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Kristin Layous, Hyunjung Lee, Incheol Choi and Sonja Lyubomirsky

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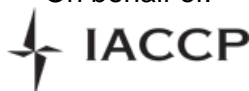
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Kristin Layous¹, Hyunjung Lee², Incheol Choi³,
and Sonja Lyubomirsky¹

Abstract

Research shows that performing positive activities, such as expressing gratitude and doing acts of kindness, boosts happiness. But do specific positive activities work equally well across cultures? Our study examined the role of culture–activity fit by testing two positive activities across two cultures. Participants from the United States ($n = 250$) and South Korea ($n = 270$) were randomly assigned to express gratitude, perform kind acts, or engage in a neutral activity for the first half of a 6-week positive activity intervention. Multilevel growth modeling analyses revealed that the effect of practicing gratitude or kindness was moderated by culture: U.S. participants increased in well-being (WB) from both activities, $\gamma_{11} = 0.19$, $SE = 0.06$, $t(511) = 3.04$, $p = .0006$; $\gamma_{12} = 0.11$, $SE = 0.06$, $t(511) = 1.73$, $p = .03$ (compared with the control group), but South Korean participants benefited significantly less from practicing gratitude than did U.S. participants, $\gamma_{13} = -0.24$, $SE = 0.07$, $t(511) = -3.36$, $p = .002$. South Korean participants, however, showed similar increases in WB as did U.S. participants when performing kind acts, $\gamma_{14} = -0.06$, $SE = 0.07$, $t(511) = -0.82$, ns . Finally, although greater self-reported effort yielded significantly larger increases in WB for U.S. participants, the effect of effort was not as strong for South Korean participants. We posit that, due to their dialectical philosophical tradition, South Koreans might have been more prone to feel mixed emotions (e.g., indebtedness and gratitude) while engaging in the gratitude letter activity than did U.S. participants.

Keywords

happiness, subjective well-being, positive activities, positive interventions, kindness, gratitude

Happiness is not only a highly valued goal to people across the world (Diener, 2000), but also a goal that is associated with multiple positive life outcomes (Lyubomirsky, King, & Diener, 2005). Fortunately, theory (Lyubomirsky, Sheldon, & Schkade, 2005) and empirical evidence (Sin &

¹University of California, Riverside, USA

²University of Texas, Austin, USA

³Seoul National University, South Korea

Corresponding Author:

Kristin Layous, Department of Psychology, University of California, 900 University Avenue, Riverside, CA 92521, USA.

Email: klayo001@ucr.edu

Lyubomirsky, 2009) show that people can intentionally improve their happiness levels by regularly performing simple positive activities, like practicing gratitude or kindness. Whether all positive activities work equally well for all people, however, is an important research question, as the degree of person–activity or culture–activity fit is theorized to influence the efficacy of any positive practice (Lyubomirsky & Layous, 2013). This article addresses the question “Do certain positive activities work equally well across cultures?” Specifically, we explore whether the effect of engaging in two happiness-increasing strategies (expressing gratitude and performing kind acts) varies in participants from the United States and South Korea.

Positive Activities in Eastern Versus Western Cultures

Culture undoubtedly affects how people practice and ultimately benefit (or not) from positive activities. Eastern and Western cultures vary in the epistemologies that guide patterns of thoughts, emotions, and behavior (Peng, Ames, & Knowles, 2001; see Oatley, Keltner, & Jenkins, 2006, for a review). Influenced by the philosophical traditions of Buddhism, Confucianism, and Taoism, members of Eastern cultures are more susceptible to contradictory (dialectical) thoughts and emotions than are members of Western cultures (Peng & Nisbett, 1999). For example, East Asians often feel positive and negative emotions simultaneously, whereas Westerners tend to experience them as oppositional (Bagozzi, Wong, & Yi, 1999; Kitayama, Markus, & Kurokawa, 2000; Schimmack, Oishi, & Diener, 2002). Furthermore, dialectical thinking is a mediator between culture and increased experience of emotional complexity (Spencer-Rodgers, Peng, & Wang, 2009). A culture’s propensity toward emotional complexity will inevitably affect how members of that culture experience certain positive activities. For example, if a positive activity elicits conflicting emotions, members of an Asian culture may be more likely to experience bittersweet feelings than members of cultures without a dialectical tradition.

