



# THE UNIVERSITY *of* EDINBURGH

## Edinburgh Research Explorer

### Humane Orientation as a New Cultural Dimension of the GLOBE Project: A Validation Study of the GLOBE Scale and Out-Group Humane Orientation in 25 Countries

**Citation for published version:**

Schloesser, O, Frese, M, Heintze, A-M, Al Najjar, M, Arciszewski, T, Besevegis, E, Bishop, G, Bonnes, M, Clegg, C, Drozda-Senkowska, E, Gaborit, M, Garzon, D, Hansen, T, Heszen, I, Juhász, M, Keating, M, Mangundjaya, W, Mansor, N, Mitchelson, J, Ortiz, A, Pandey, J, Pavakanun, U, Pavlopoulos, V, Peiró, JM, Potocnik, K, Restrepo, MH, Semmer, N, Tupinamba, A, Ventura, E, Whoolery, M & Zhang, K 2012, 'Humane Orientation as a New Cultural Dimension of the GLOBE Project: A Validation Study of the GLOBE Scale and Out-Group Humane Orientation in 25 Countries' *Journal of Cross-Cultural Psychology*, 10.1177/0022022112465671

**Digital Object Identifier (DOI):**

[10.1177/0022022112465671](https://doi.org/10.1177/0022022112465671)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Author final version (often known as postprint)

**Published In:**

*Journal of Cross-Cultural Psychology*

**Publisher Rights Statement:**

© Schloesser, O., Frese, M., Heintze, A-M., Al Najjar, M., Arciszewski, T., Besevegis, E., Bishop, G., Bonnes, M., Clegg, C., Drozda-Senkowska, E., Gaborit, M., Garzon, D., Hansen, T., Heszen, I., Juhász, M., Keating, M., Mangundjaya, W., Mansor, N., Mitchelson, J., Ortiz, A., Pandey, J., Pavakanun, . U., Pavlopoulos, V., Peiró, J. M., Potocnik, K., Restrepo, M. H., Semmer, N., Tupinamba, A., Ventura, E., Whoolery, M., & Zhang, K. (2012). Humane Orientation as a New Cultural Dimension of the GLOBE Project: A Validation Study of the GLOBE Scale and Out-Group Humane Orientation in 25 Countries. *Journal of Cross-Cultural Psychology*. 10.1177/0022022112465671

**General rights**

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

**Take down policy**

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact [openaccess@ed.ac.uk](mailto:openaccess@ed.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.



Running head: HUMANE ORIENTATION

Humane Orientation as a New Cultural Dimension of the GLOBE Project: A Validation

Study of the GLOBE Scale and Out-Group Humane Orientation in 25 Countries

Oliver Schloesser

University of Giessen

Michael Frese

National University of Singapore and Leuphana University Lüneburg

Anna-Maria Heintze

University of Giessen

Al Najjar, M.<sup>1</sup>, Arciszewski, T.<sup>2</sup>, Besevegis, E.<sup>3</sup>, Bishop, G.D.<sup>4</sup>, Bonnes, M.<sup>5</sup>, Clegg, C.<sup>6</sup>, Drozda-Senkowska, E.<sup>2</sup>, Fields, K.<sup>6</sup>, Gaborit, M.<sup>7</sup>, Garzon, D.<sup>8</sup>, Hansen, T.<sup>9</sup>, Heszen, I.<sup>10</sup>, Jenzer, C.<sup>11</sup>, Juhász, M.<sup>12</sup>, Keating, M.<sup>13</sup>, Mangundjaya, W.H.<sup>14</sup>, Mansor, N.<sup>15</sup>, Mitchelson, J.K.<sup>16</sup>, Ortiz, A.<sup>17</sup>, Pandey, J.<sup>18</sup>, Passafaro, P.<sup>5</sup>, Pavakanun, U.<sup>19</sup>, Pavlopoulos, V.<sup>3</sup>, Peiró, J.M.<sup>20</sup>, Potocnik, K.<sup>21</sup>, Restrepo, M.H.<sup>22</sup>, Semmer, N.K.<sup>11</sup>, Tupinamba, A.C.<sup>23</sup>, Ventura, E.R.<sup>24</sup>, Whoolery, M.<sup>25</sup>, Zhang, K.<sup>26</sup>

<sup>1</sup>Ministry of Interior, Kuwait. <sup>2</sup>University Paris V Rene Descartes, France. <sup>3</sup>University of Athens, Greece. <sup>4</sup>National University of Singapore, Singapore. <sup>5</sup>University of Rome La Sapienza, Italy. <sup>6</sup>University of Sheffield, Great Britain. <sup>7</sup>Gnauthstr. 20, 35394 Giessen, Germany. <sup>8</sup>Universidad Centroamericana “José Simeón Cañas”, El Salvador. <sup>9</sup>Aalborg University, Denmark. <sup>10</sup>Warsaw School of Social Psychology, Poland. <sup>11</sup>University of Bern, Switzerland. <sup>12</sup>Budapest University of Technology and Economics, Hungary. <sup>13</sup>Trinity College, Dublin, Ireland. <sup>14</sup>University of Indonesia, Indonesia. <sup>15</sup>University of Malaya, Kuala Lumpur, Malaysia. <sup>16</sup>Auburn University, U.S.A. <sup>17</sup>Rubens 43-102, Col. San Juan cp 03730, Mexico City, Mexico. <sup>18</sup>University of Allahabad, India. <sup>19</sup>Thammasat University, Bangkok, Thailand. <sup>20</sup>University of Valencia, Valencian Institute of Economic Research (IVIE), Spain. <sup>21</sup>University of Edinburgh, UK. <sup>22</sup>Universidad del Rosario, Colombia. <sup>23</sup>Federal University of Ceará, Brazil. <sup>24</sup>University of the Philippines, Quezon City, Philippines. <sup>25</sup>American University in Cairo, Egypt. <sup>26</sup>Chinese Academy of Sciences, China.

Humane Orientation as a New Cultural Dimension of the GLOBE Project: A Validation  
Study of the GLOBE Scale and Out-Group Humane Orientation in 25 Countries

ABSTRACT

We validate, extend, and empirically and theoretically criticize the cultural dimension of humane orientation of the project GLOBE (Global Leadership and Organizational Behavior Effectiveness Research Program, House et al., 2004). Theoretically, humane orientation is not just a one-dimensionally positive concept about being caring, altruistic, and kind to others as discussed by Kabaskal and Bodur (2004), but there is also a certain ambivalence to this concept. We suggest differentiating humane orientation toward in-group members from humane orientation toward out-group members. A multi-country construct validation study used students samples from 25 countries that were either high or low in humane orientation ( $N = 876$ ), and studied their relation to the traditional GLOBE scale and other cultural-level measures (agreeableness, religiosity, authoritarianism, and welfare state score). Findings revealed a strong correlation between humane orientation and agreeableness, welfare state score, and religiosity. Out-group humane orientation proved to be the more relevant sub-facet of the original humane orientation construct, suggesting that future research on humane orientation should make use of this measure instead of the vague original scale. The ambivalent character of out-group humane orientation is displayed in its positive correlation to high authoritarianism. Patriotism was used as a control variable for non-critical acceptance of one's society but did not change the correlations. Our findings are discussed as an example of how rigid expectations and a lack of tolerance for diversity may help explain the ambivalent nature of humane orientation.

