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## A 21st Century Assessment of Values across the Global Workforce

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**ABSTRACT** 

This paper provides current Schwartz Values Survey (SVS) data from samples of business managers and

professionals across 50 societies that are culturally and socio-economically diverse. We report the society

scores for SVS values dimensions for both individual-level and societal-level analyses. At the individual-

level, we report on the ten circumplex values sub-dimensions and two sets of values dimensions

(collectivism and individualism; openness to change, conservation, self-enhancement, and self-

transcendence). At the societal -level, we report on the values dimensions of embeddedness, hierarchy,

mastery, affective autonomy, intellectual autonomy, egalitarianism, and harmony. For each society, we

report the Cronbach's α statistics for each values dimension scale to assess their internal consistency

(reliability) as well as report interrater agreement analyses to assess the acceptability of using aggregated

individual level values scores to represent country values. We also examined whether societal

development level is related to systematic variation in the measurement and importance of values. Thus,

the contributions of our evaluation of the SVS values dimensions are two-fold. First, we identify the SVS

dimensions that have cross-culturally internally reliable structures and within-society agreement for

business professionals. Second, we report the society cultural values scores developed from 21st century

data that can be used as macro-level predictors in multi-level and single-level international business

research.

Keywords: cultural values, international management, Schwartz Values Survey

# A 21st Century Assessment of Values across the Global Workforce

The purpose of this paper is to report on the Schwartz Values Survey (Schwartz, 1992, 1994a, 2006) which has become an increasingly prevalent personal and cultural values instrument in business ethics and international business research (Knafo et al., 2011). At the individual level, the SVS has been used to study the influence of personal values orientations on: moral behavior (Bond and Chi, 1997), attitudes towards corporate social responsibility (Shafer et al., 2007), pro-environmental attitudes and behavior (Nordlund and Garvill, 2002; Schultz et al., 2005; Schultz and Zelezny, 1998, 1999), fair trade consumption (Doran, 2009), trust in institutions (Devos et al., 2002), diversity attitudes (Feather, 2004; Sawyerr et al., 2005), and gender differences (Prince-Gibson and Schwartz: 1998; Schwartz and Rubel, 2005). At the societal level, SVS-based cultural values have been used to study cross-national differences in moral inclusiveness (Schwartz, 2007), corporate governance (Licht et al., 2005), democratization and social attitudes (Schwartz, 2006), work ideologies (Schwartz, 1999), allocation of rewards in organizations (Fischer et al., 2007), and cultural distance in international trade (Ng et al., 2007).

In addition to the Schwartz Values Survey, there are other cultural values frameworks and measures with perhaps the three best known being those developed by Hofstede (1980, 2001), the GLOBE project (House et al., 2004), and Inglehart's (1997) World Values Survey. Hofstede's cultural values dimensions were initially derived from 1967-73 surveys of IBM employees in 40 countries and extended in 1982 to include 50 countries and three regions. Hofstede's cultural values have been used in studies on a diversity of topics such as business ethics and corruption (e.g., Husted, 1999, 2000, Scholtens and Dam, 2007), environmental performance (Husted, 2005; Peng and Lin, 2009), and personal moral philosophy and ethical attitudes (Forsyth et al., 2008; Franke and Nadler, 2008). The GLOBE societal values dimensions (House et al., 2004) substantially followed the Hofstede values framework with an expanded set of seven values and practices. Based on 1995-97 surveys of middle managers in 62 societies, GLOBE values scores for 60 societal cultures have been used in cross-national studies of corruption and bribery (e.g., Li et al., 2008; Martin et al., 2007; Parboteeah et al., 2005) and organizational commitment (Fischer and Mansell, 2009). The World Values Survey societal-level cultural values are derived from general

population surveys in 97 countries (Inglehart, 1997) and have been used to study societal attitudes related to modernization and democratization (e.g., Inglehart and Welzel, 2005, 2010) and cross-national differences in personal moral philosophy (Forsyth et al., 2008). In the international business literature, there have been conceptual and methodological critiques of the cultural values frameworks developed by Hofstede (e.g., McSweeney, 2002; Oyserman et al., 2002) and the GLOBE project (e.g., Hofstede, 2010; Peterson and Castro, 2006; Taras, Steel and Kirkman, 2010; Tung and Verbeke, 2010).

However, our purpose is not to debate the relative merits of these alternative options to the SVS in the study of values. Instead, our purpose is to report data on the SVS which we believe is a sound theoretically grounded measure to cross-culturally assess values at the individual-level. Based on subsets of 220 samples (university students and primarily schoolteachers) in 73 countries (Schwartz, 2006), Schwartz and colleagues have conducted a number of studies to validate the structure of individual-level and societal-level values models (e.g., Fischer et al., 2010; Schwartz, 1992, 1994a, 2006; Schwartz and Boehnke, 2004). As will be discussed later in this paper, the internal consistency (scale reliability) of the derived SVS values measures for different individual samples has not been comprehensively reported, and often only pooled sample reliabilities have been published. For international business researchers considering using the SVS instrument in their studies, there are two essential questions to be addressed. First, how internally consistent are the SVS values measures for samples other than university students and primarily schoolteachers? Second, how well do the SVS values measures perform in different societal contexts? For international business researchers considering using Schwartz's societal-level cultural values scores in macro-level or multilevel research, one challenge is that country values scores have changed over time and reported differently for samples (Licht et al., 2007; Schwartz, 1994a; Schwartz and Bardi, 1997; Schwartz and Ros, 1995).

