Journal of Experimental Psychology: General

Culture Shapes Whether the Pursuit of Happiness Predicts Higher or Lower Well-Being

Brett Q. Ford, Julia O. Dmitrieva, Daniel Heller, Yulia Chentsova-Dutton, Igor Grossmann, Maya Tamir, Yukiko Uchida, Birgit Koopmann-Holm, Victoria A. Floerke, Meike Uhrig, Tatiana Bokhan, and Iris B. Mauss

Online First Publication, September 7, 2015. http://dx.doi.org/10.1037/xge0000108

CITATION

Ford, B. Q., Dmitrieva, J. O., Heller, D., Chentsova-Dutton, Y., Grossmann, I., Tamir, M., Uchida, Y., Koopmann-Holm, B., Floerke, V. A., Uhrig, M., Bokhan, T., & Mauss, I. B. (2015, September 7). Culture Shapes Whether the Pursuit of Happiness Predicts Higher or Lower Well-Being. *Journal of Experimental Psychology: General*. Advance online publication. http://dx.doi.org/10.1037/xge0000108

Culture Shapes Whether the Pursuit of Happiness Predicts Higher or Lower Well-Being

Brett Q. Ford University of California, Berkeley Julia O. Dmitrieva University of Denver

Daniel Heller Tel Aviv University Yulia Chentsova-Dutton Georgetown University

Igor Grossmann University of Waterloo Maya Tamir The Hebrew University

Yukiko Uchida Kyoto University Birgit Koopmann-Holm Santa Clara University

Victoria A. Floerke Tufts University

Meike Uhrig University of Tübingen

Tatiana Bokhan Tomsk State University Iris B. Mauss University of California, Berkeley

Pursuing happiness can paradoxically impair well-being. Here, the authors propose the potential down-sides to pursuing happiness may be specific to individualistic cultures. In collectivistic (vs. individualistic) cultures, pursuing happiness may be more successful because happiness is viewed—and thus pursued—in relatively socially engaged ways. In 4 geographical regions that vary in level of collectivism (United States, Germany, Russia, East Asia), we assessed participants' well-being, motivation to pursue happiness, and to what extent they pursued happiness in socially engaged ways. Motivation to pursue happiness predicted lower well-being in the United States, did not predict well-being in Germany, and predicted higher well-being in Russia and in East Asia. These cultural differences in the link between motivation to pursue happiness and well-being were explained by cultural differences in the socially engaged pursuit of happiness. These findings suggest that culture shapes whether the pursuit of happiness is linked with better or worse well-being, perhaps via how people pursue happiness.

Keywords: happiness, well-being, culture

Do people want to feel happy? In short, yes. Resonating with both laypeople and scientists, the Dalai Lama posited, "the very purpose of our existence is to seek happiness" (Lama & Cutler,

1998, p. 16), and empirical research has verified happiness as one of humans' paramount objectives across cultures (Diener, Sapyta, & Suh, 1998). Surprisingly, however, a growing body of research

Brett Q. Ford, Department of Psychology, University of California, Berkeley; Julia O. Dmitrieva, Department of Psychology, University of Denver; Daniel Heller, School of Management, Tel Aviv University; Yulia Chentsova-Dutton, Department of Psychology, Georgetown University; Igor Grossmann, Department of Psychology, University of Waterloo; Maya Tamir, Department of Psychology, The Hebrew University; Yukiko Uchida, Kokoro Research Center, Kyoto University; Birgit Koopmann-Holm, Department of Psychology, Santa Clara University; Victoria A. Floerke, Department of Psychology, Tufts University; Meike Uhrig, Department of Media Studies, University of Tübingen; Tatiana Bokhan,

Department of Psychology, Tomsk State University; Iris B. Mauss, Department of Psychology, University of California, Berkeley.

We thank Joshua Eng, Vivian Dzokoto, Shanmukh Kamble, Christie Napa-Scollon, Tatiana Panusheva, and Yen-chen Chang for their collaboration, and the Greater Good Science Center (Berkeley, CA) and Affective Science Training Fellowship (5T32MH020006) for research support to Brett Q. Ford.

Correspondence concerning this article should be addressed to Brett Q. Ford, Department of Psychology, University of California, Berkeley, 3210 Tolman Hall, Berkeley, CA 94720. E-mail: brett.q.ford@berkeley.edu

indicates that pursuing happiness can at times impair well-being (Ford, Mauss, & Gruber, 2015; Mauss et al., 2012; Mauss, Tamir, Anderson, & Savino, 2011; Schooler, Ariely, & Loewenstein, 2003). Thus, these key questions remain: when is the pursuit of happiness likely to be associated with more or—paradoxically—less actual happiness and well-being? And what might make it so?

We propose that the downsides to pursuing happiness may be specific to individualistic cultures like the United States—where this research has primarily been conducted—and that these downsides may be due to how individuals in the United States tend to pursue happiness. People in other cultures may experience greater well-being the more they pursue happiness because they may pursue happiness in more (vs. less) socially engaged ways (e.g., being more vs. less likely to seek happiness through spending time with family and friends or helping others). Because social connection is one of the most robust predictors of well-being (Helliwell & Putnam, 2004), the pursuit of happiness may yield higher wellbeing in cultures that promote a socially engaged pursuit of happiness. We tested this hypothesis in four geographic regions that differ in their emphasis on social engagement (Varnum, Grossmann, Kitayama, & Nisbett, 2010): United States, Germany, Russia, and East Asia.

Pursuing Happiness and Well-Being

Despite the ubiquity of pursuing happiness (Diener et al., 1998), recent research suggests a surprising paradoxical effect: people who are more motivated to pursue happiness can be less likely to experience positive outcomes (see Ford & Mauss, 2014, for a review) and more likely to experience negative outcomes like higher depressive symptoms (Ford, Shallcross, Mauss, Floerke, & Gruber, 2014; Mauss et al., 2011), greater loneliness (Mauss et al., 2012), and worse prospective mood disorder illness course (Ford et al., 2015). Experimental evidence confirms that participants instructed to pursue happiness report worse emotional outcomes than controls (Mauss et al., 2012; Mauss et al., 2011; Schooler et al., 2003).

To our knowledge, however, all of this research has been conducted within the United States. There is reason to believe that this effect is unique to cultures like the United States, and that in other cultures, individuals with a stronger motivation to pursue happiness are more likely to attain happiness and well-being.

