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Adherence to Emotion Norms Is Greater in Individualist Cultures Than in Collectivist Cultures

Allon Vishkin[1, 2], Shinobu Kitayama[2], Martha K. Berg[2], Ed Diener[3], Daphna Gross-Manos[4], Asher Ben-Arieh[5], and Maya Tamir[6]

[1] Faculty of Data and Decision Sciences, Technion—Israel Institute of Technology
[2] Department of Psychology, University of Michigan
[3] Department of Psychology, University of Illinois, Urbana-Champaign
[4] Department of Social Work, Tel Hai Academic College
[5] Paul Baerwald School of Social Work and Social Welfare, The Hebrew University of Jerusalem
[6] Department of Psychology, The Hebrew University of Jerusalem

It is generally assumed that there is greater pressure to conform to social norms in collectivist cultures than in individualist cultures. However, most research on cultural differences in social norms has examined norms for behaviors. Here, we examine cultural differences in norms for emotions. Relative to members of collectivist cultures, members of individualist cultures are more attuned to internal states and value them more. Therefore, we predicted that adherence to emotion norms would be greater in individualist than in collectivist cultures. In four studies with 119 samples from 69 distinct countries and over 200,000 participants, we estimated adherence to emotion norms in different cultures, and how deviation from emotion norms is associated with life satisfaction. As predicted, in countries higher in individualism, emotional experiences of individuals were more homogenous and more concordant with the emotions of others in their culture. Furthermore, in more individualist countries, deviation from the mean emotional experience was linked to lower life satisfaction. We discuss two complementary mechanisms that may underlie such differences.

Keywords: culture, emotion, norms, well-being

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Decisions about how many children to have, how to share resources, and how to behave in social interactions are shaped by social norms. Social norms are rules that are implicitly or explicitly understood by members of a culture that guide or constrain conduct (Cialdini & Trost, 1998). Social norms are designed to promote well-being by facilitating social coordination and by transmitting and sustaining values (Schmidt & Tomasello, 2012; Sherif, 1936). Adherence to social norms, which leads to greater conformity, has been identified as a central feature of collectivist cultures (Triandis, 1989, 1995). In this investigation, we suggest that greater adherence to norms may not always characterize more collectivist cultures. Although adherence to social norms may be greater in more collectivist cultures when they pertain to behaviors, this may not necessarily be the case when they pertain to emotions. In fact, the pattern might even be reversed.

Most research to date on social norms has targeted norms for behaviors (Bicchierei, 2006; Gelfand et al., 2011; Legros & Cislaghi, 2020; van Kleef et al., 2019). Behaviors occur predominantly in the social sphere, and social norms for behaviors create a shared understanding of acceptable and unacceptable manners of acting, which can mitigate conflict and facilitate large-scale cooperation for addressing external threats, such as pathogens and

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Allon Vishkin https://orcid.org/0000-0002-9655-7449
Shinobu Kitayama https://orcid.org/0000-0001-9147-7936
Martha K. Berg https://orcid.org/0000-0002-6496-1703
Maya Tamir https://orcid.org/0000-0002-2675-8042

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All scripts are available on the Open Science Framework, as well as the data sets for Studies 1 and 2 (https://osf.io/wkvcg/?view_only=ce93ba41f0d9427b87c575b60bb459c3). Data sets for Studies 3 and 4 are publicly accessible.

Correspondence concerning this article should be addressed to Allon Vishkin, Faculty of Data and Decision Sciences, Technion—Israel Institute of Technology, Technion City, Haifa, 3200003, Israel. Email: allonv@technion.ac.il

ecological disasters (Murray et al., 2011; Roos et al., 2015). Given that collectivist cultures place greater emphasis on social harmony (Markus & Kitayama, 1991), adherence to norms for behaviors should be greater, and assimilation to them more consequential, in collectivist than in individualist cultures. Indeed, both conformity and adherence to social norms for behaviors tend to be greater in collectivist contexts than in individualist contexts (Bond & Smith, 1996; Carpenter, 2000; Gelfand et al., 2011; Harrington & Gelfand, 2014; Talhelm & English, 2020). For instance, Harrington and Gelfand (2014) used various social and demographic indices to estimate the strength of social norms for behaviors in the 50 United States and found this estimate was correlated with collectivism (r = .37). Similarly, the strength of social norms for behaviors across countries (assessed with a face-valid rating of the norm strength) was correlated with collectivism (r = .47, Gelfand et al., 2011). An additional study found a similar effect size for the association between the strength of social norms (assessed by coding an anthropological database) and collectivism (r = .44; Carpenter, 2000). Furthermore, regions in China with greater adherence to norms for behaviors are higher in collectivism (Talhelm & English, 2020). Finally, people from more collectivist cultures react more strongly to people who violate norms for behaviors such as speaking loudly on a bus or cutting in line (Brauer & Chaurand, 2010).

Norms, however, are not limited to behaviors. Norms can apply to any target that is socially or culturally significant, including emotions (A. H. Fischer, Manstead, et al., 2004; Frijda & Mesquita, 1994). We define emotions as mental reactions to events that are meaningful to the individual, involve subjective hedonic experiences, and can propel people to action (see Barrett, 2012; Ekman & Davidson, 1994; Frijda, 1986). Although conceptualizations of emotion vary, most of them acknowledge subjective experience as a key feature of emotions.

Emotion norms are culturally variable social norms that prescribe how people should feel either in general or in specific situations (Hochschild, 1983). Emotion norms can prescribe which emotions one should feel, such as norms in favor of experiencing positive emotions in the United States (Eid & Diener, 2001), and they can proscribe which emotions one should not feel, such as norms against experiencing negative emotions in the United States (Chentsova-Dutton et al., 2014). If a certain culture demonstrates greater adherence to norms for behaviors, will it also demonstrate greater adherence to norms for emotions? It is possible that adherence to norms is categorically greater in some cultures than in others, irrespective of whether those norms pertain to behaviors or emotions. If so, adherence to all norms would best be captured by culture-level indices that assess adherence to norms for behaviors such as cultural tightness (Gelfand et al., 2011).

However, it is also possible that cultural variation in norm adherence depends on domains (e.g., behavioral vs. emotional), a possibility raised by Triandis (1995). According to a functionalist perspective of norms, social norms serve to reinforce culturally sanctioned values (Schmidt & Tomasello, 2012). Individualist cultures prioritize internal attributes over public behaviors. They therefore emphasize the self-expression of one's internal attributes (English & Chen, 2011; Guignon, 2004; Markus & Kitayama, 1991), and emotions are a prominent expression of one's internal attributes (English & John, 2013). Collectivist cultures emphasize public behaviors, likely placing less emphasis on each person's internal attributes and personal experiences, including emotional experience. Therefore, individualist cultures may develop greater adherence to emotion norms compared to collectivist cultures. This leads to the hypothesis that adherence to norms for behaviors is greater in more collectivist cultures, as previously found in the literature. Importantly, however, adherence to norms for emotions may be greater in more individualist cultures.

Initial evidence indicates some merit in this possibility. Eid and Diener (2001) assessed the self-reported appropriateness and desirability of eight emotions in two countries high in individualism—the United States and Australia—and two countries high in collectivism—China and Taiwan. They found greater consensus regarding desirable and appropriate positive emotions (particularly pride) in the two individualist cultures than in the two collectivistic cultures. The authors concluded that there is greater adherence to certain emotion norms in more individualist cultures.

Although promising, the Eid and Diener (2001) study had limitations. Their data were based on a limited number of emotions and a small number of cultures. Moreover, their findings were unclear for negative emotions. In addition, they did not examine implications of conforming to (or deviating from) the emotion norms of one's culture. The present investigation sought to overcome these limitations by examining a larger number of emotions across a wider range of cultures, for both valued and experienced emotions, and by testing the implications of adherence to emotion norms for well-being.

Based on the initial findings by Eid and Diener (2001) and the functionalist perspective on how adherence to emotion norms may vary across cultures, our first key prediction in this investigation was that adherence to norms for emotions is greater in more (vs. less) individualist cultures (Hypothesis 1). For example, in more individualist cultures, there might be more internalized pressure to avoid feeling sad or to feel as cheerful as others do. Second, given that adherence to social norms predicts higher well-being (e.g., Gebauer et al., 2012; Stavrova et al., 2013; Stavrova & Luhmann, 2016), we predicted that adherence to emotion norms would be more consequential for well-being in individualist cultures than in collectivist cultures (Hypothesis 2). For example, feeling as happy, proud, or angry as other people in one's culture might be associated with greater well-being in individualist than in collectivist cultures.

Measures of Norm Adherence

In investigating our hypotheses, it is crucial to have valid indicators of norm adherence. Previous research has measured adherence to social norms using a wide range of methods, including profile correlations to assess the concordance of individuals with their culture (De Leersnyder et al., 2011), standard deviations to assess variability or homogeneity (Murray et al., 2011; Uz, 2015), self-report measures of norm strength (Gelfand et al., 2011), and the legality of punitive behaviors, such as corporal punishment in schools (Harrington & Gelfand, 2014). We tested adherence to emotion norms at the country level using two of the methods used in previous research.

First, greater adherence to social norms should result in cultural homogeneity (Gelfand et al., 2006; Triandis, 1989; Uz, 2015). We thus followed Murray et al. (2011) and used standard deviations as a measure of cultural homogeneity. We assume that smaller standard decisions for emotion ratings reflect greater norm adherence and rule out the possibility that they reflect other phenomena. Using this

measure, Murray et al. (2011) show that adherence to behavioral norms is greater in societies with greater historical threat (Murray et al., 2011). Likewise, Uz (2015) finds that country-level standard deviations are highly correlated with historical threat ($r = -.69$; Uz, 2015). We extended this work and applied this measure to emotion norms.

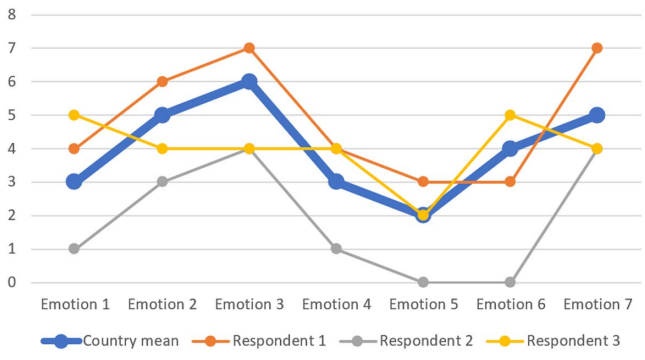
Second, another measure of norm adherence used in the current literature involves the degree to which an individual's emotions are concordant with the average emotional profile of members of his or her culture, known as *profile correlations* (De Leersnyder et al., 2011). A higher profile correlation reflects greater concordance with the social norms in one's culture. De Leersnyder et al. (2011) used this measure to test how immigrants might adopt the emotion norms of their host culture.

