

Cultural Affordances and Emotional Experience: Socially Engaging and Disengaging Emotions in Japan and the United States

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The authors hypothesized that whereas Japanese culture encourages socially engaging emotions (e.g., friendly feelings and guilt), North American culture fosters socially disengaging emotions (e.g., pride and anger). In two cross-cultural studies, the authors measured engaging and disengaging emotions repeatedly over different social situations and found support for this hypothesis. As predicted, Japanese showed a pervasive tendency to reportedly experience engaging emotions more strongly than they experienced disengaging emotions, but Americans showed a reversed tendency. Moreover, as also predicted, Japanese subjective well-being (i.e., the experience of general positive feelings) was more closely associated with the experience of engaging positive emotions than with that of disengaging emotions. Americans tended to show the reversed pattern. The established cultural differences in the patterns of emotion suggest the consistent and systematic cultural shaping of emotion over time.

Keywords: culture, emotion, self

Virtually all emotions are *intensely meaningful* (Lutz, 1988) in the sense that each of the emotions captures global thematic features of the attendant situation. These features have been referred to as *core relational themes* (Lazarus, 1991, 1999) or simply as appraisals (e.g., Ellsworth, 1994; Frijda, 1986; Mesquita & Ellsworth, 2001; Mesquita & Leu, in press). By means of these themes, emotions simplify a complex social situation and reconstitute it in a single brush that is intrinsically meaningful to the person who experiences them. For example, emotions such as pride, friendly feelings, anger, and guilt all reflect meaningful themes that go beyond mere positive or negative evaluations. These themes describe the way individuals perceive their relationship to the surrounding environment (Ellsworth, 1994; Kitayama, Karasawa, & Mesquita, 2004; Mesquita & Ellsworth, 2001). For example, although pride and friendly feelings are both positive, they are associated with very different themes that may respectively be characterized as personal achievement and social harmony. Likewise, anger and guilt are similar in their unpleasantness, but they are linked to profoundly different themes that can be described as unfair goal interference and failure of repayment. Thus, to experience anger implies, among others, that the person is

appraising the situation as one in which his or her own personal goals are being unfairly blocked by someone. Similarly, to experience guilt means that the person is construing the situation as one in which he or she has failed to repay certain obligations to someone else or has failed to perform an expected duty to the person.

What themes are likely to be highlighted in a given situation depends in part on the likelihood of the themes to be activated in memory and made available in the construction of emotional experience (Frijda, Mesquita, Sonnemans, & Van Goozen, 1991; Lazarus, 1991, 1999; Mesquita, 2003; Schachter & Singer, 1962). For example, a certain aversive situation may make someone feel different emotions, such as anger and guilt, depending on the theme that is made accessible in the situation. If the theme of unfair goal blockage comes to mind, then anger will most likely be the dominant emotion, but if the theme of failed repayment is more accessible, then the person will instead be more likely to experience guilt. It is even possible that both themes are simultaneously available, producing certain “mixed” or “ambivalent” feelings.

Systematic cross-cultural comparison can provide a potent means by which to test the foregoing analysis on emotion. Culture comprises a large number of symbolic resources, such as lay theories, schemas, images, and icons, that are distributed in a given group of people (Chiu & Hong, 2005; Kitayama, Duffy, & Uchida, in press; Sperber, 1996). Culture, therefore, may be expected to constantly supply meanings and thus modify the accessibility of different emotion themes. That is, meanings and practices of different cultural contexts may encourage certain themes over others and, as a consequence, may give rise to systematic cultural variation in emotional experience. Drawing on this reasoning, the present work seeks to examine Japanese and American self-reports of emotions across different social situations.

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Social Engagement and Disengagement

Independence and interdependence constitute two major sets of social and cultural tasks and associated ideas that are ubiquitous in all societies and cultures. These tasks and ideas can supply many themes for emotions (Kitayama, Markus, & Kurokawa, 2000; Kitayama, Markus, & Matsumoto, 1995; Markus & Kitayama, 1991b). Specifically, some themes, such as social harmony and failed repayment, are premised on the presence of an interdependent self that seeks a harmonious relationship of some kind. When relational harmony is realized, the theme of social harmony may arise. In contrast, when harmony has been temporarily disrupted and a person seeks to restore it, the theme of failed repayment may be highlighted. Themes that are derived from social interdependence and relationally embedded nature of self are referred to as *socially engaging*. Emotions are considered socially engaging when they are about these engaging themes. All engaging emotions, especially those that are positive, may thus be expected to be both deriving from and affirming the interdependence of self.

In contrast, some other themes, such as personal achievement and unfair infringement of personal goals and desires, are premised on the presence of an independent, autonomous self that seeks to pursue such goals and desires. Whereas the theme of personal achievement may arise from success on an important task, the theme of unfair goal interference may become salient when the person faces certain obstacles that are intentionally held against his or her goal pursuit. Themes that are grounded in independence and autonomy of self and its separateness from others in a relationship may be said to be *socially disengaging*. All disengaging emotions, especially those that are positive, may be expected to be both deriving from and affirming the independence of self.

Evidence suggests that individuals spontaneously recognize the engaging and disengaging orientation of different emotions. Kitayama, Markus, and Negishi (1989, as cited in Markus & Kitayama, 1991a) asked Japanese participants to rate many pairs of emotions for their perceived similarities. Likewise, Kitayama et al., (2000) asked both Japanese and American participants to rate how frequently they experienced a number of different emotions. A matrix of correlations among the emotions was used as a measure of psychological similarities among them. In both cases, a multidimensional scaling analysis performed on the similarity data yielded a dimension of social orientation in addition to the dimension of pleasantness. Thus, a set of emotions, both positive (e.g., friendly feelings and respect) and negative (e.g., guilt and shame) constituted the engagement end of the social orientation dimension, with the opposite, disengagement end defined by a different set of both positive emotions (e.g., pride and feelings of superiority) and negative emotions (e.g., anger and frustration).¹ These findings suggest that both Japanese and Americans spontaneously categorize emotions in terms of both pleasantness and social orientation. This evidence sets the stage for a next step of inquiry, namely, to examine the possibility that cultural variation in emotional experience may be accounted for by these two dimensions of emotions.²

Cultural Affordances and Emotional Experience

Cultural variation in emotional experience may be anticipated on the basis of the idea that although tasks, concerns, and goals

related to independence and those pertaining to interdependence are all potentially available in all cultures, the distribution of these symbolic resources is uneven. Markus and Kitayama (1991b) have suggested that in North America, ideas related to independence and disengagement of the self (e.g., personal achievement, goal pursuit, free choice, and personal rights) are highlighted and elaborated by means of corresponding daily tasks, routines, and lay theories. North American culture may then be described as independent. In contrast, in Asia, including Japanese culture, ideas of interdependence and engagement (e.g., social harmony, duty to groups, adjustment and fitting in, and sympathy) are highlighted and salient. Asian cultures may therefore be said to be interdependent.

Of course, not all people in any given cultural context explicitly approve the themes or values that are salient and sanctioned in that context. Nor do they always succeed in attaining such values. For example, many Americans explicitly oppose the hegemonic value of independence (Oyserman, Coon, & Kimmelmeier, 2002). Likewise, people may not always act on any given cultural value and belief. Nevertheless, depending on the pervasiveness of tasks and concerns that highlight either independence and disengagement or interdependence and engagement, cultural environments can carry the potential of evoking very different sets of emotions and other psychological responses. This potential has been called *cultural affordances* (Kitayama & Markus, 1999). The notion of cultural affordance entails the following two testable predictions.