Different Ways of Pursuing Happiness

How we define happiness determines what we pursue when we "pursue happiness" and should thus influence whether that pursuit is likely to be successful or not. Given this, how might culture shape what people pursue when they pursue happiness? Prior research suggests that cultures higher in collectivism (e.g., East Asian geographical regions) are more likely to promote social engagement in general (Markus & Kitayama, 1991; Oyserman, Coon, & Kemmelmeier, 2002) as well as socially engaged experiences of happiness in particular (Kitayama, Mesquita, & Karasawa, 2006; Lu & Gilmour, 2004; Uchida & Kitayama, 2009). In these cultures, *happiness* tends to be defined as a positive feeling contingent upon social engagement (e.g., interpersonal harmony, family well-being, or connectedness). Accordingly, a person who is motivated to pursue happiness in East Asia may find

it more appropriate and be more encouraged by their culture to seek happiness through social engagement. In contrast, a person who is motivated to pursue happiness in the United States may not be particularly encouraged by their culture to seek happiness through social engagement. In other words, in collectivist contexts compared to individualist contexts, a person who is motivated to pursue happiness should be more likely to define happiness in culturally supported, socially engaged terms, and thus, should be more likely to pursue happiness in more socially engaged ways.

Social engagement, in turn, promotes well-being (e.g., Layous, Nelson, Oberle, Schonert-Reichl & Lyubomirsky, 2012). Indeed, positive social connection is one of the few necessary predictors of well-being (Diener & Oishi, 2005), and experimental research on the benefits of loving-kindness (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008) and gratitude interventions (Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011) verifies that promoting social engagement increases well-being.

As illustrated in Figure 1, although many cultures embrace the pursuit of happiness, not all cultures pursue happiness in the same way: In cultures higher in collectivism, happiness may be more likely to be pursued in socially engaged ways. Because of this, in collectivistic cultures, people who pursue happiness may be more successful in that pursuit compared to people in individualistic cultures (who may be less likely to pursue happiness in socially engaged ways).

Current Investigation

The first aim of the present research was to test whether there are cultural differences in the link between the motivation to pursue happiness and well-being. Specifically, we tested whether the motivation to pursue happiness is linked with lower well-being in relatively individualistic cultures, but higher well-being in relatively collectivistic cultures.

Our second aim was to understand mediators of cultural differences in the link between the motivation to pursue happiness and well-being. One such mediator concerns the extent to which cultures differ in the strength of their socially engaged pursuit of

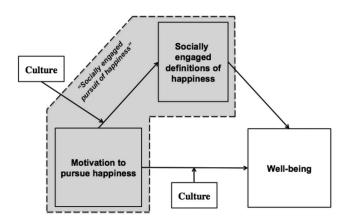


Figure 1. Proposed mediated moderation model wherein the culturally dependent link between motivation to pursue happiness and socially engaged definitions of happiness—a link we conceptualize as the socially engaged pursuit of happiness—mediates the culturally dependent link between the motivation to pursue happiness and well-being.

happiness (demonstrated by a stronger coupling between the motivation to pursue happiness and socially engaged definitions of happiness). We predicted that in collectivistic cultures, the motivation to pursue happiness would be more strongly associated with socially engaged definitions of happiness, given that individuals who are motivated to pursue happiness would be more inclined to define happiness in ways that are consistent with the prevailing cultural perspective. We further predicted that cultural differences in the link between the motivation to pursue happiness and well-being would be explained by cultural differences in how strongly the motivation to pursue happiness is associated with socially engaged definitions of happiness.

Methods

Participants

U.S. participants (n = 307) were undergraduate students recruited from a psychology research pool at the University of Denver. German participants (n = 91) were undergraduate students recruited from the University of Tübingen. Russian participants (n = 184) were undergraduate students recruited in Moscow (Moscow Higher School of Economics and Moscow State Regional University, n = 79) and Tomsk (Tomsk State University, n = 105). East Asian participants (n = 204) were undergraduate students recruited in Japan (Kyoto University, n = 109) and undergraduate and community participants recruited in Taiwan (University of Cheng-Kung in Tainan City, Soochow University in Taipei and surrounding areas, n = 95). See Table 1 for sample characteristics and descriptive statistics. Based on effect sizes observed in prior research assessing the relationship between the motivation to pursue happiness and well-being (Ford et al., 2014; Mauss et al., 2011), we aimed to collect data from at least 200 participants across independent cultural samples (United States and Germany) and 200 participants across collectivistic cultural samples (Moscow, Tomsk, Japan, and Taiwan). We did not begin data analysis until the data collection at all study sites was complete.

We chose to target cultures that vary in their level of collectivism, and thus, presumably, social engagement (United States, Germany, Russia, East Asia). Including Germany in addition to the United States provides an alternative relatively western culture that may still differ from the United States in some ways (Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009). For example, evidence suggests that Germany may be somewhat more collectivistic than the United States (Koopmann-Holm & Matsumoto, 2011). Similarly, including Russia in addition to East Asia provides an alternative collectivistic culture (Fernandez, Carlson, Stepina, & Nicholson, 1997) with its own unique history, philosophical background, and set of emotional values and experiences (Grossmann, Ellsworth, & Hong, 2012; Realo & Allik, 1999). For example, although Russia has been demonstrated to be relatively collectivistic (e.g., Matsumoto, Weissman, Preston, Brown, & Kupperbusch, 1997), Russia is also thought to be relatively less concerned about relational harmony, a construct that is particularly relevant to the present investigation (Kühnen et al., 2001). This suggests that although there may be similarities between the Russian and East Asian samples, there may also be important differences. By including Germany and Russia in addition to the United States and East Asia, we are able to extend the cross-cultural literature that often focuses on U.S. and East Asian cultures.

Finally, we enhanced cultural generalizability by sampling from different study locations within regions of Russia and East Asia that share cultural systems (Moscow and Tomsk within Russia; Kyoto, Japan and Taipei/Tainan, Taiwan within East Asia). All samples enabled us to hold constant potential confounds (e.g., age, relative social class) by largely focusing on undergraduate populations of students across the study locations.

Materials

Motivation to pursue happiness. The motivation to pursue happiness was assessed by the Valuing Happiness Scale (Mauss et al., 2011), which consists of seven items measuring to what extent participants are motivated to seek and obtain happiness (e.g., "To have a meaningful life, I need to feel happy most of the time") rated on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*).

