


Who Can Buy Happiness? Personality Traits Moderate the Effects of Stable Income Differences and Income Fluctuations on Life Satisfaction

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Abstract

The present research tested whether the Big Five personality dimensions—extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience—moderate the effects of income on life satisfaction. The authors analyzed data from three large-sample, nationally representative, longitudinal studies: the British Household Panel Survey, the German Socio-Economic Panel Study, and the Household Income and Labour Dynamics in Australia Survey. Neuroticism consistently moderated the effects of both stable between-person income differences and within-person income fluctuations on life satisfaction. Specifically, income predicted satisfaction more strongly for highly neurotic individuals than for their emotionally stable peers. These findings illustrate that the effects of life circumstances on subjective well-being can vary considerably across individuals, depending on their basic personality traits.

Keywords

income, subjective well-being, life satisfaction, personality traits, Big Five, Five-Factor Model

Does earning more money lead to greater happiness? Yes, at least in general. Both cross-sectional and longitudinal studies have consistently shown positive, small-to-moderate associations between income and subjective well-being—defined as life satisfaction, positive affect, and lack of negative affect (Diener, Suh, Lucas, & Smith, 1999). Specifically, previous studies have found that people with higher incomes tend to experience greater well-being (Howell & Howell, 2008; Luhmann, Schimmack, & Eid, 2011) and that substantial changes in income predict corresponding changes in well-being (e.g., Gardner & Oswald, 2007).

Surprisingly little research, however, has examined individual differences in these links between money and happiness. To what extent do the effects of income on subjective well-being vary across individuals? For whom is money a powerful predictor of happiness, and for whom does it matter little or not at all? The present research addressed these questions by testing whether and how the Big Five personality dimensions—extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience—moderate the effects of both stable between-person income differences (i.e., having a consistently high vs. low income) and within-person income fluctuations (i.e., experiencing an increase or decrease in income) on life satisfaction.

Why Does Higher Income Predict Greater Life Satisfaction?

Researchers have proposed two complementary mechanisms to explain why higher income generally predicts greater life satisfaction. The first concerns economic consumption. Higher income provides greater opportunities to seek out positive consumption experiences, such as buying a new car or taking a vacation (e.g., Van Boven & Gilovich, 2003). It also provides greater opportunities to avoid negative experiences, such as being unable to afford adequate food or housing (Lantz, House, Mero, & Williams, 2005; McLeod & Kessler, 1990). Because positive and negative experiences predict life satisfaction (Headey & Wearing, 1989; Lucas, 2007; Lucas, Clark, Georgellis, & Diener, 2004; Luhmann, Hofmann, Eid, &

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Lucas, 2012), these opportunities create pathways from higher income to greater satisfaction.

The second mechanism concerns cognitive comparisons. Individuals frequently compare their current income and other life circumstances to salient standards, such as to the people in their social network or national culture (social comparisons; Easterlin, 1974), or to their own past (temporal comparisons; Parducci, 1995). Put simply, people tend to feel better when their current circumstances exceed a salient standard than when they do not. Such comparisons create additional pathways from higher income to greater life satisfaction. Social income comparisons yield more favorable results for individuals with consistently high incomes than for their low-income peers. Furthermore, an increase in a particular individual's income allows them to draw more favorable social and temporal comparisons.

Why Might Personality Traits Moderate the Effects of Income on Life Satisfaction?

Individuals' levels of life satisfaction are predicted not only by their income and other life circumstances, but also—and at least as strongly—by their stable personality characteristics. In terms of the Big Five, individuals who are more extraverted and less neurotic, and to a lesser extent those who are more agreeable and conscientious, tend to experience greater satisfaction (Steel, Schmidt, & Shultz, 2008). These overall associations likely reflect the fact that people with different personalities chronically experience (a) different balances of positive and negative affect, (b) different balances of positive and negative life events, and (c) different reactions to objectively similar events, all of which predict life satisfaction (Costa & McCrae, 1980; Headey & Wearing, 1989; Magnus, Diener, Fujita, & Pavot, 1993; McCrae & Costa, 1991).

There are also reasons to suspect that some traits—particularly neuroticism and extraversion—might moderate both the consumptive and cognitive effects of income on satisfaction. Regarding consumption experiences, highly neurotic individuals show especially pronounced psychological reactions to negative experiences, whereas highly extraverted individuals show especially pronounced reactions to positive experiences (Bolger & Schilling, 1991; Larsen & Ketelaar, 1991; Luhmann & Eid, 2009). If lower income leads to more frequent negative experiences, and neurotic individuals are more strongly affected by such experiences, this would create a multiplicative effect whereby the link from income to life satisfaction would be stronger at higher levels of neuroticism. Similarly, if higher income leads to more frequent positive experiences, and extraverted individuals are more strongly affected by such experiences, then the link from income to life satisfaction may also be stronger at higher levels of extraversion.