In this paper, we address these concerns by reporting scores for the individual-level and societal-level values dimensions of the Schwartz Values Survey (Schwartz, 1992) for 50 societies based on samples of managers and professionals in the workforce. All data were collected between 2000 and 2008. In addition, all respondents were born, raised for the majority of their childhood/adolescence (first 15 years), and live

in the countries where they were sampled. Respondents who did not meet these criteria were excluded from the dataset. This important cultural demographic was not considered in the development of cultural values scores by Hofstede (1980, 2001) or the GLOBE project (House et al., 2004). Thus, the respondents in our society samples clearly reflect the values of the societal culture that they are representing. For each Schwartz Values Survey (SVS) dimension, we report the raw mean scores, within-subject standardized mean scores, and rankings based on the standardized means for societies. We present analyses of the internal consistency of measures and the level of within-group agreement to support the use of aggregated values scores for societies. We also investigate the extent to which the internal consistency, within-society agreement, and importance of these three sets of values are related to societal context, i.e., level of socioeconomic development, polity, and governance.

The contributions of this paper are twofold. First, we assess the construct reliability (using Cronbach's α) of various SVS values dimensions across 50 societies for a different sampled population (businesspersons) than the samples (university students and schoolteachers) used to construct these values dimensions (Schwartz, 1992, 1994a, 1994b, 1999, 2006). As such, we provide evidence regarding the cross-cultural generalizability of various SVS values dimensions for the segment of national populations who are of most interest to international business and comparative management researchers. Second, for those SVS dimensions that *do* work well, we provide researchers with 21<sup>st</sup> century data to use as reference points and/or predictor variables in single-level and multi-level studies of other IB phenomena. In sum, the primary contribution of this paper is providing society values data that should prove helpful to an array of colleagues engaged in international business research.

In the remainder of this paper, we first present a summary overview of the development of the Schwartz Values Survey and review how it has been utilized to develop various individual-level and societal-level values frameworks. Our review includes societal context factors that may influence the measurement and importance level of the SVS values dimensions. We then describe the methodology to assess the internal consistency of the SVS values dimensions for our 50-society sample of business managers and professionals. Following the presentation of results, we provide an interpretation of

findings with recommendations for future research.

#### An Overview of the Evolution and Development of the SVS

While certainly not the first to study individual values, Rokeach (1973) has been credited as being the 'Father of values research' due to the significant contribution that he made to this field of study. From his body of work in the area of individual values emerged the 36-item Rokeach Values Survey (RVS) measuring 18 terminal (end states) goals and 18 instrumental (means of behavior) goals (Rokeach, 1967). For cross-cultural researchers, a key limitation of the RVS is that the development and validation of the RVS was confined to the U.S. In response to this limitation, Schwartz and Bilsky (1987, 1990) led the way by adapting the RVS from a U.S.-based measure to one that can be used cross-culturally. They also drew on the work of the Chinese Culture Connection (1987) who developed the Chinese Values Survey (CVS) to reflect the unique cultural values of East Asian societies. Their efforts ultimately resulted in the 56-item Schwartz Values Survey (SVS), with one item later added. Table 1 presents the 57 SVS items, the 36 RVS items, and the 40 CVS items. The present study uses the 45 SVS items found valid for cross-cultural comparisons (Schwartz, 1992, 1994b) and which are identified in *bold italic font* in the table. Of these 45 cross-culturally valid SVS items, 35 items came from the RVS and/or CVS, with the other 10 items being unique to the SVS.

Insert Table 1 about here

The SVS items have been used to identify values dimensions at both the individual-level (Schwartz, 1992, 1994b, 2005; Schwartz and Boehnke, 2004; Schwartz and Sagiv, 1995) and the societal-level (Schwartz, 1994a, 1999, 2006). In the remainder of this section, we describe the structures of both the individual-level and societal-level SVS dimensions, and discuss previous validation studies.