Table 1
Sample Characteristics and Descriptive Statistics

				Russia			East Asia		
Characteristic	Total sample	United States	Germany	Total Russia	Tomsk	Moscow	Total East Asia	Japan	Taiwan
Sample size (n)	786	307	91	184	105	79	204	109	95
Age	21.89 (6.89)	19.37 (1.40)	22.29 (4.37)	21.24 (3.10)	21.16 (3.62)	21.34 (2.21)	26.15 (11.65)	19.87 (2.14)	33.6 (13.76)
Gender (% female)	67.8%	71.3%	76.4%	79.3%	79.0%	79.7%	47.1%	33.0%	63.2%
Motivation to pursue									
happiness	3.87 (1.12)	3.60 (.96)	3.47 (1.06)	4.12 (1.14)	4.18 (1.14)	4.04 (1.14)	4.22 (1.16)	3.63 (1.06)	4.90 (.86)
Socially engaged definitions									
of happiness	4.39 (.53)	4.53 (.39)	4.24 (.55)	4.39 (.54)	4.46 (.50)	4.28 (.57)	4.19 (.63)	4.01 (.70)	4.39 (.47)
Well-being	0 (.79)	.42 (.70)	41(.79)	07(.63)	01(.64)	14(.61)	39(.72)	77(.54)	.05 (.64)

Note. Motivation to pursue happiness is on a scale of 1–7. Socially engaged definitions of happiness is on a scale of 1–5. Well-being is a composite of four measures (Satisfaction with Life, Ryff Scales of Psychological Well-being, Hedonic Balance, Beck Depression Inventory) that were each z-scored (with M = 0 and SD = 1) and averaged together (see Methods for more details). Unless otherwise noted, values represent means with standard deviations in parentheses. Means were not compared across cultures because measurement invariance analyses indicated that these mean-level comparisons may not reflect meaningful cultural differences (see preliminary analysis section for more details).

Detailed in the preliminary analysis section, tests of measurement invariance across the three cultural groups revealed that all items demonstrated partial invariance (with the exception of two items that were dropped from analyses as a consequence: "I would like to be happier than I generally am" and "Feeling happy is extremely important to me"). Responses for the resulting five items were averaged to create a mean motivation to pursue happiness score (full sample, $\alpha = .62$; United States, $\alpha = .57$; Germany, $\alpha = .55$; Russia, $\alpha = .61$; East Asia, $\alpha = .68$). The full 7-item version of this scale typically displays good reliability in U.S. samples (e.g., $\alpha = .76$ in Mauss et al., 2011; $\alpha = .78$ in Mauss et al., 2012; $\alpha =$.79 and .70 in Ford et al., 2014; $\alpha = .72$, .72, and .77 in Ford et al., 2015). Given the goals of the present investigation (i.e., to examine cross-cultural differences in how this measure relates to well-being), we prioritized having a scale for which we would be able to interpret cultural differences in correlations between this measure and well-being. This meant dropping two culturally invariant items, which resulted in a modest loss of reliability.

Socially engaged definitions of happiness. We constructed a novel scale assessing how individuals define happiness. As depicted in Figure 1, we conceptualized the link—or coupling between the motivation to pursue happiness and socially engaged definitions of happiness as an indicator of the socially engaged pursuit of happiness. All definition items began with the prompt "Happiness means to me . . ." Fourteen items were developed to measure to what extent participants defined happiness in socially engaged ways and focused on two facets of social engagement: pro-social behavior (e.g., helping others) and relational interdependence (e.g., spending time with friends and family). All 14 initial items were significantly correlated with one another within each of the three cultures (with the exception of one item, which was subsequently dropped). Two additional items were dropped because they did not cleanly map onto prosocial behavior or relational interdependence in a face-valid level (e.g., knowing that the people I care about are healthy). Finally, to construct a parsimonious scale, three additional items were dropped because their content overlapped substantially with other items (e.g., being able to help someone vs. being able to help the people I care about). Eight items remained: four items assessing an individual's definition of happiness in terms of pro-social behavior (seeing that other people are content; caring for others in need; making the people I care about feel good; being able to help the people I care about) and four items assessing an individual's definition of happiness in terms of relational interdependence (being surrounded by good friends; spending time with family and friends; knowing my friends and/or family care about me; keeping in touch with friends and/or family).

Although the prosocial behavior items and the relational interdependence items are conceptually distinct (and this distinction is supported by the confirmatory factor analyses reported in the preliminary analyses), all items were significantly positively correlated with each other in the total sample, interitem correlation range = .23–.65, all ps < .001. Further, all eight items load positively onto a single general factor that explains 49% of the total variance in a principle components analysis (loadings range from .62 to .77). For interpretive ease and clarity, we thus combined all eight items into a single socially engaged definition of happiness index (full sample, $\alpha = .84$; United States, $\alpha = .81$; Germany, $\alpha = .85$; Russia, $\alpha = .83$; East Asia, $\alpha = .86$). **Well-being.** To comprehensively measure well-being and because the precise meaning of well-being may differ across cultures, we included assessments of cognitive well-being, psychological well-being, hedonic well-being, and lower ill-being.

Specifically, cognitive well-being was assessed with the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), which includes 5 items (e.g., "I am satisfied with my life"), rated on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*) (full sample, $\alpha = .85$; United States, $\alpha = .85$; Germany, $\alpha = .89$; Russia, $\alpha = .77$; East Asia, $\alpha = .85$).

Psychological well-being was assessed with the Ryff Scales of Psychological Well-being (PWB; Ryff & Keyes, 1995), which includes 18 items (e.g., "When I look at the story of my life, I am pleased with how things have turned out"), rated on a scale of 1 (*strongly disagree*) to 6 (*strongly agree*) (full sample, $\alpha = .79$; United States, $\alpha = .82$; Germany, $\alpha = .82$; Russia, $\alpha = .75$; East Asia, $\alpha = .66$).

Hedonic well-being was assessed with hedonic balance (HB), which is a ratio of positive affect to negative affect, as measured by the brief Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988) that assessed to what extent participants generally feel 10 positive emotions (e.g., excited, proud; full sample, $\alpha = .82$; United States, $\alpha = .83$; Germany, $\alpha = .84$; Russia, $\alpha = .77$; East Asia, $\alpha = .79$) and 10 negative emotions (e.g., irritable, nervous; full sample, $\alpha = .87$; United States, $\alpha = .83$; Germany, $\alpha = .85$; Russia, $\alpha = .87$; East Asia, $\alpha = .88$) on a scale of 1 (very slightly or not at all) to 5 (extremely).

Ill-being was assessed with the Beck Depression Inventory (BDI; Beck, Steer, & Brown, 1996), which includes 21 items, rated in severity from 0 (e.g., *I do not feel sad*), to 3 (e.g., *I am so sad or unhappy that I cannot stand it*) (full sample, $\alpha = .95$; United States, $\alpha = .88$; Germany, $\alpha = .91$; Russia, $\alpha = .86$; East Asia, $\alpha = .96$).