As for cognitive comparisons, highly neurotic individuals draw more frequent comparisons than do their emotionally stable peers (Buunk, Zurriaga, Gonzalez, Terol, & Roig, 2006; Van der Zee, Buunk, & Sanderman, 1996; Van der Zee, Oldersma, Buunk, & Bos, 1998). Moreover, the results of such

comparisons affect neurotic individuals with particular strength—especially when those results are unfavorable (Olson & Evans, 1999; Van der Zee et al., 1996, 1998). None of the other Big Five dimensions have been consistently associated with either the frequency or the potency of cognitive comparisons. If highly neurotic individuals draw more frequent income comparisons, and react more strongly to their results, this would create a second mechanism by which the effects of income on life satisfaction would be amplified by high neuroticism.

The Present Research

The present research tested whether the Big Five personality dimensions moderate the effects of income on life satisfaction, using data from three large-sample, nationally representative, longitudinal studies: the British Household Panel Survey (BHPS; see Taylor, Brice, Buck, & Prentice-Lane, 2010), the German Socio-Economic Panel Study (SOEP; see Wagner, Frick, & Schupp, 2007), and the Household Income and Labour Dynamics in Australia Survey (HILDA; see Summerfield, 2010). We hypothesized that both stable between-person income differences and within-person income fluctuations would predict life satisfaction more strongly among highly neurotic and extraverted individuals than among their emotionally stable and introverted peers.

Method

Participants and Procedures

All three of the present data sets came from studies that have recruited nationally representative samples using multistage probability sampling, interviewed participants annually regarding life satisfaction and income, and assessed the Big Five personality dimensions.

German sample. These participants were 19,262 residents of Germany, who provided data in at least one SOEP assessment wave between 2000 (following a major expansion of the study) and 2008. On average, they participated in 7.65 waves (85.0% participation rate), and most (51.4%) participated in all nine waves. In 2008, their ages ranged from 20 to 99 years old ($M = 50.13$, $SD = 17.48$), and 52.1% were female.

British sample. These participants were 13,825 residents of the United Kingdom, who provided both income and life-satisfaction data in at least one BHPS assessment wave between 1999 (following a major expansion of the study) and 2008. Excluding 2001 (when life satisfaction was not assessed), they participated in an average of 7.40 waves (82.3% participation rate), and almost half (45.8%) participated in all nine waves. In 2008, their ages ranged from 18 to 102 years old ($M = 48.47$, $SD = 18.36$), and 54.6% were female.

Australian sample. These participants were 10,562 residents of Australia, who provided data in at least one HILDA assessment wave between 2001 (when the study began) and 2008. On

Table 1. Descriptive Statistics for Life Satisfaction, Income, and Personality Traits

Variable	Mean (SD)		
	German Sample	British Sample	Australian Sample
Life satisfaction	70.07 (13.40)	70.47 (16.25)	77.13 (12.39)
Income	3.26 (0.19)	3.21 (0.22)	3.47 (0.22)
Extraversion	63.81 (18.93)	58.31 (19.60)	57.22 (17.79)
Agreeableness	74.15 (16.31)	74.09 (16.79)	72.95 (15.39)
Conscientiousness	81.63 (15.68)	71.00 (18.24)	68.16 (17.28)
Neuroticism	49.32 (20.36)	44.59 (22.08)	30.52 (18.08)
Openness to experience	58.36 (20.21)	57.58 (20.38)	53.97 (17.56)

Note. German sample, $N = 19,262$; British sample, $N = 13,825$; and Australian sample, $N = 10,562$. Life satisfaction and the Big Five are in the percentage of maximum possible metric. Income is monthly household income, in 2008 euros (German sample), pounds (British sample), or dollars (Australian sample), adjusted for household size and logarithmized. Life satisfaction and income are within-person averages, across all available measurements.

average, they participated in 7.10 waves (88.8% participation rate), and most (65.3%) participated in all eight waves. In 2008, their ages ranged from 18 to 103 years old ($M = 48.16$, $SD = 17.73$), and 53.0% were female.