Humane orientation was introduced as a cultural dimension by the Global Leadership and Organizational Behavior Effectiveness Research Program (GLOBE) (House et al., 2004). It means that a society “encourages and rewards individuals for being fair, altruistic, friendly, generous, caring, and kind to others” (House & Javidan, 2004, p. 13). There is relatively little and seemingly contradictory evidence on this concept. Kabasakal and Bodur (2004) explored the relation of humane orientation with other cultural dimensions of the GLOBE study and found humane orientation to be strongly positively related to institutional and in-group collectivism, and negatively related to assertiveness. Humane orientation was also negatively related to the willingness to justify unethical behavior (e.g., cheating on taxes) (Parboteeah, Bronson, & Cullen, 2005). However, other results on humane orientation have raised doubts concerning an unambiguously positive interpretation suggested by its definition. Kabasakal and Bodur (2004) noted a positive correlation of humane orientation with right-wing orientation. Gupta et al. (2004) found a relationship between humane orientation and items on racism and xenophobia from the World Value Survey. Humane-orientation was not related to either societal tolerance or well-being; instead, societies with a high degree of humane orientation tended to be poorer, less educated, and less urbanized than low humane-oriented societies (Kabasakal & Bodur, 2004). Bond et al. (2004) identified a positive relation of humane orientation with “dynamic externality” (a measure of a naive belief in a just world with authoritarian streaks) and a combination of high religiosity and superstitious beliefs.

The vagueness of the original GLOBE humane orientation scale further complicates the interpretation of research findings. The original items speak vaguely of “others” as the targets of humane-oriented behavior, e.g., “In this society, people are generally very concerned about others.” This leaves room for a wide range of interpretations. For instance, results may differ widely depending on whether respondents think about friends or family members or whether they think about minority groups. With this study we want to advance

the understanding of humane orientation by introducing an improved way of measuring humane orientation and by shedding light on the ambiguity of this dimension.

*Measurement issues.*

*Distinction between in-group and out-group humane orientation.* By speaking vaguely of “others,” the original humane orientation scale from the GLOBE study ignores that people may behave differently depending on who their counterpart is. We propose to differentiate between in-group and out-group members for a number of reasons: First, we hypothesize that both facets are currently intermingled in the original scale. New measures of in-group and out-group humane orientation should both be related to the original scale, each adding unique variance to explaining the original scale. Second, we believe out-group humane orientation to be the more interesting facet. For example, Gupta et al. (2004) found a negative correlation between the original humane orientation scale and World Value Survey items that explicitly reference out-groups (i.e., “accept people of different race as neighbors,” “accept immigrants and foreign workers as neighbors”). These relations may be more distinct and more easily interpretable using a specific out-group humane orientation measure. Third, we hypothesize that in-group and out-group humane orientation may be different from each other in some important aspects. Previous research has shown that people tend to treat in-group members more favorably than out-group members (Tajfel & Turner, 1986)<sup>i</sup>. Therefore, we expect in-group humane orientation to be higher than out-group humane orientation in every country. Moreover, we expect that in-group humane orientation will show less variance across countries than out-group humane orientation. If humane-oriented behaviors are more typical for relationships with in-group members in every country, then in-group humane orientation should show little variance across countries (all hypotheses displayed in Table 1).

*An alternative measurement of humane orientation.* In the case of a relatively new dimension of cross-cultural research like humane orientation it is useful to provide a link with

existing knowledge from personality psychology. The idea of adopting personality constructs to describe cultures goes back to Hofstede's (1984) proposition that "culture is to a human collectivity what personality is to an individual" (p. 21). Likewise, some newer literature has argued that personality differences may also appear as cultural differences (Schmitt, Allik, McCrae, & Benet-Martinez, 2007). Various concepts similar to humane orientation can be found in personality psychology to describe individuals, e.g., constructs such as compassion at work, the personality trait agreeableness, and a need for affiliation (Costa & McCrae, 1992; Kanov et al., 2004; Lilius et al., 2003; McClelland, 1985). We propose an alternative measurement of humane orientation based on the personality trait agreeableness. The definition of agreeableness is very similar to that of humane orientation. Costa and McCrae (1992) defined people high in agreeableness as being altruistic, sympathetic, and benevolent. The agreeableness measure is similarly vague about the target of its items. The difference between the two dimensions lies mainly in the level of measurement (i.e., the group or cultural level and the individual level). To test the relation between the two constructs, we changed the reference anchor of the agreeableness measure from the individual to the culture – this should lead to a high relation between these two measures (cf. Hypothesis 2, Table 1).

#### *Related constructs.*

Another set of hypotheses concerns our understanding of humane orientation. For this, we studied the relations of humane orientation to an institutional counterpart of humane orientation, the welfare state, to a cultural system associated with humane orientation, religiosity, and to the "dark side" of humane orientation—namely, authoritarianism. As argued above, we believe that a clearer target of humane orientation toward out-group members leads to more clearly interpretable results than those from the original scale. Therefore, the hypotheses developed below apply primarily to out-group humane orientation.

#### *The compensatory relation between humane orientation and the welfare state.*

Brodbeck, Frese, and Javidan (2002) argued for a negative relation between welfare state status and humane orientation because they act in a mutually compensatory way. The welfare state provides public institutions that protect the well-being of its citizens in times of need. In this sense, the welfare state provides a public institution that serves humane functions. A highly developed welfare state system may thus compensate for a lack of humane orientation in every-day life. When people have access to free health care, unemployment benefits, and generous pensions, there is less need for assistance on a personal level. Likewise, high humane orientation may compensate for a lower welfare state score as people directly support each other in hard times. When there is less support from the state, as is the case in most poorer countries, people need to be mutually supportive of each other.<sup>ii</sup>

*Religiosity as a cultural system promoting humane orientation.* Religiosity as a cultural dimension refers to the degree to which religion plays a central role in the lives of societal members. In this sense, religiosity is not restricted to any specific religion, but focuses in a general way on the importance of religion in people's lives. We expect religiosity to be positively related to humane orientation. Religions provide guidelines that advocate humane-oriented behaviors such as showing compassion and doing good to others (Wuthnow, 1991). In highly religious societies, humane-oriented behaviors should be strongly promoted through the guiding influence of religious teachings. With regard to empirical support for this hypothesis, the evidence is mixed. On the one hand, research has shown that religious people have lower rates of antisocial behavior (Kendler et al., 2003). On the other hand, religiosity may also be linked with aggression and hostility—especially towards out-group members. A study by Burris and Jackson (1999) found that religious people were more likely to tolerate abuse when the victim did not lead a religious life. Thus, high humane orientation and high religiosity may both allow for intolerant behavior.

*Authoritarianism and the ambivalence of humane orientation.* The positive

relationships of humane orientation with right-wing orientation and racism seem to contradict the defining aspects of humane orientation of being accepting of others and offering mutual support (Kabasakal & Bodur, 2004). It seems that people of highly humane-oriented cultures can be both kind and cruel. We believe that the basic norm underlying this ambivalence is the reciprocity norm (Korsgaard, Meglino, Lester, & Jeong, 2010) - if we give you something, you have to give something in return. High humane orientation is not given unconditionally but rather comes with a demand for conformity. The higher the humane orientation, the stronger is the need for conformity to uphold harmony and reduce friction within the society. The motto is: "We are nice to you but only if you fit in with our expectations." When one does not fit in, friendliness may turn into hostility. Such ambivalence can also be found in a construct like paternalistic leadership. Paternalistic leadership is based on a father figure with strong authority and demand of respect, but it also includes a strong concern for the well-being of those the "father-figure" is responsible for (Pellegrini & Scandura, 2008). On the one hand, both paternalistic leadership and humane orientation are concerned with the well-being of others. On the other hand, rejection ensues when the other person does not conform to the rigid set of expectations.