Positive Activities: Expressing Gratitude and Performing Kind Acts

Gratitude is a state that involves endorsing that (a) one has acquired a positive outcome and (b) this outcome came from an external source (Emmons & McCullough, 2003). Although expressing gratitude has been reliably shown to boost well-being (WB; Sin & Lyubomirsky, 2009), the external nature of the gratitude object might produce conflicting feelings (e.g., concurrently evoking the distinct emotions of gratitude and indebtedness; Watkins, Scheer, Ovnicek, & Kolts, 2006). For example, a daughter could feel valued and connected to others as she realizes how much her parents sacrificed for her, or, possibly, indebted and guilty. Related evidence suggests that Asians are uncomfortable seeking social support from close others, likely because of potential negative relational consequences (e.g., worrying others; Kim, Sherman, Ko, & Taylor, 2006). In addition, Asians associate happiness with social harmony (whereas Americans associate happiness with personal achievement; Uchida & Kitayama, 2009), so “putting others out” enough to feel grateful toward them could elicit unhappiness. Because of their dialectic tradition and desire to avoid making waves in their social networks, we predict that South Koreans will be especially likely to feel positive and negative emotions when expressing gratitude to others (e.g., see Furukawa, Tangney, & Higashibara, 2012, for evidence that South Koreans are prone to guilt), which may temper any overall happiness they obtain from trying to be grateful.

Doing acts of kindness, however, may not elicit similarly conflicting feelings. Humans as young as 18 months engage in prosocial behavior (Warneken & Tomasello, 2006), suggesting that doing good for others might be evolutionarily adaptive and have cross-cultural appeal. Performing kind acts might appeal to Westerners because it fuels an image of themselves

as caring and selfless and to Easterners because it allows them to fulfill the cultural values of interdependence or filial responsibility. Supporting this premise, a 6-week acts-of-kindness intervention revealed similar benefits for U.S. and South Korean participants (Della Porta, Jacobs Bao, & Lyubomirsky, 2012).

The Current Study

Participants were randomly assigned to engage in one of three activities over 6 weeks. For the first half of the experiment, they either wrote gratitude letters to individuals for whom they were very grateful, performed three kind acts, or listed what they did in the past 24 hrs (a neutral activity) once a week. For the second half, participants either continued doing the same positive activity (gratitude or kindness) or switched to the alternate activity (i.e., those writing gratitude letters switched to performing kind acts and vice versa).¹ The control group switched to a different neutral activity (keeping track of three locations they had visited).

Our first hypothesis was that participants in the positive activity conditions (gratitude or kindness) would show greater linear increases in WB during the intervention (and at a 1-month follow-up) than participants in the control condition. Our second hypothesis was that the effect of the gratitude condition would be moderated by culture, such that participants from the United States would show larger boosts in WB than participants from South Korea when they begin the intervention by practicing gratitude. However, we expect to see no differences between U.S. and South Korean participants who begin the intervention by performing kind acts. Because a rapid positive response to interventions has been shown to predict long-term positive outcomes (Cohn & Fredrickson, 2008), we posited that the efficacy of the first activity practiced would be crucial to the success of the overall intervention. Third, we hypothesized that, overall, participants who put more effort into practicing positive activities would show larger WB benefits (Lyubomirsky, Dickerhoof, Boehm, & Sheldon, 2011).

Method

College students from the United States ($n = 250$) and South Korea ($n = 270$) were recruited from medium-sized colleges for an online study (317 female, 199 male, 4 did not answer). The majority of U.S. participants identified as Latino(a) (30.4%) or Asian (34.8%), with 10.8% White and 24% Other categories.² All participants from South Korea identified as Asian. Sample sizes per cell were as follows: Start with Gratitude ($n = 203$), Start with Kindness ($n = 213$), and Control ($n = 104$).³

Each week, participants performed their assigned activity and logged in to the study website to report what they did and to rate the effort they applied (1 = *no effort at all*, 7 = *a great deal of effort*). In addition, they completed the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the Modified Differential Emotions Scale (mDES; Fredrickson, Tugade, Waugh, & Larkin, 2003) at baseline, midpoint (3 weeks in), posttest (after 6 weeks), and 1-month follow-up. Students' scores on the SWLS and the mDES were standardized within culture and then averaged to create a WB composite.⁴ Their weekly reported effort was averaged to produce one effort score per participant.⁵

Results

To assess within-person change in WB over time and between-person differences in change over time, we used multilevel growth modeling techniques (Singer & Willett, 2003). We used the lme4 package in R to estimate fixed and random effects and goodness-of-fit statistics (Bates, Maechler, & Bolker, 2011). In addition, we estimated significance values using Monte Carlo simulations

Table 1. Model Parameters (Standard Errors) and Goodness of Fit for Linear Changes in Well-Being Through Posttest.

