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# Growth Motivation and Well-Being in the U.S., Japan, Guatemala, and India

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RUNNING HEAD: Growth Motivation across Cultures

Growth Motivation and Well-Being in the U.S., Japan, Guatemala, and India

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### Abstract

The present study examined how the Growth Motivation Index (GMI; J. J. Bauer et al., 2015) related to well-being and identity exploration in samples from the U.S., Japan, Guatemala, and India. The GMI has two facets. GMI-reflective measures the motive to cultivate critical self-reflection and intellectual development, whereas GMI-experiential measures the motive to cultivate personally meaningful activities and relationships. We expected and found that, when comparing the two GMI facets simultaneously, GMI-reflective predicted well-being in countries ranked as having collectivist but not individualist cultures, whereas GMI-experiential predicted well-being in countries ranked as having individualist but not collectivist cultures. GMI-reflective predicted identity exploration across cultures. Implications for growth motivation and culture are discussed.

## Growth Motivation and Well-Being in the U.S., Japan, Guatemala, and India

Do different motives for personal growth relate to well-being in the same way across cultures? People who value personal growth versus self-protection report higher levels of well-being in several countries (Sortheix & Schwartz, 2017). Yet from another perspective, not all motives for personal growth would seem to be valued in the same way across cultures. People tend to feel good about their lives when their own motives and goals align with the particular values of their culture (Triandis, 1989). For instance, in the U.S., growth motivation that aims toward personal meaningfulness correlates with well-being, but growth motivation that aims toward critical self-reflection does not (Bauer, Park, Montoya, & Wayment, 2015). In light of past research on the value of critical self-reflection for promoting collectivist but not individualist ideals (e.g., Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Heine et al., 2001; Heine & Lehman, 1997; Heine, Takata, & Lehman, 2000), the present study examines whether growth motivation that aims toward either critical self-reflection or personal meaningfulness predicts well-being in countries with collectivist or individualist cultures.

### **Growth Motivation**

Growth motivation refers to a desire to foster personal growth (Bauer et al., 2015). Growth motivation has two forms: reflective and experiential. Reflective growth motivation is the desire to cultivate critical self-reflection, intellectual exploration, and a broader, deeper knowledge of the self and others. Experiential growth motivation is the desire to cultivate personally meaningful (rather than status-driven) activities and relationships. Whereas reflective growth motivation has theoretical roots in the assimilative and accommodative mechanisms of social-

cognitive development (e.g., Piaget, 1970; Loevinger, 1976), experiential growth motivation is rooted in the motives of self-determination theory (Deci & Ryan, 2012; Kasser & Ryan, 1996).

Growth motivation comes from a model of eudaimonic growth, which is a developmental model of a good life that emphasizes personally meaningful self-development along two broad paths of personality development and a good life—one toward happiness and well-being and the other toward wisdom and psychosocial maturity (Bauer, McAdams, & Pals, 2008). The use of narrative methods originally allowed for the distinction of growth-relevant motives to differentially predict these two paths of development (Bauer & McAdams, 2004, 2010; Bauer et al., 2005). As a framework for these motives and paths of development, the model of eudaimonic growth differentiates *value orientation*, *value fulfillment*, and *value perspective* (Bauer, 2016): Value orientations (e.g., growth motivation) aim toward either value fulfillment (e.g., well-being) or value perspective (e.g., wisdom).

Value orientation refers to the values, motives, and needs that one holds and that propel action. Growth motivation is a value orientation, as are its reflective and experiential subtypes. Growth motivation can be measured explicitly (e.g., by self-reported growth motivation; Bauer et al., 2015) or implicitly (e.g., by researcher-coded, narrative themes of growth; Bauer, Graham, Lauber, & Lynch, in press). Experiential growth motivation aims ultimately toward the cultivation of well-being (measured as both hedonic satisfaction and eudaimonic meaningfulness; Haybron, 2008), whereas reflective growth motivation aims toward the cultivation of wisdom (measured as thinking complexly and humanely about the self and others; Bauer, King, & Steger, in press).

Value fulfillment refers to the sense of having one's values enacted satisfactorily, notably in a sense of well-being or need fulfillment (Martela, Ryan, & Steger, 2018; Oppenheim-Weller,

Roccas, & Kurman, 2018; Tiberius, 2014; Wolf, 2010). Experiential growth motivation is a value orientation for personal growth that correlates with the value fulfillment of well-being (Bauer et al., 2015). However, the value orientation of reflective growth motivation does not correlate with well-being—at least not in the U.S.

Reflective growth motivation is a kind of value orientation that does not theoretically aim toward subjective value fulfillments (noting that this theory rests on Western, Aristotelian, and individualist assumptions). Instead, reflective growth motivation aims toward *value perspectivity* (Bauer, 2016). Value perspectivity is a unique feature of values that is seldom examined in definitions of values and motivation, yet it lies at the root of wisdom, a key feature of meaning-making, personhood, adaptation to adversity, and a good life (Bauer, King, & Steger, in press). Value perspectivity refers *not to the content of a value* (i.e., not to what one values or whether one's values are fulfilled satisfactorily) but rather to *the organizational, structural complexity and coherence by which one thinks about* the contents of one's values and their fulfillments (e.g., Labouvie-Vief, 2003; Loevinger, 1976; Suedfeld, Tetlock, & Streufert, 1992). Value perspectivity is what differentiates wisdom from a merely subjective sense of meaningfulness: It is one thing to feel that one's life has value and meaning (i.e., to be relatively fulfilled), and it is another to think complexly or simplistically about that meaningfulness and its underlying values. Wisdom comes from thinking about the humane values and value fulfillments of the self and others from a higher degree of perspectivity (i.e., from greater points of view, from multiple perspectives; Bauer, King, & Steger, in press; see also Staudinger & Glück, 2011).

As it turns out, measures of well-being (especially hedonic well-being, i.e., pleasurable experience and satisfaction; Diener, Lucas, & Scollon, 2006) typically do not correlate with measures of wisdom that emphasize complexity of thinking about the self and others (for reviews

see Bauer et al., 2008; King & Hicks, 2007)—at least not in the U.S. and other countries with individualist cultures. In the U.S., reflective growth motivation predicts wisdom-related measures but not well-being.

### **Individualist and Collectivist Growth Motivation**

Research has not yet addressed reflective and experiential growth motivation cross-culturally, but related research provides the basis for our hypotheses. First, ample evidence suggests that growth-oriented values like humanistic motives and self-improvement motives—which are combined in the construct of experiential growth motivation—correlate with well-being across cultures. For example, as noted earlier, growth-oriented values in Schwartz’s model of values correlate with well-being across cultures (Sortheix & Schwartz, 2017). We note that growth motivation correlates with the latent variable of growth-oriented values in the Schwartz et al. (2012) model (Wayment & Bauer, 2018). Second, across samples from the U.S., China, South Korea, and Taiwan (the latter three representing collectivist cultures), people whose goals were self-concordant (i.e., goals featuring self-determined, humanistic motives) had relatively higher levels of well-being (Sheldon et al., 2004). Third, individuals from both individualist and collectivist cultures value self-improvement, particularly for people who report high levels of well-being (Gaertner, Sedikides, & Cai, 2012).