We chose the construct of authoritarianism to exemplify the ambivalence of humane orientation. Originally conceived as a personality construct, authoritarianism is described by three characteristics: submission to authority (people long for leaders they can follow), conventionalism (strict adherence to social norms and traditions), and authoritarian aggression toward those who violate social norms (Altemeyer, 1989). Authoritarianism as a cultural dimension can be defined as the degree to which members of a society emphasize obedience, discipline, power, and submission to authority.

*Further variables.*

*GDP as correlate.* We report correlations with GDP. GDP is an important objective



indicator for the description of countries. Javidan and Hauser (2004) took the view that GDP per capita not only reflects a country's resources but its general effectiveness in managing external and internal challenges. As such GDP should be related to any cultural dimension that has an effect on the way people treat each other, exploit their country's resources, deal with threats from outside, and behave in work situations.<sup>iii</sup>

*Patriotism as a control variable.* Patriotism may produce artificial relations between humane orientation and other cultural dimensions. Patriotism describes a feeling of emotional attachment to one's country. Members of highly patriotic societies may be less critical of their own society to avoid cognitive dissonance. As a consequence, patriotism could bias respondents in their assessments of valued cultural dimensions. Humane orientation seems to be regarded as a positive societal characteristic across all countries (Javidan, House, & Dorfman; 2004). To acknowledge that one's society is rather unfriendly may be harder for patriotic societies. If patriotism has a similar effect on other dimensions, the relation between humane orientation and these measures would be inflated by this bias. Therefore, we used patriotism as a control variable.

## METHOD

### *Sample*

Twenty-five countries participated in our study. They were selected for their high or low scores on humane orientation practices in the GLOBE study to get a wide spread across the humane orientation variable. Our sample included 13 of the 14 lowest scoring countries from the GLOBE study and 10 of the 14 highest scoring countries (data collection 2006). We asked co-investigators to provide a convenience sample of psychology students with at least 20 psychology students per country.<sup>iv</sup> The mean age of participants was 23.4 years ( $SD = 6$  years). Roughly 70% of the respondents were female. Differences in responses from male

and female participants were negligible. Sample sizes ranged from a minimum of 20 to a maximum of 81 with a mean of 35 participants per country and a total of 876 participants.

*Cultural response bias.* We checked the country data for cross-cultural response bias, e.g., the tendency to avoid extreme ends of a scale in Asian countries or a tendency to avoid the midpoint of a scale in European cultures (Hui & Triandis, 1989). To examine cultural response bias, we calculated corrected item responses using a procedure by Triandis (1995), which was also employed in the GLOBE study (Hanges, 2004b). Comparisons of corrected and uncorrected scores in each country showed that response bias was negligible in all countries except Kuwait. Therefore, we excluded Kuwait from subsequent analyses. Once Kuwait was excluded, corrected and uncorrected aggregate scores were correlated  $r = .96$  across all countries, which indicates that there was very little cultural response bias present in the remaining data. Therefore, we used the uncorrected scores (excluding Kuwait).

### *Measures*

As recommended by House and Hanges (2004) we measured cultural dimensions at the targeted level of analysis (Chan, 1998; Fischer, 2008). All items used society as a reference anchor with phrases like “In this society, people generally are...”<sup>v</sup>. The questionnaire was translated into the local language whenever necessary. The original was developed in English. To ensure the adequacy of the translations, country co-investigators were asked to provide back translations as recommended by Brislin (1986). All measures showed convergent validity with related cross-cultural indicators, for example, other cultural measures, economic indicators, or data from the World Values Survey (see Appendix A). Table 2 provides an overview of scales, sample items, and Cronbach’s alphas.

The questionnaire contained the GLOBE *humane orientation* scale and scales on *in-group humane orientation* and *out-group humane orientation*. In-group and out-group humane orientation scales used the same items as GLOBE albeit modified to differentiate

between in-group and out-group by specifying the target of humane-oriented behaviors as “friends” or “people from neighboring countries who live and work here,” respectively<sup>vi</sup>. To rule out sequence effects, we comprised different questionnaire versions by alternating the sequence of the in-group and out-group humane orientation scales.<sup>vii</sup>

The questionnaire also included scales for the cultural dimensions of *agreeableness*, *welfare state*, *religiosity*, *authoritarianism*, and *patriotism*. With the exception of our welfare state scale, all measures were adapted from existing instruments (cf. Table 2). When instruments were originally designed for use at the individual level, items were rephrased with a societal focus. *Welfare state* was measured by five items developed for this study (items in Table 2). The *agreeableness* measure consisted of the six highest loading items of the Revised NEO Personality Inventory, reworded with society as reference anchor. *Authoritarianism* was based on Adorno’s F-scale (Adorno et al., 1950), Altemeyer’s Right-Wing Authoritarianism Scale (Altemeyer; 1989), and Roghmann’s Fascism Scale (Roghmann, 2005). *Religiosity* was a combination of three measures: the Religious Commitment Inventory (Worthington et al., 2003), the Multidimensional Measurement of Religiousness/Spirituality Scale (Fetzer Institute, 1999), and the Religious Attitudes and Practices Inventory (D’Onofrio et al., 1999). The religiosity scale addressed the importance of religious beliefs in general, thereby allowing for a meaningful comparison of countries regardless of different religions. If necessary, items were rephrased so that they contained no expressions referring to a specific religion. *Patriotism* comprised items adapted from two measures that focus on emotional attachment to one’s country (Balke, El-Menouar, Rastetter, & Schmidt, 2005; Gümüs, Gömleksiz, Glöckner-Rist, & Balke, 2005).

In addition to questionnaire measures, we included humane orientation practices, in-group collectivism, and assertiveness scores from the GLOBE study and information about Gross Domestic Product (GDP) per capita in our correlation matrix. We also included

measures of racism and tolerance from the World Values Survey (World Values Survey Association, 2009). GDP figures are based on per capita purchasing power in US dollars from 2006 (Central Intelligence Agency, 2007, World Factbook).