At the individual-level, there are 10 values sub-dimensions: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity and security. Using a 20-country sample and smallest space analysis (a form of multidimensional scaling), Schwartz (1992) initially determined a modified quasi-circumplex model structure with tradition values being peripheral to

conformity values. This theorized values model structure representing a motivational continuum has been generally supported in subsequent studies using multidimensional scaling and other exploratory methods with university student and schoolteacher from up to 67 nations (e.g., Bardi and Schwartz, 2003; Fontaine et al., 2008; Schwartz, 2005; Schwartz and Sagiv, 1995) as well as by Schwartz and Boehnke's (2004) confirmatory factor analysis using aggregated samples from 27 countries. However, Perrinjaquet et al.'s (2007) multi-group CFA model validation study using French and Swiss general population samples found weak construct and discriminant validity for the 10 values model. Further, Fontaine et al. (2008) 38 country study found systematic patterning of inequivalence in values model structures with structural deviations from the overall structure being smaller for student samples than for teacher samples, and negatively related to societal development level.

Schwartz and colleagues have generally reported the internal consistency of the 10 SVS values scales in terms of aggregated country samples and ranges. For instance, Schwartz (2005) reported that for a dataset consisting of 212 samples, the range of Cronbach's  $\alpha$  was .61 (tradition) to .75 (universalism) with an average of  $\alpha$  = .68. For their 64-country sample of university students, Schwartz and Rubel (2005) reported a range of  $\alpha$  = .55 (tradition) to .73 (universalism) with an average of  $\alpha$  = .67. However, Spini's (2003) finding of scalar and reliability inequivalence for the 10 SVS values (tested separately) using student samples from 21 countries indicates cross-national variation in the internal consistency of these measures. Whereas Perrinjaquet et al. (2007) found that the tradition values measure had low scale reliabilities for French and Swiss general population samples (respectively,  $\alpha$  = .41,  $\alpha$  = .52), the tradition values measure had an acceptable reliability ( $\alpha$  = .62) for Australian students (Feather, 2004).

The SVS values sub-dimensions have been classified into two sets of individual-level higher-order values dimensions. One set of two higher-order individual-level dimensions consists of collectivism (benevolence, tradition, and conformity) and individualism (power, achievement, hedonism, stimulation, and self-direction) (see Ralston et al., 2008). The other set of four higher-order values are aligned as two bi-polar dimensions in the Schwartz values model: openness to change (stimulation and self-direction) versus conservation (conformity, tradition, and security), and self-enhancement<sup>2</sup> (power, achievement,

and hedonism) versus self-transcendence (universalism and benevolence) dimensions (Schwartz, 1992, 1994b). Empirical support for partitioning the Schwartz values model into alternative higher-order values dimensions has been found in model validation studies (Fontaine et al., 2008; Perrinjaquet et al., 2007; Schwartz and Boehnke, 2004; Schwartz and Sagiv, 1994). Cross-cultural research using higher-order values dimensions have generally reported acceptable Cronbach's α for individual countries ranging from .57 (openness to change) to .86 (self-transcendence) (Schultz and Zelezny, 1998), and all six dimensions above .66 (Ralston et al., 2008).

At the societal-level, the SVS items have been allocated to seven types of cultural values dimensions that form three higher-order dimensions in a circumplex model (Schwartz, 1994a, 1999, 2006). These societal-level values dimensions relate to the basic societal issues of: relations between the individual and group (embeddedness<sup>1</sup> vs. affective autonomy/intellectual autonomy); the assurance of responsible social behavior (hierarchy vs. egalitarianism); and humankind's role in the social and natural world (mastery vs. harmony). The initial model validation study (Schwartz, 1994a) was based on student and teacher data from 38 countries (1988-92) and used the following procedure. First, the mean ratings for the 45 values items were calculated for each country sample, and then sample level item correlations were calculated for the MDS analyses to determine the pattern of intercorrelations among values across countries that identified the seven cultural values dimensions. To account for cultural differences in scale use, country values dimension scores were adjusted by the difference between the country mean for all SVS items and the approximate international mean (4.00). This cultural values model structure was confirmed in Schwartz's (1999) replication study with additional 1993 samples (students from 40 countries and teachers from 44 countries) that developed country cultural profiles of the relative importance of various cultural values for each country. Similar model validation procedures have been used in more recent SVS studies with larger datasets of 70 and 72 cultural groups in 67 countries (respectively, Schwartz, 2006, 2009). To support the aggregation of student and teacher subsamples, Schwartz (2006) reports withincountry correlation analyses between various demographic subsamples (e.g., students vs. teachers, gender, and age group). Later studies have calculated country-level cultural values scores using withinsubject mean-centered SVS items (Schwartz, 2006), and within-group (country) mean-centered scores (Licht et al., 2007).

Schwartz and colleagues (Schwartz, 1994a, 1999, 2006; Fischer et al., 2010) have consistently found support for his theorized cultural values model using MDS exploratory analytic techniques. However, the internal consistency of the societal-level dimensions at country and individual levels has not been reported. Tentative support for the aggregation of individual-level SVS data to culture values scores was provided by Fischer et al.'s (2007) 6-country study that found the average interrater agreement statistic across all items and countries was .57 ( $a_{wg}$ ) for employee samples. Societal-level culture values dimensions scores have been published for different subsets of student and teacher samples (Schwartz, 1994a; Schwartz and Bardi, 1997; Schwartz and Ros, 1995) with the most inclusive being scores for teacher samples in 51 countries based on 1988-98 data collections (Licht et al., 2007). Differences in country-level scores and relative country rankings between early and more recent publications could be attributed to changes in scale items for five of the seven dimensions (e.g., Schwartz, 1999, 2006) and changes in calculating adjustments for cross-cultural differences in response style.