Fourth, critical self-reflection differs between individualist and collectivist cultures in its relation to well-being. Individuals from countries characterized as having individualist cultures have been shown to endorse personal motives for affect regulation, whereas individuals from countries with collectivist cultures have been shown to endorse personal motives for critical self-reflection and self-improvement in the service of maintaining cultural norms and contributing to society (e.g., Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Heine & Buchtel, 2011;



Heine et al., 2001; Heine & Lehman, 1997; Heine, Takata, & Lehman, 2000; Wirtz, Chiu, Diener, & Oishi, 2009).

Motives for critical self-reflection guard against selfish impulsivity and an overinflated sense of one's own worth, while simultaneously promoting responsibility for one's actions, all of which facilitates the welfare of the collective (Kitayama et al., 1997). For instance, even in the U.S., participants who scored high on self-esteem and growth motivation were more likely to take responsibility for failure (presumably to learn from the failure), whereas those with high self-esteem but low growth motivation tended to externalize blame (Park, Bauer, & Arbuckle, 2009). In another study, women who scored high in growth motivation were less likely to engage in behavioral self-handicapping than those scoring low in growth motivation (Brown, Park, & Folger, 2012). Critical self-reflection—or more precisely, the motive for it—is a key component of reflective growth motivation. Theoretically, if a culture values critical self-reflection and the ability to take others' perspectives, then the explicit motivation for reflective growth should correspond to a sense of well-being.

### **Hypotheses**

Based on the research just summarized, we formed three hypotheses on the relations of reflective and experiential growth motivation to well-being (as well as to identity exploration, as a wisdom-related measure) in countries that have been rated as having individualist or collectivist cultures. We expected cultural differences for well-being, when comparing the two facets of GMI simultaneously: (Hypothesis 1) Reflective growth motivation would correlate with well-being only in collectivist but not individualist cultures, whereas (Hypothesis 2) experiential growth motivation would correlate with well-being in individualist but not collectivist cultures.<sup>1</sup> We also expected that (Hypothesis 3) reflective growth motivation rather than experiential

growth motivation would correlate with identity exploration in both individualist and collectivist cultures, as critical self-reflection appears to be characteristic of wisdom-related phenomena across cultures (Gibbs, Basinger, Grime, & Snarey, 2007).

We wish to note at the outset the difference between countries and cultures (Keller, 2012): Again, we studied individuals from countries that have been rated elsewhere as relatively more individualist or collectivist. We tested our hypotheses in four countries that differ on measures of individualism and collectivism (Hofstede, Hofstede, & Minkov, 2010; Diener, Gohm, Suh, and Oishi, 2000; Triandis & Gelfand, 1998): the U.S. (the most individualist nation, with an individualism–collectivism Hofstede score of 91), Guatemala (score of 6, the most collectivist), Japan (46, relatively collectivist), and India (48, relatively collectivist, but with important nuances). India is perhaps more difficult to classify along the individualist–collectivist divide, given its vast, multicultural complexity (Sinha, Sinha, Verma, & Sinha, 2001). For example, urban areas in northern India have scored higher on individualism than rural areas (Jha & Singh, 2001; Sinha et al., 2001), women have scored higher than men on both individualism and collectivism (Jha & Singh, 2001), and India has scored on the higher side of trait expressiveness than have other countries of similar levels of individualism–collectivism (Matsumoto et al., 2008). Our sample in India came from an urban university. We examined the role of caste, given caste’s role in self-identity construction (Jaspal, 2011) and higher castes’ ties to higher socioeconomic status (Nayar, 2007), which corresponds to individualism (Sinha et al., 2001; Triandis, 1989). We predicted that participants who self-identified in higher castes (see Method) would tend toward the individualist predictions for growth motivation. In contrast, we expected that those who self-identified in lower castes, which allow for generally less mobility and fewer freedoms for the individual person (Sen, 1999), would tend toward the collectivist predictions.

## Method

### Participants and Procedure

This study received approval from the ethics review boards of the universities through which the data were gathered. Participants signed informed consent forms. Surveys were hand-written.

**Sample 1: U.S.** One hundred nine undergraduate psychology students (62% women;  $M$  age = 19.68,  $SD = 1.19$ ) participated in this online survey study in exchange for credit in psychology course.

**Sample 2: Japan.** One hundred fifty-six undergraduate students (44% women;  $M$  age = 20.16,  $SD = 3.35$ ) participated in this survey study in exchange for credit in psychology course. All measures were translated into Japanese by the third author.

**Sample 3: Guatemala.** Fifty-seven adults (68% women) were recruited by the fourth author in Quetzaltenango, Guatemala on the street and through referral sampling. Age was measured in five categories: 18-20 (12%), 21-30 (23%), 31-40 (17%), 41-50 (10%), and 51+ (6%); 32% of participants did not report their age. All measures were translated into Spanish by the fourth author.

**Sample 4: India.** One hundred fifty-four undergraduate students (54% women;  $M$  age = 22.95,  $SD = 1.03$ ) of a university in southern India participated in this survey study in exchange for credit in a psychology course. Participants had the option to report their caste, which 88 participants did. Based on standards set by the Indian government for policies to neutralize the prejudicial effects of the caste system, we grouped castes into higher- and lower-status castes. Of the castes reported in this study, higher-status castes included (in alphabetical order) Brahmin, GM, Lingayat, Maratha, and Reddi (total  $n = 56$ ). Lower-status castes included Lamani, Scheduled Castes, and Scheduled Tribes (total  $n = 32$ ). Other participants in the sample either

did not report caste (total  $n = 65$ ), of whom 38 self-identified for religion as Hindu, 20 as Muslim, six as Christian, and one as Jain. All measures were administered in English.

### Measures

We measured reflective and experiential growth motivation, identity exploration, and two forms of well-being (life satisfaction and psychological well-being).