These measures reflect different aspects of adherence to norms. As illustrated in Figure 1, Respondents 1 and 2 have identical emotion concordances with the country-level mean emotional profile, but their absolute distance from the country-level means differs. In addition, Respondents 1 and 3 have identical absolute distances from country-level means, but their emotion concordances differ. Thus, while the concordance measure reflects how various emotions are prioritized relative to each other, the homogeneity measure reflects how close emotional ratings are to each culture's mean, separately for each emotion. Given this dissociation, the two measures represent different aspects of adherence to emotion norms.

It may be argued that the assessment of homogeneity does not reflect emotion norms per se but instead reflects cultural differences in response styles (C. Chen et al., 1995). Response styles in certain cultures reflect a moderacy bias, in which people in certain cultures avoid using scale endpoints, effectively reducing the dispersion of responses. Smaller standard deviations for valued and experienced emotions in more individualist cultures may thus be an artifact of the tendency to avoid using scale endpoints in such cultures rather than a true reflection of cultural differences in the homogeneity of valued and experienced emotions. To address this alternative account, we ran the same set of analyses on personal values. Measures of personal values have the advantages of being established cross-culturally (Schwartz, 1992; Schwartz et al., 2012) and of sampling the entire content domain of values. In addition, in the present studies, measures of personal values included a similar number of items to valued or experienced emotions in each study in which they were assessed (see Table 1). Furthermore, measures of personal values have been used previously to establish cultural differences in response styles (Smith et al., 2016). If the association between individualism and homogeneity of emotions is due to cultural differences in response styles, similar results should be obtained when analyzing personal values.

Figure 1

Illustration of How Measures of Emotion Concordances and Homogeneity Reflect Different Aspects of Adherence to Emotion Norms



Note. Emotion concordances with the country mean using Spearman's rho for Respondents 1 and 2: .81; for Respondent 3: .12. Total absolute distance from the country mean for Respondents 1 and 3: 8; for Respondent 2: 15. See the online article for the color version of this figure.

The Present Investigation

Norms influence beliefs, motivations, actions, and experiences, and each of these can be tested at different levels of analysis. Norms can refer to actions and experiences that are believed to be widely approved or disapproved among members of a given culture (prescriptive norms) or to actions and experiences that are believed to be widely engaged in or disengaged in by most members of a culture (descriptive norms; Cialdini et al., 1990). Prescriptive norms can be captured by intersubjective consensus and homogeneity regarding the actions and experiences that are most valued and shared in a culture (Wan et al., 2007). Descriptive norms can be captured by the actual homogeneity in actions and experiences in a given culture. We tested whether greater individualism predicts these aspects of emotion norms. First, we tested how emotion norms may be reflected in people's motivations by testing for homogeneity in personally valued emotions (Study 1). Second, we tested whether individualism predicts intersubjective homogeneity regarding valued emotions (Study 2), which captures consensus in beliefs about appropriate and inappropriate emotions. Third, we tested whether individualism predicts actual consensus in experienced emotions (Studies 1–4). Finally, in the studies with measures for both valued and experienced emotions (Studies 1 and 2), we tested whether individualism predicts a greater correspondence between them.

In the current investigation, we first test whether individualism predicts adherence to emotion norms in general, regardless of the norms' content (e.g., being happy or not being sad). Testing adherence to norms in general, beyond norms' particular content, is consistent with and inspired by research on behavior norms across cultures, which assesses adherence to norms for behaviors in general, rather than a particular type or set of behaviors (Gelfand et al., 2011). Then, building on previous work which suggests that adherence to norms for positive emotions varies by individualism to a greater extent than adherence to norms for negative emotions (Eid & Diener, 2001), we test whether the association between individualism and adherence to emotion norms is moderated by valence.

We tested our hypotheses in four studies that complemented each other (see Table 1). All studies assessed experienced emotions, and Studies 1 and 2 assessed valued emotions as well. Furthermore, Studies 1 and 2 included a test for whether emotions valued at the cultural level predict emotions experienced at the individual level. Study 1 included an assessment of the largest number of emotions (60), Study 2 included the largest number of cultural samples (48), Study 3 included the largest number of participants (96,918), and Study 4 tested our hypotheses in a novel sample of school-aged children. All studies allowed us to test whether these associations are also predicted by a country-level index assessing adherence to norms for behaviors (Gelfand et al., 2011), or if they are unique to

Table 1
Study Characteristics

Study	Source	Samples	Participants	Personally or intersubjectively valued emotions	Experienced emotions	Personal values
1	Tamir et al. (2016)	8	2,324	60	60	57
2	International College Survey 2001 (Kuppens et al., 2006)	48	9,989	13	14	12
3	European Social Survey, Waves 3 and 6	30	96,918	—	11	21
4	International Survey of Children's Well-Being, Wave 3	33	90,926	—	6	—

collectivism–individualism. Furthermore, Studies 2–4 tested whether adhering to emotion norms, or deviating from them, is more consequential for life satisfaction in collectivist than in individualist cultures. Finally, Studies 1–3 tested whether the greater homogeneity in valued and experienced emotions is specific to the emotion domain, or generalizes to personal values as well.

Study 1

The data in Study 1 were collected as part of a larger cross-cultural project on emotions and values. Countries were selected to represent distinct regions around the world that differ in their prevailing values (Inglehart & Baker, 2000; Schwartz, 2006).

Method

Participants

We analyzed a data set with 2,328 participants from eight countries (Tamir et al., 2016). Four participants were removed for missing data on valued or experienced positive or negative emotions, leaving eligible data from 2,324 participants (see Table S1, for sample characteristics).

Measures

Collectivism–Individualism. Country-level ratings of collectivism–individualism were computed by averaging across indices of Hofstede's individualism index (Hofstede et al., 2010), Schwartz's scores for autonomy versus embeddedness (Schwartz, 1994, 2006), and Welzel's scores for emancipative values (Welzel, 2013, 2014), which were each normalized to a scale from 0 to 10. A principal component analysis revealed that a single factor explained 77.5% of the variance, with loadings ranging from .80 for Hofstede's scores to .93 for Schwartz's scores. All three indices have been thought to address the same underlying construct (Minkov, 2020). Averaging scores across measures of individualism to achieve more reliable estimates is a common practice (R. Fischer & Boer, 2011; Suh et al., 1998). The particular method used here is nearly identical to a method used previously in the literature (R. Fischer & Boer, 2011), except that we used Welzel's scores for emancipative values rather than Inglehart's scores for survival/self-expression (Inglehart & Baker, 2000). Both rely on data from the World Values Survey, and emancipative values are similar to self-expression values, but they are more theoretically grounded, more consistently operationalized, and have better psychometric properties (Welzel, 2013).

Cultural Tightness. Scores for the cross-cultural dimension of tightness–looseness were obtained from an index assessing adherence to norms for behaviors. Gelfand et al. (2011) computed the index based on responses to six items (e.g., "People agree upon what behaviors are appropriate versus inappropriate in most situations in this country"). Tightness scores were available for seven of eight samples.

Personally Valued Emotions. Participants rated how much they wanted to experience particular emotions in their daily lives on a 5-point scale, including the answer choices *never* (coded as 1), *rarely*, *sometimes*, *often*, and *most of the time* (coded as 5). Sixty emotion terms (see Table S2) were presented in a predetermined fixed and random order. A factor analysis distinguished 28 positive emotions from 30 negative emotions, with awe and sympathy loading equally on both factors.

Experienced Emotions. The measure for experienced emotions was identical to the measure for personally valued emotions, except that participants were asked to report how often they typically experience these emotions. A factor analysis distinguished 29 positive emotions (including sympathy) from 30 negative emotions, with awe loading equally on both factors.

Personal Values. Participants reported their personal values on the 57 items of the Portrait Values Questionnaire–Revised (PVQ-R; Schwartz et al., 2012) on a 6-point scale from *not like me at all* (later coded as 1) to *very much like me* (later coded as 6). The PVQ-R assesses a circumplex of human values and has been validated in cross-cultural studies.

Analyses

Homogeneity was assessed via standard deviations. Standard deviations for valued and experienced emotions were computed for each emotion in each country. Then, we ran multilevel regressions using the package lme4 (Bates et al., 2015) to test whether collectivism–individualism (C–I), as a Level-2 variable, predicted the standard deviation (*SD*) in valued or experienced emotions within each country, with intercepts of countries and intercepts and slopes of emotions as random factors. The multilevel equation in Pseudo R Code was as follows:

$$\text{lmer}(\text{SD} \sim \text{C} - \text{I} + (1 + \text{C} - \text{I}|\text{emotion}) + (1|\text{country})). \quad (1)$$

Small standard deviations might reflect extreme mean values—both high and low means are associated with small standard

deviations. Therefore, we repeated these analyses by regressing collectivism–individualism and mean valued or experienced emotions on the standard deviation (based on the absolute distance of means from the scale midpoint). In the event of nonconvergence, we dropped the covariance between estimates of random factors. In a single instance throughout this investigation, we also needed to drop a random intercept to reach convergence. We note all instances in which random factors were dropped to reach convergence in the Supplemental Results. Since this analysis examined the standard deviation of each emotion in each country, the number of observations was equal to the number of emotions multiplied by the number of countries.

Next, emotional concordances were computed via profile correlations (De Leersnyder et al., 2011, 2014). Specifically, we calculated the mean country-level ratings of the emotions assessed and then computed Spearman correlations between these scores and each participants' emotion ratings, separately for personally valued emotions and for experienced emotions. We relied on Spearman correlations because they are more robust to outliers, which can highly skew profile correlations. Then, we transformed the correlations into a linear variable via a Fisher transformation, which is an acceptable method of transforming Spearman correlations (Zar, 2005). Furthermore, since the variation between positive and negative emotions is frequently greater than the variation within each of these groups of emotions, hedonic balance (positive emotions minus negative emotions) is a strong predictor of emotional concordance. To tease apart concordance scores from hedonic balance, we ran analyses separately for positive emotions and negative emotions. The multilevel equation in Pseudo R Code was as follows:

$$\text{lmer}(\text{Concordances} \sim \text{C} - \text{I} + (1|\text{country})). \quad (2)$$

It was not possible to calculate a profile correlation for participants with zero variance in emotion experience (0.2% of the sample for personally valued positive emotions, 2.0% of the sample for personally valued negative emotions, 0.7% of the sample for experienced positive emotions, and 0.7% of the sample for experienced negative emotions).

We report the intraclass correlation coefficient (ICC) throughout the results. The ICC we report for the analyses on standard deviations reflects how much of the variance in standard deviations is due to differences between countries. The ICC for the analyses on profile correlations reflects how much of the variance in profile correlations is due to differences between countries. Higher values indicate that the country-level differences explain a greater proportion of the variance.