*Aggregation.* Scale scores were aggregated at the country level to allow for cross-country comparisons. To justify aggregation, we calculated internal consistency, within-group agreement, factor structures at the aggregate level, and factorial equivalence across countries (see Table 2). First, we calculated Cronbach's alpha at the aggregate level to assess the internal consistency of our scales. Second, we calculated within-group agreement using  $r_{wg(J)}$  and the intraclass correlation coefficients ICC(1) and ICC(2) (Kozlowski & Hattrup, 1992; James, Demaree, & Wolf, 1993). Klein et al. (2000) recommended a minimum value of .70 for  $r_{wg(J)}$  and ICC(2). Additionally, ICC(1) values should be significantly larger than zero (tested with an F-test on the ratio of between-group mean square and within-group mean square). Third, we calculated factor structures of our scales at the aggregate level. Exploratory factor analyses of scale items provided one-factor solutions for each scale (Hanges & Dickson, 2006). When we analyse the ten items comprising in-group and out-group humane orientation together the exploratory factor analysis comes up with a two-factor solution with all out-group humane orientation items loading heavily on one factor and all in-group humane orientation items loading heavily on the second factor. Finally, we calculated Tucker's congruence coefficient to examine the equivalence of factor structures (Tucker, 1951; Zegers & Ten Berge, 1984). Tucker's congruence coefficient compares two factor structures with each other. For each scale, we calculated the unidimensional factor structure for each country and compared it to the factor structure found across all participants. A high congruence coefficient indicates that factor structures are similar across countries supporting the assumption that the psychological construct underlying the instrument is the same across groups (van de Vijver & Leung, 1997). As a lower limit for Tucker's congruence coefficient,

van de Vijver and Leung (1997) proposed a value of .90. Table 2 shows that all indicators supported the aggregation of scale scores at the country level. Cronbach's alphas were above .70; ICC(1)s were significant in all cases, and all ICC(2)s and mean  $r_{wg(J)s}$  were above .70. Exploratory factor analyses at the country level extracted one factor for each scale. The mean Tucker's congruence coefficients were .90 or higher for all scales.

## RESULTS

Our hypotheses on the in-group/out-group distinction of humane orientation were all confirmed as were our hypotheses on related constructs (cf. Table 1). Table 3 contains the country scores on each cultural dimension. Table 4 provides the intercorrelation matrix for zero-order correlations and correlations with patriotism scores partialled out. Both sets of correlations are almost identical ( $r = .99$ ). Because partial correlations and zero order correlations were so similar, we describe only the zero-order correlations.

*GDP as correlate.* Kabasakal and Bodur (2004) reported a negative correlation of  $r = -.36$  ( $n = 61, p < .01$ ) between humane orientation and GDP. We found the same relation in our data although it was only marginally significant because of the smaller number of countries in our sample ( $r = -.35, n = 24, p < .10$ ). Out-group humane orientation was very highly and negatively correlated with GDP ( $r = -.73, n = 24, p < .01$ ), whereas in-group humane orientation was unrelated to GDP ( $r = -.01, n = 24, ns$ ). We also found a strong relation between GDP and welfare state score ( $r = .71, n = 24, p < .01$ ), and of GDP with religiosity ( $r = -.68, n = 24, p < .01$ ). Thus, countries with a high GDP per capita tended to be low on out-group humane orientation, high on the welfare state scale, and low on religiosity.

*Robustness of results.* Given our study's small sample sizes in some countries, we used a twofold approach to ascertain the robustness of our results. First, we checked whether our results replicated those of the GLOBE study. Humane orientation scores were correlated  $r = .72$  ( $n = 24, p < .01$ ) with corresponding humane orientation practices scores from the

GLOBE study. Moreover, correlations of humane orientation with in-group collectivism and with assertiveness were of similar size regardless whether based on scores from our study or from the GLOBE study (for assertiveness  $r = -.60, n = 24, p < .01$  and  $r = -.73, n = 24, p < .01$  respectively; for in-group collectivism  $r = .39, n = 24, p < .05$  and  $r = .41, n = 24, p < .05$ ; cf. Table 3). Second, we ran statistical tests on whether sample size had any impact on the correlations we found in our study. For this, we used a correlation-of-correlations approach: We calculated partial correlations with sample size controlled for; we then used these partial correlations and correlated them with the original zero-order correlations. The correlation of correlations was  $r = .99$ . Also, we calculated correlations with data weighted by sample size. Weighted correlations were also nearly identical to the original correlations ( $r = .99$ ). Thus, we believe that the influence of sample size on results is small.

## DISCUSSION

The present study contributes to research on humane orientation by providing an optimized measurement of the construct. We differentiated humane orientation into in-group and out-group humane orientation. These two sub-facets were mixed in the original construct. Regression analysis revealed that both facets add unique variance in explaining the original humane orientation scale (see Table 4). Interestingly, in-group humane orientation proved to be a stronger predictor ( $\beta = .59, p < .05$ ) than out-group humane orientation ( $\beta = .32, p < .05$ ; see Table 5). However, it was mainly the out-group humane orientation dimension that showed high relations to other dimensions. For example, out-group humane orientation was correlated with GPD at  $r = -.73 (n = 24, p < .001)$ , whereas in-group humane orientation was correlated at  $r = -.01 (n = 24, ns)$  and the original unspecific scale was correlated at  $r = -.35 (n = 24, p < .05)$ . In light of our results we recommend future research to use the specific out-group humane orientation scale instead of the original scale because out-group humane orientation shows a clearer pattern in support of developed hypotheses (cf. Table 1).

We hypothesized that humane orientation and agreeableness constitute very similar constructs when measured at the same level of analysis. Indeed, the relation between humane orientation and agreeableness was very high ( $r = .81, n = 24, p < .01$ ). Future cross-cultural research might try to uncover more of this type of relations by adapting existing measures from personality psychology to the cultural level. This may help to link two hitherto separate streams of research. However, one should not assume that relations found at the society level of analysis also apply to the individual level (Hofstede, 2001).

With the inclusion of a welfare state measure in our study, we found evidence for the hypothesis that there is a (potentially) compensatory relation between out-group humane orientation and a societal institution that serves humane functions. Future research may want to study long-term cause-and-effect relations between these dimensions. We assume that economic growth is a critical factor in promoting the development of the welfare state which may in turn lead to a reduction of out-group humane orientation. We also assume that the institutionalization of humane oriented behaviors in a welfare state is more likely to occur in societies low on out-group humane orientation.

The positive correlation with authoritarianism found in this study provides evidence to the ambivalent nature of humane orientation. Understanding this ambivalence is critical. We believe that high (out-group) humane orientation goes together with a rigid set of expectations and an emphasis on conformity. Societies high in out-group humane orientation have a tendency to avoid direct confrontation, and at the same time, they value the group over the individual. Kabasakal and Bodur (2004) already reported that humane orientation was negatively related to assertiveness and positively related to in-group collectivism. Our findings confirm this with regard to out-group humane orientation (cf. Table 3). High out-group humane orientation implies that harmony is preserved by being respectful and considerate of others. People are compassionate with others - but only as long as those others

do not try to challenge the social norms of the group. Whenever harmony is destroyed, people tend to react with hostility toward the out-group. On the other hand, low humane-oriented societies are mostly individualistic and assertive. Dissent is part of these societies as well as a relatively high degree of acceptance for deviation from the majority norm. People in these societies place less emphasis on conformity. Research by Gelfand et al. (2011) on the cultural dimension of tightness-looseness, defined as the strength of social norms and the degree of sanctioning within societies, may be related here because tightness may be a potential moderator that determines whether humane orientation turns into authoritarian behaviors.

The inherent ambivalence of humane orientation may provide additional thoughts on the positive relation to religiosity. On the one hand, humane orientation and religiosity may be correlated because religiosity promotes compassion and altruism. On the other hand, religiosity and humane orientation may be related because they are both linked to a rigid set of expectations and an emphasis on uniformity. As long as the norms and expectations remain unchallenged and societal harmony is maintained, mutual kindness and caring prevail, reinforced by religious teachings. Once group norms are challenged and open conflict arises, a violent backlash may occur, potentially reinforced by religion as well.

