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Contextualism as an Important Facet of Individualism-Collectivism: Personhood Beliefs Across 37 National Groups

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Abstract

Beliefs about personhood are understood to be a defining feature of individualism-collectivism (I-C), but they have been insufficiently explored, given the emphasis of research on values and self-construals. We propose the construct of *contextualism*, referring to beliefs about the importance of context in understanding people, as a facet of cultural collectivism. A brief measure was developed and refined across 19 nations (Study 1: N = 5,241), showing good psychometric properties for cross-cultural use and correlating well at the nation level with other supposed facets and indicators of I-C. In Study 2 (N = 8,652), nation-level contextualism predicted ingroup favoritism, corruption, and differential trust of ingroup and outgroup members, while controlling for other facets of I-C, across 35 nations. We conclude that contextualism is an important part of cultural collectivism. This highlights the importance of beliefs alongside values and self-representations and contributes to a wider understanding of cultural processes.

Keywords

individualism–collectivism, personhood beliefs, cross-cultural differences, measurement invariance

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> *The central theme of individualism is the conception of the individuals as autonomous from groups; the central theme of collectivism is the conception of individuals as aspects of groups or collectives.*
>
> (Triandis, Chan, Bhawuk, Iwao, & Sinha, 1995, p. 462)

Since the beginnings of social scientific interest in cross-cultural differences, theorists and researchers have often observed that members of different cultures around the world (and in different historical periods) seem to have diverging beliefs or conceptions about the nature of personhood (Geertz, 1975; Mauss, 1938/1985; Shweder & Bourne, 1984). As illustrated by the quotation above, diverging beliefs about the extent to which individuals are separate from, or closely connected to, the social context have been portrayed as a defining feature of the cultural dimension of individualism-collectivism (I-C: Triandis, 1995; Triandis et al., 1995). Still, recent research into I-C has tended to focus on values and self-construals, leaving the belief component largely unexplored. Research into social perception has revealed meaningful cross-cultural patterns in personhood beliefs related to the importance of the context; however, no clear conceptual framework linking these beliefs to I-C has yet been put forward. We aim to fill this gap in the literature by proposing contextualism as an important belief dimension within I-C.

I-C as Values, Beliefs, and Representations of the Self

Brewer and Chen (2007) suggest that cultures provide answers to three fundamental questions: questions about the self (self-representations), questions about the world (beliefs), and questions about what one should aspire to (values). They point out, however, that most conceptualizations of I-C confound these different facets and therefore lack conceptual clarity. I-C has often been criticized as too broad and ill-defined (Earley & Gibson, 1998; Kağitçibaşi, 1997; Oyserman, Coon, & Kemmelmeier, 2002), and Brewer and Chen (2007) suggest that disentangling these different facets will generate more precise predictions and more consistent findings.

Two of these facets have so far dominated conceptualizations of I-C—that is, values and representations of the self (Kağitçibaşi, 1997). Hofstede's (1980) seminal work was hugely influential in popularizing I-C and an approach to culture based on values, which has since been widely adopted (The Chinese Culture Connection, 1987; Schwartz, 1992). In recent years, Schwartz's (1992, 2004) model of human values is perhaps the most prominent and widely used. He has identified an individual-level value structure of 10 value types or domains, organized into two higher-order bipolar dimensions, namely self-transcendence/self-enhancement and openness to change/conservation. He has found support for this structure in more than 75 nations, and a similar, but not identical, structure has been identified on the national level. Notably, several studies show evidence for a nation-level dimension of autonomy/embeddedness, conceptually similar to the individual-level dimension of openness to change/conservation (e.g., Schwartz, 2004). Although not originally designed to measure I-C, national mean scores on this dimension are correlated with Hofstede's and House, Hanges, Javidan, Dorfman, and Gupta's (2004) global indices of I-C (Gheorghiu, Vignoles, & Smith, 2009). Nevertheless, perhaps reflecting its greater theoretical precision, autonomy/embeddedness can offer additional predictive value to global I-C (e.g., Knafo, Schwartz, & Levine, 2009).

The "self" orientation to culture has also proved highly generative. Markus and Kitayama (1991) proposed that people in individualist cultures will tend to construe themselves as relatively *independent* from others, whereas those in collectivist cultures will tend to construe themselves as relatively *interdependent* or closely connected with others. Their theory suggested that self-construals mediate the influence of culture on behavior; however, over time, self-construals have often become synonymous with I-C orientation, not the least in terms of how they are measured. The explicit self-report measures have received some criticism; still, numerous studies

have linked the independent and interdependent self-construal to a wide range of behavioral and psychological outcomes (reviewed by Smith, 2011).

Less attention has been paid to the belief component of I-C, even though, as illustrated above, beliefs about personhood are central within conceptualizations of I-C. Shweder and Bourne (1984) found that the way that people thought about other people differed across cultures; Indian participants referred to contextual and relational features when asked to describe a close acquaintance, whereas Americans provided abstract and context-free accounts. Thus, the main difference they identified referred to the importance of the context in defining people. Although research into social perception has pointed to similar findings (e.g., Norenzayan, Choi, & Nisbett, 2002), these personhood beliefs have rarely been investigated, as is discussed below. Beliefs about other people often differ from beliefs about the self, as is well established in attribution research (Watson, 1982). Given that they do not necessarily coincide, self-construals and beliefs about people in general should be treated as different constructs and their convergence should be investigated empirically. We propose the construct of contextualism, which specifically refers to the perceived importance of the context in understanding people. This includes social and relational contexts, such as family, social groups, and social positions, but also physical environments. We suggest that these beliefs comprise an important facet of I-C and tap a largely unexplored side of this cultural dimension.

Beliefs Across Cultures

Bond and Leung (Bond, Leung, Tong, et al., 2004; Leung et al., 2002) have conducted extensive research in over 40 countries into general beliefs, or "social axioms," which refer to broad expectancies about the social and physical world. We argue, however, that the beliefs defining I-C are of a more specific nature and refer more narrowly to beliefs about people. Beliefs about personhood more specifically can be found in research into implicit person theories (Levy, Plaks, Hong, Chiu, & Dweck, 2001) and essentialism (Haslam, Bastian, & Bissett, 2004). Although cross-cultural differences in these beliefs have been found, the pattern of differences does not map neatly onto previously found differences in I-C across nations (cf., Chiu, Hong, & Dweck, 1997; Church et al., 2005; Church et al., 2003; Norenzayan et al., 2002). Research into entitativity (Kashima et al., 2005) has also revealed a similar pattern across cultures, with individuals generally believed to be more real entities than social groups.

A clearer pattern of cross-cultural differences has been found among beliefs about causes of behavior, where Americans have typically been found to make more dispositional attributions, referring to traits and attributes of the actor, whereas Indian and Chinese people have been found more likely to invoke contextual explanations (Miller, 1984; Morris & Peng, 1994). Such findings have led to a widely held notion that people in the West will endorse *lay dispositionism* (Ross & Nisbett, 1991)—that is, the tendency to explain behavior in terms of traits—to a greater extent than non-Western, particularly East Asian, people (Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009). However, several studies show that East Asians can make dispositional judgments to a similar extent to Americans (Choi & Nisbett, 1998; Krull et al., 1999; Norenzayan et al., 2002), which has lead Choi, Nisbett, and Norenzayan (1999) to conclude that dispositionism is cross-culturally widespread. They argue that differences in social perception may stem not from differences in dispositionism, but rather from East Asians' greater endorsement of "situationism," which they define as the tendency to explain behavior in terms of the context.

Beliefs about the importance of traits have also been investigated by Church et al. (2003), who contrast implicit trait beliefs with what they call implicit contextual beliefs. These beliefs refer to the stability, consistency, and predictability of traits, and to the possibility of inferring traits from behavior. Church et al. (2005, 2006) found that Americans tend to score higher on implicit trait beliefs and lower on implicit contextual beliefs than do Malays, Mexicans, Asian Australians,

Filipinos, and Japanese. Nevertheless, most of these cultural groups still endorsed trait theories more strongly than contextual theories.