Results

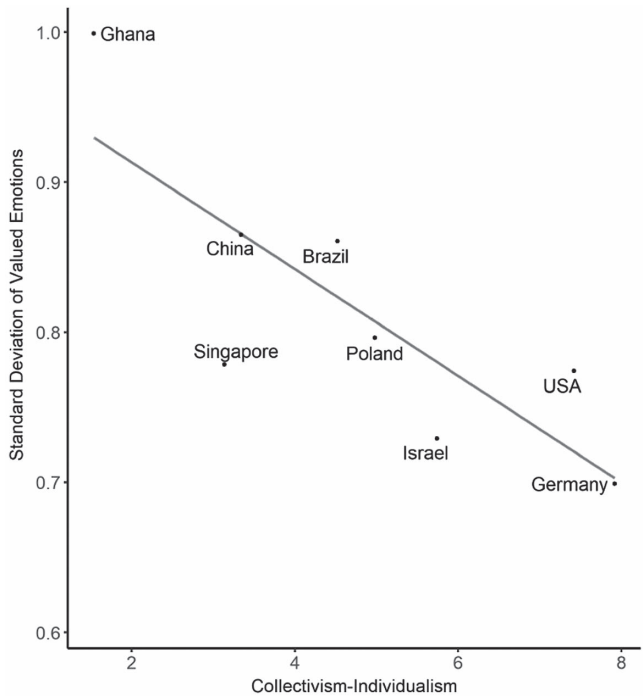
Personally Valued Emotions

First, we evaluated Hypothesis 1 on personally valued emotions by testing whether the standard deviations of personally valued emotions are greater in more individualist countries. The ICC for country was .34, indicating that country-level differences account for more than a third of the variance in standard deviations. Multilevel regressions revealed that, across emotions, standard deviations for personally valued emotions were smaller in more (vs. less) individualist countries, $b = -.04$, $t(6) = -3.44$, $p = .013$ (see Table S3). Results remained significant when controlling for mean personally valued emotions, $b = -.03$, $t(6) = -3.09$, $p = .021$; see Table S4. The average correlation between standard deviations and collectivism–individualism for each of the 60 emotions was $r = -.60$, with correlations ranging from $r = -.91$ to $r = .17$ (see Table S5). In total, 59 of the 60 correlations were negative, indicating that individualism was associated with smaller standard deviations for all emotions except one. These were not qualified by valence, such that the average correlation for negative emotions ($r = -.58$) was no different from the average correlation for positive emotions ($r = -.61$), $t(50) = 0.86$, $p = .393$. To illustrate this at the country level, individualism was associated with smaller standard deviations in personally valued emotions when collapsing across emotions in each country, $r = -.82$, $p = .013$ (see Figure 2). This remained significant when controlling for the mean of personally valued emotions.

Next, we evaluated Hypothesis 1 by testing whether profile correlations are higher in more individualist countries. The ICCs were low for both (positive emotions: .13; negative emotions: .04), indicating that the country-level differences account for a small portion of the variance among these profile correlations. Concordance with a country's emotional profile did not vary by individualism for positive emotions, $b = .01$, $t(6) = 0.31$, $p = .765$; see Table S6, or for negative emotions, $b = .01$, $t(6) = 1.70$, $p = .138$; see Table S7. A comparison of confidence intervals revealed that associations are similar for both positive and negative emotions.

Figure 2

The Association Between Collectivism–Individualism and the Variability of Personally Valued Emotions (r = −.82), Study 1



Experienced Emotions

First, we evaluated Hypothesis 1 on experienced emotions by testing whether standard deviations of emotion experience are greater in more individualist countries. The ICC for country was .57, indicating that country-level differences account for more than half of the variance in standard deviations. Multilevel regressions revealed no significant association both without controlling for means, $b = -.03$, $t(6) = -1.72$, $p = .136$; see Table S8, and with controlling for means, $b = -.01$, $t(6) = -0.77$, $p = .470$; see Table S9. The average correlation between standard deviations and collectivism–individualism for each of the 60 emotions was $r = -.47$, with correlations ranging from $r = -.75$ to .27 (see Table S10). In total, 58 of the 60 correlations were negative, indicating that greater individualism was associated with smaller standard deviations for all emotions except two. These were not qualified by valence, such that the average correlation for negative emotions ($r = -.44$) was similar to the average correlation for positive emotions ($r = -.50$), $t(57) = 1.23$, $p = .223$.

Next, we evaluated Hypothesis 1 on experienced emotions by testing whether profile correlations are higher in more individualist countries. The ICCs were low for both positive emotions and negative emotions (.09 and .09), indicating that country-level differences account for a small portion of the variance among these profile correlations. Concordance with a country's emotional profile did not vary by individualism for positive emotions ($b = -.005$, $t(6) = -0.31$, $p = .766$; see Table S11) or for negative emotions ($b = .03$, $t(6) = 1.92$, $p = .104$; see Table S12). Nevertheless, the effects are outside of each others' confidence intervals, indicating that associations with individualism are more positive for profile correlations of negative emotions than for profile correlations of positive emotions.

Correspondence Between Valued Emotions and Experienced Emotions. In a culture with greater adherence to emotion norms, valued emotions should be better predictors of emotion experience compared to a culture with weaker adherence to emotion norms. Therefore, we tested whether the correspondence between valued emotions and experienced emotions varies by country-level individualism. We computed profile correlations between participants' emotion experience and mean country-level ratings of intersubjectively valued emotions for the 28 positive emotion terms that appeared in both measures (ICC = .10), as well as for the 30 negative emotions terms that appeared in both measures (ICC = .09). Individualism did not predict the correspondence between valued and experienced positive emotions, $b = -.01$, $t(6) = -0.66$, $p = .531$; see Table S13, or valued and experienced negative emotions, $b = .01$, $t(6) = 1.22$, $p = .268$; see Table S14. A comparison of confidence intervals revealed that associations are similar for both positive and negative emotions.

Personal Values

To evaluate whether the results for standard deviations are specific to emotions or instead reflect more general tendencies that may be due to cultural differences in response styles, we tested whether collectivism–individualism predicts homogeneity in personal values. Standard deviations were computed for each of the 57 values in each country. Multilevel models on the standard deviations, with observations nested in countries and in values, revealed no association between individualism and the standard deviation of values, $b = -.01$, $t(7) = -1.01$, $p = .348$, and results remained unchanged after controlling for value means, $b = -.01$, $t(6) = -0.72$, $p = .500$. These results suggest that the greater homogeneity of emotions in more individualist cultures is not due to cultural differences in response styles.

Cultural Tightness

To test whether associations are unique to collectivism–individualism, we repeated the analyses while replacing cultural tightness with scores for collectivism–individualism. For personally valued emotions, tightness was not associated with standard deviations, $b = .000$, $t(5) = .043$, $p = .967$, profile correlations for positive emotions, $b = -.01$, $t(5) = -.65$, $p = .542$, or profile correlation for negative emotions, $b = -.004$, $t(5) = -.41$, $p = .697$. For experienced emotions, tightness was not associated with standard deviations, $b = -.000$, $t(5) = -.09$, $p = .934$, profile correlations for positive emotions, $b = -.006$, $t(5) = -.39$, $p = .711$, or profile correlations for negative emotions, $b = .004$, $t(5) = 0.91$, $p = .405$. Finally, tightness was not associated with profile correlations between experienced emotions and country profiles of valued positive emotions, $b = -.002$, $t(5) = -.12$, $p = .909$, or negative emotions, $b = .001$, $t(5) = 0.18$, $p = .865$.

Discussion

The results revealed that standard deviations for personally valued emotions were smaller in more (vs. less) individualist countries. This supports Hypothesis 1, which proposed that adherence to norms for emotions is greater in more individualist cultures. On the other hand, the results for standard deviations of experienced emotions showed no significant effects. This may reflect the greater influence of culture on valued emotions than on experienced emotions (Tsai et al., 2006). Valued emotions are more likely to be learned and culturally determined, whereas experienced emotions are likely also influenced by situational contingencies (e.g., De Leersnyder et al., 2013) or hereditary factors (e.g., Tellegen et al., 1988). Meanwhile, emotion concordances were not significantly associated with individualism in any analysis. These null effects may have been due to the low statistical power in Study 1, which included data from only eight countries. The null effects for emotion concordances might also reflect the low ICC values for profile correlations, indicating that country-level measures explain little of their variance.

Null findings on the standard deviations of personal values are inconsistent with the argument that standard deviations for personally valued emotions were smaller in more (vs. less) individualist countries due to response styles. Furthermore, null findings with tightness are inconsistent with the argument that this finding is driven by tightness–looseness rather than collectivism–individualism.

A key strength of Study 1 is the large number of emotions assessed, although a weakness is the limited number of countries that were included. Study 2 addressed this limitation by assessing adherence to norms for valued and experienced emotions across a larger number of countries.

Study 2

In Study 2, we analyzed data from the International College Survey 2001 (Kuppens et al., 2006). In addition to experienced emotions, data were available for intersubjectively valued emotions, the emotions members of a culture generally believe to be valued and shared within that culture (Wan et al., 2007). A culture with greater adherence to emotion norms should have smaller standard deviations for intersubjectively valued emotions as well as higher concordance with intersubjectively valued emotions. Furthermore, the intersubjective valuation rating should predict emotion experience, especially in cultures with greater adherence to emotion norms.

Method

Participants

The survey included 10,018 participants from 48 countries. Twenty-nine participants were excluded for missing data on valuing or experiencing positive or negative emotions, or on life satisfaction, leaving eligible data from 9,989 participants. All participants were college students (see Table S16, for sample characteristics).

Measures

Collectivism–Individualism. Country-level ratings of collectivism–individualism were calculated as in Study 1. These ratings were available for all 48 samples.

Cultural Tightness. Country-level ratings of cultural tightness were obtained as in Study 1. Tightness scores were available for 23 of 48 samples.

Intersubjectively Valued Emotions. Participants rated how valued each emotion is in their society using the following prompt: "How appropriate and valued is each of the following emotions in your society? Do people approve of this emotion?" Responses were provided on a 9-point scale from 1 (*not at all*) to 9 (*all the time*). Positive emotions included *contentment*, *happy*, *cheerful*, *pride*, *gratitude*, and *love*. Negative emotions included *sad*, *anger*, *guilt*, *shame*, *worry*, *stress*, and *jealousy*.

Emotion Experience. Participants reported how often they felt each of 14 emotions in the past week on a 9-point scale (1 = *not at all*; 9 = *all the time*). Positive emotions included *happy*, *cheerful*, *pride*, *gratitude*, *love*, *and pleasant*. Negative emotions included *sad*, *anger*, *guilt*, *shame*, *worry*, *stress*, *jealousy*, *and unpleasant*.

Life Satisfaction. Life satisfaction was assessed with the Satisfaction With Life Scale (SWLS; Diener et al., 1985; Pavot & Diener, 1993). The scale consists of five items (e.g., "In most ways, my life is close to ideal") completed on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*).