**Growth motivation.** The Growth Motivation Index (GMI) uses eight items to measure the degree to which people claim to be motivated by concerns that revolve around two facets of personal growth: reflective and experiential (Bauer et al., 2015). The GMI asks participants to rate on seven-point Likert-type scale how often they pursue activities and relationships for specific reasons of growth (1 = never, 4 = periodically, 7 = always). The GMI has demonstrated convergent and discriminant validity (Bauer, Graham, Lauber, & Lynch, in press; Bauer, Park, Montoya, & Wayment, 2015). Reflective-growth items include “I ask my friends what they think and feel about current issues so that I can understand other points of view” and “I actively seek new perspectives on how to live my life, even if these new perspectives mean I’ve been wrong.” Experiential-growth items include “I try to form my personal goals in life around my deeper interests” and “I strive to make my relationships better in the future.” Cronbach’s alphas for GMI-reflective were: U.S., .83; Japan, .69; Guatemala, .71; India, .64. Cronbach’s alphas for GMI-experiential were: U.S., .81; Japan, .65; Guatemala, .72; India, .65.

**Life satisfaction.** The Satisfaction with Life Scale (SWL; Diener, Emmons, Larson, & Griffen, 1985) is a well-validated, five-item, seven-point-scale measure of overall life satisfaction (the Indian sample rated SWL on a five-point scale). Cronbach’s alphas were: U.S., .85; Japan, .78; Guatemala, .66; India, .48. Thus we interpret findings with SWL in the India sample with caution.

**Psychological well-being.** Ryff's scale of psychological well-being (PWB; Ryff & Keyes, 1995) is a well-validated measure of six dimensions of well-being: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. We used the 42-item version, with items rated on a 6-point scale. For abbreviation we use the term PWB in reference to the aggregate measure of the subscales, and PWB-autonomy, PWB-mastery, etc. in reference to the individual scales. Cronbach's alphas were: U.S., .94; Japan, .63; India, .70. The Guatemala sample did not take PWB.

**Identity exploration.** The Identity Style Inventory – Information Orientation subscale (Berzonsky, 1989) is a well-validated, 11-item, 5-point-scale measure of Eriksonian (1968) identity exploration, assessing how much individuals think they search for information on relevant situations, explore new perspectives, and seek an elaborated understanding of psychosocial life. Cronbach's alphas were: U.S., .84; Japan, .86; Guatemala, .77; India, .60.

## Results

Descriptive statistics appear for each sample in Table 1. Participants in Guatemala and India scored at the same mean level of GMI-reflective and GMI-experiential, which was higher than that of participants in the U.S. and Japan. Participants in Japan, Guatemala, and India scored at the same mean level of identity exploration, which was higher than that of participants in the U.S. Participants in Guatemala scored higher on SWL than participants in the U.S. and India, who scored at the same mean level as each other, which was higher than that of the participants in Japan. Participants in Japan and India scored at the same mean level of PWB, which was higher than participants in the U.S. (Guatemalan participants did not take that measure).

Below we report correlations for each country and then regressions of either identity exploration or well-being on both GMI-reflective and GMI-experiential to tease apart the

reflective and experiential features of growth motivation, as done in previous studies in the U.S. (e.g., Bauer & McAdams, 2010; Bauer et al., 2015).

### **Sample 1: U.S.**

GMI-reflective correlated with GMI-experiential,  $r = .54, p < .001$ , as in previous studies (Bauer et al., 2015). GMI-reflective correlated with identity exploration and PWB but not SWL. GMI-reflective also correlated with PWB-growth, PWB-purpose, and PWB-self-acceptance (see Table 2). GMI-experiential correlated with identity exploration, SWL, PWB, and all PWB subscales except PWB-autonomy. The GMI subscales correlated significantly,  $r = .55, p < .001$ . Identity exploration correlated with SWL,  $r = .25, p < .01$ , and PWB,  $r = .36, p < .001$ . (Throughout the results section, we report correlations with PWB subscales and GMI subscales for those readers who are interested in those relations.) SWL correlated with PWB,  $r = .68, p < .001$ . None of these measures differed by gender.

Regressing identity exploration, we found that GMI-reflective was a significant predictor,  $B = .20, SE = .04, \beta = .49, p < .001$ , but GMI-experiential no longer was,  $B = -.01, SE = .06, \beta = -.01, p > .10$  (see Table 3). As suggested by the bivariate correlations, GMI-experiential predicted SWL,  $B = .36, SE = .16, \beta = .26, p < .05$ , but GMI-reflective did not,  $B = .05, SE = .11, \beta = -.16, p > .10$ . Regressing PWB, we found that GMI-experiential was a significant predictor,  $B = .24, SE = .08, \beta = .37, p < .01$ , but GMI-reflective no longer was,  $B = .02, SE = .05, \beta = .12, p < .10$ .<sup>2</sup>

Overall these findings supported expectations for countries with individualist cultures, in that experiential growth motivation predicted well-being but not identity exploration, whereas reflective growth motivation predicted identity exploration but not well-being.

### **Sample 2: Japan**

GMI-reflective correlated with GMI-experiential,  $r = .64, p < .001$ . GMI-reflective correlated with identity exploration, SWL, PWB, PWB-mastery, PWB-growth, PWB-purpose, and PWB-relations. GMI-experiential correlated with identity exploration, SWL, PWB, PWB-mastery, PWB-growth, PWB-purpose, and PWB-relations (see Table 2). The GMI subscales correlated significantly,  $r = .64, p < .001$ . Identity exploration did not correlate with SWL ( $p > .10$ ) but did correlate with PWB,  $r = .31, p < .001$ . SWL correlated with PWB,  $r = .52, p < .001$ . None of these measures differed by gender.

Regressing identity exploration, we found that GMI-reflective was a significant predictor,  $B = .25, SE = .12, \beta = .28, p < .01$ , but GMI-experiential no longer was,  $B = .18, SE = .10, \beta = .10, p < .10$  (see Table 3). As suggested by the bivariate correlations, GMI-reflective predicted SWL,  $B = .59, SE = .16, \beta = .49, p < .001$ , but GMI-experiential did not,  $B = -.16, SE = .16, \beta = -.16, p > .10$ . Regressing PWB, we again found that GMI-reflective was a significant predictor,  $B = .32, SE = .08, \beta = .29, p < .01$ , but GMI-experiential no longer was,  $B = .06, SE = .09, \beta = .12, p > .10$ .

Overall these findings supported expectations for countries with collectivist cultures, in that reflective growth motivation would predict both well-being and identity exploration.

### **Sample 3: Guatemala**

GMI-reflective correlated with GMI-experiential,  $r = .60, p < .001$ . GMI-reflective correlated with both identity exploration and SWL (PWB was not used in this study; see Table 2). GMI-experiential correlated with both identity exploration and SWL. Identity exploration correlated with SWL,  $r = .52, p < .001$ . The GMI subscales correlated significantly,  $r = .61, p < .001$ . None of these measures differed by gender.