### *Limitations*

The small sample size per country is one shortcoming of our study. On average, 35 participants per country took part in this research compared to 250 in the GLOBE study. However, there are a number of reasons for why we do not believe that sample size is a major weakness of our study. First of all, our results correlate well with results from the GLOBE study. This correlation is noteworthy as the two studies differed not only with regard to sample sizes but also in sample composition (i.e., students vs. middle managers) and time of measurement (i.e., 2006 vs. 1996). Second, we found meaningful correlations of our measures with external variables (see Appendix A). Third, we performed statistical checks to



assess the robustness of our samples. The correlations with sample size partialled out were nearly identical to the original correlations ( $r = .99$  of partial and zero-order correlations).

Although we consider our operationalizations of in-group and out-group (i.e., “friends” resp. “foreigners living and working in your country”) to be valid representations of in-group and out-group members, we recommend the use of a wider range of operationalizations for future research to ascertain generalizability. Our operationalization of the out-group may particularly limit the generalizability of the relation of religiosity and out-group humane orientation. The positive correlation between out-group humane orientation and religiosity suggests religiously motivated people show more humane-oriented behavior toward out-group members. However, had our operationalization of out-group membership explicitly stated that out-group members had a different religion, the observed correlation might have been different.

Our results on in-group humane orientation revealed high scores across all countries. Moreover, our in-group humane orientation measure was not related to any of the other variables except for the other humane orientation scales and agreeableness. Therefore, the in-group humane orientation scale is of limited use for future research. However, our measure may have been unable to capture the differences in the way in-group members are treated in different societies. Future research on in-group humane orientation might try to develop a new scale (e.g., by using more concrete behaviors).

## CONCLUSION

We believe it makes sense to adopt the differentiation between in-group and out-group forms of humane orientation in future studies. Conceptually, humane orientation makes more sense when it is directed toward others than toward the in-group. Moreover, clear differences in the variance between countries also speak for using out-group humane orientation. The GLOBE humane orientation scale is made up of in-group and out-group humane orientation

which behave very differently from each other, pointing to an inherent weakness of the original scale. The more interesting findings of the GLOBE study are linked to out-group humane orientation. Therefore, we recommend to concentrate on this dimension in the future.

Moreover, our study adds to the understanding of humane orientation. Humane orientation is inherently ambivalent. High humane orientation is linked with a rigid set of expectations and an emphasis on uniformity and societal harmony. Kindness and compassion may turn into hostility and aggression when the other does not adhere to expectations of adherence to rigid norms. This explains why we found a positive relation to authoritarianism. An interesting topic for future research may be to study the conditions in which high humane-oriented and highly authoritarian societies engage in compassionate versus aggressive behaviors, for example, depending on the conformity of the other.

## References

- Adorno, T.W., Frenkel-Brunswik, E., Levinson, D.J., & Sanford, R.N. (1950). *The authoritarian personality*. New York: Harper & Row.
- Altemeyer, B. (1989). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco: Jossey-Bass.
- Balke, D., El-Menouar, Y., Rastetter, R.U., & Schmidt, P. (2005). Wichtigkeit deutscher Identitätsmerkmale. In A. Glöckner-Rist (Ed.), *ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente*. Mannheim: Zentrum für Umfragen, Methoden und Analysen.
- Barr, N. (2004). *Economics of the welfare state*. New York: Oxford University Press.
- Bond, M.H, Leung, K., Au, A., Tong, K.-K., de Carrasquel, S.R., Murakami, F., Yamaguchi, S. et al. (2004). Culture-level dimensions of social axioms and their correlates across 41 countries. *Journal of Cross-Cultural Psychology*, 35(5), 548-570.

- Brislin, R.W. (1986). The wording and translation of research instruments. In W.J. Lohmer & J.W. Berry (Eds.), *Field methods in cross-cultural research* (pp. 137-164). Beverly Hills, CA: Sage.
- Brodbeck, F.C., Frese, M., & Javidan, M. (2002). Leadership made in Germany: Low on compassion, high on performance. *Academy of Management Executive*, *16*(1), 16-29.
- Burris, C. T. & Jackson, L. M. (1999). Hate the sin/love the sinner, or love the hater? Intrinsic religion and responses to partner abuse. *Journal for the scientific study of religion*, *38*(1), 160-174.
- Central Intelligence Agency. (2007). *CIA – The world factbook: Rank order - GDP – per capita (PPP)*. Retrieved June 10, 2007, from <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2004rank.html>.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, *83*, 234-246.
- Costa, P.T., Jr., & McCrae, R.R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources.
- D’Onofrio, B.M., Murelle, L., Eaves, L.J., McCullough, M.E., Landis, J.L., & Maes, H.J. (1999). Adolescent religiousness and its influence on substance use: Preliminary findings from the Mid-Atlantic Age Twin Study. *Twin Research*, *2*(2), 156-168.
- European Values Study Group and World Values Survey Association. (2006). *World values surveys and European values surveys, 1981-2004*. Retrieved September, 3, 2006, from <http://www.worldvaluessurvey.org>.

- Fetzer Institute / National Institute of Aging Work Group (1999). *Multidimensional measurement of religiousness/spirituality for use in health research*. Kalamazoo, MI: John A. Fetzer Institute.
- Fischer, R. (2008). Multilevel approaches in organizational settings: Opportunities, challenges and implications for cross-cultural research. In F. J. R. van de Vijver, D. A. van Hemert & Y. H. Poortinga (Eds.), *Individuals and Cultures in Multi-level Analysis* (pp. 173-196). Mahwah, NJ: Lawrence Erlbaum Associates.
- Gelfand, M.J., Raver, J.L., Nishii, L., Leslie, L.M., Lun, J., Lim, B.C., Duan, L. et al. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, 332, 1100-1104.
- Gibney, M., Cornett, L., & Wood, R., (2011). *Political Terror Scale 1976-2008*. Retrieved April 14, 2011, <http://www.politicalterrorsscale.org>.
- Gümüs, A., Gömleksiz, M., Glöckner-Rist, A., & Balke, D. (2005). Itembatterien für kulturvergleichende Untersuchungen zur Identifikation mit der eigenen Nation. In A. Glöckner-Rist (Ed.), *ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente*. Mannheim: Zentrum für Umfragen, Methoden und Analysen.
- Gupta, V., de Luque, M. S., & House, R. J. (2004). Multisource construct validity of GLOBE scales. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman & V. Gupta (Eds.), *Cultures, Leadership and Organizations: A 62 Nation GLOBE Study* (pp. 152-177). Thousand Oaks, Calif.: Sage.
- Hanges, P.J. (2004b). Appendix B: Response bias correction procedure used in GLOBE. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 737-751). Thousand Oaks, CA: Sage.