Effect	Parameter	Model 1: Unconditional linear growth	Model 2: Gratitude and kindness vs. control	Model 3: Gratitude and kindness vs. control moderated by culture
Fixed effects				
Status at baseline, π_{0i}				
Intercept	γ_{00}	0.06 (0.14)	0.06 (0.14)	0.06 (0.15)
Rate of chang, π_{1i}				
Time	γ_{10}	0.06 (0.11)	-0.01 (0.12)	-0.01 (0.12)
Gratitude	γ_{11}	—	0.10 (0.06)**	0.19 (0.06)****
Kindness	γ_{12}	—	0.08 (0.06)*	0.11 (0.06)**
Gratitude × Culture	γ_{13}	—	—	-0.24 (0.07)***
Kindness × Culture	γ_{14}	—	—	-0.06 (0.07)
Random effects				
Level 1				
Residual	σ_{ϵ}^2	0.51 (0.72)****	0.51 (0.72)****	0.51 (0.71)****
Level 2				
Intercept	σ_0^2	0.17 (0.41)****	0.17 (0.41)****	0.17 (0.41)****
Time	σ_1^2	0.02 (0.15)***	0.02 (0.15)**	0.03 (0.16)***
Goodness of fit				
Deviance		2,892	2,889	2,877
AIC		2,908	2,917	2,916
BIC		2,933	2,952	2,962

Note: In all models, the intercept parameter estimate (γ_{00}) represents the average well-being (WB) score at baseline across the sample. Because no model attempted to predict differences in baseline scores, the intercept retained the same meaning throughout the models. In Model 1, γ_{10} is the estimate of the slope (rate of linear change in WB over time) across the sample. In Model 2, γ_{10} shifts to represent the slope of the control group, whereas γ_{11} and γ_{12} represent the additional effect of being in the gratitude or kindness conditions, respectively, over and above the control group. In Model 3, γ_{10} still represents the effect of being in the control condition (across cultures), but γ_{11} and γ_{12} now represent the additional effect of being in the gratitude and kindness conditions, respectively, for U.S. participants (as opposed to the control group), and γ_{13} and γ_{14} represent the additional effect of being in the gratitude and kindness conditions, respectively, for South Korean participants (over and above the effect shown by U.S. participants). In all models, the intercept and slope (Time) were free to vary.

* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .001$. All p values in this table are two-tailed.

from the languageR package (Baayen, 2011). An unconditional linear growth model (specifying linear increases in WB through the posttest—baseline coded as 0, midpoint coded as 1, and posttest coded as 2) was a better fit to the data than a model predicting no growth, $\Delta\chi^2(3) = 17.00$, $p = .0007$, see Model 1, Table 1. All subsequent models test between-person differences in the rate of WB change over time (slope), building upon the unconditional linear growth model (see Table 1).

$$\text{Composite model: } Y_{ij} = \gamma_{00} + \gamma_{10}\text{Time}_{ij} + (\epsilon_{ij} + \zeta_{0i} + \zeta_{1i}\text{Time}_{ij}).$$

$$\text{Level 1 model: } Y_{ij} = \pi_{0i} + \pi_{1i}\text{Time}_{ij} + \epsilon_{ij}.$$

$$\text{Level 2 models: } \pi_{0i} = \gamma_{00} + \zeta_{0i} \text{ and } \pi_{1i} = \gamma_{10} + \zeta_{1i}.$$

