predictors differs for the separate types of SWB. Previous studies revealed that although measures of material wealth (e.g., income and possession of modern conveniences) were strong predictors of life evaluation, they only weakly predicted positive and negative feelings. Instead, positive and negative feelings were better predicted by fulfillment of psychological needs (Diener, Ng, et al., 2010; Tay & Diener, 2011). Consistent with these findings, financial satisfaction was the stron-

gest predictor of life evaluation in this study. Conversely, the postmaterialist need, respect, was the strongest predictor of positive feelings. Negative feelings were predicted by both financial satisfaction and respect to some extent. The differential relations between material wealth and life satisfaction versus feelings could partly stem from a focusing illusion (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2006). Kahneman and colleagues argued that reports of global life satisfaction are more susceptible to the focusing illusion as they draw people's attention to material factors, whereas moment-to-moment assessments of feelings yield only weak associations with income. Additionally, these findings underscore the importance of psychological needs (as compared with material wealth) on affective well-being. This accords with the self-determination theory, which emphasizes the psychological antecedents of well-being and highlights that satisfying innate needs improves well-being (Ryan & Deci, 2001).

Finally, of central importance is the finding that the wealth of a country moderates the effects of financial satisfaction and postmaterialist needs on SWB. Satisfaction with material aspects of life had a stronger impact on life evaluation and negative feelings in richer nations compared with poorer nations. Similarly, the postmaterialist needs of autonomy, respect, and social support impacted life evaluation and negative feelings (and positive feelings to a smaller extent) more strongly in affluent than in poor nations.

Financial Satisfaction and SWB

Although our finding of a stronger relation between financial satisfaction and SWB in richer nations conflicts with earlier findings showing a stronger impact of financial satisfaction on life satisfaction in poorer than in richer nations (Delhey, 2010; Diener & Diener, 1995, differences in the samples could be a reason for the conflicting findings. Both earlier studies used a much smaller sample of countries (48 countries in the former and 31 countries in the latter), whereas the present study included 150 countries with GDP data. The GWP sample here also included many more extremely poor countries compared with the earlier samples. Inclusion of these many subsistence-level poverty countries likely exerted different effects. Additionally, the sample from Diener and Diener's (1995) study was based on college students, which might be nonrepresentative of the whole population.

There are a few possible reasons why financial satisfaction may have a stronger impact on well-being in richer nations. One is because money is crucial in economically developed societies in order to live comfortably. In contrast, in poor agricultural societies, food and shelter may not necessarily be obtained directly with money but may be obtained via alternative means (e.g., barter trade, subsistence agriculture). Hence, the necessity of money in securing material goods and comforts in economically developed nations may result in financial satisfaction being more important for people's well-being in these nations.

Another possibility may stem from an upward shift in desire level. Some researchers propose that material aspirations rise with increasing income because of hedonic adaptation and social comparison (Easterlin, 2003; Frederick & Loewenstein, 1999). Indeed, in line with this idea, we found that people in more affluent countries were more concerned about material well-being than those in less developed countries. It seems that people do endeavor to keep up with the Joneses. As they own

more material goods, their material aspirations rise, and they desire even more. When material desires are higher, greater financial resources and autonomy would be required to satisfy these desires. As financial resources and autonomy are both greater in affluent countries, people in these countries are more likely to attain financial satisfaction, and in turn, it matters more to their happiness.

The financial uncertainty surrounding the present-day economy could also have accentuated the observed relation between financial satisfaction and SWB. The lack of financial security after the recent global recession might have prompted people to shift emphasis back to financial importance and material possessions. As the developed economies were hit more badly by the recession, people in rich nations are now seeking economic security amid the uncertainty.

The most likely explanation, however, may be because the yardstick for social comparison is now universal, as suggested by previous research (Diener, Ng, et al., 2010; Diener, Tay, & Oishi, 2013). Increasing globalization and connectivity in this modern-day world would likely amplify the effect of using a world standard for social comparison. With greater availability of Internet access, social media, and technological advancements, the ease of comparing across the world, as well as access to quality material possessions, are facilitated. As this would be more pronounced in developed nations than in less developed nations, it means that being rich in developed global economies can make a bigger difference than being rich in poor nations. This is exactly what researchers found—country wealth enhances the effect of individual wealth on SWB (Diener et al., 2013). The superior infrastructure, safety, and greater availability of choices existing in rich nations enhance the effect of individual wealth on well-being, resulting in financial satisfaction being more important in these nations. Viewed differently, it also means that a poor person is better off living in a rich than in a poor nation because of the desirable societal conditions in the former (e.g., superior health care, quality housing, and efficient transportation). The finding that nation wealth (GDP) had a stronger main effect than its moderating effect supports this inference—despite the stronger income–life evaluation relation in rich nations compared with poor ones, poor individuals still benefit from living in a wealthy nation.

In conclusion, the findings in the present study were consistent with our two predictions. Wealthier countries had higher levels of financial satisfaction and postmaterialist needs, and we found that the relation between financial satisfaction and SWB, and those between postmaterialist needs and SWB, were stronger in those countries. The findings imply that the cultural norm hypothesis—culture amplifies the effect of an attribute on happiness when that attribute matches the cultural norm (Fulmer et al., 2010; Higgins, 2000)—can be extended and applied to other psychological attributes such as financial satisfaction or postmaterialist needs. As suggested by the confirmation mechanism, people derive happiness from having their values, needs, or attributes validated by society.