#### Systematic Variation in the Measurement and Importance of SVS Values Dimensions

Previous research indicates that there is systematic cross-national variation in the measurement properties of and importance accorded to various SVS values dimensions. As earlier mentioned, Fontaine et al. (2008) found that societal development level (socioeconomic and socio-political) was positively related to the validity of the 10 values sub-dimensions model. Schwartz and Sagie (2000) also showed that in general, socioeconomic development and democratization are positively related to the importance accorded to the values in the openness to change and self-transcendence dimensions (plus hedonism) but negatively related to the importance of conservation and self-enhancement values (nonsignificant for achievement).

Using reflect scores for the bipolar societal-level dimensions, Schwartz (2006) found that both socioeconomic development and democratization were positively related to autonomy vs. embeddedness, and egalitarianism vs. hierarchy values. Whereas the harmony vs. mastery dimension was positively

related to socioeconomic development, there was no significant relationship with democratization. Licht et al. (2007) identified that societal governance (rule of law, non-corruption, voice and accountability) is positively related to affective autonomy, intellectual autonomy, and egalitarianism; and negatively related to embeddedness and hierarchy. Only the governance facet of voice and accountability had a significant relationship with harmony (positive) and mastery (negative) values.

#### **METHODS**

## **Samples**

The 50 societies included in this study are identified in Table 2. We present the sample descriptive information of individual (age and gender) and organizational (respondent position, company size and industry) demographics for each society. The society samples range in size from 70 to 350 respondents. When we had more than 350 respondents for a society, we used SPSS random sampling to select 350 respondents in order to have reasonably similar sample sizes across societies.

Insert Table 2 about here

All respondents were raised in the society which they represented. All respondents were part of the business community of their country. Data were collected either through a mail survey or prior to management/employee development programs. While differing modes of data collection were used, in order to maintain sampling integrity and consistency across samples, all respondents were provided anonymity, were voluntary participants in the survey, and were instructed that there were no right or wrong answers.

In respect to previous SVS-based values model validation studies, for studies concerned with the individual-level values model, our sample has 27 of the 38 countries in Fontaine et al.'s (2008) study, and 17 of the 27 countries in Schwartz and Boehnke's (2004) study. For the societal-level values dimensions, we have 41 societies in common with Schwartz's (2006) 72-country validation study using combined university student and teacher data; and 34 countries in common with Licht et al.'s (2007) 51-country teacher sample scores. In respect to geographic representation, the Schwartz studies (Licht et al., 2007;

Schwartz, 2006) generally have more samples from countries in Europe and Africa, whereas the present study has more samples from countries in the Middle East region. Compared to other cultural values frameworks, 36 of our societies are represented in the GLOBE project (House et al., 2004), 45 societies in the World Values Survey (Inglehart and Welzel, 2005), and 48 societies in Hofstede (2001).

#### **Instrument and Measures**

All respondents completed the questionnaire in their native language, with the exception of India where the English-language survey was used, per the norm for India. We used standard translation—back-translation procedures for each society's survey questionnaire (Brislin, 1970). This involved one individual translating the questionnaire from English to the other language, and then a second individual back-translating the questionnaire into English. The two translators resolved any translation differences, and employed a third party to assist when necessary.

*Items*. The Schwartz Values Survey initially consisted of 56 items, of which 45 are considered cross-culturally valid (Schwartz, 1992, 1994b). Although a 57<sup>th</sup> item was later added to expand the Hedonism dimension from two to three items (Schwartz and Boehnke, 2004), we did not include this 57<sup>th</sup> SVS item for the sake of consistency, since some of our samples were collected prior to this addition to the SVS instrument (per Fischer et al., 2010). Thus, our analyses are based on the 45 cross-culturally valid items identified in the 56-item instrument (Schwartz, 1992).

Per Schwartz (1994a), instructions to respondents for completing the SVS were as follows:

In this questionnaire you are to ask yourself: "What values are important to ME as guiding principles in MY life, and what values are less important to me?" There are two lists of values on the following pages. These values come from different cultures. In the parentheses following each value is an explanation that may help you to understand its meaning.

Please rate how important each value is for you <u>as a guiding principle in your life</u>. Use the rating scale below:

0--means the value is not at all important, it is not relevant as a guiding principle for you.

*3--means the value is important.* 

6--means the value is very important.

The higher the number (0,1,2,3,4,5,6), the more important the value is as a guiding principle in YOUR life.

-1 is for rating any values opposed to the principles that guide you.

7 is for rating a value of supreme importance as a guiding principle in your life; ordinarily there are no more than two such values.