Following established procedures, responses to the SWLS and PWB were averaged separately to create mean scores, responses to the BDI were summed, and HB was created by dividing mean positive affect by mean negative affect. These four scores were then z-scored and the BDI scale was reverse-coded. These four scores were significantly positively correlated with each other, interitem correlation range = .39-.60, all ps < .001, Cronbach's alpha = .79. Further, all four scales loaded positively onto a single general factor that explained 62% of the total variance in a principle components analysis (loadings range from .71 to .83). For interpretive ease and clarity, we thus averaged together all four z-scored mean scores to create a general well-being composite.

Translations

All scales were translated from their original English version into German (for the German sample), Russian (for the Moscow and Tomsk samples), Japanese (for the Japanese sample), and Chinese (for the Taiwanese sample), and then back-translated by a different person to ensure validity (Brislin, 1980). Translations and back-translations were completed by advanced researchers (all with at least a M.A. degree in psychology) familiar with both cross-cultural and happiness research.

Unlike the English language, the Russian language has two common words for happiness that reflect the underlying ambiguity of this term in English: one word refers to complete satisfaction and one word refers to the state of joy. To capitalize on this linguistic diversity of the term *happiness* in Russian, we used two subtly different translations in our Moscow and Tomsk study sites. Specifically, although both sites assessed motivation to pursue happiness with the *complete satisfaction* translation of happiness, the Moscow site assessed socially oriented definitions of happiness with the *complete satisfaction* translation of happiness and the Tomsk site assessed socially oriented definitions of happiness with the *state of joy* translation of happiness. Our data indicate that these translation differences did not result in empirical differences between study sites.

Procedure

In the United States, Germany, Moscow, Kyoto, and Taiwan, we assessed the motivation to pursue happiness, socially engaged definitions of happiness, and well-being (hedonic balance, psychological well-being, satisfaction with life, and depressive symptoms, in that order) using an online platform. The same procedure was followed for the Tomsk sample, except the study was completed on paper in a laboratory. All participants gave informed consent. All measures were approved by the local institutional review board (IRB) for study sites that employ an IRB (United States), or were approved by the on-site department for study sites that do not employ an IRB (Germany, Tomsk, Moscow, Kyoto, Taiwan).

Results

Preliminary Analyses

Combining study locations. All analyses were conducting using Mplus 7.3 (Muthén & Muthén, 2015). Because we conceptualize the Moscow and Tomsk samples as representing the broader cultural group of Russia and the Kyoto and Taiwan samples as representing the broader cultural group of East Asia, we combined the samples to create a single Russian cultural group and a single East Asian cultural group. To ensure there was empirical justification for combining the subsamples, we ran two multigroup mediation models testing whether study location (Moscow vs. Tomsk or Kyoto vs. Taiwan) moderated any of the model paths between motivation to pursue happiness, socially oriented definitions of happiness, and well-being.

First, we tested differences between the study locations in Russia (Moscow vs. Tomsk). Constraining all model paths across the two locations did not result in a significant worsening of the model fit, $\Delta\chi^2(3)=.85$, ns, indicating similarity in the associations among the variables for samples from Moscow and Tomsk. This lack of differences was also replicated for the East Asian study locations (Japan vs. Taiwan), $\Delta\chi^2(3)=6.12$, ns Because the pattern of associations between key variables did not differ by study location within Russia and East Asia, we combined the two samples with each cultural group for further analyses.

Cross-cultural measurement invariance. We followed standard procedures to examine measurement invariance in our measures, using multigroup confirmatory factor analysis that tested a set of three increasingly restrictive models that indicate whether individuals from the different cultures respond to the scales in equivalent ways (Byrne, Shavelson, & Muthen, 1989; Vandenberg

& Lance, 2000). First, we assessed configural invariance (i.e., whether the different cultures conceptualized the latent construct in the same way and all items within each scale loaded onto the same latent factor across each culture). Second, we assessed metric invariance, or whether the underlying construct is scaled on the same metric in different cultures (i.e., the strength of the relationship between a given item and the latent construct are equivalent across cultures, showing that scale items are calibrated to the factor scores equally across cultures). We next examined measures for scalar invariance—establishing whether individuals with identical scores on the underlying construct (latent variable) would also have identical scores on the observed variables (i.e., testing whether item intercepts are equivalent across cultures).

Across samples, we tested a one-factor model for motivation to pursue happiness and well-being, and a second-order model for the socially oriented pursuit of happiness with two first-order factors (prosocial behavior and relational interdependence) and one second-order factor (socially oriented pursuit of happiness). All measures demonstrated configural invariance, using acceptable levels of fit (Hu & Bentler, 1999).

Results for the 7-item Motivation to Pursue Happiness Scale suggested violations of metric invariance of the overall scale, $\Delta\chi^2(18)=43.6,\,p<.001.$ Inspection of the scale items revealed that one item ("I would like to be happier than I generally am") loaded more strongly for the Russian and East Asian samples than the U.S. and German samples, and one item ("Feeling happy is extremely important to me") loaded more strongly for the Russian sample than for all other samples. Thus, those two items were removed from the scale. The revised 5-item scale demonstrated metric invariance, $\Delta\chi^2(12)=19.28,\,ns,$ but not scalar invariance, $\Delta\chi^2(12)=153.52,\,p<.001.$ The final metric invariance model for the motivation to pursue happiness scale had excellent fit: $\chi^2(29)=31.4,\,p=.34;$ comparative fit index (CFI) = .99, root mean square error of approximation (RMSEA) = .02, standardized root mean square residual (SRMR) = .02.

Socially oriented definitions of happiness was represented by a second-order two-factor model with four items loading on the pro-social behavior factor, four items loading on the interdependence factor, and these two first-order factors loading on the second-order socially oriented definitions of happiness factor. Because the two-factor second-order model requires at least three first-order factors that load onto the second-order factors (and was thus underidentified with only two first-order factors), we overcame this restriction by testing it in a model where socially oriented happiness was correlated with the motivation to pursue happiness scale. Results revealed metric invariance, $\Delta\chi^2(18) = 23.99$, ns, but not scalar invariance, $\Delta\chi^2(24) = 211.08$, p < .001. The final metric invariance model for the socially oriented happiness scale had adequate fit: $\chi^2(93) = 162.47$, p < .001; CFI = .95, RMSEA = .06, SRMR = .09.