Regressing identity exploration, GMI-reflective was a significant predictor,  $B = .33$ ,  $SE = .11$ ,  $\beta = .45$ ,  $p < .01$ , but GMI-experiential no longer was,  $B = .03$ ,  $SE = .08$ ,  $\beta = .05$ ,  $p > .10$  (see Table 3). Regressing SWL, GMI-reflective was a significant predictor,  $B = .32$ ,  $SE = .11$ ,  $\beta = .39$ ,  $p < .01$ , but GMI-experiential no longer was,  $B = .16$ ,  $SE = .08$ ,  $\beta = .25$ ,  $p > .05$ . Neither gender nor age related to any of the variables.

Overall these findings supported expectations for countries with collectivist cultures, in that reflective growth motivation would predict both well-being and identity exploration.

#### **Sample 4: India**

GMI-reflective correlated with GMI-experiential,  $r = .36$ ,  $p < .001$ . GMI-reflective correlated with identity exploration, PWB-autonomy, and PWB-growth but not with SWL, PWB, or the PWB subscales (see Table 2). GMI-experiential did not correlate with identity exploration, SWL, or any measure of PWB except for PWB-autonomy. The GMI subscales correlated significantly,  $r = .36$ ,  $p < .001$ . Identity exploration correlated with SWL,  $r = .23$ ,  $p < .001$ , but not with PWB ( $p > .10$ ). SWL correlated with PWB,  $r = .68$ ,  $p < .001$ . Thus, while GMI-reflective did correlate with identity exploration, neither form of growth motivation correlated consistently with both SWL and PWB, at least when considering the overall sample (although we note the low reliability of SWL in the India sample). However, this scenario changed when considering caste and gender. Groups of higher versus lower castes did not differ in mean levels of any variable. Gender differences were found and are reported below.

**Higher castes.** For those who self-identified with higher castes, GMI-reflective correlated with identity exploration but not with SWL or PWB (see Table 2). In contrast, GMI-experiential did not correlate with identity exploration but did correlate with SWL and PWB (see Table 2).



Thus, for those reporting membership in a higher caste, GMI, identity exploration, and well-being functioned as in the U.S. sample but not as in the samples of Japan and Guatemala.

**Lower castes.** For those who self-identified with lower castes, GMI-reflective correlated only with PWB-autonomy and PWB-growth but not identity exploration, SWL, or aggregate PWB (see Table 2). GMI-experiential did not correlate with any variable. Regressions of identity exploration and then of well-being measures on the two GMI subscales yielded largely the same results (see Table 3). Thus, for those reporting membership in a lower caste, GMI held little by way of bivariate relations to either identity exploration or well-being. However, we note the small group size, and below we consider interactions by caste.

**No caste.** We had made no predictions regarding this group but report their findings, as caste analyses are relatively seldom reported. For those who did not report an identification with any caste, GMI-reflective and GMI-experiential each correlated with identity exploration and no other variable (see Table 2). A regression of identity exploration showed that GMI-reflective was significant,  $B = .32$ ,  $SE = .07$ ,  $\beta = .48$ ,  $p < .001$ , but GMI-experiential was not,  $B = .10$ ,  $SE = .05$ ,  $\beta = .21$ ,  $p > .05$  (see Table 3).

**Interactions by caste.** Next we tested whether GMI-experiential differed by caste in predicting well-being. In a regression of SWL (standardized) on GMI-experiential (standardized), caste (higher versus lower, contrast coded) and their interaction, the interaction was marginally significant,  $B = .19$ ,  $SE = .10$ ,  $\beta = .19$ ,  $p < .08$ . In a regression of PWB (standardized) on the same model, the interaction was significant,  $B = .24$ ,  $SE = .10$ ,  $\beta = .22$ ,  $p < .05$ . An examination of means revealed that, for participants who reported higher castes, relative to lower castes, higher GMI-experiential scores predicted especially high PWB scores (noting too that simple effects were found only for GMI-experiential). Thus the individualist model of

growth motivation seemed to characterize the participants of higher castes in India. Participants of lower castes showed a minimal suggestion of the collectivist model, as reflective growth motivation correlated with two dimensions of PWB, whereas experiential growth motivation showed no relation to well-being.

**Gender.** Women ( $M = 5.27$ ,  $SD = .90$ ) in India had higher GMI-reflective scores than men ( $M = 4.94$ ,  $SD = .83$ ),  $t(152) = 2.29$ ,  $p < .05$ . Women ( $M = 5.93$ ,  $SD = .92$ ) had higher GMI-experiential scores than men ( $M = 5.53$ ,  $SD = 1.07$ ),  $t(152) = 2.52$ ,  $p < .05$ . Women ( $M = 3.88$ ,  $SD = .56$ ) had higher SWL scores than men ( $M = 3.66$ ,  $SD = .56$ ),  $t(152) = 2.46$ ,  $p < .05$ . For men, GMI-reflective correlated with neither identity exploration, SWL, nor PWB ( $ps > .10$ ), whereas GMI-experiential correlated with identity exploration,  $r = .35$ ,  $p < .01$ , but with neither SWL nor PWB ( $ps > .10$ ). For women, GMI-reflective correlated with identity exploration,  $r = .40$ ,  $p < .001$ , but with neither SWL nor PWB ( $ps > .10$ ), whereas GMI-experiential correlated marginally with PWB,  $r = .25$ ,  $p = .05$ , but with neither identity exploration nor SWL ( $ps > .10$ ). For women, a regression of PWB showed that GMI-experiential was a marginally significant predictor,  $B = .14$ ,  $SE = .08$ ,  $\beta = .22$ ,  $p < .08$ , but GMI-reflective was not.

We turn now to gender X GMI interactions. In a regression of identity exploration (standardized) on gender (contrast-coded) and GMI-reflective (standardized) and their interaction, the interaction was significant,  $B = -.12$ ,  $SE = .05$ ,  $\beta = -.18$ ,  $p < .05$ , as was GMI-reflective,  $B = .17$ ,  $SE = .05$ ,  $\beta = .26$ ,  $p < .001$  (but gender was not,  $p > .10$ ). An examination of means showed that the relation between GMI-reflective and identity exploration was especially strong for women. In a regression of SWL on gender, GMI-experiential, and their interaction, the interaction was not significant. However, in a regression of PWB on the same model, the interaction was marginally significant,  $B = -.08$ ,  $SE = .04$ ,  $\beta = -.15$ ,  $p < .07$ . When using a

median-split, contrast-coded variable for GMI-experiential in that regression of PWB, the interaction with gender was significant,  $B = -.11$ ,  $SE = .04$ ,  $\beta = -.21$ ,  $p < .05$ , as was GMI-experiential,  $B = .11$ ,  $SE = .04$ ,  $\beta = .20$ ,  $p < .05$  (but gender was not,  $p > .10$ ). An examination of means showed that the relation between GMI-experiential and PWB was stronger for women than for men. No three-way interactions were found among caste, gender, and either GMI subscale in predicting identity exploration, SWL, or PWB. Thus, we found some support that the individualist model of growth motivation characterized women more so than men in the sample from India. We note that women self-identified with higher castes than men did,  $X^2(91) = 12.01$ ,  $p < .001$ ; women were 4.3 times more likely to claim a higher versus lower caste, whereas men were 1.2 times more likely to claim a *lower* versus higher caste.