Personal Values. Participants reported their personal values on 12 items, including happiness, intelligence and knowledge, material wealth, physical attractiveness, pessimism, physical comforts, excitement and arousal, competition, getting to heaven, self-sacrifice, success, and fun, on a scale from 1 (*do not value it at all*) to 9 (*value it extremely*).

Results

Homogeneity and Concordances

As in Study 1, standard deviations for valued or experienced emotions were computed for each emotion in each country. In addition, emotional concordances were computed via profile correlations. It was not possible to calculate a profile correlation for participants with zero variance or too much missing data (6.8% of the sample for intersubjectively valued positive emotions, 4.0% of the sample for intersubjectively valued negative emotions, 1.9% of the sample for experienced positive emotions, and 1.1% of the sample for experienced negative emotions).

Intersubjectively Valued Emotions. First, we evaluated Hypothesis 1 on intersubjectively valued emotions by testing whether standard deviations of intersubjectively valued emotions are smaller in more individualist countries. The ICC for country was .50, indicating that country-level differences account for half of the variance in standard deviations. Multilevel regressions revealed that, across emotions, standard deviations for valued of emotions were smaller in more (vs. less) individualist countries, $b = -.07$, $t(50) = -3.75$, $p < .001$, see Table S16. Results remained significant when controlling for the absolute distance of means from the scale midpoint, $b = -.07$, $t(48) = -4.43$, $p < .001$; see Table S17. The average correlation between standard deviations and collectivism–individualism for each of the 13 emotions was $r = -.42$, with correlations ranging from $r = -.58$ to $-.19$ (see Table S18). All the correlations were negative, indicating that individualism was associated with smaller standard deviations for all emotions. The average correlation for negative emotions ($r = -.40$) was no different from the average correlation for positive emotions ($r = -.44$), $t(10) = 0.74$, $p = .48$.

Next, we evaluated Hypothesis 1 by testing whether profile correlations are higher in more individualist countries. The ICCs were low for both positive emotions (.06) and negative emotions (.05), indicating that country-level differences account for a small portion of the variance among these profile correlations. Individualism was unrelated to profile correlations for positive emotions, $b = .02$, $t(47) = 1.34$, $p = .188$; see Table S19, or for negative emotions, $b = .02$, $t(46) = 1.92$, $p = .061$; see Table S20. A comparison of confidence intervals revealed that associations were similar for both positive and negative emotions.

Experienced Emotions. First, we evaluated Hypothesis 1 on experienced emotions by testing whether standard deviations of emotion experience are smaller in more individualist countries. The ICC for country was .20, indicating that country-level differences account for 20% of the variance in standard deviations. Multilevel regressions on the standard deviation of emotions revealed that, across emotions, standard deviations for emotions were smaller in more (vs. less) individualist countries, $b = -.04$, $t(40) = -2.88$, $p = .006$ (see Table S21). Results remained significant when controlling for the absolute distance of means from the scale midpoint, $b = -.03$, $t(51) = -2.47$, $p = .017$; see Table S22. The average correlation between standard deviations and collectivism–individualism for each of the 14 emotions was $r = -.29$, with correlations ranging from $r = -.65$ to $r = .14$ (see Table S23). Thirteen of the 14 correlations were negative, indicating that individualism was associated with smaller standard deviations for all emotions except one. The average correlation for negative

emotions ($r = -.37$) was similar to the average correlation for positive emotions ($r = -.19$), $t(11) = -1.74$, $p = .11$.

Next, we evaluated Hypothesis 1 by testing whether profile correlations are higher in more individualist countries. The ICCs were low for both (positive emotions: .04; negative emotions: .07), indicating that country-level differences account for a small portion of the variance among these profile correlations. Nevertheless, participants from more (vs. less) individualist countries showed higher correlations with their country's emotional profile for both positive emotions, $b = .02$, $t(49) = 2.17$, $p = .035$; see Table S24, and for negative emotions, $b = .05$, $t(44) = 4.94$, $p < .001$; see Table S25. A comparison of confidence intervals revealed that the regression coefficient for positive emotions is outside the confidence interval of the regression coefficient for negative emotions ($b = .024$, compare to 95% CI [.033, .076]), and vice versa ($b = .055$, compare to 95% CI [.002, .046]), indicating that profile correlations for negative emotions varied more by individualism than did profile correlations for positive emotions. To illustrate the findings at the country level, we computed the average profile correlation within each country and then regressed scores for collectivism–individualism on this. More (vs. less) individualist countries had higher profile correlations for negative emotions, $r = .57$, $p < .001$ (Figure 3), as well as for positive emotions, $r = .32$, $p = .029$.

Correspondence Between Intersubjectively Valued Emotions and Experienced Emotions. Next, we tested whether intersubjectively valued emotions predict experienced emotions to a greater extent in more individualist cultures. First, for positive emotions, we computed profile correlations between participants' emotion experience and mean country-level ratings of intersubjectively valued emotions across the five positive emotion terms that appeared in both measures (ICC = .04). Participants from more individualist countries showed a higher concordance between intersubjectively valued positive emotions and experienced positive emotions, $b = .08$, $t(45) = 4.18$, $p < .001$; see Table S26. Next, for negative emotions, we computed profile correlations between participants' emotion experience and mean country-level ratings of intersubjectively valued emotions across the seven negative emotion terms that appeared in both measures (ICC = .23). Participants from more individualist countries showed a higher concordance between intersubjectively valued negative emotions and experienced negative emotions, $b = .08$, $t(46) = 4.19$, $p < .001$; see Table S27.[1] A comparison of confidence intervals revealed that associations with individualism did not differ between positive and negative emotions. Overall, these results provide evidence that the correspondence between intersubjectively valued emotions and experienced emotions is greater in more individualist cultures for both positive and negative emotions.

Personal Values

To evaluate whether the results are specific to emotions or instead reflect more general tendencies that may be due to cultural differences in response styles, we tested whether collectivism–individualism predicts homogeneity in personal values. Standard deviations were computed for each of the 12 values in each country. Multilevel models on the standard deviations, with observations nested in countries and in values, revealed no association between individualism and the standard deviation of values, $b = .02$, $t(19) = 0.93$, $p = .362$, and results remained unchanged when controlling for the absolute distance of means from the scale midpoint, $b = -.03$, $t(50) = -1.99$, $p = .052$. Breaking down associations with individualism by specific values revealed that the only two values correlated negatively and significantly with individualism were values that address emotional states: valuing happiness and valuing excitement and arousal (see Table 2). When excluding these two values from the analyses, there still remained no association between individualism and the standard deviation of values without a control for means, $b = .03$, $t(16) = 1.71$, $p = .107$, nor with a control for means, $b = -.03$, $t(44) = -1.68$, $p = .100$. These results suggest that the greater homogeneity of emotions in more individualist cultures is not due to cultural differences in response styles and provide converging evidence from two values that pertain to emotional states.

Cultural Tightness

To test whether associations are unique to collectivism–individualism, we repeated the analyses while replacing cultural tightness with scores for collectivism–individualism. For intersubjectively valued emotions, tightness was not associated with standard deviations, $b = .01$, $t(22) = 0.26$, $p = .797$, profile correlations for positive emotions, $b = -.02$, $t(21) = -1.96$, $p = .063$, or profile correlation for negative emotions, $b = -.01$, $t(21) = -.61$, $p = .551$. For experienced emotions, tightness was not associated with standard deviations, $b = -.003$, $t(21) = -.28$, $p = .779$, profile correlations for positive emotions, $b = -.02$, $t(21) = -1.27$, $p = .218$, or profile correlations for negative emotions, $b = .005$, $t(20) = 0.39$, $p = .704$. Finally, tightness was not associated with profile correlations between experienced emotions and country profiles of valued positive emotions, $b = -.05$, $t(19) = -1.50$, $p = .151$, or negative emotions, $b = -.03$, $t(20) = -1.51$, $p = .148$.

Implications for Well-Being

If experienced emotions are less variable in more (vs. less) individualist cultures because of greater adherence to emotion norms, then adherence to the emotion profile of one's country, or deviation from it, should be more consequential to well-being in more (vs. less) individualist cultures. We assessed consequences for life satisfaction via one analysis testing for deviation from country-level emotion profiles and one analysis testing for adherence to them. First, we obtained deviation scores by calculating the absolute value of the difference between the emotional experience of each participant and the mean experience in his or her country. We did this for three scores: positive emotions, negative emotions, and hedonic balance (the sum of deviation from positive and negative emotions). Then, we ran multilevel regressions predicting life satisfaction (LS) from deviation from the emotion profile of one's country (separately for positive emotions, negative emotions, and hedonic balance), country-level collectivism–individualism, and their interaction. The multilevel equation in Pseudo R Code was as follows:

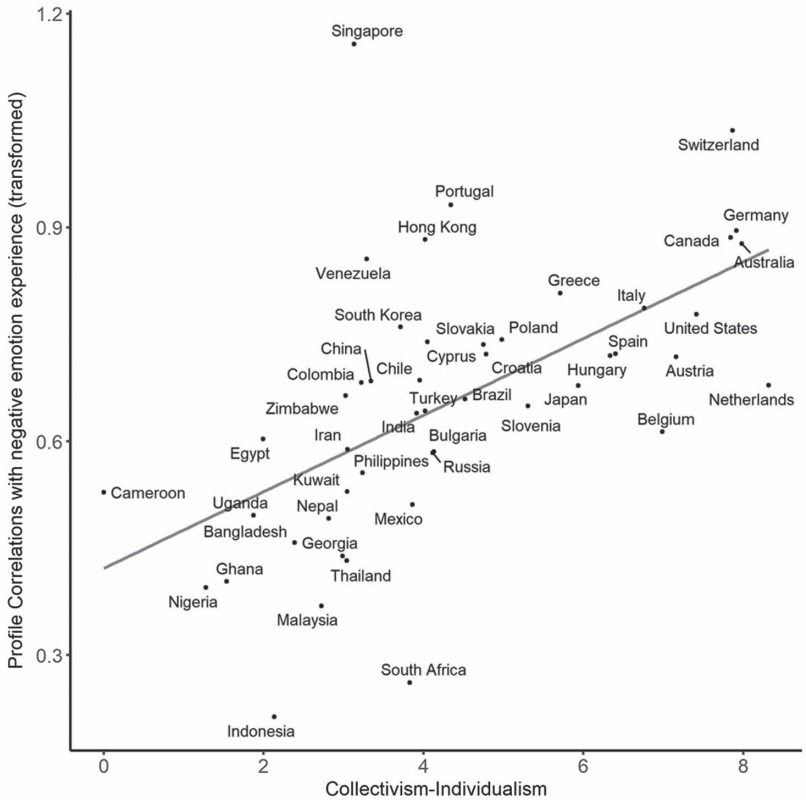
$$\text{lmer}(\text{LS} \sim \text{C} - \text{I} \times \text{Deviation} + (\text{Deviation} + 1|\text{country})). \quad (3)$$

We also controlled for the mean level of emotion experience, which is a strong predictor of life satisfaction (Diener et al., 2003;

[1] It was not possible to calculate a profile correlation for 2.43% of the sample for positive emotions and 1.51% of the sample for negative emotions due to zero variance or too much missing data.