Thus, members of collectivist cultures do not typically seem to espouse a de-traited concept of the person. As we have argued, what may be more distinctive is the tendency of members of individualist cultures to espouse a de-contextualized concept of the person (Shweder & Bourne, 1984). Church et al. (2003) defined contextual theories as the reverse of dispositionism—that is, that traits are unimportant. However, the widespread endorsement of dispositionism arguably makes this conceptualization problematic. Our theoretical and operational definition of contextualism differs from that of Church et al. by focusing instead on people's beliefs about the importance of context in its own right and its role in defining a person. It also differs from concepts of essentialism and entitativity (Haslam et al., 2004; Kashima et al., 2005), since contextualism is not concerned with whether people have a fixed and underlying nature, but refers to the type of factors that are believed to be important in making a person who he or she is.

The Present Research

We present two studies describing the development and validation of a scale measuring contextualism, investigating its correlates at both individual and cultural levels of analysis, and its incremental predictive validity. Based on an exploratory pilot study in India and the United Kingdom, we developed a scale which in Study 1 was refined and tested across 19 nations. In Study 2, we investigated whether nation-level contextualism predicts additional variance in cultural variables, after controlling for differences in values and self-construals, across 35 nations.

The confusion in the literature around the I-C construct can be attributed in part to the confounding of different levels of analysis; hence, an important task in disentangling I-C lies in specifying differences and similarities between levels. We therefore examined the relationship between contextualism beliefs and other supposed facets of I-C at both individual and cultural levels of analysis. Distinguishing between levels makes it possible to avoid the ecological fallacy (assuming the existence of individual-level relationships based on culture-level findings) and the reverse-ecological fallacy (assuming the existence of culture-level relationships based on individual-level findings: see Hofstede, 1980, p. 23; Smith, Bond, & Kağitçibaşi, 2006). We expected that contextualism beliefs would be correlated with relevant dimensions of values and self-construals at the cultural level, as they have been theorized as elements of the same cultural syndrome (Triandis, 1993). At the individual level, however, there was little reason to expect these constructs to be correlated, as a person's beliefs, values, and representations of the self do not necessarily go together consistently and often show very little overlap (Bond, Leung, Au, Tong, & Chemonges-Nielson, 2004).

Pilot

We piloted an initial pool of items among respondents in India and the United Kingdom (Vignoles, Owe, Lee, & Gadre, 2010). These items referred to the importance of a range of different contexts, including relational, group, societal, and physical contexts, in defining a person. Matsumoto et al. (2009) have found that in collectivistic cultures, behavior tends to vary more across different contexts than in individualistic cultures, and they call this variation context differentiation. We wanted to investigate whether our conceptualization of contextualism was distinct from beliefs about the variability of behavior across contexts and we therefore included items also referring to this facet. A pancultural factor analysis showed that items referring to the importance of the context in defining a person factored together, whereas they did not factor with items referring to beliefs in context differentiation, demonstrating that these are independent dimensions. We also

tested correlations between contextualism and dimensions of essentialism (Haslam et al., 2004), which were small, suggesting that these variables are indeed measuring different things. Similarly, we found contextualism to be unrelated to the perceived stability, consistency, and predictability of traits, as well as to the possibility of inferring traits from behavior (Church et al., 2003).

Study 1

In Study 1, we refined our contextualism measure using data from participants in 19 nations. The internal structure of the scale and its cross-cultural equivalence were tested through Confirmatory Factor Analysis (CFA), including separate analyses for each group, multigroup analyses, and multilevel analyses. We then investigated the correlates of this construct at both individual and cultural levels of analysis, and we expected that contextualism beliefs would be higher in those nations identified as more collectivist in previous cross-cultural research (House et al., 2004). Moreover, we expected that nation-level variation in contextualism would be correlated with other indicators of I-C within our dataset: autonomy/embeddedness values and independent/interdependent self-construals. As noted earlier, we expected the individual-level correlations among beliefs, values, and self-construals to be much weaker, reflecting the distinct roles of these constructs in psychological functioning.

Method

Participants and procedure. Measures were included in a large cross-cultural research project into identity motives and sources of motive satisfaction (see Becker et al., in press). A total of 5,241 participants across 19 nations completed the questionnaire. Sample sizes ranged from 104 (Namibia) to 737 (Brazil). Table 1 reports demographic details. In most countries, participants were high school students who took part in the study during teaching time.[1]

Instruments. Measures were translated from English into the relevant languages (see Table 1), and then independently back-translated by translators naïve to the purpose of the study (Brislin, 1970). Original and back-translated English versions were compared, discrepancies were discussed, and the translations were corrected.

Contextualism. We included 14 items tapping the importance of a range of different contexts: family, social groups, position in society, the place one comes from, occupation, where one lives, social position, role in society, and educational achievement (see appendix for subset of items). Items were rated on 6-point scales ranging from 1 (*completely disagree*) to 6 (*completely agree*).

Portrait Values Questionnaire (PVQ). We used a short version of the PVQ (Schwartz, 2007) to measure the bipolar dimension openness to change/conservation (12 items) at the individual level and autonomy/embeddedness at the nation level (aggregated national means of 10 items).[2] This latter dimension is closely related to I-C (Gheorghiu et al., 2009). Items gave a short description of a person with gender matched to the participant (e.g., *"Thinking up new ideas and being creative is important to her. She likes to do things in her own original way."*). Participants rated how similar each person was to themselves, from 1 (*very much like me*) to 6 (*not at all like me*). We reversed these scores so that higher numbers indicated greater value endorsement. Reliability was acceptable at the individual level ($\alpha = .60$) and good at the nation level ($\alpha = .78$).

Self-construal scale. We used 23 items from Gudykunst et al.'s (Gudykunst, Matsumoto, Ting-Toomey, & Nishida, 1996) self-construal scale. A subset of participants (3,552 participants in 16 nations) completed this scale, as data for most items were collected on a different occasion. We included 14 items tapping independence (e.g., "*I should be judged on my own merit*") and nine interdependence items (e.g., "*It is important to consult close friends and get their ideas before making decisions*").[3] Items were rated from 1 (*completely disagree*) to 7 (*completely agree*). Since this scale is not balanced, we ipsatized item scores within participants in order to

Table 1. Demographic Details, Fit Indices, Reliabilities, and Means for Each National Sample in Study 1

Country	*N*	Mean Age	*SD*	% Females	Language	χ^2	*df*	CFI	RMSEA	α	Means C	Means A	Means I
Belgium	251	18.22	1.09	68	French	14.90*	7	.97	.07	.73	3.04	1.32	1.17
Brazil	737	17.43	3.62	61	Portuguese	9.23	7	1.00	.02	.63	3.23	1.23	0.66
Chile	401	16.81	0.63	47	Spanish	15.50*	7	.98	.06	.72	2.73	1.14	0.87
China	227	16.33	0.67	48	Chinese	13.20	7	.97	.06	.65	2.94	0.48	—
Colombia	205	16.40	0.89	42	Spanish	10.50	7	.98	.05	.64	2.90	1.40	0.59
Estonia	234	17.72	0.71	59	Estonian	14.63*	7	.97	.07	.69	3.36	1.20	1.16
Ethiopia	250	18.47	0.94	45	Amharic	9.58	7	.98	.04	.40	3.62	0.15	–0.12
Georgia	250	17.03	0.41	58	Georgian	34.37***	7	.90	.13	.64	2.92	0.60	0.74
Hungary	239	17.34	0.86	52	Hungarian	3.15	7	1.00	.00	.69	2.77	1.22	1.19
Italy	325	18.65	0.79	52	Italian	13.36	7	.98	.05	.72	3.19	0.48	1.01
Lebanon	300	17.86	0.54	46	Arabic	17.22*	7	.94	.07	.57	3.09	0.56	0.92
Namibia	104	17.69	0.96	62	English	19.23**	7	.81	.13	.59	2.75	–0.04	—
Oman	251	17.11	0.83	49	Arabic	9.19	7	.99	.04	.62	3.23	–0.06	0.47
Philippines	301	17.77	1.60	66	English	20.00**	7	.97	.08	.75	3.92	0.14	0.55
Poland	250	18.07	0.59	57	Polish	37.23***	7	.94	.13	.79	2.85	0.92	0.81
Romania	221	17.95	0.86	49	Romanian	18.91**	7	.95	.09	.64	2.98	0.69	1.00
Spain	242	17.25	0.83	54	Spanish	8.82	7	1.00	.03	.77	2.78	1.32	0.57
Turkey	197	17.09	0.72	50	Turkish	3.51	7	1.00	.00	.46	3.41	0.12	—
United Kingdom	256	17.69	0.96	76	English	3.98	7	1.00	.00	.74	2.83	1.31	0.81
Overall	5,241	17.51	1.70	55						.69	3.08	0.75	0.78

Note. CFI = Comparative fit index; RMSEA = Root mean square error of approximation; C = contextualism; A = autonomy/embeddedness; I = independence/interdependence.
*p < .05. **p < .01. ***p < .001.

remove acquiescence. Initial analyses revealed poor reliabilities for the two original dimensions and we therefore combined the items into a single bipolar scale measuring independence/interdependence, showing adequate individual-level reliability ($\alpha = .63$) and good nation-level reliability ($\alpha = .81$).[4]

Nation-level ingroup collectivism. As an additional measure of nation-level I-C, we used the GLOBE project's nation-scores for ingroup collectivism practices (House et al., 2004).[5] The GLOBE project surveyed around 17,000 middle-managers in 62 societies around the world. Their data provide an update on Hofstede's (1980) well-cited cultural indices, using theoretically based measures (Hofstede's individualism measure was post hoc).