Finally, results for a single-factor well-being model demonstrated violations in metric invariance, $\Delta\chi^2(9)=23.07,\,p<.01.$ Inspection of the scale items, however, revealed that the scale is equivalent across the United States, German, and Russian samples. For East Asian sample, one item (low BDI scores) loaded slightly more strongly on the well-being factor than in the three other samples. The loading estimates (and their standard errors) were .40 (.05), .51 (.09), .39 (.06), and .71 (.06). Thus, the differences among the four cultural groups were statistically significant, but

relatively small at substantive level. Given that the well-being scales consist of four items only and the relatively small magnitude of the differences, we retained the BDI scores in the well-being model. The final model verifying metric invariance an adequate fit: $\chi^2(17) = 44.38$, p < .001; CFI = .96, RM-SEA = .09, SRMR = .06.

Given the strong likelihood that cultural groups will have used the same scale in different ways (e.g., culturally specific response biases), we expected to find both configural and metric invariance but did not expect to find scalar invariance. Demonstrating both configural and metric invariance and not scalar invariance, as we did, allows an investigator to compare patterns of associations between different variables within and across groups. The common occurrence of not obtaining scalar invariance precludes an investigator from interpreting mean-level cultural group comparisons because these cultural differences may be confounded by extraneous factors. Thus, we refrain from interpreting mean-level comparisons and instead focus on interpreting patterns of associations in the different cultures (e.g., links between motivation to pursue happiness and well-being).

Primary Analyses

Zero-order correlations. Replicating past results, motivation to pursue happiness was correlated with lower well-being in the United States, r=-.26, p=.003, 95% coefficient confidence interval ($\text{CI}_{.95}$): -.43, -.09. Although negative in direction, motivation to pursue happiness was not significantly associated with well-being in Germany, r=-.11, p=.485, $\text{CI}_{.95}$: -.40, .19. As predicted, motivation to pursue happiness was correlated with higher well-being in Russia, r=.31, p=.006, $\text{CI}_{.95}$: .09, .53, and East Asia, r=.25, p=.005, $\text{CI}_{.95}$: .08, .43.

Also supporting our predictions, motivation to pursue happiness was not significantly correlated with socially engaged definitions of happiness in the United States, r=.006, p=.950, $\mathrm{CI}_{.95}$: -.16, .18, or in Germany, r=-.015, p=.920, $\mathrm{CI}_{.95}$: -.32, .29, but was correlated with higher socially engaged definitions of happiness in Russia, r=.44, p<.001, $\mathrm{CI}_{.95}$: .26, .62, and in East Asia, r=.47, p<.001, $\mathrm{CI}_{.95}$: .32, .62.

Finally, socially engaged definitions of happiness were correlated with higher well-being in the United States, r=.20, p=.005, $\text{CI}_{.95}$: .06, .33; Germany, r=.40, p=.001, $\text{CI}_{.95}$: .17, .63; Russia, r=.31, p=.001, $\text{CI}_{.95}$: .13, .50; and in East Asia, r=.44, p<.001, $\text{CI}_{.95}$: .29, .58.

Mediated moderation. To test whether the culturally specific link between motivation to pursue happiness and well-being was accounted for by a culturally specific link between motivation to pursue happiness and socially engaged definitions of happiness (what we conceptualize as the *socially engaged pursuit of happiness*), we tested a mediated moderation model within the structural equation modeling framework (Preacher, Rucker, & Hayes, 2007). We report bootstrapped confidence intervals for the indirect effects because indirect effects are often not normally distributed and confidence intervals do not assume normality (unlike standard errors, which do assume normality, and thus we do not report them). When the confidence intervals do not contain zero, it is an indication that a coefficient is significant.

Figure 1 illustrates the model that was tested—we examined whether the culturally moderated link between the motivation to

pursue happiness and well-being was mediated by the culturally moderated link between the motivation to pursue happiness and socially engaged definitions of happiness. Figure 2 provides the specific path coefficients.

To test the model, three dummy-coded variables estimated coefficients for Germany, Russia, and East Asia, as compared to the United States, and product-term interactions for motivation to pursue happiness with the dummy-coded variables tested for the interaction effects between motivation to pursue happiness and culture on both well-being and socially engaged definition of happiness. Follow-up analyses also evaluated cultural comparisons with Germany and Russia as the comparison group to complete the set of pairwise comparisons.

The omnibus mediated-moderation effect (i.e., combining the mediated moderation effect across all cultural groups) was significant, B=.21, $\mathrm{CI}_{.95}$: .01, .44, indicating that overall cross-cultural differences in the path from motivation to pursue happiness to well-being were mediated by overall cross-cultural differences in the path from motivation to pursue happiness to social-engaged definitions of happiness. Next, we examined pairwise cultural differences.

The stronger link between the motivation to pursue happiness and well-being for Russia compared to the United States was mediated by the stronger link between motivation to pursue happiness and socially engaged definitions of happiness in Russia compared to the United States, B = .08, $\text{CI}_{.95}$: .001, .18. Similarly, the stronger link between the motivation to pursue happiness and well-being for East Asia compared to the United States was mediated by the stronger link between motivation to pursue happiness and socially engaged definitions of happiness in East Asia compared to the United States, B = .14, $\text{CI}_{.95}$: .02, .31. There was an identical significant mediated moderation when Russia was

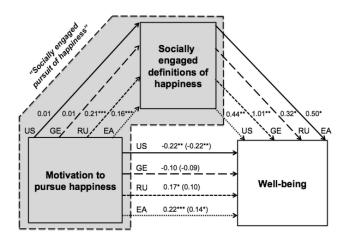


Figure 2. Culture moderated the link between motivation to pursue happiness and socially engaged definitions of happiness and moderated the link between motivation to pursue happiness and well-being but did not moderate the link between socially engaged definition of happiness and well-being. The culturally dependent link between motivation to pursue happiness and socially engaged definitions of happiness mediated the culturally dependent link between motivation to pursue happiness and well-being. Numbers represent B coefficients, numbers in parentheses represent B coefficients controlling for the mediator. US = United States, GE = Germany, RU = Russia, EA = East Asia. * p < .05. *** p < .01. **** p < .001.

compared to Germany, B = .08, $\text{CI}_{.95}$: .001, .18, and when East Asia was compared to Germany, B = .14, $\text{CI}_{.95}$: .02, .31.

The mediation model across cultures. Given that the culturally specific link between motivation to pursue happiness and well-being was mediated by a culturally specific link between motivation to pursue happiness and socially engaged definitions of happiness—demonstrating a significant mediated moderation—we broke down this effect further by examining the simple mediation in each culture.

