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BRIEF REPORT

Emotional Fit With Culture: A Predictor of Individual Differences in Relational Well-Being

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There is increasing evidence for emotional fit in couples and groups, but also within cultures. In the current research, we investigated the consequences of emotional fit at the cultural level. Given that emotions reflect people's view on the world, and that shared views are associated with good social relationships, we expected that an individual's fit to the average cultural patterns of emotion would be associated with relational well-being. Using an implicit measure of cultural fit of emotions, we found across 3 different cultural contexts (United States, Belgium, and Korea) that (1) individuals' emotional fit is associated with their level of relational well-being, and that (2) the link between emotional fit and relational well-being is particularly strong when emotional fit is measured for situations pertaining to relationships (rather than for situations that are self-focused). Together, the current studies suggest that people may benefit from emotionally "fitting in" to their culture.

Keywords: emotion, culture, fit, relationships, well-being

There is increasing evidence for emotional fit: People's emotions are similar to those of others around them. Emotional fit has been found for couples, groups, and cultures (Anderson, Keltner, & John, 2003; De Leersnyder, Mesquita, & Kim, 2011; Gonzaga, Campos, & Bradbury, 2007; Totterdell, 2000). One of the reasons for emotional fit may be that people who interact and share a social identity come to see the world in similar ways.

Consistently, emotions have often been conceived of as views of the world; they reflect a stance (Solomon, 2004) or an intention to act (Frijda, 2007). For instance, anger implies an attitude of non-acceptance and an intention to make others comply with our wishes (Frijda, Kuipers, & Terschure, 1989). In contrast, embarrassment implies a sense of personal failure and an intention to restore social standing (Tangney, Miller, Flicker, & Barlow, 1996). Experiencing anger toward a boss who neglected you for a pro-

motion reflects a different stance and intention to act than experiencing the same intensity of anger in combination with embarrassment. Thus, how emotions are patterned within situations reflects a view on the world.

To the extent that people share a view on the world, we may expect them to experience similar patterns of emotion. This is the case within a cultural context. For instance, in European American contexts that highlight autonomy and individuality, people tend to experience more emotions that reflect individual self-worth and personal autonomy, such as pride and anger, than emotions that highlight interdependence and social alignment, such as closeness and embarrassment. In contrast, in East Asian contexts that highlight interdependence and connectedness, people tend to experience more closeness than pride and no more anger than embarrassment (e.g., Boiger, Mesquita, Uchida, & Barrett, 2013; Kitayama, Mesquita, & Karasawa, 2006; Markus & Kitayama, 1991, 1994). Moreover, even when the most intense emotions (e.g., anger) are held constant, the patterns of simultaneously experienced emotions (e.g., embarrassment) tend to be "cultured" in subtle, yet distinct ways. In several studies, we compared individuals' emotional patterns with average patterns of their own versus another culture, and consistently found a better emotional fit with the own culture (De Leersnyder, Mesquita, & Kim, 2013a, 2013b). Emotional fit appears to stand for an individual's cultured view of the world.

In the current research we aim to investigate the *consequences* of emotional fit with culture. Given that emotions reflect a particular view on the world, similarity in emotional patterns stands for a shared view. Previous research has found that sharing a view on

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the world—as measured by people's attitudes—may be very powerful in establishing or maintaining social bonds (e.g., [Bliuc, McGarty, Reynolds, & Muntele, 2007](#); [Byrne, 1971](#); [Sani, 2005](#)). Building on these findings, we argue that the experience of emotions, as a signal of one's worldview, may also serve a similar function. Therefore, we expect that people's fit to their own culture's patterns of emotion is associated with relational well-being (e.g., [Ryff, 1989](#)).

In three different cultures, we tested the hypotheses (1) that people's cultural fit of emotions is associated with their level of relational well-being (as opposed to other domains of well-being), and (2) that the link between emotional fit and relational well-being is particularly strong when emotional fit is measured for situations pertaining to relationships, given that how people feel in these relationship-focused situations would be more consequential to others than how they feel in self-focused situations.

The current research goes beyond existing emotion research by contextualizing the functionality of emotions. First, it considers the consequences of emotion at the level of *patterns of co-occurring emotions*, rather than of discrete emotions. Second, this research focuses on benefits of the *cultural fit* of an individual's emotions, rather than of these emotions per se.