- Hanges, P.J., & Dickson, M.W. (2006). Agitation over aggregation: Clarifying the development of and the nature of the GLOBE scales. *The Leadership Quarterly*, *17*(5), 522-536.
- Hofstede, G. (1984). *Culture's consequences*. Thousand Oaks, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences: International differences in work-related values* (2<sup>nd</sup> ed.). Beverly Hills, CA: Sage.
- House, R.J., & Hanges, P.J. (2004). Research design. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 95-101). Thousand Oaks, CA: Sage.
- House, R.J., & Javidan, M. (2004). Overview of GLOBE. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 9-28). Thousand Oaks, CA: Sage.
- Hui, C.H., & Triandis, H.C. (1989). Effects of culture and response format on extreme response style. *Journal of Cross-Cultural Psychology*, *20*, 296-309.
- James, L.R., Demaree, R.G., & Wolf, G. (1993).  $r_{wg}$ : An assessment of within-group interrater agreement. *Journal of Applied Psychology*, *78*(2), 306-309.
- Javidan, M., & Hauser, M. (2004). The linkage between GLOBE findings and other cross-cultural information. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 102-121). Thousand Oaks, CA: Sage.
- Javidan, M., House, R.J., & Dorfman, P.W. (2004). A nontechnical summary of GLOBE findings. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 29-50). Thousand Oaks, CA: Sage.

- Kabasakal, H., & Bodur, M. (2004). Humane orientation in societies, organizations and leader attributes. In R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman & V. Gupta (Eds.), *Culture, Leadership, and Organizations: The GLOBE study of 62 societies* (pp. 564-601). Thousand Oaks, CA: Sage.
- Kanov, J.M., Maitlis, S., Worline, M.C., Dutton, J.E., Frost, P.J., & Lilius, J.M. (2004). Compassion in organizational life. *American Behavioral Scientist*, *47*, 808-827.
- Kendler, K.S., Liu, X.Q., Gardner, C.O., McCullough, M.E., Larson, D., & Prescott, C.A. (2003). Dimensions of religiosity and their relationship to lifetime psychiatric and substance use disorders. *American Journal of Psychiatry*, *160*, 496-503.
- Klein, K.J., Bliese, P.D., Kozlowski, S.W., Dansereau, F., Gavin, M.B., Griffin, M.A., et al. (2000). Multilevel analytical techniques. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations* (pp. 425-466). San Francisco, CA: Jossey-Bass.
- Korsgaard, M.A., Meglino, B.M., Lester, S.W. & Jeong, S. (2010). Paying you back or paying me forward: Understanding rewarded and unrewarded organizational citizenship behavior. *Journal of Applied Psychology*, *95*(2), 277-290.
- Kozlowski, S.W.J., & Hattrup, K. (1992). A disagreement about within-group agreement: Disentangling issues of consistency versus consensus. *Journal of Applied Psychology*, *77*(2), 161-167.
- Lilius, J.M., Worline, M.C., Dutton, J.E., Kanov, J., Frost, P.J., & Maitlis, S. (2003, August). *What good is compassion at work?* Paper presented at the meeting of the National Academy of Management, Seattle, WA.
- McClelland, D.C. (1985). *Human motivation*. Glenview: IL: Scott, Foresman.

- Parboteeah, K.P., Bronson, J.W., & Cullen, J.B. (2005). Does national culture affect willingness to justify ethically suspect behaviors? A focus on the GLOBE national culture scheme. *International Journal of Cross Cultural Management*, 5(2), 123-138.
- Pellegrini, E.K., Scandura, T.A. (2008). Paternalistic leadership: A review and agenda for future research. *Journal of Management*, 34 (3), 566-593.
- Rogmann, K. (2005). Faschismus. In A. Glöckner-Rist (Ed.), *ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente*. ZIS Version 9.00. Mannheim: Zentrum für Umfragen, Methoden und Analysen.
- Schmitt, D.P., Allik, J., McCrae, R.R., & Benet-Martinez, V. (2007). The geographic distribution of Big Five personality traits: Patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38, 173-212.
- Smith, T.W., & Kim, S. (2006). National pride in comparative perspective: 1995/96 and 2003/04. *International Journal of Public Opinion Research*, 18(1), 127-136.
- Tajfel, H., & Turner, J.C. (1986). Social identity theory of intergroup behavior. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations* (pp. 7-24). Chicago: Nelson-Hall.
- Terraciano, A., et al. (2005). National Character does not reflect mean personality trait levels in 49 cultures. *Science*, 310, 96-100.
- Triandis, H.C. (1995). *Individualism & collectivism*. Boulder, CO: Westview.
- Tucker, L.R. (1951). *A method for synthesis of factor analytic „s“ studies*. Personnel Research Section Report No. 984. Washington, D.C.: Department of the Army.
- United Nations Development Program. (2004). *Human development report 2004*. New York: Oxford University Press.
- Van de Vijver, F.J.R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Thousand Oaks, CA: Sage.

World Values Survey Association. (2009). *World values surveys 1981-2008*. Retrieved December, 7, 2010, from <http://www.worldvaluessurvey.org>.

Worthington, E.L., Jr., Wade, N.G., Hight, T.L., Ripley, J.S., McCullough, M.E., Berry, J.W., Schmitt, M.M., et al. (2003). The religious commitment inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology*, 50, 84-96.

Wuthnow, R. (1991). *Acts of compassion: Caring for others and helping ourselves*. Princeton, NJ: Princeton University Press.

Zegers, F.E. & Ten Berge, J.M.F. (1985). A family of association coefficients for metric scales. *Psychometrika*, 50(1), 17-24.



Table 1. Hypotheses and Results

No.	Hypothesis	Confirming Results
1a	In-group and out-group humane orientation are both positively related to humane orientation.	In-group and out-group humane orientation were strongly correlated with the general humane orientation scale ( $r = .73, n = 24, p < .01$ , and $r = .57, n = 24, p < .01$ , respectively) and only modestly intercorrelated ( $r = .42, n = 24, p < .05$ ).
1b	In-group and out-group humane orientation both add unique variance in explaining humane orientation.	In-group humane orientation ( $\beta = .59, p < .05$ ) and out-group humane orientation ( $\beta = .32, p < .05$ ) both add unique variance in explaining the original unspecified scale ( $R^2 = .53$ for Step 1; $\Delta R^2 = .09$ for Step 2; $p < .05$ ).
1c	In-group humane orientation is higher than out-group humane orientation in every country.	$t$ tests in each country confirmed that in-group humane orientation was significantly higher than out-group humane orientation.
1d	Out-group humane orientation shows higher variance across countries than in-group humane orientation.	The variance of out-group humane orientation scores ( $SD = 0.74$ ) was significantly higher than the variance of in-group humane orientation scores ( $SD = 0.31$ ) as confirmed by an $F$ -test ( $F(1,46) = 81.74; p < .01$ ).
2	There is a positive relation between humane orientation and culture-level agreeableness.	Humane orientation and agreeableness were strongly positively correlated ( $r = .81, n = 24, p < .01$ ). The correlation remained significant when correlating our agreeableness measure with GLOBE humane orientation scores ( $r = .57, n = 24, p < .01$ ).
3	There is a negative relation between welfare state score and out-group humane orientation.	Out-group humane orientation was negatively correlated with welfare state ( $r = -.57, n = 24, p < .01$ ).
4	There is a positive relation between religiosity and out-group humane orientation.	Out-group humane orientation was positively correlated with religiosity ( $r = .51, n = 24, p < .05$ ).
5	There is a positive relation between authoritarianism and out-group humane orientation.	Out-group humane orientation was positively correlated with authoritarianism ( $r = .57, n = 24, p < .05$ ).

Notes. Also cf. Table 3 for country scores relating to hypothesis 1c, Table 4 for correlations relating to hypotheses 1a, 2, 3, 4, and 5, Table 5 for regression analysis relating to hypothesis 1b.