Results and Discussion

Refining and testing the contextualism scale. Before testing our main predictions, we evaluated the psychometric properties of our scale, especially its suitability for cross-cultural and multilevel analyses. In doing so, we refined the scale, eliminating items that failed to perform comparably across our cultural samples. Thus, we ensured that the scale had a comparable meaning across the nations sampled, so that our subsequent analysis of national differences was not "comparing apples with oranges"—that is, observed differences could be attributed to genuine differences among the samples rather than methodological artifacts (Chen, 2008; Fischer & Fontaine, 2011). To do this, we ran a series of CFAs, using AMOS 16.0 for single-group and multigroup analyses

and Mplus Version 5 for multilevel analyses. Our measurement model included two factors: We represented contextualism as a single latent factor, but we also modeled variation in acquiescent responding with an uncorrelated method factor that loaded onto every item at a fixed value of 1 (Welkenhuysen-Gybels, Billiet, & Cambré, 2003). Model fit was assessed using the Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). Values of CFI above .90 and RMSEA up to .08 are seen as acceptable (Kline, 2005).

Achieving configural invariance. First, we wanted to refine the scale to include only cross-culturally valid items. We aimed to identify a subset of items that would show the same factor structure in each group, with all indicators related to the factor in the expected manner—known as *configural invariance*. To do this, we tested our measurement model in each group separately. Initial analyses with the 14 items provided a poor fit in most samples, with several items not loading as expected in some countries. We removed items with non-significant loadings in any one of the national groups, with just one exception, to create a balanced scale with six items (see appendix). Item 3 loaded nonsignificantly in Ethiopia but was retained in order to keep the scale balanced. Modification indices suggested a strong association between Items 2 and 6 in most groups, and we therefore allowed the residuals of these two items to covary. The model showed good fit in 16 samples, marginal fit in the Georgian and Polish samples, and poor fit in the Namibian sample (which had the smallest sample size; see Table 1). The fit of the model in these three samples could, however, be improved substantially if one more residual covariance was added in each group.[6] Reliabilities were acceptable in most nations (see Table 1).

Testing metric and scalar invariance. We now tested the six-item scale for more stringent forms of invariance, to establish its suitability for cross-cultural comparative research. *Metric invariance* signifies that variance in each item is related to the same extent in each sample to variance in the underlying construct. This implies that the construct has a comparable meaning across samples and that one can validly compare correlational patterns across samples. *Scalar invariance* signifies that absolute scores on each item are related to the same absolute levels of the underlying construct, and thus, group means can be validly compared (Chen, 2008).

We recreated our six-item model as a multigroup model, again including a method factor, analyzing data from all samples simultaneously (Model 1), and tested the impact on model fit of constraining first the factor loadings (for metric invariance: Model 2) and then the intercepts (for scalar variance: Model 3) to be equal across samples. If the fit of the constrained model remains acceptable, it is preferred to the unconstrained model because it is more parsimonious, and the hypothesis of invariance can be considered tenable (Davidov, Schmidt, & Schwartz, 2008; Little, Card, Slegers, & Ledford, 2007).[7] As shown in Table 2, Model 2 provided a good fit, supporting the hypothesis of metric invariance. However, Model 3 showed a relatively poor fit. Modification indices suggested that just one intercept (Item 3) was problematic, and we therefore allowed only this intercept to vary across groups, thus testing for "partial intercept invariance" (Byrne, Shavelson, & Muthén, 1989; Model 4). The fit of this model was acceptable, indicating that scalar invariance of the remaining five items was tenable. Baumgartner and Steenkamp (1998) have proposed that as few as two invariant intercepts may be sufficient in order to make cross-cultural mean comparisons. With five invariant intercepts, it seems safe to make such comparisons with the contextualism scale.[8]

Properties of the scale as a nation-level measure. The analyses above treat the contextualism scale as an individual-level measure, confirming that the scale can be used validly to characterize individual differences in beliefs, as well as sample mean differences, in cross-cultural comparative research. However, we have argued that contextualism can also be viewed as a culture-level construct (see Hofstede, 1980). We therefore tested the scale for *multilevel isomorphism*, which signifies that the internal structure that characterizes individuals can also be applied to nations (for discussion, see Fischer, 2009). First, we ran a multilevel CFA, specifying the same model from

Table 2. Multigroup and Multilevel Invariance Analysis in Study 1

Model	χ^2	*df*	CFI	RMSEA	RMSEA 90% CI LL	RMSEA 90% CI UL
Model 1, configural invariance	276.64***	133	.97	.06	.05	.07
Model 2, factor loadings constrained	469.45***	223	.95	.07	.06	.07
Model 3, factor loadings and intercepts constrained	1,091.59***	295	.85	.10	.09	.11
Model 4, factor loadings and 5 intercepts constrained	781.66***	277	.90	.08	.07	.09
Model 5, multilevel baseline model	104.02***	15	.98	.03	—	—
Model 6, multilevel model with cross-level constraints on factor loadings	139.77***	21	.98	.03	—	—

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; CI = confidence intervals; LL = lower level; UL = upper level. Multilevel analyses did not provide confidence intervals for RMSEA.
***$p < .001$.

our previous analyses at both individual and nation levels, except that no residual covariance was included at the nation level. This model showed excellent fit (see Table 2, Model 5). We then constrained the factor loadings to be equal across levels (Model 6). The fit of the constrained model remained excellent, which indicates that multilevel isomorphism is tenable.[9] Thus, the same factor structure can be found at both individual and nation levels, and the association between each indicator and the underlying construct is similar across levels. Hence, the scale appears to have a comparable meaning whether applied to individuals or nations—but note that this does not mean that nation-level and individual-level variation in contextualism necessarily will have the same antecedents or consequences.Reliability at the nation level was excellent ($\alpha = .87$).

Variation in contextualism among nations and individuals. To test the extent of variation among our samples, we estimated the intraclass correlation (ICC)—defined as the proportion of total variance found at the nation level rather than the individual level (Hox, 2002). Contextualism had an ICC of .11 ($p < .001$)[10], indicating that an estimated 11% of the variance is found between nations. This is in line with ICCs for our other indicators of I-C: .13 for openness/conservation values and .11 for independence/interdependence (both $p < .001$). This is also consistent with ICC coefficients in other large cross-cultural value research, which has found on average 11%–12% of variance at the cultural level (Fischer & Schwartz, 2011). As can be seen in Table 1, the Philippine sample had the highest mean of contextualism, followed by the Ethiopian and Turkish samples. Notably, the Namibian sample scored second to lowest on both contextualism and autonomy/embeddedness. Although perhaps surprising given that these variables are theoretically opposed, we should note that House et al. (2004) found Namibians to be low on ingroup collectivism, mirroring our findings of contextualism.

Nation-level correlations. Given the small sample size at the nation level and the very large sample size at the individual level, it is probably most appropriate to evaluate correlations at both levels in terms of size, rather than focusing on *p* values. The predicted nation-level relationships between contextualism and other indicators of I-C were confirmed by substantial negative correlations with autonomy/embeddedness ($r_{n = 19} = -.48$, $p < .05$) and independence/interdependence ($r_{n = 16} = -.44$, $p < .10$). Among those nations with available data, contextualism showed a positive correlation with ingroup collectivism ($r_{n = 12} = .43$, *ns*). Although nonsignificant given the sample size, the magnitude of this correlation is striking, considering that the GLOBE project sampled

middle-managers, which would have been differentially representative of their nations compared to our samples. Overall, contextualism correlated as well with our other indices of I-C (mean $|r|$ = .45) as these indices correlated with each other (mean $|r|$ = .35). Autonomy/embeddedness correlated strongly with independence/interdependence ($r_{n = 16}$ = .49, $p < .10$) but less strongly with ingroup collectivism ($r_{n = 12}$ = –.19, *ns*), which in turn was moderately related to independence/interdependence ($r_{n = 9}$ = –.37, *ns*). Taken together, these nation-level correlations support our view of contextualism as a facet of collectivism.