Figure 3

The Association Between Collectivism–Individualism and Fisher-Transformed Profile Correlations With the Negative Emotion Experience of One's Country (r = .57), Study 2



Suh et al., 1998), and for the interaction between emotion experience and collectivism–individualism, which has been found to predict life satisfaction (Suh et al., 1998). A multilevel regression revealed that deviation from country-level means of hedonic balance interacted with country-level collectivism–individualism to predict life satisfaction, $b = -.03$, $t(45) = -4.54$, $p < .001$; see Table S28, and this remained significant after including the two covariates, $b = -.01$, $t = -3.01$, $p = .005$; see Table S29. Thus, deviation from mean country-level hedonic balance was more detrimental to life satisfaction in more (vs. less) individualist countries. This interaction held when examining deviation from country-level means for positive emotions, without covariates: $b = -.03$, $t(46) = -2.99$, $p = .004$, see Table S30; with covariates: $b = -.02$, $t(1694) = -2.79$, $p = .005$, see Table S31, but not consistently for negative emotions, without covariates: $b = -.05$, $t(39) = -3.89$, $p < .001$, see Table S32; with covariates: $b = -.02$, $t(37) = -1.77$, $p = .085$, see Table S33. However, a comparison of confidence intervals revealed that effects were not significantly greater for deviation from positive emotions than for deviation from negative emotions. To illustrate this at the country level, we computed correlations per country between life satisfaction and deviation from country-level means for hedonic balance, conducted a Fisher transformation on them, and then regressed collectivism–individualism on these. Deviation from country-level means was more negatively correlated with life satisfaction in more (vs. less) individualist countries, $r = -.51$, $p < .001$ (Figure 4), and this remained significant when controlling for mean levels of hedonic balance and for the correlation between hedonic balance and life satisfaction. Thus, deviation from a

Table 2

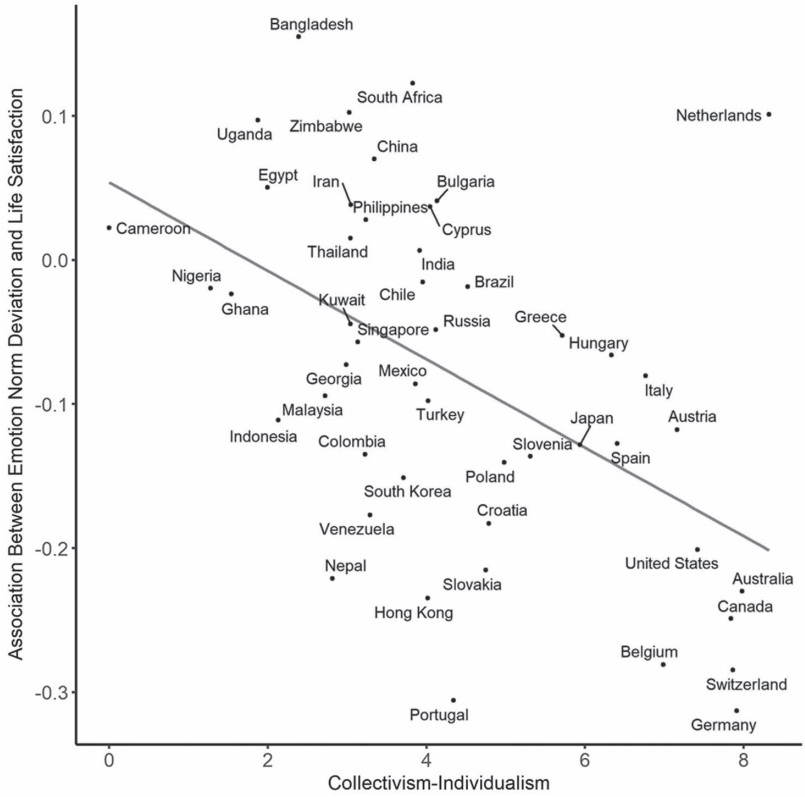
Correlations With Individualism and Standard Deviations of Values (Study 2)

Standard deviation of values	*r*	95% CI
Excitement and arousal	−0.43	[−0.64, −0.17]
Happiness	−0.29	[−0.53, 0.00]
Physical attractiveness	−0.27	[−0.51, 0.01]
Physical comforts	−0.09	[−0.37, 0.20]
Material wealth	0.00	[−0.28, 0.29]
Intelligence and knowledge	0.04	[−0.24, 0.32]
Pessimism	0.08	[−0.21, 0.36]
Competition	0.17	[−0.12, 0.44]
Success	0.27	[−0.01, 0.52]
Self-sacrifice	0.35	[0.07, 0.58]
Fun	0.50	[0.25, 0.69]
Getting to heaven	0.58	[0.35, 0.74]

Note. CI = confindence interval.

Figure 4

The Association Between Collectivism–Individualism and the z-Transformed Correlation Between Life Satisfaction and Deviation from Emotion Norms (r = −.51), Study 2



Note. More negative correlations indicate that deviation from emotion norms is more detrimental to life satisfaction.

country's mean emotion experience predicted lower life satisfaction in more (vs. less) individualist countries.

Second, we tested adherence to emotion profiles via profile correlations, in which multilevel regressions predicted LS from concordance with the emotion profile of one's country (for both positive and negative emotions), country-level collectivism–individualism, and their interaction. The multilevel equation in Pseudo R Code was as follows:

$$\text{lmer}(\text{LS} \sim \text{C} - \text{I} \times \text{Concordances} + (\text{Concordances} + 1|\text{country})). \quad (4)$$

We also controlled for the mean level of emotion experience and for the interaction between emotion experience and collectivism–individualism as in the prior analysis. First, for positive emotions, concordance with the emotional profile in one's country did not interact with country-level collectivism–individualism to predict life satisfaction, without covariates: $b = .00$, $t(36) = 0.06$, $p = .953$, see Table S34; with covariates: $b = .02$, $t(37) = 0.87$, $p = .389$, see Table S35. Likewise, for negative emotions, concordance with the emotional profile in one's country did not interact with country-level collectivism–individualism to predict life satisfaction, without covariates: $b = .07$, $t(44) = 1.87$, $p = .068$, see Table S36; with covariates: $b = .04$, $t(31) = 1.57$, $p = .125$, see Table S37. Overall, findings reveal that individualism moderates the association between deviation from a country's mean emotion experience and well-being but not the association between emotion concordance and well-being.

Discussion

Consistent with Hypothesis 1, standard deviations were smaller for both intersubjectively valued emotions and experienced emotions. Findings on standard deviations of personal values did not reveal similar associations with individualism, ruling out cultural differences in response styles as an alternative explanation. Furthermore, profile correlations for experienced emotions were higher in more individualist countries (but not for valued emotions). Moreover, the association between experienced emotions and country norms for valued emotions was greater in more individualist cultures for both positive and negative emotions. These results converge with findings from Study 1 in revealing that homogeneity in emotions is greater in more individualist countries. Furthermore, consistent with Hypothesis 2, deviating from the mean level of experienced emotions in one's

country predicted lower life satisfaction in more individualist countries, even though similar results were not obtained for concordance with a country's emotion profile. Finally, tightness was not associated with any measure of adherence to emotion norms.

A strength of Study 1 was the large number of emotions assessed, although a weakness of the study was that only eight countries were included. A strength of Study 2, in turn, was the larger number of countries that were included, although a weakness of the study was the relatively small sample sizes in each country. We sought to overcome this limitation in Study 3.

Study 3

In Study 3, we analyzed data from the European Social Survey (ESS), which included modules assessing emotion experiences in Waves 3 and 6, conducted in 2006 and 2012, respectively.

Method

Participants

We included participants from Waves 3 and 6 of the ESS, which included modules assessing emotion experiences. Hungary from Wave 3 and Albania from Wave 6 were excluded from the analyses because they did not include all the emotion terms. Kosovo was excluded from the analysis because it did not have a score for collectivism–individualism. This resulted in a total sample of 97,758 participants from 30 countries. In total, 840 participants were excluded for missing data on positive emotions, negative emotions, or life satisfaction, leaving eligible data from 96,918 participants. Respondents in each wave were selected based on random probability samples with estimates based on the entire eligible residential population that is 15 years or older. Sample sizes ranged from 748 (in Iceland) to 5,861 (in Germany). See Table S38 for sample characteristics.

Measures

Collectivism–Individualism. Country-level ratings of collectivism–individualism were calculated as in Study 1.

Cultural Tightness. Country-level ratings of cultural tightness were obtained as in Study 1. Tightness scores were available for 16 of 30 samples.

Emotion Experience. Participants reported how often they felt each of 11 emotions in the past week on a 4-point scale (1 = *none or almost none of the time*, 4 = *all or almost all of the time*). Positive emotions referred to feeling happy, feeling calm and peaceful, having a lot of energy, and enjoying life. Negative emotions referred to feeling depressed, restless, lonely, sad, anxious, not able to get going, and feeling that everything was an effort.

Life Satisfaction. Life satisfaction was assessed using a single item: "All things considered, how satisfied are you with your life as a whole nowadays?" (Question B24 in ESS Round 3, 2006 and Question B20 in ESS Round 6, 2012), used in previous research to measure life satisfaction (Kööts-Ausmees et al., 2013). Participants completed this item on an 11-point scale (0 = *extremely dissatisfied*, 10 = *extremely satisfied*).

Personal Values. Personal values were assessed via the 21-item Portrait Values Questionnaire (Schwartz, 2010), which measures 10 basic human values on a 6-point scale from 1 (*very much like me*) to 6 (*not like me at all*).

Results

As in Studies 1 and 2, standard deviations for experienced emotions were computed for each emotion in each country. In addition, emotional concordances were computed via profile correlations. It was not possible to calculate a profile correlation for participants with zero variance or because of too much missing data (25.4% of the sample for positive emotions and 16.0% of the sample for experienced negative emotions). The calculation of profile correlations requires within-participant variability across the emotion norms, and the higher percentages of participants for whom it was not possible to calculate profile correlations reflect the lower likelihood of variability given the fewer emotion terms assessed in this study.