Intensity of Experiencing Engaging and Disengaging Emotions

The first prediction concerns a consequence of the cultural affordances for engaging and disengaging emotional themes. Cultural affordances result from a biased pool of symbolic resources of culture that are brought to bear on the construction of concrete daily situations (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Morling, Kitayama, & Miyamoto, 2002). These symbolic resources are used to define general classes of events and episodes that are available in a given cultural context (e.g., school, taking an exam, business, success, failure, and the like). But more importantly, they profoundly influence more subtle, yet powerful nuances and psychological meanings (e.g., pride, shame, obligation, honor, and the like) that are added to the lived experience of such events and episodes. These meanings may often be highly idio-

¹ These findings also suggest that the most dominant meaning of *pride* is "pride in the self" in both languages. Pride can, of course, be produced by achievement of ingroup members. But this more interpersonal or social pride must be linguistically marked at least in both English and Japanese (e.g., pride in my friend).

² Emotion words have diverse meanings, and, moreover, no single word is likely to have the exact translation equivalent in another language (Wierzbicka, 1994). Nevertheless, our previous studies used multidimensional scaling analyses to show that underlying core appraisals, such as pleasantness and social orientation, are still common across cultures. This fact has enabled us to draw systematic cross-cultural comparisons. Note, however, that these core appraisals alone can by no means cover the entire range of meanings different emotion words and emotion concepts can carry. Hence, our analysis implies no one-to-one correspondence between the core appraisals and emotion words or concepts.

syncratic and hardly predictable in any specific instances, and, yet, because they are derived or fostered by a pool of symbolic resources that are available in a given culture, they may be systematically biased over many situations and episodes in accordance with the specific, historically crafted and accumulated contents of this pool. In this way, individual experiences may be collectively constructed through sociohistorical processes (Kitayama & Markus, 1999; Kitayama et al., 1997).

For example, “getting an A in an important course” is likely to be both positive and disengaging (causing one to feel proud) in all cultures. Nevertheless, certain engaging themes, icons, and ideas, such as the smiling faces of parents who would be very happy to know about their daughter’s performance in the course, may be more available in interdependent cultural contexts than in independent cultural contexts. If so, then a subtle yet distinctly engaging element or nuance may be added to the experience for those in interdependent contexts, but such addition of engaging nuances may be relatively unlikely for those in independent contexts. This example illustrates how subtle the effect of cultural affordances can sometimes be. It also suggests, however, that such subtle effect can be very powerful over time because it is highly recurrent and present all the time, insofar as all individuals must necessarily be drawing on the pool of symbolic resources of their own culture.

Accordingly, we expected that, over time and across many different situations, Asian, interdependent cultures would make socially engaging themes salient and thus would facilitate the corresponding engaging emotions such as friendly feelings and guilt. Similarly, we expected that American, independent culture would, over time and across different situations, make salient socially disengaging themes and would thus foster the corresponding disengaging emotions such as pride and anger.³

Recently, Kitayama and colleagues (2000) investigated emotional experience as a function of the social orientation of emotions. The researchers asked both Japanese and American participants to report how frequently they experienced both positive and negative emotions that were either engaging or disengaging. As predicted, Japanese reported that they experienced engaging emotions, both positive and negative, more frequently than disengaging emotions, both positive and negative. In contrast, a pattern shown by Americans belied the prediction. Overall, American participants reported that they experienced positive engaging emotions such as friendly feelings and close feelings much more frequently than the remaining three categories of emotions. It is possible that the reported frequency of emotional experience was skewed in a positive, desirable direction by memory distortion and reporting bias. Oishi (2002) showed that such a memory distortion is quite pervasive when Americans make a frequency judgment of emotional experience. Specifically, positive engaging emotions may be especially desirable emotions to experience, and, as a consequence, Americans may have sought to see themselves in a positive light by selectively remembering the experience of these emotions and/or by simply overreporting it. Past research indicates that Japanese do not show any strong tendency toward positive self-images (Heine, Lehman, Markus, & Kitayama, 1999; Kitayama & Markus, 1999).

The Kitayama et al. (2000) evidence implies that in order to carry out a valid test of the present prediction, it is important to use a much more *episodic* task that minimizes any memory bias or reporting bias. Moreover, the cultural affordances for both engage-

ment for Japanese and disengagement for Americans are expected to be pervasive in the respective cultural contexts primarily because they are highly consistent and, thus, cumulative over numerous situations that recur in daily life (Abelson, 1985). We therefore anticipated that the hypothesized effect of cultural affordances would be best captured when emotional experience was examined over a number of different situations.

With the foregoing considerations in mind, in Study 1, we had participants remember a very concrete episode on each of many days in which they felt strong emotions and to report how intensely they experienced different emotions in that episode. Likewise, in Study 2, participants were to remember concrete episodes that were fitted to many different situation types and then to report the emotions they experienced in these episodes.

Predictors of Well-Being

Our second prediction is derived from the idea that emotions that vary with regard to their social orientation affirm different forms of self. Whereas positive engaging emotions affirm the interdependent self, positive disengaging emotions affirm the independent self. Moreover, past research has shown that Asians are chronically motivated toward social harmony and other related goals of interdependence, but Americans are chronically motivated toward personal control and other related goals of independence (Kitayama, Karasawa, Curhan, Ryff, & Markus, 2006; Markus & Kitayama, 1991b). We therefore expected that socially engaging positive emotions, such as friendly feelings and feelings of respect, would best predict subjective well-being in Japanese groups. In contrast, among Americans, we predicted that socially disengaging positive feelings, such as pride and self-esteem, would best predict subjective well-being.

Past evidence is consistent with the present predictions. For example, in the aforementioned study by Kitayama and colleagues (2000), for Japanese the reported frequency of experiencing happiness was better predicted by the reported frequency of experiencing positive engaging emotions (e.g., friendly feelings) than by the reported frequency of experiencing positive disengaging emotions (e.g., pride), but this pattern was reversed for Americans. Some other studies have shown analogous patterns by using personality measures of engagement and disengagement. For example, Kwan, Bond, and Singelis (1997) have shown that among Americans, subjective well-being is predicted by self-esteem (disengagement) more strongly than by relationship harmony (engagement), but among Hong Kong Chinese, subjective well-being was equally predicted by both. Both Kang, Shaver, Min, and Jin (2003) and Uchida, Kitayama, Mesquita, Reyes, and Morling (2004) have reported consistent findings with different measures of social engagement. Furthermore, Kitayama and colleagues (2006) have used a much wider range of measures of well-being and observed the same pattern with adult, noncollege student samples. Overall,

³ This argument amounts to the hypothesis that culture “primes” different emotion themes. Unlike social cognition researchers who focus on effects of specific priming stimuli such as *I* versus *we* (Brewer & Gardner, 1996) or cultural icons such as Great Walls or Marilyn Monroe (Hong, Morris, Chiu, & Benet-Martinez, 2000), our emphasis is on the entire pool of icons, lay theories, and other symbolic resources that are unevenly distributed across different cultural contexts.

Table 1
Emotions in Each of the Four Examined Emotion Types and reliabilities in Studies 1 and 2

Emotion type	Emotion	Reliability			
		Study 1		Study 2	
		JPN	U.S.	JPN	U.S.
Positive engaging emotions	Friendly feelings	.83	.55	.86	.67
	Close feelings ^a				
	Respect				
	Sympathy				
Positive disengaging emotions	Proud	.78	.78	.72	.73
	Superior				
	Top of the world ^a				
	Self-esteem ^b				
Negative engaging emotions	Guilt	.80	.71	.82	.67
	Indebted				
	Ashamed				
	Afraid of causing trouble on another ^b				
Negative disengaging emotions	Sulky feelings	.83	.83	.79	.76
	Frustration				
	Angry				

Note. JPN = Japan; U.S. = United States.

^a Not included in Study 1. ^b Not included in Study 2.

the studies summarized here show that both engagement and disengagement are associated with subjective well-being and happiness, but the relative significance of the two factors vary across cultures, with disengagement more important for Americans and engagement more important for Asians (see also Mesquita et al., 2005, for relevant evidence).