The first model regressed well-being on motivation to pursue happiness (see Table 2 for coefficients and standard errors). Based on this direct effect model, motivation to pursue happiness was negatively associated with well-being in the United States, was not associated with well-being in Germany, and was positively associated with well-being in Russia and East Asia (see Figure 2 for coefficients). There were significant cultural differences in the magnitude of this regression path, $\Delta\chi^2(3)=30.13,\ p<.001.$ Specifically, the path coefficients for Russia and East Asia were significantly higher than those for the United States and Germany, $\Delta\chi^2(1)=29.03,\ p<.001.$ There were no significant differences between the United States and Germany, $\Delta\chi^2(1)=.64,\ ns$, and no significant differences between Russia and East Asia, $\Delta\chi^2(1)=.46,\ ns$

The second model tested whether socially engaged definitions of happiness mediated the link between motivation to pursue happiness and well-being to different degrees across cultures. As predicted, the motivation to pursue happiness was associated with stronger socially engaged definitions of happiness in Russia and East Asia but was not associated with socially engaged definitions of happiness in the United States and Germany. Indeed, the path from motivation to pursue happiness to socially engaged definitions of happiness varied significantly across cultures, $\Delta \chi^2(3) =$ 22.01, p < .001: It was significantly stronger in East Asia and Russia than the United States and Germany, $\Delta \chi^2(1) = 21.44$, p <.001. There were no significant differences between the United States and Germany, $\Delta \chi^2(1) = .01$, ns, and no significant differences between Russia and East Asia, $\Delta \chi^2(1) = .57$, ns. In turn, socially engaged definitions of happiness were equally strongly associated with greater well-being in all countries, $\Delta \chi^2(3) = 3.87$, p = .28.

Importantly, adding socially engaged definitions of happiness as a mediator of the link between the motivation to pursue happiness and well-being changed the strength of this link, but only for Russia and East Asia. Adding this mediator reduced the overall cross-cultural differences in the link between motivation to pursue happiness and well-being, from $\Delta\chi^2(3)=30.13,\ p<.001$ to $\Delta\chi^2(3)=16.89,\ p<.001$. More specifically, we evaluated the magnitude of the indirect path from motivation to pursue happiness to well-being via socially engaged definitions of happiness using bootstrapped estimates (2,000 sample draws) of CI_{.95} and found that socially engaged definitions of happiness mediated the path from motivation to pursue happiness to well-being for Russia, B=.07, CI_{.95}: .001, .18, and East Asia, B=.08, CI_{.95}:.03, .16, but not the United States, B=-.001, CI_{.95}: -.04, .04], or Germany, B=.001, CI_{.95}: -.12, .19.

Controlling for age and gender. To ensure that age and gender did not account for any of the primary effects, we entered them as simultaneous covariates in the same omnibus moderated-mediation analysis reported above. The tests remained significant, B = .01, CI_{.95}: .004, .02. We further examined multigroup moderated mediation models with gender and age as control variables. Adding these covariates produced virtually identical results.

Discussion

The current investigation examined whether culture shapes the link between being motivated to pursue happiness and well-being. Although this link has been paradoxically negative in previous U.S. samples, the present data suggest that this is not a universal phenomenon: Although we replicated the effect that being motivated to pursue happiness was associated with lower well-being in the United States, it was not associated with well-being in Germany and was associated with higher well-being in both Russia and East Asia. This pattern of results suggests that a culture's degree of collectivism may play a role in shaping the correlates of pursuing happiness. These results build upon and extend an important body of research suggesting that culture modulates how individual differences predict well-being (e.g., self-esteem; Diener & Diener, 2009; Fulmer et al., 2010; Suh, 2002).

In addition, the motivation to pursue happiness and socially engaged definitions of happiness were associated with one another in Russia and in East Asia but were unassociated in the United States and in Germany, suggesting that people in Russia and East Asia (but not the United States or Germany) may be motivated to

Table 2
Unstandardized Regression Coefficients (Standard Errors) for the Direct Effect and Mediation Models

	B (SE)						
Model	United States (US) Germany (G)		Russia (R) East Asia (EA		$\Delta \chi^2(3)$	Significant $(p < .05)$ pairwise differences	
Direct effect model							
Link between motivation to pursue happiness and well-being	22** (.08)	10 (.13)	.17* (.07)	.22*** (.05)	30.13***	US, G < R, EA	
Mediation model Link between motivation to pursue happiness and							
well-being	22** (.08)	09 (.12)	.10 (.08)	.14* (.06)	16.89***	US < R, EA	
Link between motivation to pursue happiness and socially engaged definitions of happiness	<.001 (.03)	.001 (.05)	.21*** (.06)	.16*** (.03)	22.01***	US, $G < EA$, R	
Link between socially engaged definitions of happiness and well-being	.44** (.16)	1.01** (.35)	.32* (.15)	.50* (.22)	3.87		

^{*} p < .05. ** p < .01. *** p < .001.

pursue happiness in more socially engaged ways. This differential linkage could be explained by culturally different views of happiness: Collectivistic cultures that tend to view happiness from a socially engaged perspective (Lu & Gilmour, 2004; Uchida & Kitayama, 2009) may encourage those who are more strongly motivated to pursue happiness to do so in more socially engaged ways. In contrast, an individual who is motivated to pursue happiness in the United States may not be particularly culturally encouraged to seek happiness through social engagement. Thus, the pursuit of happiness may look quite different depending on the culture in which the pursuit is occurring.

Interestingly, culture did not moderate the link between socially engaged definitions of happiness and well-being. Consistent with some prior research (McMahan, Ryu, & Choi, 2014), individuals who defined happiness in social terms were more likely to have higher well-being, regardless of how intensely motivated to pursue happiness they were and regardless of which culture they were from. Thus, happiness is perhaps best achieved not by intensely pursuing it, but by orienting oneself toward social connection and engagement and letting happiness follow. This conclusion is consistent with experimental research on the benefits of loving-kindness (Fredrickson et al., 2008) and gratitude interventions (Lyubomirsky et al., 2011) that strongly suggest promoting positive social orientation can benefit happiness and well-being.

This study has several key strengths. First, by collecting data from multiple study locations in both Russia and East Asia, idio-syncratic differences in particular study locations are unlikely to account for our results. Second, by assessing socially engaged definitions of happiness and well-being using multiple facets, we enhance the robustness of these results. Third, by primarily recruiting participants enrolled in college, we held age and relative socioeconomic status constant across samples. Finally, by analyzing differences in links between constructs across cultures, rather than mean-level differences, we are more confident that the pattern of results are robust with respect to possible culture-specific response biases (Grossmann & Na, 2014).