General Method

Materials

Cultural fit in emotions. To measure cultural fit, we adopted the Emotional Patterns Questionnaire (EPQ; [De Leersnyder et al., 2011](#)). In the EPQ, participants are presented with prompts that are defined by valence (positive, negative), relationship focus (*about your relationship with others, about things that happened to you personally*) and social context (Family, Work/school, Friends). The prompt also lists sample emotions expected to be most intense in the situation (e.g., ashamed, guilty, indebted for negative relationship-focused situations). Participants first describe a situation from their own recent past that matches the prompt, and then rate the intensity of their emotions in that situation according to a set of emotion scales (1 = *totally not* – 7 = *extremely*) that covered the domain of emotional experience (as in [De Leersnyder et al., 2011](#)). The intensity ratings of the full set of emotions (20 in Studies 1 and 3, and 34 in Study 2) constitute an individual's emotional profile for a specific type of situation.

We calculated each participant's cultural fit by 1) calculating the culture's average emotion profiles for each type of situation, and 2) running profile correlations between each individual's profile and the average cultural profile for the corresponding situation.¹ We excluded emotion items from the profile if there was no within-sample agreement about their meaning (as suggested by low or cross-loadings on a Principal Component Analysis). Furthermore, each participant's own scores were omitted from the average cultural profile to which they were compared. Fisher *z*-transformations of the fit-scores were used for statistical analysis. In each study, we excluded participants when the valence of their self-reported situations did not match the valence of the prompt (Study 1, *n* = 3; Study 2, *n* = 9; Study 3, *n* = 5).

Relational well-being. Participants completed either the long (Studies 1 and 3) or the short (Study 2) version of the World Health Organization's Quality of Life Questionnaire (WHOQOL-

group, 1995; [Skevington, Lotfy, & O'Connell, 2004](#)). Both versions cover 26 well-being facets that cluster into four broad domains: psychological, physical, environmental, and relational well-being. Higher domain scores (20-point scale in the long version; 5-point scale in the short version) indicate higher well-being. The *Relational well-being domain* consists of three facets referring to 'satisfaction with relationships,' 'satisfaction with social support,' and 'satisfaction with sex life.' In the current research, the other well-being domains were combined to create an *Overall Quality of Life index* that served as a control for testing the link between emotional fit and relational well-being.

Demographic variables. All participants completed demographic questions for which we will control when testing our hypotheses.

Study 1

Participants and Procedure

Participants were 31 European Americans from a community sample (60% female; $M_{\text{age}} = 38\text{years}$ ($SD_{\text{age}} = 14$); $M_{\text{social_class}} = 3.17$ ($SD_{\text{social_class}} = .80$) on a scale from 1 = *working class* – 5 = *upper class*). Participants were recruited in public places, such as malls, and received \$10 for their participation.

All participants completed four versions of the EPQ: two were relationship-focused, and two were self-focused (one positive and one negative for each). Each participant completed all prompts with respect to the same context (Family *n* = 17; Work/school *n* = 14). The order of the prompts was counterbalanced, but there were no order effects. In the PCA (explaining 60% of the variance), all emotion items loaded well on three theoretically meaningful factors and were retained to establish the average profiles. Results on the link between relational well-being and emotional fit in positive and negative situations were no different. Therefore, we collapsed the fit scores across negative and positive situations, obtaining one fit score for relationship-focused and one for self-focused situations.

Participants completed the long version of the WHO Quality of Life scale (*Relational well-being* $\alpha = .72$; $M = 14.28$ [$SD = 2.84$]; *Overall Quality of Life* $\alpha = .89$; $M = 15.01$ [$SD = 2.22$]).

Results

To test the link between relational well-being and emotional fit in relationship-focused situations we conducted 1) correlational analyses and 2) linear regression analyses in which we controlled for variables that may be related to relational well-being ([Carton, Kessler, & Pape, 1999](#)). As expected, emotional fit was positively correlated to relational well-being (H1); yet only in relationship-focused situations and not in self-focused situations (H2; [Table 1](#),

¹ Profile correlations have the advantage that they 1) take into account the similarity across a whole set of emotions; 2) capture the idea of emotional patterns (i.e., the relative intensities of different emotions); 3) are not prone to individual differences in scale use. The use of summed absolute difference scores as a fit measure yielded convergent results in predicting relational well-being when these scores were normally distributed. However, the summed difference scores were normally distributed in only one of the three studies.