### **Cross-Cultural Interactions with GMI**

The regression models above demonstrated simple effects within individual countries for growth motivation in relation to identity exploration and well-being. To provide a more rigorous test of individualist and collectivist models of growth motivation across countries, we ran regressions testing interactions of each GMI subscale by countries with reportedly individualist versus collectivist cultures. Based on *a priori* expectations, we created a “Culture” variable by designating as individualist the participants from the U.S. and those from India who self-identified with higher castes (contrast-coded as -1) and by designating as collectivist the participants from Japan, Guatemala, and those from India who self-identified with lower castes (coded as 1). However, we note that the empirical rationale (based on the present data) for dividing the India sample in this way was stronger for the higher-caste group than for the lower.<sup>3</sup>

To create interaction variables, we first standardized the variables for GMI subscales, identity exploration, SWL, and PWB across all samples. We then computed variables for three two-way

interactions and one three-way interaction by multiplying the contrast-coded variable “Culture” by GMI subscales: Culture X GMI-reflective, Culture X GMI-experiential, GMI-reflective X GMI-experiential, and finally Culture X GMI-reflective X GMI-experiential. The full regression model (whether predicting identity exploration, SWL, or PWB) included variables for Culture, GMI-reflective, GMI-experiential, each of the three two-way interactions, and the three-way interaction. In terms of the hypotheses, we were most interested in the interactions of Culture and GMI subscales—especially GMI-reflective when predicting well-being. We first present regressions of identity exploration, SWL, and PWB individually and then present graphs of a regression of an aggregate of the two well-being measures that summarize the overall patterns.

**Predicting SWL.** Regressing SWL on the full model, GMI-reflective,  $B = .21$ ,  $SE = .06$ , the Culture X GMI-reflective interaction,  $B = .15$ ,  $SE = .06$ , and the Culture X GMI-experiential interaction (inversely),  $B = -.15$ ,  $SE = .06$ , each simultaneously predicted SWL (standardized betas and significance levels appear in Table 4). Examinations of means showed that, in support of Hypothesis 1, participants who scored high on GMI-reflective tended to report higher levels of SWL in putatively collectivist cultures but not individualist cultures. In contrast, participants in putatively individualist cultures who scored high on GMI-experiential tended to report higher levels of SWL. In contrast, participants in putatively collectivist cultures who scored higher on GMI-experiential actually tended to score lower on SWL, in support of Hypothesis 2 (although we expected GMI-experiential to have nothing to do with well-being for collectivist cultures, rather than to correlate inversely). We note that these interactions were significant when controlling for each other, in addition to the other variables. The three-way interaction was not significant.

**Predicting PWB.** Cross-cultural analyses with PWB did not include the Guatemala group, as PWB was not used in that study, meaning that the collectivist group included participants from Japan and participants from India who self-identified with lower castes. Regressing PWB on the full model, GMI-reflective,  $B = .14$ ,  $SE = .06$ , GMI-experiential,  $B = .27$ ,  $SE = .06$ , the Culture X GMI-reflective interaction,  $B = .16$ ,  $SE = .06$ , and the Culture X GMI-experiential interaction,  $B = -.18$ ,  $SE = .06$ , each simultaneously predicted PWB (see Table 4). Examinations of means showed that participants who scored high on GMI-reflective tended to report higher levels of PWB in putatively collectivist but not individualist cultures, in support of Hypothesis 1. In contrast, participants who scored high on GMI-experiential tended to report higher levels of PWB in putatively individualist but not collectivist cultures, in support of Hypothesis 2 (except that, again, as with SWL, we expected GMI-experiential to have nothing to do with well-being for collectivist cultures, rather than to correlate inversely). The three-way interaction was not significant.

**Predicting aggregated well-being.** For the purpose of presenting the preceding interactions graphically, we first median-split the two standardized GMI subscales and then aggregated the standardized scores of SWL and PWB into a single variable called Well-Being (WB). (A regression of WB on the full model revealed the same pattern of results as with the previous regression with PWB, which in the interest of space we do not detail here. We note that the Guatemalan participants is not included in these analyses, as they did not take PWB.) An ANOVA predicting WB using the same model as in the regressions but with median-split GMI subscales revealed simultaneously significant interactions of Culture x GMI-Reflective,  $F(1, 219) = 6.04$ ,  $p < .05$ , and of Culture x GMI-Experiential,  $F(1, 219) = 8.47$ ,  $p < .01$ . The three-way interaction was not significant. Figure 1 shows that (a) GMI-reflective corresponded to

higher levels of WB in putatively collectivist but not individualist cultures, whereas (b) GMI-experiential corresponded to higher levels of WB in putatively individualist but not collectivist cultures. These findings support Hypotheses 1 and 2.

**Predicting identity exploration.** Regressing identity exploration on the full model, only GMI-reflective predicted identity exploration,  $B = .34$ ,  $SE = .07$  (see Table 4). In other words, in support of Hypothesis 3, reflective growth motivation predicted identity exploration across cultures, controlling for experiential growth motivation, their interaction, and all interactions with culture.

### Discussion

The present study tested how motives for two kinds of personal growth—reflective and experiential—functioned in relation to well-being and identity exploration in four countries that score relatively high on measures of individualism (U.S.) or collectivism (Japan, Guatemala), plus India, whose scores lean collectivist but are clouded by the complexities of social caste (Sinha et al., 2001). Based on past research (e.g., Gaertner et al., 2012; Heine et al., 2001), we predicted that reflective growth motivation would predict well-being in collectivist but not individualist cultures, whereas experiential growth motivation would predict well-being in individualist but not collectivist cultures. We also expected that reflective growth motivation would predict identity exploration across cultures. We found support for our hypotheses when comparing the U.S., Japan, and Guatemala, but the findings from India raise important questions for future research.