Limitations and Future Directions

The present results suggest several future directions. First, the present results, together with evidence provided by experimental (Mauss et al., 2011) and prospective studies (Ford et al., 2015) support a model wherein the motivation to pursue happiness can lead to worse well-being. However, these studies were all conducted in the United States and until additional research is conducted in collectivistic cultures, the alternative direction of effects cannot be ruled out in those cultures. For example, perhaps individuals from collectivistic backgrounds are less motivated to pursue happiness as a result of experiencing lower well-being. To be able to make causal claims about the effects of pursuing happiness across cultures, it is necessary to measure well-being in crosscultural studies that manipulate or longitudinally assess the extent to which people pursue happiness.

Second, the present investigation targeted a fairly extreme level of motivation to pursue happiness (e.g., "To have a meaningful life, I need to feel happy most of the time") and to understand the boundary conditions of these effects, future research could target more moderate levels of motivation.

Third, to understand the role of culture in the pursuit of happiness more thoroughly, it will be necessary to examine other cultures, whether defined by country or more broadly construed (e.g., socioeconomic-status, age, or religion). Given that the present investigation focused on college samples as a way to hold factors like socioeconomic status and age relatively constant, future research with more diverse samples would also provide an important test of the generalizeability of the current results.

Fourth, given the complexities of the pursuit of happiness, multiple mechanisms may shape the link between pursuing happiness and well-being across cultures (see Ford & Mauss, 2014 for a review). We suggested that the socially engaged pursuit of happiness is an active ingredient in the successful pursuit of happiness, but additional methods of pursuing happiness must be examined (e.g., more self-focused pursuits of happiness). Prior research suggests that in the United States, for example, the pursuit of happiness may be characterized by a relatively strong selforientation, which may result in feelings of social disconnection (Mauss et al., 2012) and personal disappointment (Mauss et al., 2011). This stronger focus on the self (vs. others) in more individualistic cultures' pursuit of happiness may be responsible for the link between pursuing happiness and worse well-being. Cultures may also shape how normative individuals believe it is to feel happy (Bastian, Kuppens, De Roover, & Diener, 2014), the type of happiness they hope to achieve (high vs. low arousal happiness; Tsai, 2007), or whether they believe happiness can be pursued at all (Oishi, Graham, Kesebir, & Galinha, 2013). Additional research designed to parse these mechanisms apart would help us further understand how culture shapes the pursuit of happiness and how individuals may attain their optimum levels of happiness and well-being.

Finally, happiness itself is a multifaceted term that can mean different things—not only across cultures but also within cultures (see translation note in Methods section for discussion of the Russian terms for happiness). As such, we must strive for clarity in our research on happiness and acknowledge these different perspectives as we try to understand what happiness is and how it is linked with well-being. The present research contributes to this effort by assessing differences in how individuals across cultures conceptualize happiness. Future research will benefit from a continued appreciation of individual and cultural differences in how happiness is viewed (Harmon-Jones, Harmon-Jones, Amodio, & Gable, 2011; Joshanloo et al., 2014; McMahan et al., 2014; Oishi et al., 2013; Tsai, 2007).

Concluding Comment

The present results suggest that although people across the world consider happiness one of their most important goals, happiness holds different meanings depending on individuals' cultural context. Critically, these culturally bound meanings shape whether individuals' pursuit of happiness is likely to result in more or—paradoxically—less actual happiness and well-being.

References

Bastian, B., Kuppens, P., De Roover, K., & Diener, E. (2014). Is valuing positive emotion associated with life satisfaction? *Emotion*, 14, 639– 645. http://dx.doi.org/10.1037/a0036466

- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). Beck Depression Inventory (2nd ed.). San Antonio, TX: The Psychological Corporation.
- Brislin, R. (1980). Translation and content analysis of oral and written material. In H. C. Triandis & J. W. Berry (Eds.), *Handbook of Cross-Cultural Psychology* (vol. 1, pp. 389–444). Boston, MA: Allyn & Bacon.
- Byrne, B. M., Shavelson, R. J., & Muthen, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin*, *105*, 456–466. http://dx.doi.org/10.1037/0033-2909.105.3.456
- Diener, E., & Diener, M. (2009). Cross-cultural correlates of life satisfaction and self-esteem. *Indicators Research Series*, 38, 71–91. http://dx.doi.org/10.1007/978-90-481-2352-0_4
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71–75. http://dx.doi.org/10.1207/s15327752jpa4901_13
- Diener, E., & Oishi, S. (2005). The nonobvious social psychology of happiness. *Psychological Inquiry*, 16, 162–167. http://dx.doi.org/10 .1207/s15327965pli1604_04
- Diener, E., Sapyta, J. J., & Suh, E. (1998). Subjective well-being is essential to well-being. *Psychological Inquiry*, *9*, 33–37. http://dx.doi.org/10.1207/s15327965pli0901_3
- Fernandez, D. R., Carlson, D. S., Stepina, L. P., & Nicholson, J. D. (1997). Hofstede's country classification 25 years later. *The Journal of Social Psychology*, 137, 43–54. http://dx.doi.org/10.1080/00224549709595412
- Ford, B. Q., & Mauss, I. B. (2014). The paradoxical effects of pursuing positive emotion: When and why wanting to feel happy backfires. In J. Gruber & J. T. Moskowitz (Eds.), *The Light and Dark Sides of Positive Emotion* (pp. 363–381). New York, NY: Oxford University Press. http://dx.doi.org/10.1093/acprof:oso/9780199926725.003.0020
- Ford, B. Q., Mauss, I. B., & Gruber, J. (2015). Valuing happiness is associated with bipolar disorder. *Emotion*, 15, 211–222. http://dx.doi .org/10.1037/emo0000048
- Ford, B. Q., Shallcross, A. J., Mauss, I. B., Floerke, V. A., & Gruber, J. (2014). If you seek it, it won't come: Valuing happiness is associated with symptoms and diagnosis of depression. *Journal of Social and Clinical Psychology*, 93, 891–906.
- Fredrickson, B. L., Cohn, M. A., Coffey, K. A., Pek, J., & Finkel, S. M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95, 1045–1062. http://dx.doi.org/10.1037/a0013262
- Fulmer, C. A., Gelfand, M. J., Kruglanski, A. W., Kim-Prieto, C., Diener, E., Pierro, A., & Higgins, E. T. (2010). On "feeling right" in cultural contexts: How person-culture match affects self-esteem and subjective well-being. *Psychological Science*, 21, 1563–1569. http://dx.doi.org/10 .1177/0956797610384742
- Grossmann, I., Ellsworth, P. C., & Hong, Y. Y. (2012). Culture, attention, and emotion. *Journal of Experimental Psychology: General*, 141, 31–36. http://dx.doi.org/10.1037/a0023817
- Grossmann, I., & Na, J. (2014). Research in culture and psychology: Past lessons and future challenges. WIREs Cognitive Science, 5, 1–14. http:// dx.doi.org/10.1002/wcs.1267
- Harmon-Jones, E., Harmon-Jones, C., Amodio, D. M., & Gable, P. A. (2011). Attitudes toward emotions. *Journal of Personality and Social Psychology*, 101, 1332–1350. http://dx.doi.org/10.1037/a0024951
- Helliwell, J. F., & Putnam, R. D. (2004). The social context of well-being. Philosophical Transactions of the Royal Society of London Series B, Biological Sciences, 359, 1435–1446. http://dx.doi.org/10.1098/rstb .2004.1522
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1–55. http://dx.doi.org/10.1080/ 10705519909540118