Homogeneity and Concordances

First, we evaluated Hypothesis 1 by testing whether standard deviations of emotion experience are smaller in more individualist countries. The ICC for country was .30, indicating that country-level differences account for 30% of the variance in standard deviations. Multilevel regressions on the standard deviation of emotions revealed that, across emotions, standard deviations for emotions were smaller in more (vs. less) individualist countries, $b = -.02$, $t(32) = -2.43$, $p = .021$ (see Table S39), and this remained significant when controlling for the absolute distance of means from the scale midpoint, $b = -.02$, $t(27) = -2.16$, $p = .040$ (see Table S40). The average correlation between standard deviations and collectivism–individualism for each of the 11 emotions was $r = -.34$, with correlations ranging from $r = -.65$ to $r = -.02$ (see Table S41). All correlations were negative, indicating that individualism was associated with smaller standard deviations for all emotions. The average correlation for negative emotions ($r = -.47$) was greater than the average correlation for positive emotions ($r = -.13$), $t(8) = -3.54$, $p = .008$, revealing that standard deviations of negative emotions are more strongly related to collectivism–individualism than standard deviations of positive emotions.

Next, we evaluated Hypothesis 1 by testing whether profile correlations are higher in more individualist countries. The ICCs were low for both (positive emotions: .03; negative emotions: .02), indicating that country-level differences account for a small portion of the variance among these profile correlations. Nevertheless, participants from more (vs. less) individualist countries showed higher concordance with their country's emotional profile for both positive emotions, $b = .07$, $t(28) = 3.82$, $p < .001$ (see Table S42), and for negative emotions, $b = .02$, $t(28) = 2.38$, $p = .025$ (see Table S43). A comparison of confidence intervals revealed that the regression coefficient for positive emotions is outside the confidence interval of the regression coefficient for negative emotions ($b = .067$, compare to 95% CI [.004, .040]), and vice versa ($b = .022$, compare to 95% CI [.033, .102]), indicating that profile correlations for positive emotions varied more by collectivism–individualism than did profile correlations for negative emotions.

Personal Values

To address the alternative explanation that results reflect more general cultural differences in response styles, we tested whether collectivism–individualism predicts homogeneity in personal values. Standard deviations were computed for each of the 21 values in

each country. Multilevel models on the standard deviations, with observations nested in countries and in values, revealed no association between individualism and the standard deviation of values, $b = -.003$, $t(44) = -.29$, $p = .770$, and results remained unchanged after controlling for value means, $b = -.01$, $t(34) = -1.49$, $p = .145$. These results suggest that the greater homogeneity of emotions in more individualist cultures is not due to cultural differences in response styles.

Cultural Tightness

To test whether associations are unique to collectivism–individualism, we repeated the analyses while replacing cultural tightness with scores for collectivism–individualism. Tightness was not associated with standard deviations of experienced emotions, $b = -.01$, $t(18) = -1.47$, $p = .160$, profile correlations for positive emotions, $b = .04$, $t(14) = 2.10$, $p = .055$, or profile correlation for negative emotions, $b = .006$, $t(14) = 0.63$, $p = .538$.

Implications for Well-Being

To evaluate Hypothesis 2, we tested whether deviation from the emotion profile of one's country or adherence to it was more consequential for life satisfaction in more (vs. less) individualist cultures. As in Study 2, we ran multilevel regressions predicting life satisfaction from deviation from the emotion profile of one's country (separately for hedonic balance, positive emotions, and negative emotions), country-level collectivism–individualism, and their interaction. A multilevel regression revealed that deviation from country-level means of hedonic balance interacted with country-level collectivism–individualism to predict life satisfaction, $b = -.09$, $t(25) = -4.42$, $p < .001$; see Table S44, and this remained significant after including the two covariates, $b = -.05$, $t(25) = -3.24$, $p = .003$; see Table S45. This indicates that deviation from country-level means of hedonic balance was more detrimental to life satisfaction in more (vs. less) individualist countries. This interaction held when examining deviation from country-level means for positive emotions, without covariates: $b = -.13$, $t(23) = -4.34$, $p < .001$, see Table S46; with covariates: $b = -.08$, $t(24) = -3.98$, $p < .001$, see Table S47, and negative emotions, without covariates: $b = -.18$, $t(25) = -4.14$, $p < .001$, see Table S48; with covariates: $b = -.08$, $t(26) = -2.25$, $p < .001$, see Table S49. A comparison of confidence intervals revealed that effects were not significantly greater for deviation from positive emotions than for deviation from negative emotions.

Next, we looked at concordance with the emotional profile in one's country. First, profile correlations for positive emotions did not interact with country-level collectivism–individualism to predict life satisfaction, without covariates: $b = -.00$, $t(27) = -0.00$, $p = .999$, see Table S50; with covariates: $b = .01$, $t(27) = 0.37$, $p = .717$, see Table S51. However, concordance with the emotional profile in one's country for negative emotions did interact with country-level collectivism–individualism to predict life satisfaction after controlling for covariates, without covariates: $b = -.02$, $t(27) = -0.63$, $p = .534$, see Table S52; with covariates: $b = .04$, $t(25) = 2.19$, $p = .038$, see Table S53. This finding indicates that higher emotion concordance contributed more to life satisfaction in more (vs. less) individualist countries. A comparison of confidence intervals revealed that effects were not significantly greater for concordance with negative emotions than for concordance with positive emotions.

Discussion

Consistent with Hypothesis 1, standard deviations were smaller, whereas profile correlations for experienced emotions were larger, in more individualist countries. Analyses on personal values revealed that findings on standard deviations cannot be explained by response styles, and further analyses revealed that adherence to emotion norms could not be explained by cultural tightness. Consistent with Hypothesis 2, deviating from the mean level of experienced emotions in one's country predicted lower life satisfaction in such countries. Adhering to the mean level of experienced emotions in one's country, as assessed via profile correlations, produced similar but less reliable results across the different analyses.

These results converge with findings from Studies 1 and 2 in larger samples. Given that there are both individualist and collectivist pathways in human development (Greenfield et al., 2003), these differences might already emerge in children. Study 4 tested whether these findings extend to school-aged children.

Study 4

The emotion socialization of children is influenced by cultural norms and values for emotions (Eisenberg et al., 1998; Friedlmeier et al., 2011). Consequently, greater adherence to emotion norms in more individualist cultures may be reflected in the emotional experience of children as well. Study 4 included participants from 33 countries who participated in the third wave of the International Survey of Children's Well-Being in the 10- and 12-year-old age groups. Data were representative samples of the country or region in which they were collected.

Method

Participants

We analyzed the third wave of the International Survey of Children's Well-Being (ISCWeb: www.isciweb.org). Different versions of the questionnaire were administered to three different age groups (8, 10, and 12) in schools. Relevant measures appeared only for the latter two age groups. Sri Lanka was excluded from the analysis because it did not have a score for collectivism–individualism. Since the scores on collectivism–individualism refer to Great Britain (Hofstede) or the United Kingdom (Schwartz and Welzel), we combined the data in this study from England and Wales and refer to them as a single country. This resulted in data from 93,199 participants from 33 countries. A total of 2,316 participants were excluded for missing data on positive emotions, negative emotions, or life satisfaction, leaving eligible data from 90,926 participants (see Table S54, for sample characteristics).

Measures

Collectivism–Individualism. Country-level ratings of collectivism–individualism were calculated as in Study 1.

Cultural Tightness. Country-level ratings of tightness were obtained as in Study 1. Tightness scores were available for 17 of 33 samples.

Emotion Experience. Participants reported how often they felt each of six emotions in the past 2 weeks on an 11-point scale (0 = *not at all*, 10 = *extremely*). Positive emotions included *happy*, *calm*, and *full of energy*. Negative emotions included *sad*, *stressed*, and *bored*.

Life Satisfaction. Participants completed a number of measures assessing subjective well-being. Analyses of an earlier wave of the survey found that a five-item scale that included four items from the Student Life Satisfaction Scale (Huebner, 1991) and one item from the SWLS (Diener et al., 1985) displayed the strongest psychometric properties, including measurement equivalence across diverse samples, in a sample of children (Casas, 2017). Consequently, we adopted this measure to assess life satisfaction.

Results

As in Studies 1–3, standard deviations of experienced emotions were computed for each emotion in each country. In addition, emotion concordances were computed via profile correlations. However, the low number of both positive emotion terms and negative emotion terms (three each) made it impractical to calculate profile correlations separately for each. Therefore, we calculated profile correlation across all positive and negative emotion terms. This precludes the possibility of testing for differences in emotion concordances between positive and negative emotions but results in more robust profile correlations. The number of participants for whom profile correlations could not be computed due to zero variance or too much missing data was low (2.9%).

Homogeneity and Concordances

First, we evaluated Hypothesis 1 by testing whether standard deviations of emotion experience are smaller in more individualist countries. The ICC for country was .11, indicating that country-level differences account for 11% of the variance in standard deviations. Multilevel regressions on the standard deviation of emotions revealed that, across emotions, standard deviations for emotions were smaller in more (vs. less) individualist countries, $b = -.06$, $t(23) = -2.67$, $p = .014$; see Table S55. Results remained significant when controlling for the absolute distance of means from the scale midpoint, $b = -.06$, $t(33) = -3.32$, $p = .002$; see Table S56. The average correlation between standard deviations and collectivism–individualism for each of the six emotions was $r = -.39$, with correlations ranging from $r = -.71$ to $r = -.07$ (see Table S57). All the correlations were negative, indicating that individualism was associated with smaller standard deviations for all emotions. The average correlation for negative emotions ($r = -.59$) was greater than the average correlation for positive emotions ($r = -.19$), $t(4) = -4.00$, $p = .017$, revealing that standard deviations of negative emotions are more strongly related to collectivism–individualism than standard deviations of positive emotions.

Next, we evaluated Hypothesis 1 by testing whether profile correlations are higher in more individualist countries. The ICC was low (.03), indicating that country-level differences account for a small portion of the variance among the profile correlations. Participants from more (vs. less) individualist countries showed higher correlations with their country's emotional profile, $b = .03$, $t(31) = 2.17$, $p = .038$; see Table S58. One concern with calculating profile correlations across both positive and negative emotions is that means for positive emotions tend to be higher than means for negative emotions (Lischetzke et al., 2012), and therefore, such profile correlations may be highly correlated with hedonic balance (positive emotions minus negative emotions). Regressing both hedonic balance and individualism on profile correlations revealed that hedonic balance is indeed highly correlated with these profile correlations, $b = .15$, $t(31) = 40.57$, $p < .001$, but the association between individualism and emotion concordances remained significant, $b = .02$, $t(31) = 3.40$, $p = .002$; see Table S59, indicating that participants from more (vs. less) individualist countries showed higher concordance with their country's emotional profile.

Cultural Tightness

To test whether associations are unique to collectivism–individualism, we repeated the analyses while replacing cultural tightness with scores for collectivism–individualism. Tightness was not associated with standard deviations of experienced emotions, $b = .001$, $t(15) = 0.07$, $p = .944$, or profile correlations without controlling for means, $b = -.02$, $t(15) = -1.47$, $p = .164$, or with controlling for means, $b = -.01$, $t(14) = -.54$, $p = .598$.