Measures

Life satisfaction. During each assessment wave, participants rated how satisfied they were with their life overall. Participants in the German sample used an 11-point scale (0 = *totally dissatisfied*, 10 = *totally satisfied*), those in the British sample used a 7-point scale (1 = *not at all satisfied*, 7 = *completely satisfied*), and those in the Australian sample used a 10-point scale (1 = *not at all satisfied*, 10 = *completely satisfied*).

Personality traits. In 2005, all participants completed a measure of the Big Five personality dimensions. Participants in the German and British samples completed a 15-item version of the Big Five Inventory (BFI; John & Srivastava, 1999). Each item was a short descriptive phrase, which the participants rated on a 7-point scale (1 = *does not apply to me at all*, 7 = *applies to me perfectly*). In the German sample, the scales' α reliabilities were .66 for extraversion, .50 for agreeableness, .62 for conscientiousness, .60 for neuroticism, and .63 for openness to experience; in the British sample, they were .54, .53, .52, .68, and .67, respectively. In a sample of 224 American students (see Soto & John, 2009), these brief scales correlated .91, .88, .89, .92, and .90, respectively, with the corresponding full-length BFI scales, and their 2-month retest reliabilities were .86, .68, .74, .80, and .79.

Participants in the Australian sample completed a 28-item version of the Mini-Markers (Saucier, 1994). Each item was a personality-descriptive adjective, which the participants rated on a 7-point scale (1 = *does not describe me at all*, 7 = *describes me very well*). The scales' α reliabilities were .74 for extraversion, .78 for agreeableness, .78 for conscientiousness, .80 for neuroticism, and .74 for openness to experience. In the American student sample, they correlated .98, .84, .96, .98, and .97, respectively, with the corresponding full-length Mini-Marker scales, and their 2-month retest reliabilities were .88, .71, .83, .75, and .77.

Income. Household income was assessed during each assessment wave. To adjust for changes in currency values over time, we inflated income to 2008 Euros (in the German sample), pounds (in the British sample), or Australian dollars (in the Australian sample). We then divided each household's monthly income by the square root of the household size, to adjust for expenses shared by household members. Finally, we applied a logarithmic transformation to (a) correct for positive skewness and (b) reflect the fact that income effects on subjective well-being are greater, per unit of currency, at lower income levels (see Buhmann, Rainwater, Schmaus, & Smeeding, 1988).¹

Data Analysis

Descriptive statistics for all variables are presented in Table 1. To facilitate comparisons across samples, values for life satisfaction and the Big Five are presented in the percentage of maximum possible metric (Cohen, Cohen, Aiken, & West, 1999). In this metric, 0 and 100 represent the lowest and highest possible scores, respectively, on a measure.

We tested the effects of income and personality traits on life satisfaction using multilevel models, with measurement occasions nested within individuals. These models, fit using Statistical Package for the Social Sciences 19, allowed us to examine stable between-person income differences (at Level 2) and within-person income fluctuations (at Level 1) simultaneously. Our presentation of results focuses on the fixed effects of income, personality traits, and their interactions on life satisfaction. All models also included a random intercept, as well as a random income slope.

Prior to these multilevel analyses, we standardized all variables around the descriptive statistics presented in Table 1. Due to this standardization on between-person variance, the fixed effects of between-person income differences, personality traits, and their interactions may be interpreted as approximately standardized coefficients. However, the effects of within-person income fluctuations and their interactions should not be interpreted as standardized coefficients. The results of analyses with sex and age included as control variables were conceptually identical to those presented here. Complete output from all models is available from the first author.

Table 2. Fixed Effects of Income and Personality Traits on Life Satisfaction

Effect	Model With Income Only			Model With Income and the Big Five		
	German Sample Coefficient (SE)	British Sample Coefficient (SE)	Australian Sample Coefficient (SE)	German Sample Coefficient (SE)	British Sample Coefficient (SE)	Australian Sample Coefficient (SE)
Mean income	.337 (.007)	.125 (.008)	.067 (.010)	.300 (.007)	.103 (.008)	.065 (.009)
Income fluctuations	.129 (.006)	.026 (.005)	.028 (.005)	.128 (.006)	.026 (.005)	.028 (.005)
Extraversion				.059 (.007)	.055 (.008)	.104 (.009)
Agreeableness				.098 (.007)	.110 (.008)	.127 (.010)
Conscientiousness				.049 (.007)	.123 (.009)	.076 (.010)
Neuroticism				-.235 (.007)	-.330 (.008)	-.208 (.010)
Openness to exp.				.064 (.007)	-.055 (.008)	-.106 (.010)

Note. German sample, $N = 19,262$; British sample, $N = 13,825$; and Australian sample, $N = 10,562$. Openness to exp. = openness to experience; SE = standard error. All coefficients are statistically significant at the .001 level.