Individual-level correlations. Prior to analyses, all variables were standardized within nations. This removes nation-level differences and analyses at this level are therefore "within-nations." As predicted, correlations between contextualism and openness/conservation and independence/interdependence were small ($r_{n = 5,209}$ = –.11, $p < .01$; $r_{n = 4,555}$ = .01, *ns*, respectively).[11] In contrast, the correlation between openness/conservation and independence/interdependence was slightly larger ($r_{n = 4,564}$ = .21, $p < .01$). This is consistent with earlier findings using this self-construal scale (Gudykunst et al., 1996). However, we should note that some items in this self-construal scale actually tap values (e.g., *"My personal identity, independent of others, is very important to me"*), which could have inflated this correlation. Overall, the different facets of I-C did not converge at the individual level.

Study 2

Study 1 provided evidence for the cross-cultural validity of the scale and its nomological network, which indicated that nation-level contextualism can be considered a facet of collectivism. Study 2 investigates its predictive validity—that is, whether or not contextualism is useful as an explanatory construct. Our focus here is on contextualism as a cultural construct, as it was shown to be part of I-C at this level, and does not extend to individual-level contextualism. We ask to what extent nation-level contextualism can explain cross-cultural differences in relevant outcomes and whether it will add any explanatory power over and above values and self-construals.

It has been suggested that in collectivist cultures, the distinction between ingroups and outgroups is sharper than in individualist cultures (Triandis, 1972). We propose that this pattern should be explained in part by the different sets of beliefs about people that are generally held within the culture. Contextualism beliefs refer to the importance of contexts, such as family, social groups, and social positions, in understanding people. With emphasis on these contextual factors, people in highly contextualist nations are likely to differentiate between people and engage in differential treatment of others based on these factors. In contrast, in nations where a decontextualized conception of persons is emphasized, less weight will be given to contextual factors, and therefore people are more likely to be treated based on their own personal attributes, rather than based on their social position or connections. Contextualism may therefore contribute to our understanding of a range of processes in which people are treated differently based on their group memberships. Thus, we investigated the role of contextualism in relation to three variables where sharper distinctions are made between different groups of people: ingroup favoritism, differential trust of ingroup and outgroup members, and corruption.

Although the relationship between I-C and ingroup bias appears somewhat complex at the individual level (for a discussion, see Smith & Long, 2006), it is likely that cultures that emphasize the importance of family and social groups will also promote a more favorable evaluation of these groups compared to other groups. Similarly, given the importance of social markers such as status and group boundaries in collectivistic cultures, it is also likely that there will be significantly more trust towards ingroups than towards outgroups, especially in cultures high on contextualism, compared to cultures in which contextualist beliefs are not highly endorsed.[12] Moreover, in corrupt societies, certain groups are given preferential treatment in distribution of power or

resources, often based on social status or relational ties. We suggest that strong endorsement of beliefs in the importance of social positions, social groups, and family in how people are defined will promote a climate where such tendencies are seen as more natural. Finally, although beliefs, values, and self-construals all appear to be part of cultural-level I-C and are correlated at the nation level, a majority of the variance is still not shared, which suggests they are tapping somewhat different aspects. Hence, we expected that contextualism would predict these outcomes while controlling for values and self-construals at the nation level.

Method

Participants and procedure. Measures were included in a second cross-cultural study into identity motives and motive satisfaction. This was a larger study with 35 nations[13] (see Table 3), and rather than high school students, it included adult samples. A total of 8,652 adults took part in the study, with samples sizes ranging from 71 (Thailand) to 566 (India). A variety of means were used to recruit opportunity samples of adults in different locations, including a snowballing technique among the researchers' social networks, through community groups and non-governmental organizations, and with help of university students who collected data from their relatives. Table 3 reports demographic details.

Instruments. Where additional languages were needed, the measures went through the same process of translation and back-translation as in the first study.

Contextualism. We used the final six-item scale from Study 1 and investigated its equivalence across cultures once again. A multigroup model, again including a method factor, analyzing all samples simultaneously, showed a good model fit (CFI = .98, RMSEA = .07) and the fit remained good when all factor loadings were constrained (CFI = .97, RMSEA = .06), however not when all intercepts were constrained (CFI = .89, RMSEA = .09). Therefore, we tested for partial intercept invariance again by once more freeing the intercept of Item 3, which resulted in an acceptable fit (CFI = .92, RMSEA = .08). Hence, we were able to establish the same level of invariance as in the previous study with this increased number of samples. Moreover, the scale showed good overall reliability at the individual level ($\alpha = .75$) and excellent cultural-level reliability ($\alpha = .90$).

Portrait Values Questionnaire (PVQ). We used the same short version of the PVQ as in Study 1 and the same dimension of autonomy/embeddedness as in Study 1 ($\alpha = .65$).

Self-construal scale. The scale included in Study 2 was slightly shorter than in Study 1, with eight items measuring independence and eight items measuring interdependence. As before, these were combined into a bipolar scale, independence/interdependence. Because of the often complex sentence structure and their abstract and decontextualized nature, the original items from Gudykunst et al. (1996) were reworded. For example, the original independence item *"I assert my opposition when I disagree with members of my group"* was reworded as *"You are comfortable expressing disagreement with friends, "* and the interdependence item *"I am careful to maintain harmony with my group"* was reworded as *"You try to maintain harmony among the people around you."* Moreover, rather than rating the items on *agree-disagree* scales, participants were asked, *"How well does each of these statements describe you?"* which was rated on 9-point scales ranging from 1 (*not at all*) to 9 (*exactly*). Individual-level scores were aggregated to the nation level ($\alpha = .59$).

Ingroup favoritism. Nation scores for ingroup favoritism were taken from van de Vliert (2010), who demonstrated that nation-level compatriotism (from the World Value Survey, WVS[14]), nepotism (from the World Economic Forum, 2004), and familism (from House et al., 2004) formed a common factor ($\alpha = .86$ among the nations sampled here).

Differentiated trust. The fifth wave of the WVS asks about levels of trust in people from different groups, including family, the neighborhood, people one knows personally, people of another

Table 3. Demographic Details and Means for National Samples in Study 2

Country	*N*	Mean Age	*SD*	% Females	Language	Means C	Means A	Means I
Belgium	363	36.37	11.56	47	French	2.99	0.61	0.19
Brazil	500	32.68	12.96	57	Portuguese	3.57	0.60	0.01
Cameroon	100	26.07	6.10	57	English	3.15	–0.72	–0.07
Chile	300	41.64	14.10	57	Spanish	3.21	0.13	0.45
China	260	31.38	8.49	69	Chinese	3.85	–0.41	–0.04
Colombia	300	36.96	12.59	62	Spanish	3.17	0.36	0.48
Egypt	164	31.12	9.98	52	Arabic	3.45	–0.47	–0.19
Ethiopia	300	34.07	9.15	42	Amharic	4.22	–0.02	0.13
Georgia	219	41.23	14.42	58	Georgian	3.55	–0.56	–0.32
Germany	257	40.04	15.11	59	German	3.35	0.03	0.23
Ghana	116	28.58	5.08	24	English	3.19	–0.50	0.05
Hungary	243	35.54	12.48	47	Hungarian	3.32	0.26	0.35
Iceland	124	35.29	13.29	68	Icelandic	3.15	0.46	0.17
India	566	35.69	10.83	44	Hindi, English	3.53	–0.29	–0.26
Italy	173	39.01	13.13	71	Italian	3.47	–0.78	0.02
Japan	284	43.83	15.34	62	Japanese	3.03	0.18	0.23
Lebanon	265	35.12	14.01	49	Arabic	3.27	0.04	0.26
Malaysia	150	28.05	7.92	63	Malay	3.79	–0.32	0.00
Namibia	204	24.61	5.70	66	English	2.91	0.06	0.51
New Zealand	204	34.91	13.06	49	English	3.39	0.61	0.26
Norway	102	37.01	13.53	59	Norwegian	2.79	0.16	0.18
Oman	160	25.21	4.98	45	Arabic	3.36	–0.31	–0.09
Peru	154	35.52	15.04	58	Spanish	3.53	–0.13	0.28
Philippines	308	28.58	11.22	51	English, Tausug	3.99	–0.18	–0.12
Romania	482	35.74	13.19	58	Romania	3.22	–0.10	0.15
Russia	262	30.92	12.19	79	Russian	3.20	0.00	0.11
Singapore	110	34.95	12.74	54	English	3.73	0.02	–0.02
South Africa	496	30.80	11.46	59	English	3.45	0.07	0.39
Spain	180	40.11	14.60	52	Spanish	3.40	0.37	0.02
Sweden	101	45.18	16.01	65	Swedish	3.11	0.63	0.07
Thailand	71	27.99	6.71	69	Thai	3.92	0.40	0.03
Turkey	248	39.83	10.46	61	Turkish	3.55	–0.34	0.11
Uganda	444	34.62	6.35	51	English	3.70	–0.15	–0.04
United Kingdom	228	47.19	17.32	66	English	3.16	0.16	–0.08
United States	214	31.60	13.26	66	English, Spanish	3.63	0.63	0.63
Overall	8,652	35.02	12.99	56		3.41	0.02	0.12