In the space before each value, write the number (-1,0,1,2,3,4,5,6,7) that indicates the importance of that value for you, personally. Try to distinguish as much as possible between the values by using all the numbers. You will, of course, need to use numbers more than once.

As previously noted, the SVS items have been allocated to values dimensions in different ways for individual-level and societal-level dimension scales.

Individual-level values dimensions. The individual-level Schwartz values model identifies ten sub-dimensions which are then used to form two alternative sets of higher-order dimensions (Schwartz, 1992, 1994b; Schwartz and Boehnke, 2004; Schwartz and Sagiv, 1994). The ten individual-level values sub-dimensions consist of: power (4 items), achievement (4 items), hedonism (2 items), stimulation (3 items), self-direction (5 items), universalism (8 items), benevolence (5 items), tradition (5 items), conformity (4 items) and security (5 items). Appendix A provides the description and item allocation for the ten values sub-dimensions.

The allocation of the ten values sub-dimensions to higher-order values dimensions are as follows. In the Schwartz values model, the first set of two higher-order individual-level dimensions are: collectivism (benevolence, tradition, and conformity; 14 items) and individualism (power, achievement, hedonism, stimulation, and self-direction; 18 items) (Ralston et al., 2008). The second set of four higher-order dimensions are: openness to change (stimulation and self-direction; 8 items), conservation (conformity, tradition, and security; 14 items), self-enhancement (power, achievement, and hedonism; 10 items), and self-transcendence (universalism and benevolence; 13 items). Appendix B provides descriptions of these higher-order dimensions.

Societal-level values dimensions. The societal-level values model consists of seven values dimensions: embeddedness (15 items), hierarchy (4 items), mastery (8 items), affective autonomy (4 items), intellectual autonomy (4 items), egalitarianism (6 items), and harmony (4 items) (Schwartz, 2006). Appendix C provides the description and item allocation for the seven societal-level dimensions.

#### Analyses

For each values dimension identified in the previous section, we report the raw mean score and the scale reliability (Cronbach's α) statistic by society. Systematic cross-cultural differences in scale response styles (e.g., extreme, mid-point, acquiescence, and disacquiescence response biases) may result in raw observed scores being unrelated to the true score of an individual (Fischer, 2004; Harzing, 2006; Johnson et al., 2005). Therefore, we also present the within-subject standardized means and identify the rank-order for each society based on the standardized means. The procedure for calculating the within-subject standardized scores (ipsatization) was as follows. For each individual respondent, the overall mean and standard deviation across all SVS items were calculated. Then, individuals' scores for each values dimension were converted to within-subject standardized scores using the following equation:  $y' = (x - y')^2$  $\mu_{individual}$ ) /  $\sigma_{individual}$  where, y'= within-subject standardized score for a values dimension, x = individual's raw score for a values dimension,  $\mu_{individual}$  = individual's overall mean score for all SVS items, and  $\sigma_{individual}$  = individual's overall standard deviation of item scores for all SVS items. The resulting standardized score represents the relative importance of a values dimension for an individual (positive or negative) with the mean across variables averaging to zero. For the 50 societies in this study, we calculated the society rank order based on the standardized scores for each set of values dimensions (1 = highest to 50 = lowest).

The individual society data for the SVS values dimensions' means, Cronbach's  $\alpha$  statistics, standardized means, and rank-order of standardized means are provided in Appendices D, E, and F. To justify aggregating individual-level data for the use of society-level scores in research, within-group interrater agreement needs to be established (cf Fischer et al., 2009; LeBreton and Senter, 2008). Hence, we estimated Brown and Hauenstein's (2005)  $a_{wg(J)}$  interrater agreement (IRA) statistic for the values dimensions (using scale item raw scores) for each society. We calculated the society mean, standard deviation, and range of the  $a_{wg(J)}$  statistics, as well as distribution of acceptability levels. Whereas Brown and Hauenstein (2005) recommended an  $a_{wg(J)} \ge .70$  as the cutoff for acceptable level of IRA, Fischer et

al. (2007) proposed that the agreement level cutoff of .60 or higher suggested for small group research is too stringent for nation-level samples. Further, LeBreton and Senter (2008) proposed revised standards for interpreting IRA estimates with .71 or higher representing strong agreement, .51 to .70 representing moderate agreement, .31 to .50 representing weak agreement, and .30 or less representing a lack of agreement. Given this disparity in recommended IRA cutoffs, we used the following categories for  $a_{wg(J)}$  levels: strong agreement (.70 or higher), moderate agreement ( subdivided into .60 to .69, and .51 to .59), weak agreement (.31 to .50), and lack of agreement (.00 to .30). Society measures with IRA levels generally viewed as unacceptable (.50 and less) are identified in Appendices D to F with **bold italic** font for mean (raw) scores.