Results

Effects of Income on Life Satisfaction

Do stable individual differences in income predict life satisfaction? And do changes in income predict corresponding changes in satisfaction? To address these questions, we separated each participant's income measurements into two components. The first was a within-person mean, which indexed stable between-person income differences. The second was a set of deviation scores from the within-person mean, which indexed fluctuations in that individual's income over time.

In each sample, we then fit a multilevel model that predicted life satisfaction from mean income (at Level 2) and income fluctuations (at Level 1). The fixed-effect coefficients from these models are presented on the left side of Table 2. As expected, in all three samples, both mean income and income fluctuations positively predicted life satisfaction. The positive coefficients for mean income (.337 in the German sample, .125 in the British sample, and .067 in the Australian sample; $ps < .001$) indicate that consistently earning a high income predicted greater life satisfaction, with small-to-moderate effect sizes. The positive coefficients for income fluctuations (.129 in the German sample, .026 in the British sample, and .028 in the Australian sample; $ps < .001$) indicate that experiencing an increase or decrease in income predicted a corresponding change in satisfaction.

Effects of Personality Traits on Life Satisfaction

Do personality traits predict individual differences in life satisfaction, beyond the effects of income? To address this question, we fit a second multilevel model in each sample. This model added all of the Big Five personality dimensions as predictors, and their fixed-effect coefficients are presented on the right side of Table 2. As expected, in all three samples, higher extraversion, agreeableness, and conscientiousness, as well as lower neuroticism, predicted greater satisfaction ($ps < .001$). Surprisingly, the effects of openness to experience varied across samples. Higher openness predicted greater satisfaction in the German

sample but lower satisfaction in the British and Australian samples ($ps < .001$).

Moderation Effects

Do the effects of income on life satisfaction vary across individuals, depending on their personality traits? To address this final question, we fit a series of five multilevel models in each sample. In addition to the main effects of mean income, income fluctuations, and the Big Five, each model included two interaction effects: one representing the interaction of a particular Big Five dimension with mean income, and one representing its interaction with income fluctuations.

The interaction coefficients from these models are presented in Table 3. They show that, as hypothesized, neuroticism consistently moderated the effects of both mean income and income fluctuations on life satisfaction. The interaction between neuroticism and mean income was positive and significant in all three samples, indicating that consistently earning a high versus low income predicted life satisfaction more strongly for neurotic individuals than for emotionally stable individuals. Specifically, in the German sample, the effect of mean income on life satisfaction was .327 for highly neurotic individuals (i.e., those 1 standard deviation [SD] above the sample mean), compared with .276 for highly stable individuals (i.e., those 1 SD below the mean); the corresponding effects were .170 versus .036 in the British sample, and .086 versus .047 in the Australian sample.² Averaged across the three samples, the effect of mean income on satisfaction was 62% stronger among highly neurotic individuals than among highly stable individuals (.195 versus .120).

The interaction between neuroticism and income fluctuations was also positive in all three samples, and significant in both the German and Australian samples. These effects indicate that an increase or decrease in an individual's income, over time, predicted a larger corresponding change in life satisfaction for neurotic individuals than for emotionally stable individuals. In the German sample, the effect of income fluctuations on satisfaction was .142 for highly neurotic individuals, compared with .114 for highly stable individuals; the

Table 3. Interaction Effects Between Income and Personality Traits

	Extraversion Coefficient (SE)	Agreeableness Coefficient (SE)	Conscientiousness Coefficient (SE)	Neuroticism Coefficient (SE)	Openness to exp. Coefficient (SE)
Interaction with mean income					
German sample	-.002 (.006)	.003 (.006)	.004 (.006)	.026 (.006)***	-.020 (.006)**
British sample	-.002 (.008)	-.002 (.008)	-.012 (.008)	.067 (.007)***	.005 (.008)
Australian sample	-.010 (.009)	-.001 (.009)	-.015 (.009)	.019 (.009)*	.030 (.009)**
Interaction with income fluctuations					
German sample	.005 (.006)	-.005 (.006)	.008 (.006)	.014 (.006)*	-.015 (.006)*
British sample	-.001 (.005)	-.001 (.005)	.001 (.005)	.002 (.005)	.005 (.005)
Australian sample	.002 (.005)	.011 (.005)*	.012 (.005)*	.012 (.005)*	.009 (.005)

Note. German sample, $N = 19,262$; British sample, $N = 13,825$; and Australian sample, $N = 10,562$. Openness to exp. = openness to experience; SE = standard error. All models also included fixed effects of mean income, income fluctuations, and the Big Five.