One significant shortcoming of the present literature stems from the fact that all of the existent studies examine correlations across individuals, showing culturally divergent association patterns between individual propensities toward either engagement or disengagement and individual propensities toward happiness and well-being. It is yet to be determined whether analogous patterns of association can be observed within each individual. In order to examine whether individuals would in fact feel happier when they experience either engagement or disengagement, we examined associations between engagement/disengagement and happiness within each individual participant.

Study 1: Reported Intensity of Experiencing Emotions in Naturally Occurring Situations

To maximize ecological and cultural validity, we sought to test our predictions with naturally occurring emotional events in Study 1. We used a diary method to test both Japanese and Americans in their native cultural contexts.

Method

Participants and procedure. Thirty-eight Japanese college students at a Japanese university (20 men and 17 women, and 1 whose gender is unknown) and 49 American college students at a U.S. university (29 men and 20 women) participated in the study in exchange for course credits. Participants were asked to remember "the most emotional episode of the day" at the end of each of 14 consecutive days. They were asked to briefly describe the episode and then to report how strongly they experienced each of 27 emotions. The ratings were made on a 6-point scale ranging from 0

(not experienced it at all) to 5 (experienced it very strongly). The questionnaire was printed on the backside of a prestamped postcard in Japan. It was printed on a sheet of paper, which was to be enclosed in a prestamped envelope in the United States. In both cases, the participants were asked to send the questionnaire to the psychology office every day. Only those data that were postmarked on the same or the next day were analyzed. Three Japanese male participants and 2 American male participants who failed to return the questionnaire on more than 7 days were excluded from the analysis.

Materials. All emotion terms were selected, and their translation equivalents developed, through a series of discussions among Japanese–English bilinguals (see Kitayama et al., 2000, for details). Drawing on our previous work (Kitayama et al., 2000, 1995), the list of emotions contained four theoretically derived types of emotion terms, which were defined by their position on the pleasantness (positive and negative) and the social orientation (engaging and disengaging) dimensions.⁴ Whereas engaging emotions both result from and foster social engagement of the self, disengaging emotions both result from and foster social disengagement of the self. The emotion terms used are listed in Table 1. The scales for the four types of emotions had reasonable reliabilities in both studies (see Table 1 for Cronbach's alphas). In addition to these four emotion scales, defined by pleasantness and social orientation, we included several emotion terms to indicate well-being or general positive emotions (happy, elation, relaxation, and calmness) and negative well-being or general negative emotions (unhappy, sadness, fear, depression, boredom, and disgust), respectively. Common among the terms for general positive and general negative emotions was that they did not specify any particular social orientation.

Results and Discussion

Emotional experience. We anticipated that whereas engaging emotions would be more strongly experienced by Japanese than by Americans, disengaging emotions would be more strongly experienced

⁴ Four additional emotions were included (excited, sleepy, feeling like babied [amae in Japanese], and afraid of causing trouble to someone) in Study 1.

rienced by Americans than by Japanese. This prediction implies a significant interaction between culture and the social orientation of emotion. In testing this prediction, however, it is important to distinguish positive from negative emotional situations because our predictions on cultural differences in social orientation would be expected to hold primarily for the *focal* themes in the attendant situations (Mesquita & Ellsworth, 2001; Mesquita & Frijda, 1992)—namely, the themes that constitute the most dominant meaning of the situation. Thus, we expected our prediction of cultural differences in social orientation to emerge for positive emotions in the positive situations and negative emotions in the negative situations. We did not have any predictions with regard to the emotions that were inconsistent in pleasantness with the situation's main theme, except that they would be of relatively low intensity.

We divided all the reported situations into two sets, containing positive and negative events, respectively. We first computed the mean intensity ratings for general positive emotions and general negative emotions. The scales for general positive and general negative emotions had reasonable reliability (positive emotions: $\alpha_s = .92$ and $.88$, for Japanese and Americans, respectively; negative emotions: $\alpha_s = .80$ and $.78$, for Japanese and Americans, respectively). We then classified as positive the situations for which the average of the general positive emotions was greater than that for general negative emotions and as negative the situations for which the reverse was the case. All respondents reported both negative and positive emotional events.

Mean intensity ratings of the four types of emotions that varied in pleasantness and social orientation were computed for each

participant and submitted to an analysis of variance (ANOVA), with two between-subjects variables (culture and gender) and three within-subjects variables (emotion pleasantness, emotion social orientation, and situation pleasantness). Four participants with missing cells (3 Americans and 1 Japanese) were excluded, as was another Japanese participant whose gender information was missing. So the analysis was performed on 33 Japanese and 44 Americans.

The pertinent means are shown in Figure 1. As expected, we observed a significant interaction between culture and social orientation only for the emotions that were matched in pleasantness to the attendant situations. This observation is underscored by a significant interaction involving culture, social orientation of the emotion, emotion pleasantness, and situation pleasantness, $F(1, 73) = 19.70, p < .0001$. The results of separate ANOVAs performed on the four conditions that were marked by both emotion pleasantness and situation pleasantness are summarized in Table 2.

When the emotions and the situations were matched in pleasantness, the interaction between culture and social orientation of the emotions was highly significant. When both the emotions and the situations were positive, Japanese reportedly experienced the engaging emotions (e.g., friendly feelings) more strongly than the disengaging emotions (e.g., pride), $t(73) = 4.41, p < .001$. In contrast, Americans showed a reliable reversal, experiencing the disengaging emotions (e.g., pride) reportedly more strongly than the engaging emotions (e.g., friendly feelings), $t(73) = 2.60, p < .01$. Comparing between cultures, Americans reported a greater intensity of experiencing disengaging emotions than did Japanese,

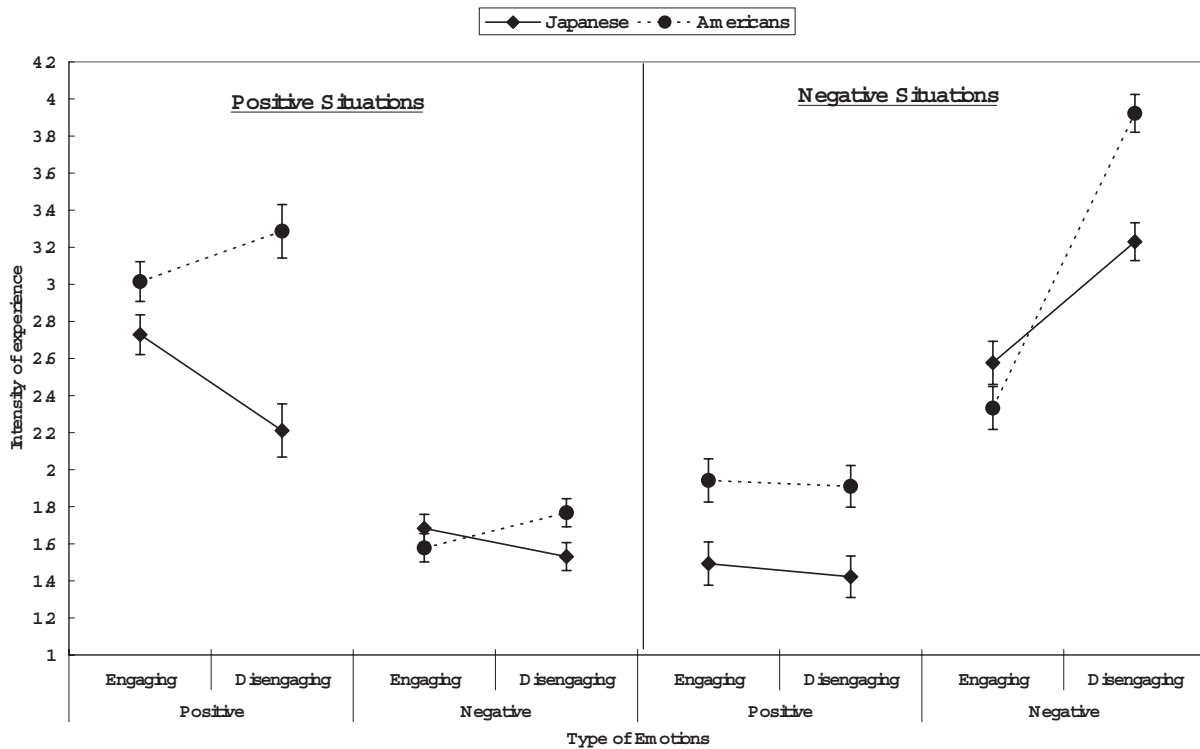


Figure 1. Reported intensity of experiencing positive and negative emotions that are either engaging or disengaging in positive and negative situations in Study 1. The bar attached to each mean indicates the standard error of that mean.