Postmaterialist Needs and SWB

We should emphasize that valuing postmaterialist needs is not tantamount to devaluing materialist concerns. Postmaterialist

needs should not be perceived as attributes that people start to value only after attainment of a certain level of financial security, whereby beyond which they no longer value or care about material wealth and security. Both can still be important to different components of SWB as they are separate, independent constructs. Our findings that financial satisfaction was the strongest predictor of life evaluation, whereas respect was the strongest predictor of positive feelings concur with Welzel and Inglehart's (2010) finding that monetary saturation (i.e., financial satisfaction) showed the strongest effect on life satisfaction. These findings align with Inglehart's assumption that material concerns continue to be salient, even as postmaterialist concerns become more important as societies progress toward postmodernization (Inglehart, 1997). Additionally, we found that postmaterialist needs were essential to well-being (i.e., positive and negative feelings) even in impoverished societies. Therefore, such needs do not occur after economic growth is attained, but are universally important to emotional well-being. Hence, our findings offer support for the argument that postmaterialist needs such as agency is rooted in the human motivational system (Welzel & Inglehart, 2010).

The postmaterialist needs assessed in this study—respect, autonomy, and social support—derive from the basic psychological needs postulated in need theories (Deci & Ryan, 2000). Unsurprisingly, we found that they were important for well-being, especially positive feelings, across cultures. The universality of these psychological needs and their importance for well-being may be explicated by the proposition that they are basic motives, such that deficits in these needs arouse desires to fulfill the missing experiences (Sheldon & Gunz, 2009). Even when these needs are satisfied, people do not orient away from these needs. Having/increasing these needs not only predicted well-being and enhanced well-being; additionally, the meeting of these needs had beneficial effects on SWB, regardless of people's motives for the needs (Sheldon & Schuler, 2011). That is, even if a person does not seem to value or want that need, meeting that need would still enhance his or her SWB, which reinforces the notion that these psychological needs are important and universal. The present findings support the proposition that the three psychological factors (autonomy, social support, respect) assessed in this study reflect universal and essential needs, and are not merely values that people start to emphasize only after attaining financial/material security.

Conclusions

In this study, we took the logarithmic transformation of both income and GDP. Doing so means that an increase in income (or GDP) at a lower level in the scale (e.g., from \$10,000 to \$20,000) is now equal to an increase at a higher level in the scale (e.g., from \$90,000 to \$180,000), as both cases reflect changes of equal percentages. This addresses the issue of the diminishing marginal utility of money, whereby the same increase in absolute raw income produces a much larger effect for the poor than the rich. As there is evidence of diminishing marginal utility of income for well-being (Layard, Mayraz, & Nickell, 2008), it is appropriate to use the logarithmic transformation of wealth to examine its relation with SWB. The logarithmic transformation also accords with Weber-Fechner law, which states that the perception of discriminable differences

between two stimuli (e.g., intensity of light) is based on the percentage, not absolute, change, resulting in a logarithmic relationship between the stimulus and perception (Hecht, 1924). Finally, using a logarithmic scale has the advantage of yielding linear relations in the plots of SWB against log income (or log GDP), making the correlations more interpretable.

An important avenue for further research would be to address the causal direction of the links between happiness, materialist, and postmaterialist needs. Future studies can use longitudinal data to determine how societal- and individual-level changes in postmaterialist needs impact changes in SWB. Another future direction to examine would be to explore how other societal indicators would affect the relative salience of material versus psychological factors. For instance, would the rate of economic development (e.g., rapid vs. steady economic growth) or income inequality moderate the effects of these well-being predictors?

Our findings highlight a few important implications for societal policies and beliefs about well-being. First, satisfaction with material aspects of life is essential for well-being, and contrary to popular belief, it has a stronger impact on SWB in wealthier than in poorer countries. This suggests that societies that are economically developed and stable should not simply neglect economic growth and refocus all attention to self-expression values. Instead, they need to strike a balance and continue to focus on both—further developing their economies as well as fostering values that facilitate the satisfaction of basic psychological needs (e.g., autonomy, mastery). Second, postmaterialist/social needs are essential to positive and negative feelings across the world. This suggests that societal conditions that promote autonomy and social relations among their citizens are important in all societies, as the fulfillment of such needs, and not just having more money, can also substantially improve well-being. However, we recognize that these analyses are cross-sectional and cannot provide definite conclusions regarding how economic development and growth would actually influence the importance of material and needs variables. Third, the findings suggest that policy makers should not view material needs and desires as concerns that plague only societies in early stages of economic development, whereas postmaterialist values become paramount only during postmodernization. Rather, they are both important for societies at any stage of economic development, albeit for different types of SWB. Finally, the finding that psychological variables (e.g., postmaterialist needs) have more influence than material wealth on positive feelings underline the pertinence of formulating policies to address the correct SWB component. That is, policy makers should be clear about which aspect(s) of happiness they are targeting to enhance, as our findings imply that the different types of well-being call for different emphases.

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(Appendix follows)

Appendix

Wealthy and Poor Countries' GDP

15 richest nations	GDP (\$)	15 poorest nations	GDP (\$)
Qatar	69,512.33	Congo Kinshasa	276.9935
Luxembourg	68,290.31	Liberia	345.7582
United Arab Emirates	66,854.72	Burundi	485.8903
Kuwait	48,782.65	Niger	609.8371
Norway	47,626.28	Ethiopia	636.0687
Singapore	45,374.24	Malawi	644.8367
United States	42,516.39	Sierra Leone	646.9881
Ireland	38,896.39	Mozambique	669.5234
Switzerland	36,963.59	Central African Republic	672.0042
Hong Kong	36,440.07	Afghanistan	688.2151
Netherlands	35,104.49	Rwanda	840.4747
Canada	35,033.42	Togo	858.2173
Iceland	34,889.19	Madagascar	868.6751
Austria	33,626.39	Mali	884.5544
Denmark	33,193.24	Uganda	911.0815

Note. GDP = gross domestic product.

Received June 3, 2013
Revision received March 4, 2014
Accepted April 8, 2014 ■

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