### Cultural Differences in Growth Motivation

We found differences across countries that largely matched our expectations for countries with individualist or collectivist cultures. Reflective growth motivation predicted well-being for

participants from Japan and Guatemala but not for participants from the U.S. and the higher castes of India. Conversely, experiential growth motivation predicted well-being for participants from the U.S. and higher-caste India but not from Japan and Guatemala (again, when teasing out the core qualities of experiential growth motivation by controlling for reflective growth motivation). In other words, for countries that are known to score relatively high on measures of collectivism (e.g., Hofstede et al., 2010; Diener et al., 2000), well-being was tied to reflective growth motivation, which emphasizes critical self-reflection over personal interests, which in turn is a hallmark value in collectivist cultures (e.g., Heine et al., 2000; Kitayama et al., 1997). In contrast, for countries that are known to score relatively high on measures of individualism, well-being was tied to experiential growth motivation, which emphasizes the pursuit of personal interests over critical self-reflection. Furthermore, even though the findings for the Guatemala sample fit the hypotheses, we note that this was the only sample comprised of adults, so it is not clear whether these findings are products of culture or developmental maturity.

The sample from India was as interesting as it was perplexing. While India is often considered to be a collectivist culture (its Hofstede score of 48 on individualism–collectivism is very close to that of Japan’s score of 46), various sectors of India are more likely to endorse individualist values (Sinha et al., 2001). We suspect that the caste differences were tied to socioeconomic status differences in participants’ families as well as to the notion that individualism corresponds to industrialized environments and resources (Triandis, 1989), to which people in higher castes have greater access, compared to those in lower castes (Nayar, 2007). For instance, Sinha et al. (2001) found that participants who reported higher levels of collectivism were more likely to have fathers who worked in agricultural settings (which are relatively more populated by people in of lower castes) than in business settings (which are

relatively more populated by people in of higher castes). Similarly, in nearby Bangladesh, Devine et al. (2008) found that participants were motivated toward autonomy, but autonomy in urban settings (and for men generally) was directed toward individualistic independence, whereas autonomy in rural settings was directed more toward collectivist concerns like providing for one's family, leading a household, and other social ends.

In the present study, Indian participants who claimed membership in higher castes followed the individualist pattern of correlations between experiential growth motivation and well-being. As expected, participants who claimed membership in lower castes did not follow the individualist pattern, yet they followed the collectivist pattern only minimally (that is, in only two of six dimensions of PWB). Thus we do not conclude that these participants fit any pattern of individualist or collectivist growth motivation. Their group size was very small ( $n = 32$ ), and even when magnitudes of correlations and regression coefficients were in the .20 and .30 range, the directions of those relations were inconsistent. We note that the Indian sample took the survey in English, although we cannot determine how this fact might have steered the findings.

Finally, Indian women's GMI scores, compared to men's, functioned more like those of U.S. participants. Then again, women were four times more likely to claim a higher caste, whereas men more evenly claimed higher and lower castes. Still, the gender X caste X GMI interactions were not significant. Past research has shown differences in self-construal by gender and culture (e.g., Kashima, Hardie, Wakimoto, & Kashima, 2011; Kashima, Yamaguchi, Kim, Choi, Gelfand, & Yuki, 1995), notably that women in India reported a higher mix of individualist and collectivist orientations than men did (Sinha et al., 2001; however, that sample came from a northern region of India, whereas the present sample came from southern India).

### **Cultural Similarities in Growth Motivation**



We found similarities across cultures in two ways. First, as expected, reflective growth motivation but not experiential growth motivation predicted identity exploration across cultures and in each country.<sup>4</sup> Whereas the presence of well-being in one's life depends on whether one values the values of one's culture, which vary from culture to culture (Sortheix & Schwartz, 2017), the presence of thinking complexly in one's life probably depends, across cultures, on whether one values critical reflection on the self and others. The structural complexity of thinking about the self and others follows similar principles of social perspective-taking across cultures (Gibbs et al., 2007), even if their particular expression varies across cultures (Bell, Bell, & Nakata, 2000).

Second, we found that *some* form of growth motivation (either reflective or experiential) corresponded to well-being in every country. This finding supports research suggesting a universal endorsement of the self-improvement motive (Gaertner et al., 2012), except that the self-improvement motive does not target specifically eudaimonic forms of self-improvement like growth motivation does (Bauer, Graham, Lauber, & Lynch, in press).

### **Implications for Eudaimonic Growth across Cultures**

The present findings shed light on the two-dimensional model of growth motivation. Notably, these findings suggest that the original predictions surrounding the GMI—as well as its theoretical model of eudaimonic growth—have reflected an especially *individualist* account of personality development. More broadly, the model of eudaimonic growth claims that eudaimonic personality development follows two paths—toward wisdom and toward well-being—and that motives for reflective growth and experiential growth facilitate the person's development along those paths (e.g., Bauer, 2016; Bauer & McAdams, 2010). If the present data generalize, then this scenario is characteristic of individualist but not collectivist cultures. The culturally salutary

qualities of individualist growth motivation appear to reside in the cultivation of deeper personal interests, whereas the culturally salutary qualities of collectivist growth motivation appear to reside in the cultivation of critical self-reflection. Hence the model of eudaimonic growth appears to need revising with respect to well-being—but not necessarily to wisdom—as being culturally bound. Specifically, the theoretical paths from motivation to well-being depend on the value orientations of a culture. To the degree a culture values one's actively seeking others' perspectives, the motive to do so (e.g., reflective growth motivation)—as well as the perceived ability to do so—should predict not only the value perspectivity of wisdom but also the value fulfillment of well-being.

On a broader level, these findings support research showing that different cultures place importance on similar kinds of values (e.g., experiential and reflective growth in Bauer et al., 2015; self-transcendence and self-enhancement in Gaertner et al., 2012; O'Mara, Gaertner, Sedikides, Zhou, & Liu, 2012; Oppenheim-Weller et al., 2018). Even if different cultures do so to different degrees, these value orientations correspond to the fulfillment of these values that correspond to the particular values structures and hierarchies of the individual culture (Oppenheim-Weller et al., 2018).

Furthermore, the present findings might too easily be interpreted to suggest that countries with collectivist cultures value reflective growth and wisdom more so than do countries with individualist cultures. We do not take this position, not only because mean levels of GMI-reflective and identity exploration were inconsistent across these countries, but also because complexity of thinking about the self and others seems not to vary among individualist and collectivist cultures when considering socioeconomic status and education (Gibbs et al., 2007).

The present findings suggest only that, in cultures that value reflective growth, individuals who also value reflective growth will find satisfaction and meaningfulness in their lives.

### **Limitations**

The present study did not directly measure individualist–collectivist values of participants, so we have tried to be careful to claim that the findings only represent the functioning of growth motivation in countries that have been externally rated as relatively high or low on individualism–collectivism, rather than claiming that growth motivation related to differences in the individualist–collectivist beliefs of the present participants. Furthermore, the individualism–collectivism dimension of cultural differences may be better explained by considerations such as socioeconomic mobility (Sen, 1999) or how tightly or loosely social norms are enforced in a culture (Triandis, 1989). However, despite these concerns, the findings did largely fit the predicted patterns (and squarely so in the U.S., Japan, and Guatemala), and these findings do fit well with and extend previous work on individualism and collectivism (e.g., Heine et al., 2000).