Correlation Analyses. We conducted correlation analyses to examine relationships between societal context (socioeconomic development, polity, and societal governance) and the scale reliability, withingroup agreement, and importance scores of the three sets of values dimensions. Socioeconomic development was measured by the United Nations' Human Development Index (http://hdrstats.undp.org/) which is a composite index based on life expectancy, educational attainment, and GDP per capita (purchasing power parity). Polity (democratization) was measured using the Polity IV composite measure (Marshall et al., 2010) which rates countries on a scale of strongly autocratic (-10) to strongly democratic (+10). Polity ratings are not provided for Hong Kong and Macau so a reduced sample (N = 48) was used for this analysis. Societal governance was measured by the World Bank's Worldwide Governance Indicators (www.worldbank.org/wbi/governance) that consist of six dimensions (voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption). Following Globerman and Shapiro (2003), we conducted a principal component analysis for estimates for the six dimensions and used the score for the one identified factor (Eigenvalue = 5.23, 87% variance explained). For each measure, we used the scores for the year each society's data was collected.

#### **RESULTS**

### Internal Consistency of the Values Sub-dimensions and Dimensions Measures

Table 3 presents the 50-society summary analyses of scale reliabilities (Cronbach's α) for the

individual-level and societal-level values dimension. We present the means, standard deviations, and range of scale reliabilities, as well as the distribution of society scale reliabilities in three categories of acceptability with  $\alpha \ge .70$  denoting the general threshold of acceptability,  $.69 \ge \alpha \ge .60$  denoting acceptable reliabilities for exploratory research, and  $\alpha \le .59$  as unacceptable reliabilities (Hair et al., 1998). The individual society results of the scale reliability analysis (mean, range, and number of reliable scales using the  $\alpha \ge .60$  cutoff) for the individual-level and societal-level measures are presented in Table 4. In the remainder of this section, we use both sets of data to present our findings for each set of SVS values measures.

Insert Tables 3 and 4 about here

Individual-Level Values Sub-dimensions. As shown in Table 3, the average scale reliability for the 50 societies across the 10 values sub-dimensions ranged from  $\alpha = .52$  for hedonism to  $\alpha = .77$  for universalism, with the remaining values dimensions averaging between  $\alpha = .60$  and  $\alpha = .66$ . The 2-item hedonism scale was problematic with 68% of the societies having scale reliabilities below .59 and only 6% being .70 or higher<sup>3</sup>. Other sub-dimensions with a substantial number of unacceptable scale reliabilities were security (48%), self-direction (38%), and tradition (48%).

Examination of the individual society results in Table 4 shows that there were acceptable scale reliabilities for all 10 SVS values sub-dimensions for 8 societies (Canada, Germany, Lebanon, Macau, Peru, South Africa, Turkey, and UK). For an additional 32 societies, the majority of these measures were reliable (9 scales for 7 societies, 8 scales for 8 societies, and 7 scales for 12 societies, 6 scales for 5 societies). For 10 societies, five or fewer sub-dimensions had acceptable scale reliabilities. None of these 10 measures had acceptable scale reliabilities for Egypt, only one scale was reliable for Algeria, and two were reliable for Malaysia and the UAE. Three societies had four reliable measures (Cuba, Spain, and Thailand) while another three societies had five reliable measures (Bulgaria, China, South Korea).

*Individual-Level Values Dimensions*. We assessed the scale reliabilities for two sets of individual-level values dimensions. As shown in Table 3, both collectivism and individualism were highly reliable

measures across the 50 societies with average alpha values of .82 and .84, respectively. For all societies, these two measures had acceptable scale reliabilities with the lowest being  $\alpha$  = .73 for collectivism and  $\alpha$  = .69 for individualism. In respect to the second set of individual-level values dimensions, the scale reliabilities for openness to change, conservation, self-enhancement, and self-transcendence are at acceptable levels across the 50 societies with average Cronbach's  $\alpha$  values of .74, .80, .78, and .82, respectively. For both conservation and self-transcendence values, all society scale reliabilities were in the acceptable range (i.e., .69 or higher for conservation, .64 or higher for self-transcendence). The large majority of societies had acceptable scale reliabilities for openness to change (94%) and self-enhancement (96%). The individual society results in Table 4 show that Egypt and the UAE had unacceptable scale reliabilities for both the openness to change and self-enhancement dimensions, and that Algeria also had an unacceptable scale reliability for the openness to change dimension. In sum, these analyses indicate that the higher-order values dimensions are consistently much more reliable measures than the values sub-dimension measures.

Societal-Level Values Dimensions. There were mixed results for the seven societal-level values dimensions of embeddedness, hierarchy, mastery, affective autonomy, intellectual autonomy, egalitarianism, and harmony. As shown in Table 3, the average scale reliability for the 50 societies across these seven values dimensions ranged from unacceptable levels for hierarchy ( $\alpha$  = .51) and intellectual autonomy ( $\alpha$  = .56) to acceptable levels for the others.<sup>3</sup> The embeddedness measure ( $\alpha$  = .81) was reliable for all 50 societies ( $\alpha \ge .70$ ), whereas only two societies had unacceptable scale reliabilities for the egalitarianism (Egypt, UAE), mastery (Egypt, Thailand) and harmony (Egypt, UAE) measures. For the affective autonomy measure, 80% of societies (40) had acceptable scale reliabilities. The hierarchy scale was problematic with only 18% of societies having acceptable scale reliabilities. The intellectual autonomy dimension was marginal with only 48% of the societies having acceptable scale reliabilities.