Table 2
F Tests From Analyses of Variance Performed on Four Conditions That Varied in the Pleasantness of Emotions and the Pleasantness of the Situations (in Study 1)

Variable	Positive situation		Negative situation	
	Positive emotion	Negative emotion	Positive emotion	Negative emotion
Culture	14.31***	1.29	11.25**	2.78
Gender	1.23	<1	<1	1.89
Culture × Gender	<1	<1	1.11	<1
Social orientation (SO)	<1	6.17*	<1	56.32***
SO × Culture	20.69***	8.31**	<1	21.70***
SO × Gender	<1	2.15	<1	7.74*
SO × Culture × Gender	1.55	2.27	<1	2.82

* $p < .05$. ** $p < .001$. *** $p < .0001$.

$t(73) = 5.58, p < .01$, but this difference disappeared for engaging emotions, $t(73) = 1.45, ns$.

When both the emotions and the situations were unpleasant, the disengaging emotions (e.g., anger) were reportedly experienced more strongly in both cultural groups than the engaging emotions (e.g., guilt), but, as expected, this tendency was reliably more pronounced for Americans than for Japanese. The disengaging emotions (e.g., anger) were reportedly more strongly experienced by Americans than by Japanese, $t(73) = 3.78, p < .01$, but this cultural difference was reversed, albeit nonsignificantly, for the engaging emotions (e.g., guilt), $t(73) = 1.37, ns$.

When emotions and situations were not matched in pleasantness, the intensity of emotions was low; moreover, as predicted, the Culture × Social Orientation interaction was much weaker. This interaction was statistically significant for negative emotions in positive situations. Disengaging positive emotions were reportedly experienced more strongly by Americans than by Japanese, $t(73) = 2.16, p < .05$. No such difference was present for engaging emotions. As can be seen in Figure 1, however, the interaction pattern was very weak. For positive emotions in negative situations, the Culture × Social Orientation interaction was trivial. In addition, for negative emotions in negative situations, the Gender × Social Orientation interaction was significant. Although disengaging emotions were more strongly experienced than engaging emotions, this effect was more pronounced for women ($M_s = 3.56$ vs. 2.30) than for men ($M_s = 3.61$ vs. 2.56). If anything, the pattern goes against the common assumption that women are more interdependent than men (Cross & Madson, 1997).

Note that in both cultures, negative disengaging emotions such as anger and frustration were reportedly experienced much more strongly than negative engaging emotions such as guilt and shame. We suspect that the disengaging negative emotions are more arousing than their engaging counterparts, and, as a consequence, the intensity of the former was experienced to be greater than that of the latter (Sonnemans & Frijda, 1994).

Predictors of well-being. In order to determine when individuals would feel happy or unhappy, we carried out an analysis in two steps. First, for each participant, the ratings of general positive (or negative) emotions over all the 14 episodes were regressed on the corresponding ratings of engaging positive (or negative) emotions and those of disengaging positive (or negative) emotions. The respective regression coefficients were then averaged over all the

participants in the two cultures. These two steps were simultaneously estimated with an algorithm provided by the hierarchical linear models (HLM) analysis (Raudenbush & Bryk, 2002).

The pertinent regression coefficients are summarized in Table 3. Preliminary analysis showed no significant gender effect, so this variable was dropped. The regression coefficient for engaging positive emotions (e.g., friendly feelings) was positive in both cultures, indicating that individuals felt happier when they found themselves connected with close others. As predicted, however, the effect of engaging emotions (e.g., friendly feelings) was stronger for Japanese than for Americans, $\chi^2(1) = 7.39, p < .01$. In contrast, the effect of disengaging emotions (e.g., pride) was much stronger for Americans than for Japanese, $\chi^2(1) = 21.13, p < .0001$. Within each country, the relative magnitude of the effect of the two types of positive emotions conformed to our predictions. In Japan, the effect of engaging emotion was significantly larger than the effect of disengaging emotion, $\chi^2(1) = 11.65, p < .0001$. In contrast, in the United States, the effect of disengaging emotion was no different from the effect of engaging emotion, $\chi^2(1) = 1.16, p > .25$.

Because positive situations are likely to induce all positive emotions and negative situations are likely to induce all negative emotions, one might expect that engaging positive emotion would be positively correlated with disengaging positive emotion. This in fact was the case. When this correlation was computed for each of the participants, it was substantially positive, with means of .54

Table 3
Regression Coefficients That Predict General Positive Emotion as a Function of Engaging Positive Emotion (e.g., Friendly Feelings) and Disengaging Positive Emotion (e.g., Self-Esteem) Within Each Individual (in Study 1)

Culture	Predicting general positive emotion (e.g., happiness)		Predicting general negative emotion (e.g., unhappiness)	
	Engaging emotion	Disengaging emotion	Engaging emotion	Disengaging emotion
Japanese	0.68	0.27	0.21	0.59
American	0.50	0.60	0.15	0.50

and .47 and standard deviations of .23 and .27 for Japanese and Americans, respectively. Because multicollinearity can introduce considerable noise in the estimation of regression coefficients (Neter, Kutner, Wasserman, & Nachtsheim, 1996), we ran another analysis that is theoretically equivalent and, yet, that is not susceptible to the multicollinearity problem.

For each participant, we first subtracted the mean intensity of engaging positive emotions from the mean intensity of disengaging positive emotions. This difference score was used to predict the mean intensity of general positive emotions. As predicted, and replicating the first regression analysis, the effect of country was highly significant, with the average standardized regression coefficient for the difference score being significantly greater for Americans than for Japanese ($M_s = .27$ and $-.37$ for Americans and Japanese, respectively), $\chi^2(1) = 19.15$, $p < .0001$. As predicted, the American coefficient was significantly positive, $\chi^2(1) = 15.06$, $p < .0001$, indicating that Americans feel happier when they experience more disengaging (rather than engaging) positive emotions. In contrast, the Japanese coefficient was significantly negative, $\chi^2(1) = 28.67$, $p < .0001$, meaning that Japanese feel happier when they experience more engaging (rather than disengaging) positive emotions.⁵

Next, we carried out a comparable analysis for negative emotions. As can be seen in Table 3, unhappiness was more reliably predicted by disengaging negative emotion than by engaging negative emotion. This was the case for both Japanese and Americans, $\chi^2(1) = 102.34$, $p < .0001$ and $\chi^2(1) = 42.09$, $p < .0001$, respectively. Moreover, the effect of both engaging emotion and the effect of disengaging emotion tended to be larger for Japanese than for Americans, but only the latter effect was statistically significant, $\chi^2(1) = 6.20$, $p < .02$. The same conclusion was obtained in an additional analysis in which a difference score between engaging negative emotion and disengaging negative emotion was used to predict general negative emotion.

Correlation between two indices of emotional experience. We used two primary indices of emotional experience in the present study (i.e., intensity and predictor of happiness). In order to explore whether the two indices of emotional experience may be correlated, we first obtained a single measure for each index.