Table 1

Bivariate Correlations Between the Four Well-Being Domains and Emotional Fit in Relationship-Focused and Self-Focused Situations

Well-being domain	Panel A Study 1: European Americans		Panel B Study 2: Belgians		Panel C Study 3: Koreans	
	Emotional fit relationship-focused situation	Emotional fit self-focused situation	Emotional fit relationship-focused situation	Emotional fit self-focused situation	Emotional fit relationship-focused situation	Emotional fit self-focused situation
Relational well-being	.568**	-.041	.147*	.076	.340**	.057
Physical well-being	.132	-.046	-.028	-.029	.120	.040
Psychological well-being	.121	-.092	.099	.100	.315**	.191
Environmental well-being	.286	.053	.066	.031	.304*	.215

* $p < .05$. ** $p < .01$.

panel A). The linear regression analysis yielded the same association after controlling for context (step 1; dummy-coded as 0 = *family*; 1 = *work/school*), demographic variables (step 2), and overall well-being (step 3; Table 2, panel A). This link held true across family and work/school contexts (tested in step 5).

Study 2

Study 2 aimed to replicate the findings of Study 1 in a different cultural context, and including a larger sample.

Participants and Procedure

Two hundred sixty-seven Belgian psychology freshmen participated in this study (84% female; Mean age = 19 years; $SD = 1.86$). Socioeconomic status was operationalized as the parents' highest degree of education (0 = *no diploma* – 4 = *university diploma*; $M_{\text{education_mother}} = 3.59$ [$SD_{\text{education_mother}} = .58$]; $M_{\text{education_father}} = 3.58$ [$SD_{\text{education_father}} = .69$]).

Students participated in the study for course credit. Each student completed the EPQ for two different situations, similar in valence and context, yet one pertaining to a relationship-focused situation, the other pertaining to a self-focused situation. Participants rated their emotional experience on 34 items; 30 loaded well on four factors yielded by a PCA (explaining 65% of the variance). We omitted the nonloading items from the average profile because they may lower emotional fit scores artificially. The EPQ included a Friends context (context_dum2), in addition to the Work/school context (context_dum1) and Family context (reference category).

Students completed the short version of the QOL. *Relational well-being* was measured by averaging the items: "How satisfied are you with your social relations?" and "How satisfied are you with the support you get from friends?" ($\alpha = .62$; $M = 3.79$ [$SD = .43$]).² As in the previous study, the *Overall Quality of Life index* was calculated by averaging all domains not referring to relational well-being ($\alpha = .85$; $M = 4.03$ [$SD = .70$]).

Results

We adopted the same analytic strategy as in Study 1. Confirming both hypotheses 1 and 2, we found a positive correlation between relational well-being and cultural emotional fit in relationship-focused situations only (Table 1, panel B). Results from the regression analysis strengthened our confidence in this link (Table 2, panel B). Further steps of the regression analysis includ-

ing two-way (step 5) and three-way (step 6) interactions between emotional fit on the one hand, and the between-subjects factors of valence and context on the other, did not reach significance in predicting relational well-being.

Study 3

Both studies 1 and 2 support the hypothesis that relational well-being is linked to cultural fit in situations that are about relationships. However, both the United States and Belgium are independent cultural contexts, characterized by similar types of relationships. Given the cultural differences in how central social relationships are to the self in independent versus interdependent cultural contexts (Markus & Kitayama, 1991), we examined whether the same link would replicate in an interdependent context, such as Korea. We theorized that emotional fit is an important ingredient for relational well-being for most people at some basic level, and thus anticipated that the general pattern of results would hold.

Participants and Procedure

Participants were 75 Koreans from a community sample (60% female; $M_{\text{age}} = 28$ years; $SD_{\text{age}} = 4.25$). As an index of socioeconomic status participants reported their highest degree of education (dummy-coded as 'edu_dum1' = college ($n = 41$); 'edu_dum2' = graduate school ($n = 9$); with "reference group" = high school ($n = 26$)).

Participants were recruited through a Christian megachurch and received ₩10,000 for completing the questionnaires. The design and materials were similar to those used in Study 1. Again, there were no order-effects. We collapsed emotional fit scores into one score for relationship-focused and one for self-focused situations, as the patterns of association were similar between the relationship-focused as well as between the self-focused situations. The PCA on the emotion data (explaining 65% of the variance) yielded a clear three-factor structure for all but three items that were consequently omitted from the average pattern.

Participants completed the long version of the Quality of Life Scale from which we derived a *Relational well-being* scale ($\alpha =$

² The item—"How satisfied are you with your sex life?"—was omitted because it was not normally distributed (Shapiro-Wilk test = .870; df_{251} ; $p \leq .001$).