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

corresponding effects were .040 versus .016 in the Australian sample. Averaged across the three samples, the effect of income fluctuations on satisfaction was 37% stronger among highly neurotic individuals than among highly stable individuals (.070 versus .051).

None of the other Big Five dimensions consistently moderated the effects of income on life satisfaction. Openness to experience negatively moderated the effects of both mean income and income fluctuations in the German sample but positively moderated the effect of mean income in the Australian sample. Agreeableness and conscientiousness positively moderated the effect of income fluctuations in the Australian sample but not in the other samples. Extraversion did not moderate either of the income effects in any sample.³

Discussion

The present results support several conclusions about how income and personality traits predict life satisfaction; they also highlight some key issues in need of further investigation. Using data from three longitudinal studies with large, nationally representative samples, we found that (a) people with consistently high incomes—as well as those with extraverted, agreeable, conscientious, and emotionally stable personalities—were generally more satisfied with their lives, and (b) within-person increases or decreases in income predicted corresponding changes in life satisfaction. Most importantly, however, we found that the effects of income on satisfaction varied considerably across individuals, depending on their personality traits. Specifically, both stable between-person income differences and within-person income fluctuations predicted life satisfaction more strongly for highly neurotic individuals than for their emotionally stable peers.

These moderation effects may reflect neurotic individuals' stronger reactions to negative consumption experiences associated with low income (e.g., struggling to afford housing), as well as their greater vulnerability to unfavorable social (e.g., to a friend with a higher paying job) and temporal (e.g., before versus after a pay cut) income comparisons.⁴ Although previous findings indirectly support both of these mechanisms

(e.g., Luhmann & Eid, 2009; Van der Zee et al., 1996, 1998), to our knowledge neither has been fully tested in a single study. Does neuroticism moderate the impact of negative consumption experiences on life satisfaction? Similarly, does this trait affect the frequency and psychological potency of social and temporal income comparisons? Directly testing these causal mechanisms is an important goal for future research.

Contrary to our initial hypotheses, the effects of income on life satisfaction were not moderated by extraversion. Why might neuroticism, but not extraversion, moderate income effects? One possibility is that life satisfaction may be more strongly influenced by negative experiences than by positive ones (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; David, Green, Martin, & Suls, 1997). If so, then neurotic individuals' especially pronounced reactions to negative experiences may affect their satisfaction more so than extraverts' pronounced reactions to positive experiences. In addition, life satisfaction may be more strongly influenced by income comparisons than by consumption experiences (Easterlin, McVey, Switek, Sawangfa, & Zweig, 2010). Neuroticism, but not extraversion, has been consistently found to moderate the frequency and impact of various cognitive comparisons (Buunk et al., 2006; Olson & Evans, 1999; Van der Zee et al., 1996, 1998), and this difference may extend to income comparisons.

Interestingly, the effects of openness to experience on life satisfaction in general—and on the link between income and satisfaction—differed across samples. In the British and Australian samples, higher openness predicted lower life satisfaction; in the Australian sample, it also predicted a stronger link between income and satisfaction. Just the opposite pattern was found in the German sample, where higher openness predicted greater satisfaction, as well as a weaker link between income and satisfaction. The overall effects of openness on life satisfaction have varied considerably across previous studies (Steel et al., 2008), and to our knowledge no previous research has examined whether openness moderates the effects of income on satisfaction. Clearly, additional research is needed to investigate the variable relations between openness, income, and life satisfaction across different cultural contexts.

The present findings should be interpreted with at least two limitations in mind. First, all three of the studies analyzed here used brief Big Five measures, which necessarily sacrificed some breadth and reliability for efficiency (Credé, Harms, Niehorster, & Gaye-Valentine, 2012). Therefore, the present results should be interpreted as lower bound estimates for the true effects of personality traits on life satisfaction. Second, we examined concurrent associations between income, personality traits, and life satisfaction. We therefore cannot establish causal relationships between these variables; additional research will be needed to test causal models.