We start with the relative magnitude of experiencing disengaging (vs. engaging) emotions. For each participant, the average intensity rating for positive engaging emotions in positive situations was subtracted from the average intensity rating for positive disengaging emotions in the same positive situations. Likewise, the average intensity rating for negative engaging emotions in negative situations was subtracted from the average intensity rating for negative disengaging emotions in the same negative situations. These two relative intensities were averaged to yield a single measure of the relative intensity of experiencing disengaging (rather than engaging) emotions. As may be predicted, the index was positive for Americans and negative for Japanese, and, moreover, the cross-cultural difference was quite substantial ($M_s = .37$ vs. $-.13$), $t(78) = 5.01$, $p < .0001$. The effect size was large, as indicated by Cohen's $d = 1.16$ (Cohen, 1988).

Next, we computed for each participant a standardized regression coefficient that predicts happiness as a function of disengaging (rather than engaging) positive emotions. As may be predicted, the coefficient was positive for Americans and negative for Japanese, and, moreover, the cross-cultural difference was substantial

($M_s = .13$ vs. $-.22$), $t(79) = 4.38$, $p < .0001$. The effect size was large, as indicated by Cohen's $d = 0.99$.

Finally, we computed the correlation between the two indices. Both of them showed substantial variations, and, yet, the correlation was no different from zero either in Japan or in the United States ($r_s = .29$ and $-.14$, $p_s > .10$, for Japanese and Americans, respectively).

Study 2: Reported Intensity of Experiencing Emotions in a Preselected Set of Situations

Although Study 1 confirmed our predictions in naturally occurring, ecologically and culturally valid settings, this same feature of the study made it difficult to exclude one alternative interpretation. That is to say, the cultural differences in emotional response may have happened because very different sets of emotional events were recalled in the two cultures. For example, Japanese may have experienced more engaging emotions than did Americans because they were more likely to be in a situation that involved a meaningful social relationship. If, however, emotional responses were different because culturally accessible emotional themes were different, then the findings from Study 1 should be replicated even when respondents reported their emotional responses to the same set of social situations. Study 2 was designed to address this issue.

Method

Participants and procedure. Fifty-five Japanese (20 men and 35 women) and 46 Americans (23 men and 23 women) participated in a study on "emotional experiences in daily life." The Japanese participants, all undergraduates at a Japanese university, received either course credit or 1000 yen (U.S. \$8) for their participation. American participants, all Caucasian American undergraduates who were temporarily studying at a Japanese university, received 1000 yen for their participation. All participants were tested in small groups. Respondents were asked to remember the latest event of each of 22 different event categories and to report the extent to which they experienced each of 25 emotions in the situation.⁶ A 6-point rating scale that ranged from 0 (*not experienced it at all*) to 5 (*experienced it very strongly*) was used.

Materials. We adopted 22 types of situations from earlier work by Reyes (1997; see Table 4 for a list of the situation types) because they spanned a wide variety of daily emotion elicitors. Some situations involved social relations, others involved study and work, and still others had to do with daily hassles and bodily conditions of the self. Furthermore, a priori the 22 situations seemed to include about as many positive as negative events. Inadvertently, one of the situations included in the Japanese set ("saw somebody I like") was missing in the American set, whereas one situation included in the American set ("saw the person I have a crush on") was missing in the Japanese set.

Results and Discussion

Intensity of emotional experience. In order to control for the effect of the pleasantness of situations, we first divided the 21

⁵ The beta from this analysis was highly correlated with the difference between the beta for engaging emotion and the one for disengaging emotion from the first analysis ($r = .84$).

⁶ Three of the emotion terms were related to "amae"—a Japanese indigenous emotion glossed as desire for dependency (Doi, 1971). These terms were not analyzed.

Table 4
Emotional-Experiences-in-Daily-Life Situations Used in Study 2

Situation	Japan		U.S.	
	Happiness	Unhappiness	Happiness	Unhappiness
Positive situation				
Positive interaction with friends	3.58	0.33	2.72	0.29
Something good happened to a family member	2.36	0.30	2.85	0.20
Good interaction with family members	3.38	0.40	2.69	0.14
Heard a comment about my appearance	1.54	0.81	2.49	0.31
Watched TV or listened to music	2.99	0.57	1.69	1.01
Read a novel or book	2.46	0.56	2.78	0.29
Participated in a sports activity	2.65	0.51	2.82	0.21
Class got canceled	2.92	0.40	1.54	0.44
Negative situation				
Caught up in a traffic jam	0.73	1.80	0.92	1.12
Thought about my appearance	1.07	1.35	0.98	1.07
Overloaded with work (e.g., schoolwork)	0.85	1.52	0.88	0.93
Getting ill or injured	0.60	2.20	0.37	1.29
Problem with a family member	0.59	1.98	0.77	1.08
Difficulty understanding a lecture	0.50	1.76	0.46	1.64
Took an exam	0.94	1.48	0.77	1.23
Studied for an exam	0.72	1.68	0.75	1.25
Ambivalent situation				
Late for an appointment	0.50	1.37	1.03	0.84
Didn't get enough sleep	0.51	1.86	1.73	0.26
Argument or problem with friends	0.36	2.24	1.48	1.01
Something bad happened to a family member	0.42	2.01	1.58	1.26
Skipped a class	1.30	1.14	0.69	0.80
Negative situation				
Saw the person I have a crush on	—	—	1.54	1.27
Saw somebody I like	3.18	0.74	—	—

Note. The 23 situations are classified into different types, depending on the relative reported intensity of experiencing happiness-versus unhappiness-related emotions. U.S. = United States; dashes indicate data were not obtained or are not reported.

common situations into two categories, one of positive and one of negative events. Positive events were operationalized as events that, in both cultures, elicited more general positive emotions than general negative emotions, whereas negative events were those events that, in both cultures, elicited more general negative than general positive emotions. Specifically, we calculated for each situation the average intensity of experiencing general positive emotions ($\alpha_s = .90$ and $.85$ for Japanese and Americans, respectively) and that of experiencing general negative emotions ($\alpha_s = .80$ and $.74$ for Japanese and Americans, respectively), after which we determined for each situation the ratio of general positive and general negative emotions for each culture separately (see Table 4). Of the 21 situations, 16 were successfully classified as being either predominantly positive or predominantly negative for both cultures. The remaining 5 situations were excluded from the analysis on intensity of emotional experience.

We performed an ANOVA in which subjects were used as a random variable. For each participant, mean emotion intensities were computed for the four types of emotions and for positive and negative situations separately. Type of emotion is characterized by

both social orientation (engaging vs. disengaging) and pleasantness (positive vs. negative). The mean intensity ratings for each of the four emotion types were submitted to an ANOVA, with two between-subjects variables (culture and gender) and three within-subjects variables (emotion pleasantness, emotion social orientation, and situation pleasantness). This ANOVA assessed the generalizability of effects relative to the variability across different subjects.

We also sought to determine the generalizability of the effects relative to the variability across different situations with another ANOVA wherein situations served as a random variable. For each of the situations that were either positive or negative, mean emotion intensities were computed for the four types of emotions calculated separately for the four groups of participants that differed in culture and gender. The mean intensity ratings were then submitted to an ANOVA, with one between-situation factor (situation pleasantness) and four within-situation factors (emotion social orientation, emotion pleasantness, participant culture, and participant gender). This ANOVA assessed the generalizability of the effects across different situations.

Pertinent means by culture are illustrated in Figure 2. As can be seen, the predicted interaction between culture and social orientation of emotions is evident for those cases in which situation pleasantness is matched with emotion pleasantness, namely, for both positive emotions that were experienced in positive situations and negative emotions that were experienced in negative situations. In the remaining two cases, no such interaction is evident. This observation is underscored by an interaction that involved culture, social orientation of the emotion, emotion pleasantness, and situation pleasantness. This interaction was significant in both the between-subject analysis, $F(1, 97) = 41.33, p < .0001$, and the between-situation analysis, $F(1, 14) = 5.15, p < .05$.