Implications for Well-Being

To evaluate Hypothesis 2, we tested whether deviation from country-level emotion profiles or adherence to them was more consequential for life satisfaction in more (vs. less) individualist cultures. A multilevel regression revealed that deviation from country-level means of hedonic balance interacted with country-level collectivism–individualism to predict life satisfaction, without covariates: $b = -.03$, $t(31) = -3.37$, $p = .002$, see Table S60; with covariates: $b = -.02$, $t(31) = -2.83$, $p = .008$, see Table S61. Thus, deviation from country-level means of hedonic balance was more detrimental to life satisfaction in more (vs. less) individualist countries. This interaction held when examining deviation from country-level means for positive emotions, without covariates: $b = -.02$, $t(31) = -1.36$, $p = .184$, see Table S62; with covariates: $b = -.04$, $t(30) = -4.56$, $p < .001$, see Table S63, and negative emotions, without covariates: $b = -.04$, $t(32) = -4.76$, $p < .001$, see Table S64; with covariates: $b = -.03$, $t(32) = -3.84$, $p < .001$, see Table S65. A comparison of confidence intervals revealed that effects were not significantly different for deviation from positive emotions versus deviation from negative emotions. Similarly, a multilevel regression revealed that concordance with the emotional profile in one's country, as assessed by profile correlations across both positive and negative emotions, interacted with country-level collectivism–individualism to predict life satisfaction, without covariates: $b = .18$, $t(31) = 3.59$, $p = .001$, see Table S66; with covariates: $b = .18$, $t(31) = 3.66$, $p < .001$, see Table S67. Thus, higher profile correlations contributed more to life satisfaction in more (vs. less) individualist countries.

Discussion

Consistent with Hypothesis 1, standard deviations were smaller, whereas profile correlations were larger, among children in more individualist countries. Further analyses revealed that these associations could not be explained by cultural tightness. Consistent with Hypothesis 2, deviation or adherence to the mean level of experience

in one country was more consequential for life satisfaction among children from countries higher in individualism. These results converge with findings from Studies 1–3 and extend them to a sample of children as young as 10, suggesting that culturally variable emotion norms are communicated to children from an early stage of development.

General Discussion

While previous research has found that adherence to social norms is greater in more collectivist cultures, our findings suggest that when they pertain to emotions, adherence to social norms is actually greater in individualist cultures than in collectivist ones. As summarized in Table 3, homogeneity is greater in more individualist cultures for both valued emotions in Studies 1 and 2 and experienced emotions in Studies 2–4. Moreover, as summarized in Table 4, emotion concordances for experienced emotions are larger in more individualist cultures in Studies 2–4, and the correspondence between valued and experienced emotions is greater in more individualist cultures in Study 2. Some associations are not statistically significant, particularly in Study 1, and that might be due to the lack of power in that study, but no associations were opposite to our predicted direction.

The studies also demonstrated that adherence to emotion norms predicted well-being, especially in individualistic countries. Individualism consistently moderated the association between deviation from country-level means and well-being in Studies 2–4 (see Table 5). These results were obtained even after controlling for the interaction between emotion experience and individualism, which has been shown to predict life satisfaction (Suh et al., 1998). However, individualism did not consistently moderate the association between emotion concordances and well-being (see Table 6). Overall, these findings converge to indicate that adherence to emotion norms is greater, and more consequential to well-being, in more individualist cultures.

As can be seen in Tables 3–6, links with individualism were captured more reliably via measures assessing homogeneity (whether assessed via standard deviations when testing cultural differences in adherence to emotion norms or via absolute distance when testing implications for well-being) than via emotion concordance measures. Moreover, ICCs were consistently smaller for emotion concordances, indicating that country-level variables account for a smaller part of their variance. As we illustrated in Figure 1, these measures capture different aspects of adherence to emotion norms: the homogeneity measures capture conformity to a baseline, separately for each emotion, whereas the concordance measure assesses the relative prioritization of emotions. Thus, these results suggest that cultural differences in adherence to emotion norms reflect cultural differences in sensitivity to emotion-specific baselines rather than sensitivity to the extent to which certain emotions are prioritized more or less in one's culture.

Early work found greater adherence to norms for positive emotions in more (vs. less) individualist cultures, with equivocal findings for cultural variation in adherence to norms for negative emotions (Eid & Diener, 2001). In the present investigation, some findings were indeed moderated by valence (see Tables 3–6). However, such moderation was typically in the opposite direction: Individualism was more strongly associated with homogeneity and concordance for negative emotions than for positive emotions. The source of this difference relative to earlier work is unclear and might be due to differences in the magnitude and scope of the investigations. Whereas Eid and Diener examined four countries and eight emotions among 1,846 participants in a single study, this investigation assessed up to 60 emotions (Study 1) and up to 48 countries (Study 2) among up to 96,918 participants (Study 3).

Alternative Accounts

It may be argued that cultural differences in the variability of emotions likely reflect cultural differences in the strength of norms for behaviors and therefore should be correlated more with cultural tightness (Gelfand et al., 2011) than with individualism (vs. collectivism). Indices of cultural tightness were created by assessing intersubjective norms for behaviors, such as agreement with the item, "People agree upon what behaviors are appropriate versus inappropriate in most situations in this country." Contrary to this account, however, cultural tightness did not predict the same pattern of findings that collectivism–individualism predicted. In particular, cultural variation in homogeneity or concordance in Studies 1–4 was never predicted by cultural tightness. The fewer number of countries with tightness scores than with individualism scores makes such a comparison challenging. Nevertheless, these findings suggest that cultural variation in the strength of emotion norms is better accounted for by individualism (vs. collectivism) than by cultural tightness. Furthermore, they suggest that norms for emotions are

Table 3
Summary of Evidence From Each Study on Adherence to Emotion Norms, for Homogeneity as Operationalized via Standard Deviations

	Valued emotions			Experienced emotions		
Study	Baseline	Controlling for mean	Valence moderates?	Baseline	Controlling for mean	Valence moderates?
Study 1	✓	✓	no	ns	ns	no
Study 2	✓	✓	no	✓	✓	no
Study 3	—	—	—	✓	✓	negative > positive
Study 4	—	—	—	✓	✓	negative > positive

Note. Baseline = without control for mean; — = not tested in study; ns = nonsignificant; > = indicates where effect of individualism is greater, for example; negative > positive = indicates that individualism predicts smaller standard deviation for negative emotions to greater extent than it does for positive emotions.

Table 4
Summary of Evidence From Each Study for Concordances as Operationalized via Profile Correlations

	Valued emotions			Experienced emotions			Valued predicting experienced		
Study	Positive	Negative	Valence moderates?	Positive	Negative	Valence moderates?	Positive	Negative	Valence moderates?
Study 1	ns	ns	no	ns	ns	negative > positive	ns	ns	no
Study 2	ns	ns	no	✓	✓	negative > positive	✓	✓	no
Study 3	—	—	—	✓	✓	positive > negative	—	—	—
Study 4	—	—	—	[a] ✓, & ✓ with HB controlled		—	—	—	—

Note. — = not tested in study; ns = nonsignificant; HB = Hedonic balance; > = indicates where effect of individualism is greater (see note in Table 3).
[a] Profile correlations in Study 4 were computed across both positive and negative emotions.

distinct from norms for behaviors, and show a distinct pattern of association with aspects of culture.

One of the measures assessing the strength of emotion norms was based on standard deviations within the population of each country. This approach was based on theoretical literature that identified homogeneity as a feature of greater adherence to social norms (Triandis, 1989) and on empirical literature showing that standard deviations predict the strength of social norms (Uz, 2015). However, it may be argued that homogeneity may be influenced by factors other than social norms, such as choices made under a limited set of affordances or the aggregation of individuals with similar tastes and preferences in a single social network (Legros & Cislaghi, 2020). Nevertheless, none of these influences appear to be viable explanations for the present findings regarding valued and experienced emotions. First, we see no reason why people from more individualist cultures have a more limited set of emotional affordances in their daily lives. Second, results were obtained even in Study 3, which relied on random probability samples across entire countries and therefore cannot be due to a biased selection of individuals with similar tastes and preferences.

In addition, the standard deviation of responses may be influenced by cultural differences in response styles such as a moderacy bias, which is the tendency to use the middle of a response scale rather than the extremes of the response scale, leading to greater apparent homogeneity. Critically, smaller standard deviations were unique to valued and experienced emotions and did not generalize to measures of personal values in Studies 1–3. Indeed, findings in the literature suggest that a stronger moderacy bias is not directly related to collectivism–individualism, such that this bias is sometimes larger in more collectivist cultures (C. Chen et al., 1995), sometimes larger in more individualist cultures (Stening & Everett, 1984), and sometimes not clearly associated with higher or lower individualism or collectivism (Marshall & Lee, 1998). Consequently, cultural differences in response styles do not appear to be a viable alternative account of our findings.

Mechanisms Linking Individualism With Greater Adherence to Emotion Norms

Why might adherence to emotion norms be greater in more individualist cultures, as the present investigation shows? We do not have direct evidence why this might be the case. Here, we offer two potential accounts to address this question. According to the first mechanism, individualism leads to greater adherence to prescriptive norms for emotions. According to the second mechanism, individualism leads to greater adherence to descriptive norms for emotions. Both the prescriptive and descriptive accounts are consistent with the present findings, as they demonstrate that individualism is linked to both the valuation and experience of emotions. Descriptive and prescriptive norms are mutually constitutive: a descriptive norm regarding how people commonly behave can create a prescriptive norm to behave that way, and a prescriptive norm regarding how one should behave creates a descriptive norm affecting how people commonly behave (Eriksson et al., 2015). Common to both is an intersubjective consensus that influences motivation, feelings, and behaviors (Gelfand & Jackson, 2016).

The Prescriptive Norm Account

According to the prescriptive norm account, greater adherence to emotion norms in more individualist cultures results from prescriptive

Table 5
Summary of Evidence From Each Study on Implications for Well-Being, for Deviations as Operationalized via Absolute Distances

	Hedonic Balance		Positive emotions		Negative emotions		Valence moderates?	
Study	Baseline	With covariates	Baseline	With covariates	Baseline	With covariates	Baseline	With covariates
Study 2	✓	✓	✓	✓	✓	ns	no	no
Study 3	✓	✓	✓	✓	✓	✓	no	no
Study 4	✓	✓	ns	✓	✓	✓	no	no

Note. Baseline = without covariates; ns = nonsignificant.