Note. C = contextualism; A = autonomy/embeddedness; I = independence/interdependence.

religion, and people of another nationality (Welzel, 2010). These were rated on 4-point scales ranging from 1 (*trust completely*) to 4 (*do not trust at all*), but we reversed these for ease of interpretation. We constructed a measure of the difference in trust between ingroups and outgroups by subtracting the mean of outgroup trust (other religion and nationality; $\alpha = .93$) from the mean of ingroup trust (family, neighborhood, and known personally; $\alpha = .78$).[15]

Corruption. National scores of corruption were derived from the 2010 Corruption Perceptions Index (Transparency International, 2011). The index is calculated so that a low score means high corruption, but the scores were reversed so that high scores meant high corruption.

Table 4. Correlations Among Variables in Study 2

	1	2	3	4	5	6
1. Contextualism	—					
2. Autonomy/embeddedness	–.21	—				
3. Independence/interdependence	–.33†	.53**	—			
4. Ingroup favoritism	.56**	–.58***	–.41*	—		
5. Differentiated trust	.44*	–.55**	–.45*	.76***	—	
6. Corruption	.39*	–.57***	–.27	.83***	.64**	—
7. Ingroup collectivism	.54*	–.57**	–.47*	.94***	.80***	.73***

Note. All variables are at the nation level. $N = 35$ for correlations between contextualism, autonomy/embeddedness, independence/interdependence, and corruption. $N = 33$ for correlations with ingroup favoritism. $N = 24$ for correlations with differentiated trust. $N = 21$ for correlations with ingroup collectivism. The correlation between ingroup favoritism and ingroup collectivism is particularly high because of an overlap of items between one facet of ingroup favoritism (familism) and ingroup collectivism. Because of this overlap, we did not control for ingroup collectivism in the regression analyses.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

Results and Discussion

Means of contextualism, values, and self-construals are shown in Table 3. Compared to Study 1, these show a wider range, especially towards the "collectivist" end of the scales. This could be a reflection of the more diverse set of nations and the adult rather than student samples. Intercorrelations of the variables are given in Table 4. Compared to Study 1, contextualism appears to be more clearly distinct from values and self-construals, increasing the chances of finding differential effects of these variables. The difference between the two studies could be due to the fact that the different facets of I-C are more loosely connected in the more diverse adult sample. It should be noted, however, that contextualism still appears to be part of I-C, as it is still strongly correlated with ingroup collectivism (see Table 4).

In order to investigate whether nation-level contextualism predicts ingroup favoritism, differentiated trust, and corruption while controlling for autonomy/embeddedness and nation-level independence/interdependence, we conducted three separate hierarchical regression analyses. We regressed each outcome on values and self-construals entered into the first step. We then entered contextualism alongside values and self-construals in the second step, in order to assess whether it would explain additional variance. The results from these analyses are shown in Table 5. Values and self-construals explained 35% of the variance in ingroup favoritism, and adding contextualism explained an additional 18% of variance, $\Delta F(1, 29) = 11.14$, $p < .01$. In line with predictions, contextualism was a significant predictor of ingroup favoritism ($\beta = .45$, $p < .01$). Hence, in nations where contextual attributes are generally considered to be important, ingroups also tend to be favored. Similarly, values and self-construals explained 34% of the variance in differentiated trust, and adding contextualism explained an additional 12% of variance, $\Delta F(1, 20) = 4.38$, $p < .05$. As predicted, contextualism was a significant predictor of differentiated trust, ($\beta = .35$, $p < .05$), such that in nations high on contextualism, the difference between trust in ingroups and outgroups was larger. Finally, values and self-construals explained 32% of the variance in corruption scores, and adding contextualism explained an additional 9%, $\Delta F(1, 31) = 4.78$, $p < .05$. Contextualism was a significant predictor of corruption ($\beta = .32$, $p < .05$)—the stronger the endorsement of contextualism beliefs in a nation, the higher the level of corruption, as predicted.

The above results highlight the importance of contextualism in cultural processes. Contextualism predicted ingroup favoritism, differentiated trust, and corruption, which confirms the notion that

Table 5. Hierarchical Multiple Regression Analyses Predicting Ingroup Favoritism, Differentiated Trust, and Corruption in Study 2

	Ingroup Favoritism		Differentiated Trust		Corruption	
Predictor	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	.35**		.34**		.32**	
Autonomy/embed		–.50**		–.43†		–.59**
Indep/interdep.		–.15		–.23		.05
Step 2	.18**		.12*		.09*	
Autonomy/embed		–.48**		–.40†		–.58**
Indep/interdep.		–.02		–.19		.15
Contextualism		.45**		.35*		.32*
Total R^2	.53		.46		.41	
n	33		24		35	

Note. Indep/interdep. = independence/interdependence. All variables are at the nation level.
†$p < .10$. *$p < .05$. **$p < .01$.

nation-level contextualism is related to sharper distinctions between people based on their contextual attributes and differential treatment based on these distinctions. However, it is important to keep in mind that these relationships were not tested at the individual level; the question of whether individual endorsement of contextualism beliefs is related to these outcomes still remains open. From these results we also cannot ascertain whether these results are a truly cultural phenomenon or the effect of aggregated individual processes, and multilevel analyses would be needed to disentangle these effects.

Contextualism was shown to be a significant predictor while controlling for values and self-construals, and it explained a substantial amount of incremental variance. Thus, although these cultural variables are interrelated, they are not synonymous. Rather, they can complement each other as cultural measures, each tapping somewhat different aspects of I-C. It should be noted, however, that although independence/interdependence was significantly correlated with ingroup favoritism and differentiated trust, it was never a significant predictor when entered at the same time as autonomy/embeddedness. It appears these two variables share a substantial amount of variance and their explanatory power overlaps to some extent. In light of this, contextualism seems to be a more useful addition to values as a cultural-level predictor.[16]

General Discussion

A central theme within I-C refers to beliefs about individuals; still, this facet has rarely been explored. Moreover, although research has shown that variation in the importance of the context in person perception appears to map onto variation in I-C, no clear conceptualization and measurement of this variation has previously been put forward. We propose the construct of contextualism, defined as the importance of contextual attributes in understanding a person, to fill this gap in the literature. Our operationalization of contextualism differs from previous measures in focusing on the context in its own right, rather than as the inverse of traitedness.

Contextualism as a Facet of Collectivism

We propose that contextualism should be considered an important facet of cultural collectivism. We demonstrated that contextualism shows a similar proportion of nation-level variability to

other supposed facets of I-C, such as values and self-construals, and the pattern of mean scores across nations appeared to broadly reflect differences in I-C. At the nation level it converges with indicators of I-C as strongly as they converge with each other. We should note, however, that the nation-level correlations were not so high as to suggest that these constructs are interchangeable. Low autonomy values cannot simply be equated with high contextualism, as illustrated by the Namibian sample in Study 1, which scored low on both dimensions. Similarly, the Cameroonian sample scored low on both dimensions and the Thai sample scored high on both dimensions in Study 2. Moreover, while scoring highest on independence/interdependence, USA also scored relatively high on contextualism. It is therefore important to measure I-C in terms of multiple facets, in order to capture the breadth and richness of this construct.