Table 2. Questionnaire Scales with Sample Items, Internal Consistency, Within-Group Agreement, and Factor Equivalence

Scale	Sample Item (Number of items per scale)	Internal	Within-Group		Factor	
		Consistency Cronbach's alpha	Mean $r_{wg(J)}$	ICC (1)	ICC (2)	Equivalence Mean Tucker coefficient
Humane Orientation <sup>1</sup>	In this society, people are generally very concerned about others. (5)	.90	.89	.15	.86	.98
In-Group Humane Orientation	In this society, people are generally very concerned about their friends. (5)	.94	.91	.07	.73	.99
Out-Group Humane Orientation	In this society, people are generally very concerned about people from neighboring countries who live and work here. (5)	.98	.84	.29	.94	.99
Agreeableness <sup>2</sup>	In this society, people generally try to be thoughtful and considerate. (6)	.86	.88	.20	.90	.93
Welfare State (self-developed)	In this society, the poor receive sufficient benefits from the state. In this society, there are enough places that provide people in need with a free meal. In this society, people who cannot afford a home receive financial help to pay for it. In this society, the unemployed get generous support from the state. In this society, a good education is affordable for everyone. In this society, the poor receive sufficient benefits from the state. (5)	.95	.79	.48	.97	.98
Religiosity <sup>3</sup>	In this society, religious beliefs influence all dealings in life. (7)	.97	.91	.48	.97	.98
Authoritarianism <sup>4</sup>	In this society, people are convinced that it is necessary to take decisive actions against people leading an immoral life. (6)	.78	.83	.16	.87	.94
Patriotism <sup>5</sup>	In this society, people love their country. (5)	.94	.89	.21	.90	.99

*Notes.* All items used a seven-point Likert answer scale. ICC(1) is significantly larger than zero for every scale. Exploratory factor analyses at the country level extracted one factor per scale. Sources: <sup>1</sup> GLOBE study (Kabasakal & Bodur, 2004) <sup>2</sup> Revised NEO Personality Inventory (Costa & McCrae, 1992) <sup>3</sup> Religious Commitment Inventory (Worthington et al., 2003), Multidimensional Measurement of Religiousness/Spirituality Scale (Fetzer Institute, 1999), Religious Attitudes and Practices Inventory (D'Onofrio et al., 1999). <sup>4</sup> F-scale (Adorno et al., 1950), Right-Wing Authoritarianism Scale (Altemeyer, 1989), Fascism Scale (Roghmann, 2005). <sup>5</sup> Importance of German Identification Symbols (Balke et al., 2005), National Identification Scale (Gümüüs et al., 2005)

Table 3. Country Scores of Study Scales (sorted by humane orientation)

Country	Humane Orientation	In-Group Humane Orientation	Out-Group Humane Orientation	Agreeableness	Welfare State	Religiosity	Authoritarianism	Patriotism	
Total	<i>M</i>	4.11	5.39	3.90	3.60	3.13	3.97	4.49	4.70
	<i>SD</i>	0.41	0.31	0.74	0.41	1.04	1.04	0.40	0.56
France		3.49	5.07	3.30	3.14	3.74	2.86	4.35	4.60
Germany		3.59	5.48	3.10	2.96	4.53	2.93	4.35	3.60
Singapore		3.60	5.40	3.70	3.56	3.61	3.88	4.73	4.16
Hungary		3.63	5.18	3.12	2.78	2.43	2.94	3.60	3.92
Greece		3.69	5.12	2.81	3.14	2.64	4.33	3.95	5.37
Italy		3.72	4.85	2.96	3.28	2.89	3.55	4.20	4.32
USA		3.72	5.16	3.16	3.04	3.15	4.13	4.78	4.98
El Salvador		3.86	5.33	4.35	3.47	1.69	4.74	5.14	4.08
Brazil		3.90	5.39	5.19	4.02	1.89	4.98	4.68	4.19
Poland		3.92	5.07	3.74	3.30	3.21	4.22	4.77	4.31
Ecuador		3.95	5.01	3.98	3.56	2.46	4.53	4.70	4.11
Switzerland		4.11	5.49	3.12	3.63	5.21	2.66	3.91	4.97
Malaysia		4.14	4.91	3.93	3.73	3.22	4.85	4.46	5.22
Colombia		4.14	5.50	4.87	3.83	2.26	4.65	4.89	4.97
Thailand		4.22	5.07	4.00	3.62	3.57	4.53	4.16	4.94
Denmark		4.27	5.65	3.59	3.89	5.80	2.31	3.86	5.20
China		4.33	5.51	5.27	3.57	2.49	2.23	4.41	4.86
England		4.34	5.56	3.35	3.58	4.02	2.92	4.65	5.13
Spain		4.45	5.75	3.46	4.13	3.51	3.33	4.50	4.54
Ireland		4.63	5.88	3.91	3.89	3.65	3.19	4.19	5.82
Egypt		4.66	5.90	4.60	4.00	1.99	5.39	4.80	5.11
India		4.69	5.60	4.43	3.62	3.11	5.24	5.11	5.49
Indonesia		4.71	5.72	4.78	4.24	1.86	5.57	4.88	4.61
Philippines		4.86	5.80	4.91	4.39	2.27	5.30	4.75	4.18

*Note.* Scales are based on items using seven-point Likert answer scales (ranging from 1 to 7). Higher scores correspond to higher values on the variable.

Table 4. Intercorrelation Matrix

	(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
(1) Humane Orientation		.65**	.71**	.63**	.81**	-.26	.38*	.38*	-	-.51**	.48**	-.49**	.40§	-.27
(2) Humane Orientation GLOBE <sup>1</sup>	.72**		.19	.57**	.53**	-.30	.48*	.28	-	-.49*	.49*	-.66**	.43§	-.42§
(3) In-Group Humane Orientation	.73**	.28		.43*	.62**	-.01	.03	.23	-	-.07	.08	-.08	.18	-.07
(4) Out-Group Humane Orientation	.57**	.52**	.42*		.68**	-.59**	.51*	.57**	-	-.75**	.63**	-.56**	.31	-.71**
(5) Agreeableness	.81**	.57**	.64**	.66**		-.23	.43*	.39§	-	-.42*	.42*	-.49*	.14	-.21
(7) Welfare State	-.12	-.16	.05	-.57**	-.16		-.70**	-.50*	-	.70**	-.75**	.07	-.45§	.79**
(8) Religiosity	.33	.43*	.03	.51*	.41*	-.68**		.66**	-	-.69**	.66**	-.24	.51*	-.55**
(9) Authoritarianism	.29	.22	.20	.57**	.35§	-.51*	.65**		-	-.48*	.44*	-.27	.27	-.41§
(10) Patriotism	.47*	.44*	.25	.03	.24	.23	.00	-.09		-	-	-	-	-
(11) GDP per capita <sup>2</sup>	-.35§	-.35§	-.01	-.73**	-.35§	.71**	-.68**	-.48*	.20		-.76**	.45*	-.62*	.75**
(12) In-Group Collectivism GLOBE <sup>3</sup>	.39§	.41*	.06	.62**	.38§	-.74**	.66**	.45*	-.07	-.76**		-.40§	.45*	-.69**
(13) Assertiveness GLOBE <sup>4</sup>	-.60**	-.73**	-.18	-.52**	-.53**	-.03	-.22	-.20	-.43*	.31	-.33		-.39§	.34
(14) Racism WVS <sup>5</sup>	.45*	.48*	.22	.32	.19	-.38§	.51*	.27	.22	-.58**	.43*	-.44*		-.49*
(15) Tolerance WVS <sup>6</sup>	-.17	-.28	-.04	-.70**	-.16	.79**	-.54**	-.42*	.15	.75**	-.69**	.23	-.45*	

Notes. Lower part: nominal correlation; upper part: partial correlation controlled for patriotism; §  $p < .10$ ; \*  $p < .05$ ; \*\*  $p < .01$ ;  $N = 24$

<sup>1</sup>Humane orientation societal practices from the GLOBE study (Kabasakal & Bodur, 2004). <sup>2</sup>2006 estimates of Gross Domestic Product per capita in power purchasing parity from the CIA World Factbook (Central Intelligence Agency, 2007). <sup>3</sup>In-group collectivism societal practices from the GLOBE study.