We note that the individualism–collectivism divide can too easily lead to simplistic claims about the functioning of cultures and especially individuals (Voronov & Singer, 2002). Earlier we mentioned that we now view the model of eudaimonic growth within its individualist origins, but here we wish to emphasize the fact that this model derives more deeply from specifically Western notions of the good in life, such as the valuing of self-determined motives (Deci & Ryan, 2012), even if such principles of motivation correspond to well-being across individualist and collectivist cultures (Chen et al., 2015; Sheldon et al., 2004). Furthermore, future research would benefit from a wider range of countries and cultures, measures of individualism and collectivism, larger samples within each country, and multi-level analysis.

### **Summary**

We found evidence for cultural differences and similarities regarding growth motivation and well-being. Growth motivation predicted well-being across samples, but differently across samples for reflective and experiential forms of growth motivation. Happier participants (i.e., those with higher levels of well-being) from putatively collectivist cultures identified with reflective growth motivation, whereas happier participants from putatively individualistic cultures identified with experiential growth motivation. Across samples, motives for reflective growth corresponded to identity exploration. These findings suggest that predictions by the model of eudaimonic growth should include consideration of cultural values with respect to well-being.

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Table 1

## Descriptive Statistics

Variable	Study			
	1 – U.S. ( <i>n</i> = 109)	2 - Japan ( <i>n</i> = 156)	3 - Guatemala ( <i>n</i> = 57)	4 – India ( <i>n</i> = 154)
GMI-reflective	4.56 <sup>a</sup> (1.10) <i>2.0 – 7.0</i>	4.63 <sup>a</sup> (.72) <i>2.9 – 6.6</i>	5.19 <sup>b</sup> (.97) <i>3.2 – 7.0</i>	5.12 <sup>b</sup> (.87) <i>2.3 – 6.8</i>
GMI-experiential	5.03 <sup>a</sup> (.77) <i>2.3 – 7.0</i>	4.97 <sup>a</sup> (.86) <i>2.5 – 7.0</i>	5.48 <sup>b</sup> (1.26) <i>2.3 – 7.0</i>	5.75 <sup>b</sup> (1.01) <i>2.2 – 7.0</i>
Identity exploration	3.36 <sup>a</sup> (.43) <i>1.9 – 4.4</i>	3.90 <sup>b</sup> (.75) <i>1.9 – 6.2</i>	3.95 <sup>b</sup> (.72) <i>1.7 – 5.0</i>	3.82 <sup>b</sup> (.63) <i>2.1 – 5.0</i>
SWL	5.15 <sup>b</sup> (1.09) <i>2.2 – 7.0</i>	3.44 <sup>a</sup> (1.16) <i>1.0 – 6.2</i>	5.52 <sup>c</sup> (1.09) <i>2.5 – 7.0</i>	5.30 <sup>b,c</sup> (.57) <i>2.8 – 7.0</i>
PWB	4.43 <sup>b</sup> (.50) <i>3.2 – 5.6</i>	3.79 <sup>a</sup> (.61) <i>2.0 – 5.5</i>		3.91 <sup>a</sup> (.52) <i>3.0 – 5.5</i>

<sup>a or b</sup> Within each row, means with superscripts of the same letter are statistically the same ( $p > .10$ ). Means with different superscripts are different ( $p < .05$ ). Alphabetically higher superscripts indicate higher means.

*Note.* Statistics include means, standard deviation in parentheses, and minimum and maximum scores in italics. PWB was not used in Guatemala. IS I-info = Identity Style Inventory – information orientation (identity exploration). SWL = Satisfaction with Life Scale. PWB = aggregate of the PWB subscales.

Table 2

Correlations between GMI facets and both identity exploration and well-being in the U.S., Japan, Guatemala, and India

Study	GMI	IE	SWL	PWB	AU	EM	PG	PL	PR	SA
1. U.S.	Ref	.49***	.19	.26*	.03	.17*	.35***	.23*	.18	.31***
	Exp	.26*	.28**	.40***	.19	.36***	.42***	.38***	.27**	.39***
2. Japan	Ref	.32***	.29***	.34***	.00	.36***	.37***	.24**	.46***	.12
	Exp	.22**	-.02	.24**	.06	.20*	.40***	.17*	.30***	-.02
3. Guatemala	Ref	.47***	.55***							
	Exp	.32*	.49***							
4. India	Ref	.31***	.07	.12	.18*	.00	.19*	.00	.09	.07
	Exp	.22**	.13	.14	.18*	.01	.05	.08	.12	.14
4a. India (higher castes, n = 56)	Ref	.27*	.12	.16	.16	-.08	.21	.12	.17	.14
	Exp	.11	.29*	.39**	.29*	.21	.21	.30*	.42**	.36**
4b. India (lower castes, n = 32)	Ref	.00	-.08	.29	.48**	.17	.47**	-.04	.04	.10
	Exp	.21	-.10	.03	.33	-.31	.11	-.08	-.01	.15
4c. India (no caste, n = 65)	Ref	.55***	.07	.09	.16	.20	-.01	-.04	.05	.06
	Exp	.36**	.14	.00	.00	.11	-.15	.04	.04	.00

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

*Note.* Pearson coefficients are reported. Ref = GMI-Reflective. Exp = GMI-Experiential. IE = Identity exploration. SWL = Satisfaction with Life Scale. PWB = Psychological Well-Being, aggregate of subscales. AU = PWB–autonomy, MA = PWB–mastery. PG = PWB–growth. PL = PWB–relations. PWB-SA = PWB–self-acceptance.

Table 3

Regressions of both identity exploration and well-being on GMI facets in the U.S., Japan, Guatemala, and India

Study	GMI	IE	SWL	PWB
1. U.S.	Ref	.49***	.05	.05
	Exp	-.01	.26*	.37**
2. Japan	Ref	.28**	.36***	.29**
	Exp	.10	-.16	.12
3. Guatemala	Ref	.45**	.39**	
	Exp	.05	.25 <sup>^</sup>	
4. India	Ref	.27**	.02	.08
	Exp	.12	.12	.10
4a. India (higher castes, n = 56)	Ref	.32*	.02	.00
	Exp	.04	.29*	.35**
4b. India (lower castes, n = 32)	Ref	-.09	-.05	.32 <sup>^</sup>
	Exp	.24	-.08	-.08
4c. India (no caste, n = 65)	Ref	.48***	.03	.10
	Exp	.21 <sup>^</sup>	.14	-.03

<sup>^</sup> $p = < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

*Note.* Standardized betas are reported. Shaded cells represent predicted patterns for individualist (lighter shading) and collectivist (darker shading) cultures. Ref = GMI-Reflective. Exp = GMI-Experiential. IE = Identity exploration. SWL = Satisfaction with Life Scale. PWB = Psychological Well-Being, aggregate of subscales.