The importance of measuring these different facets separately was also demonstrated in Study 2. Nation-level contextualism was shown to predict incremental variance in ingroup favoritism, differentiated trust, and corruption after controlling for variation in values and self-construals. This confirms contextualism as a useful cultural construct that can contribute to our understanding of cultural processes and demonstrates the importance of considering cultural beliefs alongside the more common approach of studying values. This supports Brewer and Chen's (2007) assertion that more precise predictions can be made by disentangling different facets of I-C.

The need to disentangle I-C refers not only to its different facets but also to its different levels of analyses. In Study 1, we found that the different proposed facets of I-C covaried predictably at the nation level, and although they were more distinct in Study 2, a similar pattern was found among the more diverse samples in the second study. At the individual level, however, the corresponding correlations were mostly very small, supporting the notion that these variables are distinct. This is consistent with previous research that has identified small correlations between general beliefs and values and has shown that each makes its own unique contribution to predicting behavior (Bond, Leung, Au et al., 2004; Leung et al., 2007). Our results suggest that I-C does not form a coherent dimension of individual-level cultural orientation (see also Triandis, 1993). Instead, its different aspects need to be considered separately, and each will make its own contribution to the unpacking of cultural influences. Thus, although values, beliefs, and self-representations are distinct at both levels, they are, however, more meaningfully related as cultural constructs. It would therefore seem more reasonable to conceive of I-C as a cultural-level construct, as it was originally conceptualized (Hofstede, 1980).

The Contextualism Scale

Our contextualism measure has excellent potential for use in cross-cultural research. It is brief, easy to administer, and includes a balance between positive and reverse-scored items—thus avoiding the problem of acquiescence. Controlling for acquiescence is important in cross-cultural psychology (Schimmack, Oishi, & Diener, 2005), and yet many well-used cross-cultural scales include no reverse-scored items (e.g. Singelis, 1994). Tested across 19 and 35 nations with student and adult samples, the scale showed evidence of invariant factor loadings, and five of the six items showed invariant intercepts. Considering the very different cultural groups and many different languages involved in the study, this level of performance is at least comparable with other well-validated and well-used scales in the cross-cultural literature. Difficulty with invariance of intercepts is not unusual in cross-cultural research (e.g. Davidov et al., 2008; Spini, 2003). Nonetheless, freeing only one intercept still makes it possible to conduct cross-cultural comparisons, as this is well beyond Baumgartner and Steenkamp's (1998) benchmark of at least two invariant intercepts.

By comparing the internal structure at the individual and the nation levels, we were able to establish cross-level isomorphism for the scale. Thus, the belief dimension of contextualism is defined similarly at both levels of analysis. This is important considering arguments in the

cross-cultural literature against assuming that culture-level constructs can necessarily be measured with the same meaning at the level of individual differences and vice versa (reviewed by Smith et al., 2006). Although we found the same internal structure at both levels of analysis, we must emphasize that this does not mean that individual-level and nation-level contextualism are the same thing. Individual-level contextualism refers to beliefs in the minds of individuals, whereas nation-level contextualism refers to normative beliefs generally held within nations, and these are likely to have different antecedents and different psychological and behavioral consequences.

For example, one might speculate that contextualism beliefs will be differentially linked to reality at the two levels of analysis. It seems likely that nation-level variation in contextualism beliefs will be associated with actual differences in societal functioning, such as social practices and institutions (Yamagishi, 2010). As illustrated by the outcomes predicted in Study 2, in some societies it really *does* matter more than in other societies what family one comes from or what social position one occupies, and one might expect that variation in normative beliefs about personhood will be influenced by these differences in societal functioning, as well as helping to sustain them. In contrast, to the extent that individuals within a nation are located within a common societal context, individual-level variation in contextualism beliefs should reflect different ways of thinking about the same world, rather than differences in the world that is thought about. Still, we should acknowledge that individuals may encounter different social practices and institutions as a result of regional, ethnic, or socioeconomic differences within a given nation, as well as idiosyncratic experiences; and these differences in the social reality faced by different individuals may also be linked to contextualism beliefs.

Limitations and Future Directions

We should acknowledge some limitations of these studies. We defined our cultural level of analysis in terms of national groups. Although this is a very common approach in cross-cultural psychology, it does not take account of the large diversity within many nations (Smith et al., 2006). We are currently investigating variations in contextualism, and their implications, across cultural, religious, and ethnic groups within the nations included in our studies, and preliminary results indicate validity of the scale also among these more specific groups.

Although we regard contextualism as a central belief dimension within I-C, we should note that there may be other types of beliefs that vary systematically between individualist and collectivist societies. Future research could explore these alternative belief dimensions and their relationship to contextualism, as well as values and self-construals. It may also be the case that beliefs about personhood vary depending on the target of the beliefs; for instance, one might perceive members of some groups in society in a relatively decontextualized manner and members of other groups in a more contextualized manner. Thus, future research should test to what extent contextualism beliefs are uniform across different target groups in society. An especially important case of such variation may be when the target is the self. Hence, it might be interesting to adapt the items of our contextualism scale to refer to the self (e.g., "*To understand me well, it is essential to know about which social groups I am a member of.*"), in order to explore to what extent a contextualized view of the self is related with contextualist beliefs about others, as well as with more commonly used measures of cultural differences in self-construal.[17]

We were able to demonstrate predictive validity of contextualism at the nation level of analysis, which highlights contextualism as a useful cultural construct. However, in order to completely disentangle individual- and cultural-level effects, multilevel analyses are needed that simultaneously model effects at both levels. As an example of this multilevel approach, Becker et al. (in press) found that culture-level variation in contextualism, but not individual-level variation,

predicted people's use of different sources of distinctiveness in constructing their identities (Vignoles, Chryssochoou, & Breakwell, 2000). Thus, it was the surrounding cultural climate of contextualism beliefs, rather than the degree to which an individual personally internalized those beliefs, that predicted this aspect of identity construction.

In conclusion, a central theme within I-C refers to beliefs about the person and we propose the construct of contextualism as tapping this mostly unexplored facet of I-C. We showed that belief in the importance of the context in defining a person is a cross-culturally valid construct that can be applied to both individuals and cultures. At the nation level, it correlated with other proposed facets of I-C as strongly as these facets correlated with each other, and it could therefore be considered a part of cultural collectivism. Moreover, contextualism predicted incremental variance in cultural variables where sharp distinctions are made between people based on contextual attributes. These findings highlight the importance of contextualism as a cultural construct, which alongside values and self-construals can contribute to a greater understanding of I-C and allow more precise predictions of cultural influence.

Appendix

Contextualism Scale

Using the scale below, please indicate the extent to which you agree or disagree with each of the following statements by circling a number for each statement.

completely disagree	moderately disagree	slightly disagree	slightly agree	moderately agree	completely agree
1	2	3	4	5	6

1. To understand a person well, it is essential to know about which social groups he/she is a member of.
2. One can understand a person well without knowing about his/her family [*reversed*].
3. To understand a person well, it is essential to know about the place he/she comes from.
4. One can understand a person well without knowing about his/her social position [*reversed*].
5. One can understand a person well without knowing about the place he/she comes from [*reversed*].
6. To understand a person well, it is essential to know about his/her family.