We subsequently conducted four separate sets of ANOVAs for the four possible combinations of pleasantness of emotions and pleasantness of situations. Again, two separate ANOVAs assessed the generalizability of the effects across both subjects and situations. The results of these analyses are summarized in Table 5. For the positive emotions in the positive situations, the predicted Culture \times Social Orientation interaction was significant in the between-subjects analysis and also reached marginal significance in the between-situations analysis. Both Japanese and Americans reportedly experienced the engaging emotions (e.g., friendly feelings) more strongly than the disengaging emotions (e.g., pride). As predicted, however, the reliable Culture \times Social Engagement interaction indicates that this tendency was reliably stronger for Japanese than for Americans. From a different angle, the disengaging emotions (e.g., pride) were reportedly experienced more strongly by Americans than by Japanese, $t(97) = 2.79, p < .001$, but this difference vanished for the engaging emotions (e.g.,

friendly feelings; $t < 1$). For the negative emotions in the negative situations, the Culture \times Social Orientation interaction proved to be significant in both the between-subjects analysis and the between-situations analysis. Both Japanese and Americans reportedly experienced the disengaging emotions (e.g., anger) more strongly than the engaging emotions (e.g., guilt). As predicted, however, this tendency was reliably more pronounced for Americans than for Japanese. In the remaining two cases in which the pleasantness of the emotions did not match with the pleasantness of the situations, the Culture \times Emotion Social Orientation interaction was negligible.

As can also be seen in Table 5, there were some sporadic significant interactions involving gender. Two of them (Social Orientation \times Gender interaction for the positive emotions in both positive and negative situations) achieved statistical significance in both the between-subjects analysis and the between-situations analysis. These interactions are in accordance with the idea that women are more interdependent than men (Cross & Madson, 1997). That is, in the positive situations, although both men and women reportedly experienced engaging positive emotions more strongly than disengaging positive emotions in the positive situations, this effect was more pronounced for women ($M_s = 2.81$ and 2.16) than for men ($M_s = 2.68$ and 2.27). In the negative situations, whereas men reportedly experienced disengaging positive emotions more strongly than engaging positive emotions ($M_s = 1.62$ vs. 1.50), women reportedly experienced engaging emotions more than disengaging emotions ($M_s = 1.67$ vs. 1.56). Caution is warranted, however, because the comparable finding was absent in Study 1. In fact, Study 1 showed one interaction involving gender

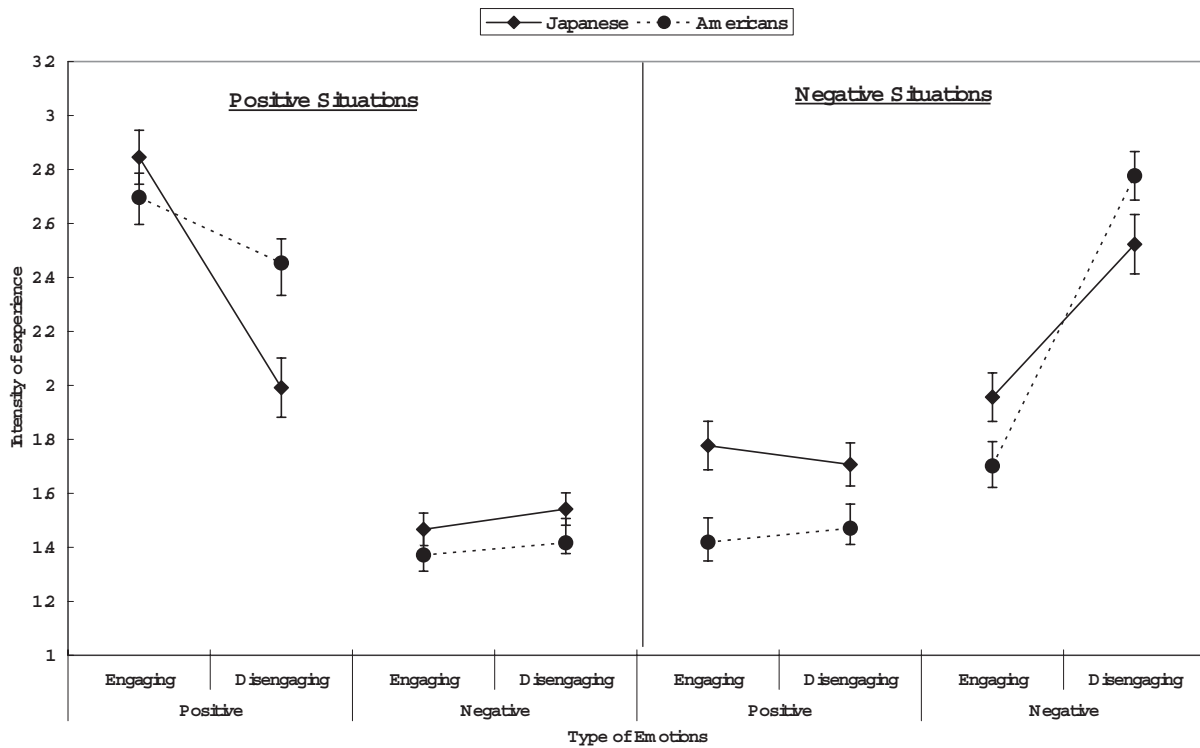


Figure 2. Reported intensity of experiencing positive and negative emotions that are either engaging or disengaging in positive and negative situations in Study 2.

Table 5
F Tests From Analyses of Variance Performed on Four Conditions That Varied in the Valence of Emotions and the Valence of Situations (in Study 2)

Variable	Positive situation				Negative situation			
	Positive emotion		Negative emotion		Positive emotion		Negative emotion	
	Between subjects	Between situations	Between subjects	Between situations	Between subjects	Between situations	Between subjects	Between situations
Culture	1.73	4.42†	1.92	<1	7.56*	17.11**	<1	<1
Gender	<1	<1	<1	<1	<1	<1	1.06	3.60†
Culture × Gender	2.11	4.47†	<1	1.09	<1	2.54	1.21	4.75†
Social orientation (SO)	85.38***	12.65**	2.79	1.69	<1	<1	175.78***	33.42***
SO × Culture	25.30***	4.02†	<1	<1	1.07	<1	17.37***	11.06*
SO × Gender	4.48*	5.47†	<1	<1	6.04*	15.04***	<1	<1
SO × Culture × Gender	<1	<1	<1	<1	<1	<1	<1	<1

† $p < .10$. * $p < .05$. ** $p < .001$. *** $p < .0001$.

that contradicted this pattern. Evidently, the gender effects are weaker and less consistent than the culture effects.

Predictors of well-being. In this analysis, all the 22 situations were used.⁷ Over the diverse array of situations, we predicted that Americans would be happiest when they succeeded in tasks of independence, whereas Japanese would be happiest when they succeeded in tasks of interdependence. Preliminary analysis showed no significant gender effect, so this variable was dropped. An HLM analysis performed on the measures of emotional experience provided strong support for this prediction. As shown in Table 6, the degree of experiencing general positive emotions (e.g., happiness) was significantly increased as a function of the degree of experiencing both engaging and disengaging positive emotions (e.g., friendly feelings and pride, respectively). As predicted, however, the effect of engaging emotions (e.g., friendly feelings) was stronger for Japanese than for Americans, $\chi^2(1) = 9.23, p < .05$, but the effect of disengaging emotions was stronger for Americans than for Japanese, $\chi^2(1) = 30.00, p < .0001$. Within each culture, the relative magnitude of the effects of the two types of positive emotions provided strong support for our analysis. Thus, in Japan, the effect of engaging emotions was much stronger than the effect of disengaging emotions, $\chi^2(1) = 17.13, p < .0001$, whereas in the United States, the effect of disengaging emotions was reliably stronger than the effect of engaging emotions, $\chi^2(1) = 8.20, p < .05$.