- Joshanloo, M., Lepshokova, Z. K., Panyusheva, T., Natalia, A., Poon, W. C., Yeung, V. W., . . . Jiang, D. Y. (2014). Cross-cultural validation of fear of happiness scale across 14 national groups. *Journal of Cross-Cultural Psychology*, 45, 246–264. http://dx.doi.org/10.1177/0022022113505357
- Kitayama, S., Mesquita, B., & Karasawa, M. (2006). Cultural affordances and emotional experience: Socially engaging and disengaging emotions in Japan and the United States. *Journal of Personality and Social Psychology*, 91, 890–903. http://dx.doi.org/10.1037/0022-3514.91.5 .890
- Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M., & Uskul, A. K. (2009). A cultural task analysis of implicit independence: Comparing North America, Western Europe, and East Asia. *Journal of Personality and Social Psychology*, 97, 236–255. http://dx.doi.org/10.1037/a0015999
- Koopmann-Holm, B., & Matsumoto, D. (2011). Values and display rules for specific emotions. *Journal of Cross-Cultural Psychology*, 42, 355– 371. http://dx.doi.org/10.1177/0022022110362753
- Kühnen, U., Hannover, B., Roeder, U., Shah, A. A., Schubert, B., Upmeyer, A., & Zakaria, S. (2001). Cross-cultural variations in identifying embedded figures. *Journal of Cross-Cultural Psychology*, 32, 366–372. http://dx.doi.org/10.1177/0022022101032003007
- Lama, D., & Cutler, H. C. (1998). The art of happiness: A handbook for living. New York, NY: Riverhead Books.
- Layous, K., Nelson, S. K., Oberle, E., Schonert-Reichl, K. A., & Ly-ubomirsky, S. (2012). Kindness counts: Prompting prosocial behavior in preadolescents boosts peer acceptance and well-being. *PLoS ONE*, 7(12), e51380. http://dx.doi.org/10.1371/journal.pone.0051380
- Lu, L., & Gilmour, R. (2004). Culture and conceptions of happiness: Individual oriented and social oriented SWB. *Journal of Happiness Studies*, 5, 269–291. http://dx.doi.org/10.1007/s10902-004-8789-5
- Lyubomirsky, S., Dickerhoof, R., Boehm, J. K., & Sheldon, K. M. (2011). Becoming happier takes both a will and a proper way: An experimental longitudinal intervention to boost well-being. *Emotion*, 11, 391–402. http://dx.doi.org/10.1037/a0022575
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224– 253. http://dx.doi.org/10.1037/0033-295X.98.2.224
- Matsumoto, D., Weissman, M. D., Preston, K., Brown, B. R., & Kupperbusch, C. (1997). Context-specific measurement of individualism-collectivism on the individual level: The Individualism-Collectivism Interpersonal Assessment Inventory. *Journal of Cross-Cultural Psychology*, 28, 743–767. http://dx.doi.org/10.1177/0022022197286006
- Mauss, I. B., Savino, N. S., Anderson, C. L., Weisbuch, M., Tamir, M., & Laudenslager, M. L. (2012). The pursuit of happiness can be lonely. *Emotion*, 12, 908–912. http://dx.doi.org/10.1037/a0025299
- Mauss, I. B., Tamir, M., Anderson, C. L., & Savino, N. S. (2011). Can seeking happiness make people unhappy? Paradoxical effects of valuing happiness. *Emotion*, 11, 807–815. http://dx.doi.org/10.1037/a0022010
- McMahan, E. A., Ryu, S., & Choi, I. (2014). Lay conceptions of well-being among undergraduate students from the United States and South Korea: Culture-level differences and correlates. *Social Indicators Research*, 119, 321–339. http://dx.doi.org/10.1007/s11205-013-0476-7
- Muthén, L. K., & Muthén, B. O. (2015). *Mplus User's Guide*. Los Angeles, CA: Muthén & Muthén.
- Oishi, S., Graham, J., Kesebir, S., & Galinha, I. C. (2013). Concepts of happiness across time and cultures. *Personality and Social Psychology Bulletin*, 39, 559–577. http://dx.doi.org/10.1177/0146167213480042
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128, 3–72.
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Mul-*

tivariate Behavioral Research, 42, 185–227. http://dx.doi.org/10.1080/00273170701341316

- Realo, A., & Allik, J. (1999). A cross-cultural study of collectivism: A comparison of American, Estonian, and Russian Students. *The Journal* of Social Psychology, 139, 133–142. http://dx.doi.org/10.1080/ 00224549909598367
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727. http://dx.doi.org/10.1037/0022-3514.69.4.719
- Schooler, J. W., Ariely, D., & Loewenstein, G. (2003). The pursuit and assessment of happiness can be self-defeating. In J. C. I. Brocas (Ed.), *The Psychology of Economic Decisions* (pp. 41–70). Oxford, UK: Oxford University Press.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. Journal of Personality and Social Psychology, 83, 1378–1391. http://dx.doi.org/10.1037/0022-3514.83.6.1378
- Tsai, J. L. (2007). Ideal affect: Cultural causes and behavioral consequences. *Perspectives on Psychological Science*, 2, 242–259. http://dx.doi.org/10.1111/j.1745-6916.2007.00043.x

- Uchida, Y., & Kitayama, S. (2009). Happiness and unhappiness in east and west: Themes and variations. *Emotion*, 9, 441–456. http://dx.doi.org/10 .1037/a0015634
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Meth*ods, 3, 4–70. http://dx.doi.org/10.1177/109442810031002
- Varnum, M. E., Grossmann, I., Kitayama, S., & Nisbett, R. E. (2010). The origin of cultural differences in cognition: Evidence for the social orientation hypothesis. *Current Directions in Psychological Science*, 19, 9–13. http://dx.doi.org/10.1177/0963721409359301
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070. http://dx.doi.org/10.1037/0022-3514.54.6.1063

Received June 7, 2015
Revision received July 24, 2015
Accepted July 26, 2015