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Notes

1. Participants in the Philippines were university students, as they had a similar age range to high school students in other countries.
2. The short version of the PVQ, with a total of 21 items, is not optimal for measuring autonomy/embeddedness, as ideally one would use more items. However, given that we were able to establish acceptable reliability in both studies, we decided to include it. Two fewer items were used at the cultural level as there is a potential shift in meaning of these items across levels (Schwartz, personal communication, March 1, 2011).
3. For reasons of space, we excluded two items that seemed irrelevant to high school students and four items because of conceptual redundancy. In common with most self-construals scales, this scale measures a broad range of content including not only self-beliefs but also some values and behaviors.
4. We do not necessarily regard self-construals as unidimensional; in fact, there is accumulating evidence that they may be multidimensional (e.g., Hardin, Leung, & Bhagwat, 2004). However, given the very low reliabilities of the bidimensional structure, the simpler structure seemed preferable for our current purposes.
5. House et al. (2004) created four different collectivism measures. However, their measure of ingroup collectivism practices is closest to the construct of I-C as defined and measured elsewhere in cross-cultural psychology (House et al., 2004; see also Smith, 2006).
6. Adding a covariance in the Georgian sample between the residuals of Items 3 and 5, in the Polish sample between Items 1 and 6, and in the Namibian sample between Items 1 and 5 improved model fit in these samples to an acceptable level.
7. Invariance has traditionally been assessed by the difference in the chi-square statistic between the unconstrained and the constrained model. However, given its sensitivity to sample size, it is unsuitable for large samples. The alternative criterion of a change in CFI smaller than or equal to .01 (Cheung & Rensvold, 2002) has often been used by researchers comparing a small number of groups. We should note, however, that this criterion was based on a simulation study with only two groups, and little is known about its suitability for analyses with a larger number of groups. Indeed, this criterion has not typically been used in studies with many cultural groups (e.g., Davidov et al., 2008; Fischer et al., 2009; Franke & Nadler, 2008; Spini, 2003).
8. In the process of refining the scale, eight items were eliminated as they were not cross-culturally comparable. Although the remaining combination of six items showed the highest level of invariance, it may be desirable to expand the scale in order to include a wider range of different contexts. Therefore, we also investigated an eight-item version, which in addition to the six items included *"One can understand a person well without knowing about where he/she lives*" and "*To understand a person well, it is essential to know about his/her role in society*," both of which had been found to be non-significant in Ethiopia and the latter also in Colombia. This eight-item version showed a slightly lower level of invariance. Most notably, three intercepts had to be allowed to vary in order to achieve intercept invariance. Nonetheless, depending on the nations involved and the level of invariance required, this eight-item version can be used by future researchers wanting to measure contextualism.
9. Kreft and De Leeuw (1998) suggested that 20 groups are sufficient at the highest level in multilevel analysis. Since Study 1 had a nation-level sample size very close to this, we can be relatively confident in the accuracy of our analyses. Given the non-invariant intercepts of Item 3 in the multigroup analysis, we looked carefully at this item in the multilevel analysis. It had a larger nation-level error variance compared to other items but freeing its cross-level constraint did not improve model fit. So the loading of the item was similar at both levels of analysis.

10. *p* values refer to the cultural-level variance component. Statistical significance indicates that members of the same group are more similar to each other/more different from members of other groups than would be expected by chance.
11. These correlations remained small ($|r| < .20$) when we tested disattenuated correlations, which control for reliability.
12. A related perspective on cultural differences in trust comes from Yamagishi and Yamagishi (1994), who make a distinction between unconditional trust based on expectations of goodwill, and assurance, or conditional "trust," which is a function of individuals' social relationships. They suggest that collectivistic cultures are low on the former but high on the latter (see also Gheorghiu et al., 2009).
13. An additional national sample from Nigeria became available subsequent to acceptance of the article. Parallel analyses including this sample yielded identical conclusions to those reported here.
14. Information on question wording, fieldwork, samples, and available data sets is available at www.worldvaluessurvey.org.
15. In addition to these five items, one item refers to "people you meet for the first time." Since it is not clear whether this item refers to a member of the ingroup or the outgroup, we did not include it in our measure of differentiated trust. However, if included in outgroup trust, it does not substantially change the results.
16. It may be that a more differentiated model of self-construals will have greater explanatory power. We are currently in the process of developing a multidimensional model of self-construals using a wider range of items than those included in the present analysis.
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References

Baumgartner, H., & Steenkamp, J. B. E. M. (1998). Multi-group latent variable models for varying numbers of items and factors with cross-national and longitudinal applications. *Marketing Letters*, *9*, 21-35.

Becker, M., Vignoles, V. L., Owe, E., Brown, R., Smith, P. B., Easterbrook, M., . . . Yamakoğlu, N. (in press). Culture and the distinctiveness motive: Constructing identity in individualistic and collectivistic contexts. *Journal of Personality and Social Psychology.*

Bond, M. H., Leung, K., Au, A., Tong, K.-K., & Chemonges-Nielson, Z. (2004). Combining social axioms with values in predicting social behaviours. *European Journal of Personality*, *18*, 177-191.

Bond, M. H., Leung, K., Tong, K.- K., de Carrasquel, S. R., Murakami, F., Yamaguchi, S., . . . Lewis, G. (2004). Culture-level dimensions of social axioms and their correlates across 41 cultures. *Journal of Cross-Cultural Psychology*, *35*, 548-570.

Brewer, M. B., & Chen, Y. R. (2007). Where (who) are collectives in collectivism? Toward conceptual clarification of individualism and collectivism. *Psychological Review*, *114*, 133-151.

Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, *1*, 185-216.

Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin*, *105*, 456-466.

Chen, F. F. (2008). What happens if we compare chopsticks with forks? The impact of making inappropriate comparisons in cross-cultural research. *Journal of Personality and Social Psychology*, *95*, 1005-1018.

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, *9*, 233-255.

The Chinese Culture Connection. (1987). Chinese values and the search for culture-free dimensions of culture. *Journal of Cross-Cultural Psychology*, *18*, 143-164.

Chiu, C., Hong, Y., & Dweck, C. S. (1997). Lay dispositionism and implicit theories of personality. *Journal of Personality and Social Psychology*, *73*, 19-30.

Choi, I., & Nisbett, R. E. (1998). Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personality and Social Psychology Bulletin*, *24*, 949-960.

Choi, I., Nisbett, R. E., & Norenzayan, A. (1999). Causal attribution across cultures: Variation and universality. *Psychological Bulletin*, *125*, 47-63.

Church, A. T., Katigbak, M. S., del Prado, A. M., Ortiz, F. A., Mastor, K. A., Harumi, Y., . . . Cabrera, H. F. (2006). Implicit theories and self-perceptions of traitedness across cultures. *Journal of Cross-Cultural Psychology*, *37*, 694-716.

Church, A. T., Katigbak, M. S., Ortiz, F. A., del Prado, A. M., Vargas-Flores, J. D., Ibáñez-Reyes, J., . . . Cabrera, H. F. (2005). Investigating implicit trait theories across cultures. *Journal of Cross-Cultural Psychology*, *36*, 476-496.

Church, A. T., Ortiz, F. A., Katigbak, M. S., Avdeyeva, T. V., Emerson, A. M., Vargas Flores, J. D., & Ibáñez Reyes, J. (2003). Measuring individual and cultural differences in implicit trait theories. *Journal of Personality and Social Psychology*, *85*, 332-347.

Davidov, E., Schmidt, P., & Schwartz, S. H. (2008). Bringing values back in: The adequacy of the European social survey to measure values in 20 countries. *Public Opinion Quarterly*, *72*, 420-445.

Earley, P. C., & Gibson, C. B. (1998). Taking stock in our progress on individualism-collectivism: 100 years of solidarity and community. *Journal of Management*, *24*, 265-304.

Fischer, R. (2009). Where is culture in cross cultural research? An outline of a multilevel research process for measuring culture as a shared meaning system. *International Journal of Cross Cultural Management*, *9*, 25-49.

Fischer, R., Ferreira, M. C., Assmar, E., Redford, P., Harb, C., Glazer, S., . . . Achoui, M. (2009). Individualism-collectivism as descriptive norms: Development of a subjective norm approach to culture measurement. *Journal of Cross-Cultural Psychology*, *40*, 187-213.

Fischer, R., & Fontaine, J. R. J. (2011). Methods for investigating structural equivalence. In D. Matsumoto & F. van de Vijver (Eds.), *Handbook of cross-cultural research methods* (pp. 179-215). Cambridge, UK: Cambridge University Press.

Fischer, R., & Schwartz, S. (2011). Whence differences in value priorities? Individual, cultural, or artifactual sources. *Journal of Cross-Cultural Psychology*, *42*, 1127-1144.

Franke, G. R., & Nadler, S. S. (2008). Culture, economic development, and national ethical attitudes. *Journal of Business Research*, *61*, 254-264.

Geertz, C. (1975). On the nature of anthropological understanding. *American Scientist*, *63*, 47-53.

Gheorghiu, M. A., Vignoles, V. L., & Smith, P. B. (2009). Beyond the United States and Japan: Testing Yamagishi's emancipation theory of trust across 31 nations. *Social Psychology Quarterly*, *72*, 365-383.

Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S., & Nishida, T. (1996). The influence of cultural individualism-collectivism, self construals, and individual values on communication styles across cultures. *Human Communication Research*, *22*, 510-543.