Table 6
Regression Coefficients That Predict General Positive Emotion as a Function of Engaging Positive Emotion (e.g., Friendly Feelings) and Disengaging Positive Emotion (e.g., Self-Esteem) Over 22 Situations Within Each Individual (in Study 2)

Culture	Predicting general positive emotion (e.g., happiness)		Predicting general negative emotion (e.g., unhappiness)	
	Engaging emotion	Disengaging emotion	Engaging emotion	Disengaging emotion
Japanese	0.61	0.30	0.24	0.56
American	0.41	0.65	0.20	0.40

We also used a difference score between the intensity rating for positive disengaging emotions and the intensity rating for positive engaging emotions to predict happiness. This analysis eliminated the multicollinearity problem associated with the first analysis. We replicated the first analysis and found that the average standardized regression coefficient for Americans was significantly positive ($M = .14$), $\chi^2(1) = 10.93, p < .002$, indicating that Americans feel happy primarily when they feel disengaging (rather than engaging) positive emotions. In contrast, the standardized regression coefficient for Japanese was significantly negative ($M = -.44$), $\chi^2(1) = 154.05, p < .0001$, indicating that Japanese feel happy primarily when they feel engaging (rather than disengaging) positive emotions.

Remember 21 of the 22 situations were common across the two cultures. For each of the 21 situations, we tested the predicted cross-cultural difference by predicting happiness as a function of both engaging and disengaging positive emotions in each situation. The pattern was very consistent across situations, with the predicted cross-cultural difference evident in 19 of the 21 situations.

We also sought to predict the experience of general negative emotions (e.g., unhappiness) as a function of negative engaging and negative disengaging emotions. As in Study 1, the effect of disengaging negative emotions (e.g., anger) was stronger than the effect of engaging negative emotions (e.g., guilt) for both Japanese and Americans, $\chi^2(1) = 51.06, p < .0001$. The conclusion remained the same when a difference score between disengaging negative emotion and engaging negative emotion was used to predict happiness.

Correlation between two indices of emotional experience. As in Study 1, we first computed, for each participant, a single index of the relative magnitude of experiencing disengaging (vs. engaging) emotions. As predicted, this index took a positive value for Americans and a negative value for Japanese ($M_s = .42$ and $-.13$), $t(99) = 7.28, p < .0001$. Moreover, the cross-cultural difference was quite large, with Cohen's $d = 1.46$. Next, also for each participant, we computed a standardized regression coefficient predicting happiness as a function of disengaging (rather than

⁷ Results were no different when the situation that was unique to each country was excluded.

engaging) positive emotions. The average coefficient, as predicted, was positive for Americans and negative for Japanese ($M_s = .05$ and $-.37$), $t(99) = 7.34$, $p < .0001$. Moreover, the cross-cultural difference was large, with Cohen's $d = 1.46$. Finally, we correlated the two indices. Notably, the correlation was significantly positive both in Japan and in the United States ($r_s = .37$ and $.58$, $p_s < .05$, for Japanese and Americans, respectively). The convergence between the relative intensity measure and the happiness measure here is in sharp contrast with the finding in Study 1, in which we found no such convergence.

General Discussion

Culture and Experience of Emotion

Past research on culture and emotion has primarily focused on the *potential* for emotions (Mesquita, Frijda, & Scherer, 1997), that is, the emotions that people are capable of having in principle. Thus, much cross-cultural research on emotions has aimed at finding similarities in the aptitude for certain aspects of emotions, such as the facial or vocal expressions and the physiological response patterns associated with particular emotions. In fact, this research has yielded overwhelming evidence for similarity with regard to the emotional responses that people in different cultures are capable of having and expressing (Ekman, 1994; Scherer, 1997; Scherer, Schorr, & Johnstone, 2001; Scherer, Wallbott, & Summerfield, 1986), although some careful comparisons have also yielded culture specificity even at this level (e.g., Menon & Shweder, 1994; Mesquita, 2001). The present study takes the cross-cultural research on emotions beyond the potential for emotions to the *actual experience* of emotions (Mesquita, 2003). The most important contribution of the present work, then, was to demonstrate that there exists reliable and systematic cross-cultural variation in emotional experience.

We focused on emotions that are distinguished on the dimensions of pleasantness and social orientation. Drawing on our earlier work, we proposed that, across cultures, emotional experience is organized according to these dimensions, such that one can cross-culturally distinguish between positive and negative emotions and, moreover, between socially engaging and disengaging emotions. We expected that the meanings and practices of independent cultural contexts encourage themes of independence such as personal achievement and goal blockage, and the meanings and practices of interdependent cultural contexts make themes of connectedness or the lack thereof salient. As a consequence, we predicted systematic cultural variation in emotional experience. In particular, we expected that interdependent cultural contexts would activate engaging emotions more, whereas independent cultural contexts would activate socially disengaging emotions more. We conducted two studies, comparing the emotions experienced in Japanese, interdependent contexts with those in North American, independent contexts.

Intensity of Emotional Experience

In support of the idea that socially engaging themes such as social harmony and failed repayment are prevalent in interdependent cultures but socially disengaging themes such as personal achievement and right infringement are more prevalent in inde-

pendent cultures, we found systematic tendencies for Japanese to experience engaging emotions more strongly than Americans do and, conversely, for Americans to experience disengaging emotions more strongly than Japanese do. These findings were consistent across the two studies that adopted somewhat different methodologies.

Notably, both studies included a relatively large number of different emotional episodes (7–22) per respondent. The data thus reflect cultural patterns of emotional responses across different people as well as situations, rather than merely representing one-time measurements of emotional feelings in response to one particular event. The present data are thus consistent with the notion that cultural affordances for engaging or disengaging emotions are consistently present across different situations over all individuals engaging in the respective cultural contexts and, thus, highly pervasive even though their effect sometimes may not be readily detectable in a single person's response to a single, specific situation or episode. We believe that the present methods that assess emotions across a number of situations are much more suited to reveal systematic effects of culture than more common methods in the emotion research that focus on a very small number of situations because these effects are mediated by cultural affordances that are subtly, but consistently present in many ordinary daily practices and pervasive ideas, beliefs, and assumptions.

Predictors of Happiness

Moreover, in accordance with the notion that positive engaging themes are affirming of interdependence of self, we found that well-being is best predicted by positive emotions that are engaging among Japanese. We also hypothesized that positive disengaging themes are affirming of independence of self. In support of this idea, we found in Study 2 that positive disengaging emotions best predicted well-being of Americans, although this pattern was weak in Study 1. These findings indicate that Japanese and Americans are chronically motivated toward the very different goals of interdependence (e.g., social harmony) and independence (e.g., personal control), respectively (Kitayama et al., 2006).

An overarching conclusion, then, is that across cultures, both positive engagement and positive disengagement can promote well-being. Yet, in Japan, those individuals who are embedded in close, relatively harmonious relations and thus are likely to experience friendly feelings, respect, and the like tend to enjoy more well-being; however, in the United States, social interdependence may be less important for well-being than is standing on one's own feet, striving for personal achievement, and maintaining high self-esteem. Our findings are consistent with several past studies that make this general point (e.g., Kang et al., 2003; Kitayama et al., 2006, 2000; Kwan et al., 1997). Yet, the present findings are one of the first in the literature that demonstrates this consistency with ecologically valid daily experiences of emotions. Mesquita and colleagues have recently amassed evidence that is convergent with the evidence described here (Mesquita & Karasawa, 2002; Mesquita et al., 2005).