Table 4

## Regressions across Cultures

Block Model	IE		SWL		PWB	
	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$
1. Culture	-.09	.00	-.01	.00	-.01	.00
2. GMI-Reflective	.34***	.16***	.21***	.07***	.14*	.11***
GMI-Experiential	.09		.08		.27***	
3. Culture X GMI-Ref	-.05	.00	.16**	.03**	.16**	.03**
Culture X GMI-Exp	.08		-.16**		-.18**	
4. GMI-Ref X GMI-Exp	-.05	.01	-.09	.01	.05	.00
Culture X GMI-Ref X GMI-Exp	.06		.00		.02	

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

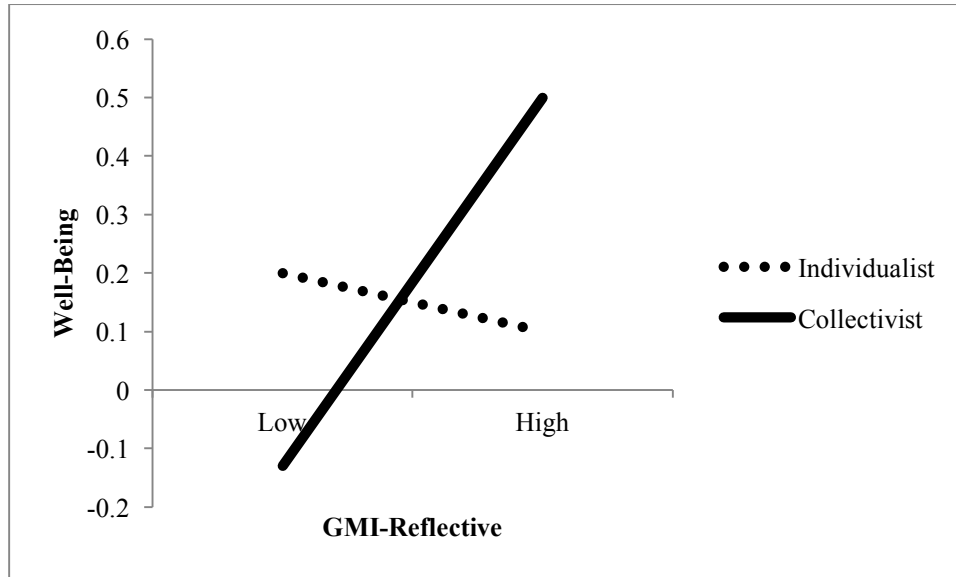
*Note:* Beta coefficients are standardized and represent the magnitude and direction of its corresponding variable to predict the regressed variable when controlling for all other variables simultaneously in the full model. IE = Identity Style Inventory – information orientation. SWL = Satisfaction with Life Scale. PWB = Psychological Well-Being, aggregate of subscales. Blocks note conceptual breaks in terms of hypotheses.  $\Delta R^2$  = Change in (adjusted)  $R^2$  for each block, i.e., those variables dealing with the next level of complexity for the question of that block. The GMI-Ref X GMI-Exp interaction, despite being a two-way interaction like the ones with culture, is included in Block 4 because it was not hypothesized and is necessary only for testing for the also-not-hypothesized three-way interaction.



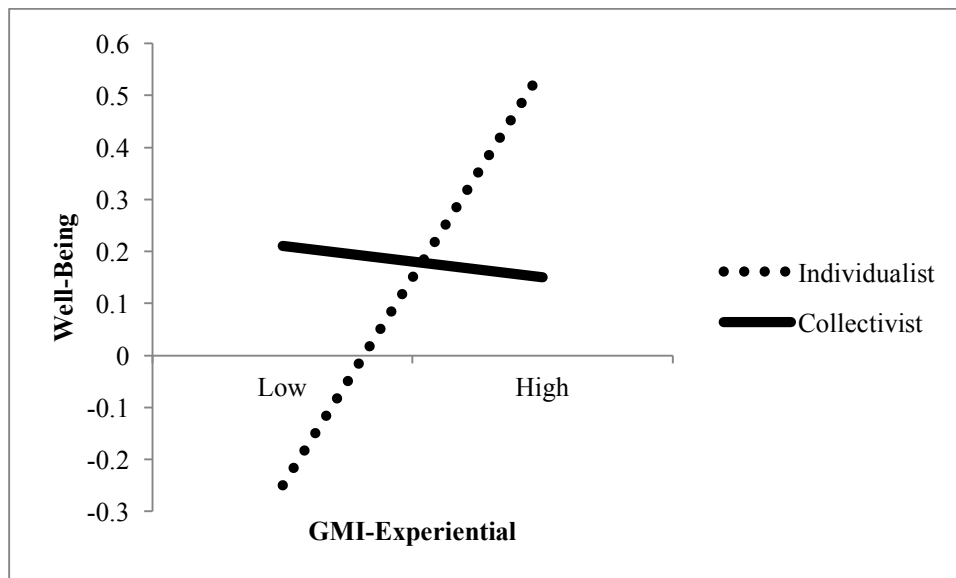
Figure 1

Interactions of Culture and Growth Motivation Predicting Aggregated Well-Being

(a)



(b)



## End Notes

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<sup>1</sup> As in past research (Bauer et al., 2015), where either reflective or experiential growth motivation would hold a bivariate correlation with an unpredicted variable (e.g., reflective growth motivation correlates with well-being in the U.S.), we expected that this correlation would no longer be significant when controlling for the other facet of growth motivation.

<sup>2</sup> Women scored higher than men on GMI-experiential, identity exploration, PWB, PWB-growth, and PWB-purpose. However, there were no gender X GMI interactions, and gender did not account for the correlations reported above.

<sup>3</sup> Still, GMI-reflective did correspond somewhat to PWB for participants who self-identified in lower castes. For the analyses that follow, we additionally conducted tests that excluded those in the lower castes, and the findings were very similar to the reported findings. Also, we excluded participants from India who did not identify with any caste, as we had no hypothesis for them and as their within-country findings suggested neither individualist nor collectivist patterns of growth motivation.

<sup>4</sup> As in past research in the U.S. (Bauer et al., 2015), any bivariate relations between experiential growth motivation and identity exploration no longer held when controlling for reflective growth motivation. The two facets of growth motivation are not orthogonal, but controlling for one teases out the unique qualities of the other. Also, the measures of identity exploration and reflective growth motivation are similar: Both involve exploring new perspectives in life. But the two are not identical: They correlate at approximately the .50 level in past and present research, and identity exploration revolves around personal life decisions, whereas reflective growth motivation revolves around thinking about persons and life more generally.