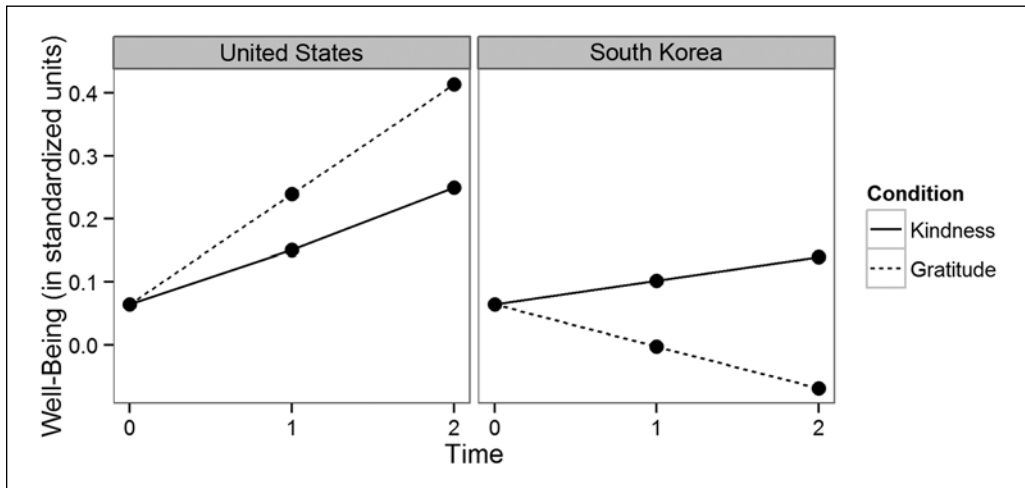


Figure 1. Model predicted changes in well-being through posttest.
 Note: On the x-axis, 0 = baseline, 1 = midpoint, and 2 = posttest.

To test Hypothesis 1, we dummy-coded condition, such that the parameter estimates for expressing gratitude or performing kind acts (coded as 1) reflect the difference in linear change in WB over time for participants in the positive activity (gratitude or kindness) conditions versus the control task (coded as 0). As predicted, across cultures, practicing the gratitude, $\gamma_{11} = 0.10$, $SE = 0.06$, $t(513) = 1.80$, $p = .03$, and kindness, $\gamma_{12} = 0.08$, $SE = 0.06$, $t(513) = 1.52$, $p = .056$, activities predicted greater changes in WB than practicing the control task (see Model 2, Table 1).

To test whether practicing gratitude first would be especially effective for Americans and ineffective for South Koreans (Hypothesis 2), we added a dummy-coded culture variable to the model (South Korea = 1), such that parameter estimates including a positive activity condition by culture interaction reflect the effect of being from the South Korean versus U.S. sample. As predicted, the effect of practicing gratitude or kindness is moderated by culture: U.S. participants increased in WB from both activities, $\gamma_{11} = 0.19$, $SE = 0.06$, $t(511) = 3.04$, $p = .0006$; $\gamma_{12} = 0.11$, $SE = 0.06$, $t(511) = 1.73$, $p = .03$ (compared with the control group), but South Korean participants benefited significantly less from practicing gratitude than did U.S. participants, $\gamma_{13} = -0.24$, $SE = 0.07$, $t(511) = -3.36$, $p = .002$. As predicted, however, South Korean participants showed similar increases in WB as U.S. participants when performing kind acts, $\gamma_{14} = -0.06$, $SE = 0.07$, $t(511) = -0.82$, ns (see Model 3, Table 1, and Figure 1).⁶ The linear growth in WB continued through the follow-up, as a model predicting linear changes in WB was a better fit than a model predicting no growth, $\Delta\chi^2(3) = 19.00$, $p = .0002$. Furthermore, all significant trends remained at least marginally significant through the follow-up (see Table 2).

Greater self-reported effort was also expected to predict larger increases in WB. Supporting Hypothesis 3, greater effort predicted linear gains in WB across the sample, $\gamma_{11} = 0.13$, $SE = 0.03$, $t(405) = 5.23$, $p = .0001$ (see Model 8, Table 3).⁷ Further examination revealed, however, that the strength of the effect of effort on changes in WB varied by culture. Greater effort yielded increases in WB for U.S. participants, $\gamma_{11} = 0.13$, $SE = 0.03$, $t(403) = 4.84$, $p = .0001$, but trended toward paying off less for the South Korean participants, $\gamma_{14} = -0.08$, $SE = 0.05$, $t(403) = -1.80$, $p = .13$ (see Model 9, Table 3, and Figure 2).

Table 2. Model Parameters (Standard Errors) and Goodness of Fit for Linear Changes in Well-Being Through Follow-Up.

Effect	Parameter	Model 4: Unconditional linear growth	Model 5: Gratitude and kindness vs. control	Model 6: Gratitude and kindness vs. control moderated by culture
Fixed effects				
Status at baseline, π_{0i}				
Intercept	γ_{00}	0.08 (0.10)	0.08 (0.10)	0.08 (0.10)
Rate of change, π_{1i}				
Time	γ_{10}	0.03 (0.06)	-0.02 (0.06)	-0.02 (0.06)
Gratitude	γ_{11}	—	0.06 (0.04)*	0.10 (0.04)***
Kindness	γ_{12}	—	0.06 (0.04)*	0.04 (0.04)
Gratitude × Culture	γ_{13}	—	—	-0.11 (0.05)**
Kindness × Culture	γ_{14}	—	—	0.05 (0.05)
Random effects				
Level 1				
Residual	σ_{ϵ}^2	0.47 (0.68)****	0.47 (0.68)****	0.47 (0.68)****
Level 2				
Intercept	σ_0^2	0.22 (0.47)****	0.22 (0.46)****	0.22 (0.46)****
Time	σ_1^2	0.01 (0.12)****	0.01 (0.12)****	0.01 (0.12)****
Goodness of fit				
Deviance		3,312	3,309	3,304
AIC		3,330	3,341	3,348
BIC		3,356	3,377	3,395