Further Understanding Life Circumstances, Personality, and Well-Being

Why are some people happy and others unhappy? Historically, much research addressing this question has treated life circumstances and personality characteristics as distinct, even competing, predictors of subjective well-being (e.g., Brickman, Coates, & Janoff-Bulman, 1978; Costa & McCrae, 1980; Diener, 1984). More recently, some scholars have suggested that this conceptualization is overly simplistic (e.g., Diener, Lucas, & Scollon, 2006), and the present findings support this contention. They illustrate that the effects of a life circumstance (e.g., income) on an aspect of well-being (e.g., life satisfaction) can vary substantially across individuals, depending on their personality characteristics (e.g., neuroticism).

This insight suggests three important directions for future research. First, life satisfaction is only one key component of subjective well-being, alongside positive and negative affect. Do personality traits also moderate the effects of income on affective well-being? Previously demonstrated links between neuroticism and negative reactivity (e.g., Larsen & Ketelaar, 1991) suggest that its moderation effects should extend to negative affect. Similarly, although in the present research extraversion did not moderate the effects of income on life satisfaction, this trait may magnify income effects on positive affect. As an initial test of these hypotheses, we repeated our moderation analyses in the British sample, with scores on the 12-item General Health Questionnaire (GHQ; Goldberg & Williams, 1988), a measure of positive versus negative affective balance, as the dependent variable. (The GHQ was not administered in the German and Australian samples.) Results indicated that the effects of stable between-person income differences on affective well-being were stronger at higher levels of neuroticism and that the effects of within-person income fluctuations were stronger at higher levels of extraversion. However, these preliminary findings await replication with other samples and measures.

Second, basic personality traits like the Big Five constitute only one level of personality (McAdams & Pals, 2006). Other, more contextualized characteristics, such as values and goals, may further moderate the effects of income on subjective well-being. For example, a previous study (Malika & Chatman, 2003) found that income predicted well-being more strongly for individuals with extrinsic work orientations (who viewed

work primarily in terms of remuneration) than for those with intrinsic orientations (who viewed work in terms of intellectual fulfillment, creative self-expression, and skill mastery). Such studies, however, remain rare, and additional research is needed to investigate other potential moderators.

Finally, many life circumstances besides income predict subjective well-being. For example, people generally experience greater well-being when they are well-educated, engaged and successful at work, involved in stable and satisfying close relationships, religious, and reasonably healthy (Diener et al., 1999; Myers & Diener, 1995). Moreover, important changes in work, relationship, and health status predict lasting changes in well-being (Lucas, 2007; Luhmann et al., 2012). Additional research is needed to investigate whether personality characteristics also moderate the effects of these circumstances on well-being.

In sum, the questions “What circumstances make people happy?” and “What personality characteristics make people happy?” are not independent of each other. A particular circumstance may predict someone’s subjective well-being powerfully or not at all, depending on their personality. Future research can greatly enhance our understanding of how life circumstances and personality characteristics jointly predict well-being.

Authors’ Note

Data from the German, British, and Australian samples were made available by the U.K. Data Archive, the German Institute for Economic Research, and the Melbourne Institute of Applied Economic and Social Research, respectively. However, the findings and views reported in this article are those of the authors and should not be attributed to these organizations. The authors thank Oliver P. John for access to the American student data, as well as Adam K. Thompson and Lindsay M. Hylek for their helpful comments on earlier versions of this article. Preparation of this article was supported in part by a grant from Colby College.

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Notes

1. To logarithmize income, we added a constant of 100, then took the base-10 logarithm. This transformation greatly reduced skewness, without creating extreme outliers at the low end of the distribution. Additional analyses confirmed that the effects of nonlogarithmized income on satisfaction were greater at lower income levels. The results of analyses with nonlogarithmized income were conceptually identical to those presented here but attenuated by nonnormality and nonlinearity.
2. In the neuroticism model, the fixed effect of mean income on life satisfaction was .302 in the German sample, .103 in the British

sample, and .067 in the Australian sample. The fixed effect of income fluctuations was .128, .026, and .028 in these three samples, respectively.

3. Analyses of nonlogarithmized income confirmed that neuroticism's moderation effects were greater among low-income individuals than among high-income individuals, as implied by our logarithmic transformation, and that none of the other Big Five dimensions consistently moderated the effects of nonlogarithmized income on life satisfaction.
4. We conducted follow-up analyses to test whether neuroticism moderated the effects of comparative income—relative to other individuals with similar levels of education and occupational prestige—on life satisfaction (cf. Clark & Oswald, 1996). Results indicated that (a) both absolute and comparative income positively predicted life satisfaction, (b) both income effects were stronger in high-neuroticism than in low-neuroticism groups, and (c) the strength of neuroticism's moderation effect was about equally strong for absolute and comparative income.

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