Cultural Affordances and the Two Effects of Social Orientation

We have argued that people differentially experience engaging and disengaging emotions because of the cultural affordances they

are exposed to, with American contexts affording disengaging emotions and Japanese contexts affording engaging emotions. We have also argued that either engaging or disengaging positive emotions are more closely linked to happiness and subjective well-being because of culturally divergent motivational propensities, with Americans oriented toward independence and Japanese oriented toward interdependence. One significant question that must be addressed in future work concerns the connection between the two hypotheses tested in the present work.

As a first approximation, we might posit that cultural affordances for engaging and disengaging social orientations are instrumental in nurturing and fostering relatively chronic motivational tendencies toward the corresponding goals of interdependence and independence (Kitayama et al., 1997). That is, people who are chronically exposed to cultural affordances for disengaging emotions may eventually acquire motivational tendencies toward independence, whereas those chronically exposed to cultural affordances for engaging emotions may eventually acquire motivational tendencies toward interdependence. If so, then the relative intensity of emotional experience and the predictor of happiness may be expected to be closely related to one another. That is, our two indices of emotional experience should converge. This is exactly what we found in Study 2.

It is of interest, however, that we did not find any such correlation in Study 1. We suspect that this was because in Study 1, participants recalled only a very specific type of social episode, namely, the most emotional experience of the day. People's motivational tendencies (as revealed in the happiness measure) may be influenced not only by cultural affordances existing in this type of situation (as indicated by the relative intensity measure) but also by cultural affordances associated with myriad other types of situations. It stands to reason that each person's motivational tendencies are best predicted by the entire pool of cultural affordances he or she is exposed to over many different types of situations. It would follow that the relative intensity measure that is based on a wide array of situations (see Study 2) is a better proxy for the entire pool of cultural affordances than the corresponding measure that is based only on one type of situation (see Study 1). This may account for the fact that a highly reliable correlation between the relative intensity measure and the happiness measure was observed in Study 2 but not in Study 1. Although speculative, this analysis suggests that the notion of cultural affordances is useful in furthering researchers' understanding of both origins and underlying mechanisms for a variety of cross-culturally divergent psychological effects.

Toward an Implicit Measure of Self-Orientation

The present results may be brought to bear on the measurement of orientation of the self as independent or interdependent. In order to capture individual differences on this dimension, researchers have traditionally relied on several different attitudinal scales (e.g., Singelis, 1994). All these scales probe one's independence or interdependence in terms of explicit self-reports ("In general, I make my own decisions" for independence and "When my opinion is in conflict with that of another person's, I often accept the other opinion" for interdependence). Although these attitude scales have been used in numerous studies (Oyserman et al., 2002), the validity of these measures have recently been called into question. Some

researchers have pointed out certain methodological artifacts such as acquiescence response bias (Schimmack, Oishi, & Diener, 2005) and reference group effect (Heine, Lehman, Peng, & Greenholtz, 2002). Some others have argued that people's behavioral propensities toward independence or interdependence may be implicit; that is, they may be rarely self-reflective, deliberate, or even conscious. If there is only a limited conscious access to such behavioral propensities (Kitayama, 2002; see also Nisbett & Wilson, 1977), then explicit self-report may be ill-suited as a tool for measuring them.

The present work used the notion of independent and interdependent self to predict some systematic cross-cultural variations in the pattern of emotional responses. Yet, given the results reported in this article, we wonder whether the converse of the present logic may prove to be equally fruitful in future work. That is, it may be possible to use the pattern of emotion responses as a means for implicit assessment of independence and interdependence. One obvious measure is the extent to which engaging or disengaging positive emotions are linked to happiness. Furthermore, at least if emotional experience is assessed over a wide variety of social situations (as in Study 2), it may be reasonable to use the relative intensity of experiencing engaging versus disengaging emotions. Individuals may be said to be more independent (or interdependent) if their happiness is predicted more by disengaging positive (or engaging positive) emotions, if they experience disengaging (or engaging) emotions more, or both.⁸ Study 2 provided initial evidence for the convergent validity of these measures.

Future research should directly assess the predictive validity of these implicit measures of independence and interdependence with respect to a variety of cross-cultural differences in cognition, such as analytic versus holistic thought (e.g., Nisbett, Peng, Choi, & Norenzayan, 2001), and motivation, such as self-enhancement and self-improvement (e.g., Heine et al., 1999). We suspect that many of such behavioral or online responses may be better predicted by implicit measures of independence and interdependence than by their explicit counterparts, such as the one developed by Singelis (1994).

Uncovering Social Orientation of Emotions

The present work has provided yet another piece of evidence for the dimension of social orientation as central in analyzing emotional experience. Nevertheless, this dimension has never been acknowledged in appraisal theories of emotion (Scherer et al., 2001). This apparent neglect may be because the appraisal theories have their set of dimensions that overlap with social engagement and disengagement. To be more specific, whereas social engagement may often be conflated with submissiveness, externality in control, and lower self-control, social disengagement may have a lot in common with dominance, internality in control, and higher self-control. This means, for example, that a state of social relationship that can be described and experienced as "harmonious," "respectful," and thus "socially engaging" can alternatively be described and experienced as "submissive," "externally con-

⁸ Yet another implicit measure that is promising is the spontaneous accessibility of personal versus relational attributes in a 20-statement test (Balci, Dunning, & Miller, 2006).

trolled,” and “losing self-control.” Likewise, a state of social relationship that can be described and experienced as “separated,” “independent,” and “ego centered” can also be described and experienced as “in control,” “self-enhancing,” and “dominating.”

It then appears that the appraisal dimensions assumed in the contemporary literature on emotion provide alternative ways of conceptualizing social engagement and disengagement. Like ambiguous figures, any given social situation can be multiply construed. However, it seems important to stay experientially close to the experiential perspective, as it is this perspective—not the researchers’—that will shape the nature of emotional experience and subsequent behaviors. We suggest that especially in cultures that emphasize the connectedness between people, a situation may rather be captured as one of engagement than as one of low control, submissiveness, and the like. We believe that exploring such perspectival effects on emotions will be a next significant challenge in future research on culture and emotion.

Limitations

A few limitations of the present work should be acknowledged. First, we only used verbal report of emotions. Emotions, however, can be unconscious or, even if not, may not always be amenable to verbal articulation. Future work should examine nonverbal measures of emotion to determine whether the pattern of cultural variation can be reliably identified with such measures as well.

The second limitation concerns the notion of social orientation itself. One major feature of negative emotions that vary in this regard involves motivational tendencies. Thus, whereas engaging negative emotions, such as guilt and shame, are considered to entail a strong motivational tendency to repair damaged social harmony and to restore interdependence, disengaging negative emotions, such as anger and frustration, are considered to entail a strong motivational tendency to repair damaged independence and to restore the sense of autonomy. These motivational tendencies have so far been rarely addressed in the emotion literature, and the present research is no exception. Future research should focus on the link between emotional and motivational processes. This new focus would allow emotion researchers to explicitly link the emotion literature to other related areas of personality and social psychology, such as altruism, intrinsic motivation, and aggression.

Third, we relied on the notion of cultural affordances to make the predictions that were tested in this work. Although we did not directly assess the affordances themselves, such assessment has been successfully attempted in the domains of self-esteem (Kitayama et al., 1997), control (Morling et al., 2002), and cognitive style (Miyamoto, Nisbett, & Masuda, 2006). Future work should identify in detail the nature of cultural affordances for both engagement and disengagement.

Finally, present psychological research on culture, including the studies described here, is based largely on college student samples. Future work on emotion and culture should cover the entire range of the life cycle (Kitayama et al., 2006). Moreover, with initial evidence for both regional variations (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, in press) and variations as a function of social class (Schooler, in press; Snibbe & Markus, 2005), it will be increasingly important to pay careful attention to similarities and differences within any single macroscopic culture. By so

doing, it will be possible to better understand the process by which culture influences and shape one’s emotional experience.

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