Hardin, E. E., Leong, F. T. L., & Bhagwat, A. A. (2004). Factor structure of the Self-Construal Scale revisited: Implications for the multidimensionality of self-construal. *Journal of Cross-Cultural Psychology*, *35*, 327-345.

Haslam, N., Bastian, B., & Bissett, M. (2004). Essentialist beliefs about personality and their implications. *Personality and Social Psychology Bulletin*, *30*, 1661-1673.

Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: SAGE.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Thousand Oaks, CA: SAGE.

Hox, J. (2002). *Multilevel analysis: Techniques and applications.* Mahwah, NJ: Erlbaum.

Kağitçibaşi, Ç. (1997). Individualism and collectivism. In J. W. Berry, M. H. Segall, & Ç. Kağitçibaşi (Eds.), *Handbook of cross-cultural psychology* (2nd ed., Vol. 3, pp. 1-49). Boston: Allyn & Bacon.

Kashima, Y., Kashima, E., Chiu, C.- Y., Farsides, T., Gelfand, M., Hong, Y.- Y., . . . Yzerbyt, V. (2005). Culture, essentialism, and agency: Are individuals universally believed to be more real entities than groups? *European Journal of Social Psychology*, *35*, 147-169.

Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M., & Uskul, A. K. (2009). A cultural task analysis of implicit independence: Comparing North America, Western Europe, and East Asia. *Journal of Personality and Social Psychology*, *97*, 236-255.

Kline, R. B. (2005). *Principles and practice of structural equation modelling* (2nd ed.). London: The Guilford Press.

Knafo, A., Schwartz, S. H., & Levine, R. V. (2009). Helping strangers is lower in embedded cultures. *Journal of Cross-Cultural Psychology*, *40*, 875-879.

Kreft, I. G., & De Leeuw, J. (1998). *Introducing multilevel modeling.* London: SAGE.

Krull, D. S., Loy, M. H.- M., Lin, J., Wang, C.- F., Chen, S., & Zhao, X. (1999). The fundamental fundamental attribution error: Correspondence bias in individualist and collectivist cultures. *Personality and Social Psychology Bulletin*, *25*, 1208-1219.

Leung, K., Au, A., Huang, X., Kurman, J., Niit, T., & Niit, K.- K. (2007). Social axioms and values: A cross-cultural examination. *European Journal of Personality*, *21*, 91-111.

Leung, K., Bond, M. H., de Carrasquel, S. R., Munoz, C., Hernandez, M., Murakami, F., . . . Singelis, T. M. (2002). Social axioms: The search for universal dimensions of general beliefs about how the world functions. *Journal of Cross-Cultural Psychology*, *33*, 286-302.

Levy, S. R., Plaks, J. E., Hong, Y., Chiu, C., & Dweck, C. S. (2001). Static versus dynamic theories and the perception of groups: Different routes to different destinations. *Personality and Social Psychology Review*, *5*, 156-168.

Little, T. D., Card, N. A., Slegers, D. W., & Ledford, E. C. (2007). Representing contextual effects in multiple-group MACS models. In T. D. Little, N. A. Bovaird, & J. A. Card (Eds.), *Modeling contextual effects in longitudinal studies* (pp. 121-147). Mahwah, NJ: Lawrence Erlbaum.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.

Matsumoto, D., Yoo, S. H., Fontaine, J., & 56 Members of the Multinational Study of Cultural Display Rules. (2009). Hypocrisy or maturity? Culture and context differentiation. *European Journal of Personality*, *23*, 251-264.

Mauss, M. (1985). A category of the human mind: The notion of person; the notion of self (W. D. Halls, Trans.). In M. Carrithers, S. Collins, & S. Lukes (Eds.), *The category of the person* (pp. 1-25). Cambridge, UK: Cambridge University Press. (Original work published 1938)

Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social psychology*, *46*, 961-978.

Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, *67*, 949-971.

Norenzayan, A., Choi, I., & Nisbett, R. E. (2002). Cultural similarities and differences in social inference: Evidence from behavioral predictions and lay theories of behavior. *Personality and Social Psychology Bulletin*, *28*, 109-120.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, *128*, 3-72.

Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology.* New York: McGraw-Hill.

Schimmack, U., Oishi, S., & Diener, E. (2005). Individualism: A valid and important dimension of cultural differences between nations. *Personality and Social Psychology Review*, *9*, 17-31.

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). San Diego, CA: Academic Press.

Schwartz, S. H. (2004). Mapping and interpreting cultural differences around the world. In H. Vinken, J. Soeters, & P. Ester (Eds.), *Comparing cultures: Dimensions of culture in a comparative perspective* (pp. 43-73). Leiden, the Netherlands: Brill.

Schwartz, S. H. (2007). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell, C. Roberts, R. Fitzgerald, & G. Eva (Eds.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey* (pp. 161-193). London: SAGE.

Shweder, R. A., & Bourne, E. J. (1984). Does the concept of the person vary cross-culturally? In R. A. Shweder & R. A. LeVine (Eds.), *Culture theory: Essays on mind, self, and emotion* (pp. 158-199). Cambridge, UK: Cambridge University Press.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality and Social Psychology Bulletin*, *20*, 580-591.

Smith, P. B. (2006). When elephants fight, the grass gets trampled: The GLOBE and Hofstede projects. *Journal of International Business Studies*, *37*, 915-921.

Smith, P. B. (2011). Cross-cultural perspectives on identity: Conceptions and measurement. In S. J. Schwartz, K. Luyckx, & V. L. Vignoles (Eds.), *Handbook of identity theory and research* (pp. 249-265). New York: Springer.

Smith, P. B., Bond, M. H., & Kağitçibaşi, Ç. (2006). *Understanding social psychology across cultures: Living and working in a changing world*. London: SAGE.

Smith, P. B., & Long, K. M. (2006). Social identity theory in cross-cultural perspective. In R. J. Brown & D. Capozza (Eds.), *Social identities: Motivational, emotional and cultural influence* (pp. 153-169). Hove, UK: Psychology Press.

Spini, D. (2003). Measurement equivalence of 10 value types from the Schwartz Value Survey across 21 countries. *Journal of Cross-Cultural Psychology*, *34*, 3-23.

Transparency International. (2011). *Corruption perceptions index*. Retrieved from http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results

Triandis, H. C. (1972). *The analysis of subjective culture.* New York: Wiley.

Triandis, H. C. (1993). Collectivism and individualism as cultural syndromes. *Cross-Cultural Research*, *27*, 155-180.

Triandis, H. C. (1995). *Individualism & collectivism.* New Boulder, CO: Westview Press.

Triandis, H. C., Chan, D. K.- S., Bhawuk, D. P. S., Iwao, S., & Sinha, J. B. P. (1995). Multimethod probes of allocentrism and idiocentrism. *International Journal of Psychology*, *30*, 461-480.

Vignoles, V. L., Chryssochoou, X., & Breakwell, G. M. (2000). The distinctiveness principle: Identity, meaning, and the bounds of cultural relativity. *Personality and Social Psychology Review*, *4*, 337-354.

Vignoles, V. L., Owe, E., Lee, S. W. S., & Gadre, T. (2010). *Personhood beliefs in India and the UK*. Unpublished manuscript, University of Sussex, United Kingdom.

van de Vliert, E. (2010). Climato-economic origins of variation in ingroup favoritism. *Journal of Cross-Cultural Psychology*, *42*, 494-515.

Watson, D. (1982). The actor and the observer: How are their perceptions of causality divergent? *Psychological Bulletin*, *92*, 682-700.

Welkenhuysen-Gybels, J., Billiet, J., & Cambré, B. (2003). Adjustment for acquiescence in the assessment of the construct equivalence of Likert-type score items. *Journal of Cross-Cultural Psychology*, *34*, 702-722.

Welzel, C. (2010). How selfish are self-expression values? A civicness test. *Journal of Cross-Cultural Psychology*, *41*, 152-174.

World Economic Forum. (2004). *The global competitiveness report 2004-2005*. New York: Palgrave Macmillan.

Yamagishi, T. (2010). Micro-macro dynamics of the cultural construction of reality: A niche construction approach to culture. In M. J. Gelfand, C.- y. Chiu, & Y.- y Hong (Eds.), *Advances in culture psychology* (Vol. 1, pp. 251-308). Oxford, UK: Oxford University Press.

Yamagishi, T., & Yamagishi, M. (1994). Trust and commitment in the United States and Japan. *Motivation and Emotion*, *18*, 129-166.