Note: In all models, the intercept parameter estimate (γ_{00}) represents the average well-being (WB) score at baseline across the sample. Because no model attempted to predict differences in baseline scores, the intercept retained the same meaning throughout the models. In Model 4, γ_{10} is the estimate of the slope (rate of linear change in WB over time) across the sample. In Model 5, γ_{10} shifts to represent the slope of the control group, whereas γ_{11} and γ_{12} represent the additional effect of being in the gratitude or kindness conditions, respectively, over and above the control group. In Model 6, γ_{10} still represents the effect of being in the control condition (across cultures), but γ_{11} and γ_{12} now represent the additional effect of being in the gratitude and kindness conditions, respectively, for U.S. participants (as opposed to the control group), and γ_{13} and γ_{14} represent the additional effect of being in the gratitude and kindness conditions, respectively, for South Korean participants (over and above the effect shown by U.S. participants). In all models, the intercept and slope (Time) were free to vary.

* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .001$. All p values in this table are two-tailed.

Discussion

Increasing evidence shows that people can purposely and effortfully improve their own happiness through simple self-directed positive practices (Sin & Lyubomirsky, 2009). This study sought to identify for whom the pursuit of happiness is most successful and under what conditions. As predicted, participants from the United States benefited more from expressing gratitude than those from South Korea, perhaps because they are less likely to experience conflicting emotions (such as guilt) when they are grateful. In addition, participants from the United States reported putting more effort into the practice of positive activities than South Koreans, and effort was relatively more predictive of WB increases in them. This finding may be rooted in Americans' belief that personal happiness is in their own hands and can be changed by force of will or effort (Oishi, Graham, Kesebir, & Galinha, 2012). By contrast, indicating a different perspective, the word *happiness* in Korean means “fortunate or lucky blessing” (Oishi et al., 2012).

Table 3. Model Parameters (Standard Errors) and Goodness of Fit for Linear Changes in Well-Being by Level of Effort (Through Posttest).

Effect	Parameter	Model 7: Unconditional linear growth	Model 8: Level of effort	Model 9: Level of effort moderated by culture
Fixed effects				
Status at baseline, π_{0i}				
Intercept	γ_{00}	0.04 (0.16)	0.04 (0.16)	0.05 (0.17)
Rate of change, π_{1i}				
Time	γ_0	0.08 (0.12)	0.07 (0.12)	0.11 (0.13)
Effort	γ^{11}	—	0.11 (0.02)****	0.13 (0.03)****
Culture	γ_{12}	—	—	-0.11 (0.04)***
Effort \times Culture	γ_{13}	—	—	-0.08 (0.05)
Random effects				
Level 1				
Residual	σ_{ϵ}^2	0.52 (0.72)****	0.51 (0.71)****	0.50 (0.71)****
Level 2				
Intercept	σ_0^2	0.17 (0.41)****	0.16 (0.40)****	0.16 (0.40)****
Time	σ_1^2	0.03 (0.16)***	0.03 (0.17)****	0.03 (0.18)****
Goodness of fit				
Deviance		2,585	2,558	2,549
AIC		2,600	2,581	2,584
BIC		2,625	2,611	2,624

Note: Models 4 to 7 cannot be directly compared with Models 1 to 3 because 109 participants failed to provide enough information about their level of effort to be included in these analyses. In all models, the intercept parameter estimate (γ_{00}) represents the average well-being (WB) score at baseline across the sample. Because no model attempted to predict differences in baseline scores, the intercept retained the same meaning throughout the models. In Model 7, γ_0 is the estimate of the slope (rate of linear change in WB over time) across the sample. In Model 8, γ_{10} shifts to represent the rate of change in WB for participants who exerted the average level of effort (effort was centered), whereas γ_{11} represents the effect of more or less than average effort on an individual's rate of change over time (regardless of culture). In Model 9, γ_{10} again shifts to represent the rate of change in WB for participants who exerted the average level of effort in the U.S. sample, whereas γ_{11} represents the effect of more or less than average effort on an individual's change in WB over time in the U.S. sample. γ_{12} represents the additional effect of being from the South Korean sample (over and above the U.S. sample) for participants who exerted the average level of effort, whereas γ_{13} represents the additional effect of being from the South Korean sample (over and above the U.S. sample) and exerting more or less than average effort on an individual's change in WB over time. In all models, the intercept and slope (Time) were free to vary.

* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .001$. All p values in this table are two-tailed.

People all around the world are increasingly attempting to improve their happiness through simple positive activities. Indeed, one of the authors' books describing empirically validated happiness-increasing strategies has been translated and sold in 22 countries. Our study revealed, however, that, while some positive activities (doing kindness) might have universal appeal, others (writing gratitude letters) might only work in certain cultures. Future studies need to continue to investigate the cultural boundary conditions, as well as the critical mediators (e.g., guilt), that might affect the efficacy of positive activities. For example, South Koreans may actually feel relatively more "well" when experiencing a balance of positive and negative emotions (Uchida, Norasakkunkit, & Kitayama, 2004), yet a conception of happiness as an average of life satisfaction, positive emotion, and (less) negative emotion would not reflect that (Busseri & Sadava, 2010). In sum, because happiness not only feels good but also positively affects the happy person's family, workplace, and community (Lyubomirsky, King, et al., 2005), improving happiness across the globe is a worthy pursuit.

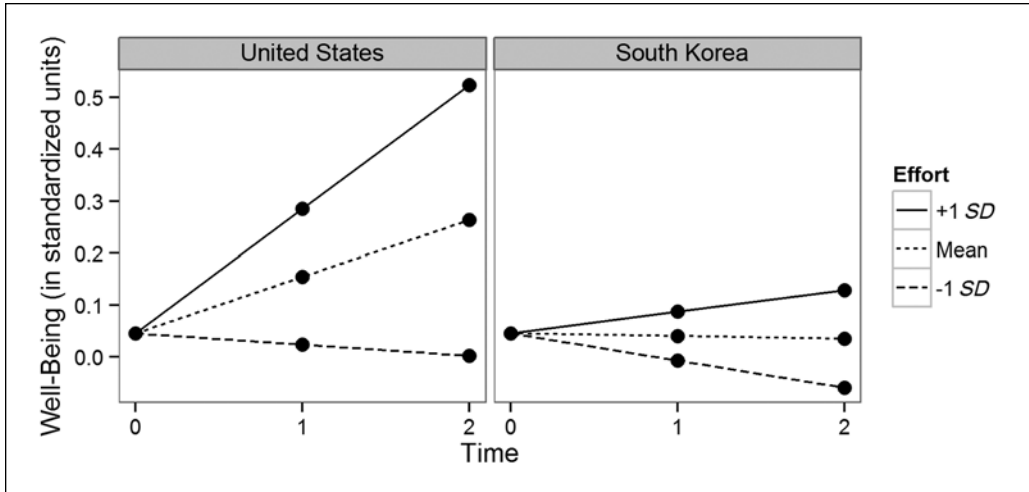


Figure 2. Changes in well-being by level of effort through posttest.
 Note: On the x-axis, 0 = baseline, 1 = midpoint, and 2 = posttest.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Notes

1. We tested the effect of switching (vs. not switching) positive activities during the 6-week intervention period to examine the effect of variety. Because no differences were found between people who changed positive activities during the intervention and those who did not, we combined all participants who started with gratitude into one group, all participants who started with kindness into a second group, and all participants who completed the control task into a third group.
2. We analyzed the data from Asian participants in the U.S. sample separately from the rest of the U.S. sample and found that they followed the same trends as the overall U.S. sample (as opposed to mirroring the South Korean trends).
3. No significant group differences on our primary dependent variables were found at baseline.
4. U.S. participants scored higher on both scales than South Korean participants, so scores were standardized within culture to account for potential response biases. Midpoint, posttest, and follow-up scores were standardized based on the mean and standard deviation from baseline. We also ran all analyses with scores standardized across cultures and found all of the same between-person trends.
5. Further details about method and results (including activity instructions) are available from the first author.
6. This nonsignificant effect demonstrates that South Korean participants in the kindness condition showed similar increases in well-being as did U.S. participants.
7. One hundred and nine participants were excluded from the effort analyses for not reporting their level of effort at half or more of the time points.

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