Table 4 identifies that six societies (Australia, Canada, Costa Rica, Hong Kong, Peru, and Taiwan) had acceptable scale reliabilities for all seven societal-level values dimensions. For 35 societies, the majority of these measures were reliable (6 scales for 19 societies and 5 scales for 16 societies). Marginal

results were obtained for six societies which had four reliable measures. This set of dimension measures were not supported for three societies with only three reliable scales for Thailand, and two reliable scales for Egypt and the UAE. In sum, these results indicate that across the 50 societies in this study, the most reliable societal-level values dimensions are egalitarianism, embeddedness, harmony, and mastery, with affective autonomy having variable reliability. We found the hierarchy and intellectual autonomy scales to be generally unreliable measures.

In that Schwartz (2006) developed the societal-level dimensions using country-level mean item scores (within-subject centered), we also calculated scale reliabilities using society means of the within-subject standardized item scores (N = 50). These analyses yielded scale reliabilities that were lower than the 50-society average reliabilities: embeddedness ( $\alpha$  = .60), hierarchy (.49), mastery (.20), affective autonomy (.33), intellectual autonomy (.50), egalitarianism (.67), and harmony (.64). Examination of the item intercorrelations showed negatively correlated items for the hierarchy, affective autonomy, intellectual autonomy, and mastery measures.

#### Within-Society Agreement for the Values Sub-dimensions and Dimensions Scores

Table 5 provides the summary results of analyses examining the within-society interrater agreement statistics ( $a_{wg(J)}$ ) for each set of values sub-dimensions and dimensions. Per Brown and Hauenstein (2005) and LeBreton and Senter (2008), acceptable levels of interrater agreement (IRA) are generally considered to be .60 or higher.

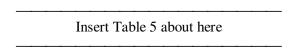
For the 10 individual-level sub-dimensions, the 50-society average  $a_{wg(J)}$  statistics ranged from .53 (tradition) to .68 (benevolence) with the average across items and societies being .61. Measures that had relatively more unacceptable IRA levels (i.e.,  $a_{wg(J)} \le .50$ ) were tradition (38% of societies), power (26%), stimulation (18%), security (14%), and hedonism (12%). Of the 50 societies, 52% had acceptable IRA levels ( $a_{wg(J)} \ge .51$ ) for all 10 sub-dimensions, with an additional 42% having between 6 and 9 sub-dimensions with acceptable IRA levels. Societies with a low number of sub-dimensions with acceptable IRA levels included: Algeria (0), Bulgaria (4), and Venezuela (5).

For the first set of two individual-level values dimensions, the average  $a_{wg(J)}$  statistic was .61, and

90% of societies had acceptable IRA levels for both collectivism and individualism. For the second set of individual-level values dimensions, the range of  $a_{wg(J)}$  statistics was .58 (conservation) to .64 (self-transcendence). Measures with relatively more unacceptable IRA levels were conservation (16% of societies) and self-enhancement (12% of societies). Of the 50 societies, 82% had acceptable IRA levels for all four of these dimensions, and 8% had 3 dimensions with acceptable IRA levels. Across both sets of values dimensions (6 dimensions in total), societies with a low number of acceptable IRA levels included: Algeria (0), Bulgaria (2), Mexico (2), and Venezuela (3).

For the 7 societal-level values dimensions, the range of  $a_{wg(J)}$  statistics was .56 (hierarchy) to .65 (egalitarianism, intellectual autonomy) with the average across items and societies being .61. Measures with relatively more unacceptable IRA levels were hierarchy (24%), harmony (14%), and affective autonomy (12%). Of the 50 societies, 70% had acceptable IRA levels for all 7 dimensions, and 18% had 6 dimensions, and 6% had 5 or 4 dimensions with acceptable IRA levels. Societies with a low number of values dimensions with acceptable IRA levels included: Algeria (0), Venezuela (2), and Mexico (3).

In sum, these IRA results provide general support for the aggregation of individual-level dimension scores to the society level and other researchers' use of the scores presented in this paper. However, it should be noted that scores for Algeria and to a lesser extent Bulgaria, Mexico, and Venezuela, should be regarded with caution.