<sup>4</sup>Assertiveness societal practices from the GLOBE study. <sup>5</sup> $N = 22$ ; Percentage rejecting neighbors of a different race (World Values Survey Association, 2009).

<sup>6</sup> $N = 23$ ; Mean rating on justifiability of homosexuality (World Values Survey Association, 2009).

Table 5. Hierarchical Regression Analysis Predicting Humane Orientation

Variable	<i>B</i>	<i>SE B</i>	<i>B</i>
Step 1			
In-Group Humane Orientation	0.96	0.19	0.73**
Step 2			
In-Group Humane Orientation	0.78	0.20	0.59*
Out-Group Humane Orientation	0.18	0.08	0.32*

Notes.  $R^2 = .53$  for Step 1;  $\Delta R^2 = .09$  for Step 2 ( $p < .05$ ); \*  $p < .05$ ; \*\*  $p < .01$

## Appendix A: Convergent Validity of Questionnaire Measures

The following results provide evidence for the construct validity of the scales (all focused on the societal level). *Agreeableness* showed convergent validity with an agreeableness measure from the national character survey by Terraciano et al. (2005;  $r = .60$ ,  $n = 16$ ,  $p < .05$ , these authors reported country scores obtained with a modified version of the NEO-PI-R questionnaire called the national character survey with society as reference anchor). *Religiosity* scores were positively correlated with attendance of religious services ( $r = .78$ ,  $n = 21$ ,  $p < .01$ ), and negatively with the percentage of respondents describing themselves as atheists ( $r = -.64$ ,  $n = 20$ ,  $p < .01$ ) (European Values Study Group and World Values Survey Association, 2006). *Authoritarianism* was found to be significantly correlated with the number of people favoring the army to rule their country ( $r = .52$ ,  $n = 20$ ,  $p < .05$ ) (European Values Study Group and World Values Study Association, 2006). Additionally, the Political Terror Scale was positively correlated with our authoritarianism measure ( $r = .54$ ,  $n = 24$ ,  $p < .01$ ) (Gibney, Cornett, & Wood, 2011). The *Welfare State* score was positively correlated with the Human Development Index ( $r = .65$ ,  $n = 24$ ,  $p < .01$ ) and income equality as measured by the Gini index ( $r = -.54$ ,  $n = 24$ ,  $p < .01$ ) (United Nations Development Program, 2004). We also found a positive relation with actual welfare expenditure figures (Barr, 2004). Although the correlation was high, it was significant only at the  $p < .1$  level because of the small number of countries for which figures were available ( $r = .60$ ,  $n = 10$ ,  $p = .07$ ). *Patriotism* scores showed a strong relation with a measure of domain-specific national pride from the International Social Survey Program (Smith & Kim, 2006). This measure assesses positive feelings about national achievements in various domains. The correlation was sizable but only marginally significant ( $r = .58$ ,  $n = 11$ ,  $p < .10$ ) because of a lack of power as the overlapping sample between our study and the International Social Survey Program consisted of only 11 countries.

---

<sup>i</sup> The GLOBE project also includes an in-group collectivism measure (Gelfand et al., 2004). There is overlap between our in-group humane orientation measure and in-group collectivism. To keep the paper brief, we do not formally discuss in-group collectivism; however, for the sake of completeness, we report the correlations in Table 4.

ii One might also argue that the welfare state is a manifestation of humane orientation, which would show in a positive relation between the two dimensions. Following this reasoning, a poorly developed welfare state would be typical of low humane-oriented societies. However, such a situation may not be viable long term. Low humane oriented societies in particular need a strong welfare system to prevent social descent in times of crisis (e.g., crime, anomy, and illness).

iii Hofstede (2001) treated GDP as a control variable. He was concerned about potential spurious correlations caused by the impact of national wealth rather than culture. Javidan and Hauser (2004) cautioned against this approach because “the relationships among wealth, national culture, and other archival variables are so intertwined that they cannot be easily isolated, and cause and effect relationships, although intuitively appealing, are hard to verify empirically” (pp. 117-118). Controlling for GDP implies the risk of excluding meaningful variance. Therefore, we also did not utilize GDP as a control variable.

iv The Malaysian sample consisted of MBA students and the Polish sample of psychology and medical students. We found no significant differences between the two groups in Poland.

v There is considerable controversy in cross-cultural psychology on how to measure cultural constructs. One group, which includes the GLOBE research group, argues that measures with societal-level reference anchors should be used in cross-cultural research (referent shift approach as the referent is no longer the individual but the culture, Chan, 1998). The second group argues that culture is to be conceptualized as an additive model: Individuals are asked about their personal behaviors and culture is conceptualized as the accumulation of individual characteristics (Terracciano et al., 2005). Our study was not designed to contribute to this debate. We followed the positions of Chan (1998) and Fischer (2008) that different theoretical questions will demand different approaches. Our theoretical contribution was to examine the construct validity of humane orientation, which was conceptualized as shared practices in the GLOBE study. Therefore, we adopted the approach of project GLOBE and used referent shift measures in this study.

vi The operationalization of out-group members as “people from neighboring countries who live and work here” was chosen because foreigners epitomize out-group membership. Moreover, the specifications “from neighboring countries” and “live and work here” were added to prevent misinterpretation (e.g., equating them with affluent tourists).

vii To control for sequence effects, we used two forms of sequencing the in-group and out-group humane orientation scales. A sequence effect occurs when one observation affects a later observation (e.g., the item-context effect). Each form was filled out by half of the respondents in each country, which cancels out potential differences due to sequence effects (only France and Indonesia used one form). We decided to use the unweighted raw data from all countries after examining the sequence effect: Respondents tended to rate in-group humane orientation slightly higher when they were first asked about out-group humane orientation ( $M_A = 5.44$ ,  $SD_A = 0.92$ ,  $M_B = 5.26$ ,  $SD_B = 0.99$ ,  $t(842) = 2.71$ ,  $p < .01$ ). However, when each country was separately checked for a sequence effect on in-group humane orientation scores, only Spain and India showed such an effect, whereas all others did not. Moreover, the important out-group humane orientation scores were not influenced by the sequence of scales ( $M_A = 3.79$ ;  $SD_A = 1.22$ ;  $M_B = 3.76$ ;  $SD_B = 1.39$ ,  $t(842) = .39$ ,  $ns$ ).