Table 6
Summary of Evidence From Each Study for Concordances as Operationalized via Profile Correlations

	Positive emotions		Negative emotions		Valence moderates?	
Study	Baseline	With covariates	Baseline	With covariates	Baseline	With covariates
Emotion concordances						
Study 2	ns	ns	ns	ns	no	no
Study 3	ns	ns	ns	✓	no	no
Study 4	[a] Baseline: ✓; with covariates: ✓				—	—

Note. Baseline = without covariates; — = not tested in study; ns = nonsignificant.
[a] Profile correlations in Study 4 were computed across both positive and negative emotions.

social norms pertaining to manners of expressing one's authentic self. In collectivist cultures, the self is defined primarily by relationships with significant others, such as family members or members of one's community (Markus & Kitayama, 1991). This does not mean that the self's internal attributes, including emotions, are unimportant. It does mean, however, that emotions are relatively less important in defining who one is. In comparison, individualist cultures place greater emphasis on personal authenticity and the self-expression of one's internal attributes (English & Chen, 2011; Guignon, 2004; Markus & Kitayama, 1991). Prominent among such highly valued internal attributes are emotions, which are typically considered expressions of the authentic self in both individualist and collectivist cultural contexts (English & John, 2013). Since social norms serve to reinforce culturally sanctioned values (Schmidt & Tomasello, 2012; Sherif, 1936), the greater value placed on authentic self-expression in more individualist cultures might lead, paradoxically, to greater adherence to norms regarding how people should express their emotions and to more pressure to conform to these norms. The more weight is attributed to individual emotional experiences, the greater the pressure may be to conform to socially desirable ones.

Recent theoretical work has suggested that valuing authentic self-expression leads to making choices that are aligned with one's identity, including identities that are informed by culturally constructed gender roles, leading in some instances to larger gender differences in more individualist countries (Charles & Bradley, 2009; Soylu Yalcinkaya & Adams, 2020). This is consistent with the idea that valuing authentic self-expression can paradoxically increase conformity to social norms and expectations.

The Descriptive Norm Account

According to the descriptive norm account, people in more individualist cultures are more susceptible to certain types of social pressure. This is a result of several characteristics of individualism, including more motivation to influence others rather than adjust to them, and greater needs for positive self-regard and self-esteem that can be afforded by social relations. We expand on the unique forms of social pressures afforded by individualist cultural contexts below.

First, members of more individualist cultures are more likely to try to convince others to think as they do. While members of more collectivist cultures are more likely to adjust to their environment, reflecting the interconnectedness of the self with the broader social environment, members of more individualist cultures are more likely to try to influence their environment, reflecting the independence and autonomy of the self (Weisz et al., 1984). Cultural differences in the latter are particularly stark in interpersonal situations (Morling et al., 2002), where one might try to influence others' opinions by persuasion.

Furthermore, members of more individualist cultures have a greater need for positive self-regard (Heine et al., 1999). To the extent that a positive self-regard is determined by one's social relations (Abrams & Hogg, 1988), the desire to maintain a positive self-regard which is characteristic of more individualist cultures should increase identification with and adoption of social identities. Indeed, ingroup favoritism is greater in more individualist cultures (Ma-Kellams et al., 2011; Ng et al., 2016), and the greater influence of minimal groups in more individualist cultures is mediated by self-esteem (Falk et al., 2014).

The proposal that social pressure is greater in more individualist cultures is consistent with the present findings but inconsistent with findings that collectivism is related to greater adherence to norms for behaviors (e.g., Brauer & Chaurand, 2010; Gelfand et al., 2011; Harrington & Gelfand, 2014). One possibility is that social expectations for emotions are clearer in more individualist cultures because people from such cultures express their internal states, including feelings and emotions, more frequently and more emphatically than people from more collectivist cultures. For instance, members of more individualist cultures are more likely to think aloud or express their thoughts and feelings by sharing them with others (H. S. Kim, 2002; H. S. Kim & Markus, 2002). Moreover, members of more individualist cultures are more likely to engage in an open exchange of emotion experiences, such as self-disclosure (Schug et al., 2010). When faced with stress, members of more individualist cultures are more likely to seek social support and share their feelings with others (J. M. Chen et al., 2012; H. S. Kim et al., 2006; Taylor et al., 2004). Members of more individualist cultures are also less likely to express emotions using subtle facial muscles, relative to members of more collectivist cultures, such as in the eye region (Jack et al., 2012). These converging lines of evidence indicate that in more individualist cultures, social interactions contain more expressions of feelings and emotions, sharpening social expectations regarding how to feel. Taken together, pressure to conform to social expectations might be greater in more individualist cultures and particularly so for states that are frequently and emphatically expressed, such as emotions and feelings. Future work could potentially disentangle these two accounts by examining the acquisition and development of emotion norms in individualist versus collectivist cultures.

Limitations and Future Directions

Our suggestion that people in more individualist cultures are more likely to be influenced by emotion norms appears to be incompatible

with the cultural directive to "go against the grain" that exists in at least some individualist cultures (H. Kim & Markus, 1999). One possibility is that people in more individualist cultures are unaware of being influenced by the emotion norms in one's culture. However, since people in more individualist cultures were more likely to perceive the existence of such norms at the intersubjective level (i.e., to perceive which emotions are judged as valued and appropriate among members of their own culture; Study 2), the influence of emotion norms appears to be above conscious awareness. Another possibility is that adherence to emotion norms is experienced as a standard by which to judge the quality of the personal self. Emotion norms are therefore carefully followed in individualist cultures. This contrasts with adherence to behavior norms, which might be experienced as a standard by which to judge one's standing as a decent member of the community—and therefore a constraint on the personal self. An alternative possibility is that individuals who accurately perceive the social norms of their culture are not necessarily accurate in perceiving that they are acting in accordance with those norms. People are susceptible to self-infiltration, or the misperception of others' expectations as one's own goals (Baumann & Kuhl, 2003), and such a tendency might be higher in more individualist cultures (Soylu Yalcinkaya & Adams, 2020). Thus, people in more individualist cultures might accurately perceive their culture's emotion norms but do not accurately perceive the influence that such norms have on them. Further work is required to investigate whether people in more individualist cultures are more or less accurate in perceiving the influence that emotion norms have on them and whether this might differ from accurately perceiving the influence that behavior norms have on them.

Although research has investigated cultural differences in the content of emotion norms (Kitayama et al., 2000; Tsai et al., 2006), this investigation builds on the idea that the content of a norm is independent of adherence to it. For instance, two cultures might both have a norm in favor of feeling happy, but in one culture the strength of that norm might nevertheless be much stronger than in the other culture. East Asians might value calmness more than Americans (Tsai et al., 2006), but East Asians might have a weaker norm in favor of feeling calm than Americans might have against feeling calm. Thus, how valued a certain emotion is in each culture can be distinct from the extent to which that value is reinforced in that culture. The present studies did not include a sufficient number of low-arousal positive emotions and high-arousal positive emotions to test this, but a future study can endeavor to do so.

Research increasingly points to significant cultural variation in the content of emotion norms, even among collectivist cultures. For instance, while it has been well-established that European Americans value high-arousal positive affect and East Asians value low-arousal positive affect (Tsai et al., 2006, 2007), Mexicans value high-arousal positive affect (Ruby et al., 2012), even though they have a collectivist orientation. This distinction has been replicated in ratings of Americans of European, East Asian, and Latin heritage in the United States (Senft et al., 2022). These findings, however, may speak more to the content of emotion norms and less to the extent of adherence to emotion norms. Nevertheless, they suggest that certain collectivist cultures orient themselves differently to norms about emotions. Since the emphasis across collectivist cultures is on relationships rather than on one's feelings per se, we do not necessarily expect any collectivist culture to show adherence to emotion norms that is on a similar level to highly individualist cultures. Yet, there could be meaningful variation in adherence to emotion norms among collectivist cultures. Future cross-cultural research can directly investigate variation in adherence to emotion norms between different types of collectivist cultures.

The present investigation focused on emotion norms abstracted from specific contexts. Norms are abstractions or rules that are applied across a range of situations. An important question is whether similar findings would be obtained when assessing emotions in specific situations (De Leersnyder et al., 2011). Emotional experiences in specific situations may be more constrained by situational demands, and so less influenced by norms. Future research can investigate this question by assessing adherence to norms for emotions experienced in specific situations.

Models of emotion socialization in children have acknowledged the role of cultural norms in emotion socialization (Eisenberg et al., 1998), but such norms have received only limited attention in empirical research (e.g., Friedlmeier et al., 2011; Raval & Walker, 2019). The findings from Study 4 reveal that the influence of norms in emotion socialization may be more important in more individualist cultures. This may be surprising given findings that when discussing shared emotional experiences, Chinese mothers, relative to Americans mothers, emphasize social norms and behavioral expectations (Wang, 2001). Nevertheless, we contend that this fits with the distinction between norms for behaviors, which are stronger in more collectivist cultures and therefore are likely to undergo greater socialization in such cultures, and norms for emotions, which appear to be stronger in more individualist cultures and therefore are likely to undergo greater socialization in such cultures.

In the distinction between emotion norms and behavior norms, where does emotion expression fall? Emotion expressions might reflect both emotion experiences and self-presentation concerns, which also shape socially relevant behaviors (Baumeister & Hutton, 1987). As such, adherence to norms about emotion expression may reflect adherence to norms about emotions or norms about behaviors. Even so, initial evidence suggests that adherence to norms for emotion expression is greater in more individualist cultures as well. For instance, contrary to their predictions, Matsumoto et al. (2008) found that country-level individualism predicts less variability in the self-reported endorsement of emotion expression. Furthermore, contrary to their predictions, A. H. Fischer, Rotteveel, et al. (2004) found that priming people with an independence (vs. interdependence) mindset decreased variability in emotion expressions. Further work is needed to elucidate the relationship between norms for emotion experiences and emotion expressions.

We have made a theoretical distinction between behaviors, for whom norms are stronger in more collectivist cultures, and emotion experiences as internal states, for whom norms may be stronger in more individualist cultures. Evidence for stronger norms for behaviors in more collectivist cultures comes from the existing literature (Brauer & Chaurand, 2010; Carpenter, 2000; Gelfand et al., 2011; Harrington & Gelfand, 2014; Talhelm & English, 2020), whereas the main evidence for stronger emotion norms comes from the present investigation. Future research can seek to simultaneously demonstrate this in a single study by assessing norms for both emotions and behaviors across a range of cultures.

The present investigation focused on norms for emotions. An important question, however, is whether the pattern of findings

obtained here may potentially extend to other types of internal states. To the extent that individualist cultures place greater value on the self-expression of internal states to communicate authenticity, such as emotions, thoughts, or beliefs (Markus & Kitayama, 1991; Suh et al., 1998), adherence to norms for such states may be greater in individualist cultures than in collectivist cultures. Indeed, many non-Western and nonindividualist cultures deemphasize internal states and limit attention to them, sometimes due to the lay belief that the mind is opaque and inaccessible (Dere et al., 2012; Lillard, 1998; Robbins & Rumsey, 2008). Further research is needed to test cultural variability in the strength of social norms for internal states other than emotion.

Conclusion

Triandis (1989, 1995) identified adherence to social norms as a central feature of collectivist cultures, yet acknowledged the possibility that adherence to some norms might be greater in some cultures, whereas adherence to other norms might be greater in other cultures. The present investigation challenges the former intuition and supports the latter intuition by demonstrating that adherence to emotion norms is actually greater in more individualist cultures.

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