Table 2
Output of Hierarchical Regression Analyses Predicting Relational Well-Being

Predictor	Panel A Study 1: European Americans		Panel B Study 2: Belgians		Panel C Study 3: Koreans	
	ΔR^2	β^a	ΔR^2	β^a	ΔR^2	β^a
Step 1	.047		.024		.001	
Context_dum1		-.096	Valence Context_dum1 Context_dum2	.085 -.146* -.117†	Context_dum1	-.059
Step 2	.475**		.039†		.101	
Gender		-.026	Gender	.129*	Gender	.042
Age		-.040	Age	-.016	Age	-.260
Class		.602***	Edu_mother	-.033	Edu_dum1	.123
			Edu_father	-.026	Edu_dum2	.108
Step 3	.162**		.328***		.179***	
Overall QOL		.339*	Overall QOL	.547***	Overall QOL	.404**
Step 4	.091†		.016*		.062††	
Emotional Fit Rel-foc Sit		.300*	Emotional Fit Rel-foc Sit	.143*	Emotional Fit Rel-foc Sit	.268*
Emotional Fit Self-foc sit		-.237	Emotional Fit Self-foc sit	.058	Emotional Fit Self-foc sit	-.151
Total R^2	.832***		.407***		.342**	

Note. Emotional Fit Rel-foc sit = Emotional Fit in Relationship-focused situations; Emotional Fit Self-foc sit = Emotional Fit in Self-focused situations; Edu_Mother = educational level mother; Edu_Father = educational level father; Overall QOL = Overall Quality of Life index.

^a The β s presented here are the ones from the final regression model (i.e., the latest step that significantly contributed to the explained variance).

†† $p = .086$. † $p \leq .065$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

.79; $M = 13.69$ [$SD = 1.97$])³ and an *Overall Quality of Life* scale ($\alpha = .704$; $M = 4.03$ [$SD = .70$]).

Results

We adopted the same analytic strategy as in the previous studies. The correlations revealed associations between cultural emotional fit and several different domains of well-being. However, as predicted, emotional fit was most strongly associated with relational well-being and this association only held true in relationship-focused situations (Table 1, panel C). We probed this association further in a regression analysis and found that the main effect of emotional fit in relationship-focused situations significantly predicted relational well-being, above and beyond all control variables (Table 2, panel C).

General Discussion

Emotional fit at the level of culture is associated with relational well-being. Across three studies, we found a link between individuals' relational well-being and their cultural fit in situations that were *about* relationships. This finding is consistent with research on positive relationship outcomes of emotional similarity in dyads and teams (Anderson et al., 2003; Gonzaga et al., 2007; Totterdell, 2000). Thus, when individuals interact with others in relationship-focused situations, and experience emotions that fit the prevalent patterns in their cultural context, they report to have better social relationships. Relational well-being was not associated with emotional fit in self-focused situations, which was expected, given that these situations are less central to establishing or maintaining social relations.

Furthermore, the results support the hypothesis that emotional fit in relationship-focused situations would be more strongly associated with relational well-being than with other domains of well-being. Only in the Korean sample did we find a positive

relationship between cultural fit in relationship-focused situations and several other domains of well-being. The fact that emotional fit in relationship-focused situations is predictive of a wider range of well-being measures in Korea than in the United States and Belgium may be because social relationships are more central to one's personhood (Markus & Kitayama, 1991; Kim, Sherman, & Taylor, 2008). Because relationship satisfaction is thus more central to well-being in interdependent than in independent cultures (Diener & Diener, 1995; Kitayama, Markus, & Kurokawa, 2000; Kwan, Bond, & Singelis, 1997; Uchida & Kitayama, 2009), Koreans' emotional fit with others may be relevant not just to relational well-being, but also to general well-being.

We want to note, first, that the results cannot be explained by demand characteristics. Emotional fit was measured implicitly, by taking the correlation between an individual's emotion ratings and the aggregate of the ratings by all others in the sample. Second, we measured fit with the local cultural patterns of emotions (which are not necessary nationally representative), because we expect that this fit is most relevant to well-being.

Some post hoc analyses support the idea that the benefits of emotional fit are exclusive to individuals' specific cultural context and do not generalize to other contexts. We calculated Koreans' fit to the average U.S. emotional patterns, and European Americans' fit to the average Korean emotional patterns (as Studies 1 and 3 used the same measures). We conducted the same regression analyses as before, except we replaced same-culture emotional fit by *other*-culture emotional fit. Other-culture emotional fit did not predict relational well-being in either sample.

There is a clear association between emotional fit and relational well-being, yet our research neither speaks to the direction of this association, nor to the underlying mechanisms. Emotional fit may

³ The facet about people's sex life was omitted because it was not normally distributed (Shapiro-Wilk test = .958; df_{64} ; $p = .030$).

either produce better relationship outcomes, or conversely, better relationships may produce better emotional fit; a feedback-loop between the two is likely.

These limitations notwithstanding, the research strongly suggests that the social functionality of emotions depends on their fit with the context.

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