## Societal influences on scale reliabilities, within-group agreement, and values scores

Table 6 presents results of correlation analyses examining relationships between three facets of societal development (socioeconomic, polity, and governance) and the reliability, within-group agreement, and importance scores for the three sets of values dimensions. On average, the reliability of the individual-level values sub-dimension measures was positively related to socioeconomic development (r = .36, p < .05; 5 sub-dimensions significant), polity (r = .49, p < .001; 8 sub-dimensions significant), and governance (r = .33, p < .05; 5 sub-dimensions significant). Societal development had the most

influence on the scale reliabilities for the five measures of power, achievement, hedonism, stimulation, self-direction values, and was unrelated to the reliability of the benevolence and tradition measures. For the remaining values, polity was positively related to the reliability of the universalism, conformity and security measures, while governance was positively related to the reliability of the conformity measure. For the six individual-level values dimensions, on average, scale reliability was significantly related to polity level (r = .50, p < .001; 5 dimensions significant) but not to socioeconomic development or governance (respectively, r = .20, 1 dimension significant; r = .20, two dimensions significant). For the seven societal-level dimensions (excluding the revised hierarchy scale), on average, scale reliability was strongly related to polity (r = .51, p < .001; 6 dimensions significant) and less strongly related to socioeconomic development and governance (respectively, r = .29, p < .05; r = .25, p < .10; both with only affective autonomy significant).

Insert Table 6 about here

On average, within-group interrater agreement ( $a_{wg(J)}$ ) of the individual-level values sub-dimension measures was positively related to socioeconomic development (r = .24, p < .10; 4 sub-dimensions significant) and governance (r = .41, p < .01; 8 sub-dimensions significant), and unrelated to polity (r = .07, one sub-dimension marginally significant). For both the individual-level and societal-level values dimensions, within-group agreement was strongly related to governance (respectively, r = .40, r = .42, p < .01), and unrelated to polity (r = -.10, r = -.07). Overall, socioeconomic development was marginally related to within-group agreement for the societal-level dimensions (r = .24, p < .10; 3 dimensions significant) but not to the individual-level dimensions (r = .23, 2 dimensions significant).

In respect to the importance attributed to various values, we found very similar results for the total sample (N=50) and for the reduced samples of societies that had acceptable levels of scale reliability and within-group interrater agreement. Similar results were also found across the three facets of societal development (socioeconomic development, polity, governance). In respect to the individual-level values sub-dimensions, societal development level is generally positively related to the importance of hedonism,

self-direction, and benevolence values; negatively related to power, tradition, and conformity values, and unrelated to achievement, stimulation, universalism, and security values. Overall, these findings are consistent with those of Schwartz and Sagie (2000) with the exception that they found significant positive correlations for stimulation and universalism.

For the individual-level values dimensions, societal development is positively related to the importance individualism, openness to change, and self-transcendence values; and negatively related to collectivism and conservation values. The nonsignificant correlations for self-enhancement values can be attributed to different findings for component sub-dimensions (negative correlations for power, positive for hedonism, and nonsignificant for achievement). In respect to the societal-level values dimensions, societal development level is positively related to the importance of affective autonomy, intellectual autonomy, and egalitarianism values, and negatively related to the importance of embeddedness and hierarchy values, while not significantly related to mastery and harmony values. These findings are consistent with those of Licht et al. (2007) for three facets of societal governance with two exception (voice and accountability was negative related to mastery and positively related to harmony).

#### **DISCUSSION AND CONCLUSIONS**

Whereas the Schwartz Values Survey was developed and validated with samples consisting primarily of university students and schoolteachers (e.g., Schwartz, 1992, 1994b, 2006; Schwartz and Boehnke, 2004), the samples for this study consisted entirely of business professionals. Given the number of dimensions for which we did not find support with our business professionals data, we also note that previous research has shown substantive differences between students and business professionals that draws into question the use of students as surrogates for business professionals in international business research (Bello et al., 2009). As such, our data and findings provide a potentially more accurate view of the SVS values dimensions for studying professional workforces around the world.

Our analyses using samples of business managers and professionals in 50 societies yielded mixed support for the internal consistency of the SVS values dimension measures articulated by Schwartz and his colleagues (e.g., Schwartz, 1992, 1994a, 1994b, 1999, 2006; Schwartz and Boehnke, 2004; Schwartz

and Sagiv, 1994). Of the 10 individual-level sub-dimensions, we found a high level of cross-national internal consistency for the universalism measure, and acceptable reliabilities for another five subdimensions (power, achievement, stimulation, benevolence, and conformity) for 74% or more of the societies. Consistent with previous SVS cross-national research (e.g., Perrinjaquet et al., 2007; Schwartz 2005, Schwartz and Rubel, 2005), the tradition measure had low reliabilities for a substantial proportion of societies (38%). In addition, our findings indicate substantial cross-national variation in the internal consistency of the self-direction and security measures, and that the hedonism measure, in both its two item and three item forms, is a generally unreliable measure (Spini, 2003). These findings bring into question the validity of the 10-values circumplex model (Schwartz, 1992) for business professionals samples that are more demographically and occupationally diverse than the student and schoolteacher samples that were used to develop this values model (cf Fontaine et al., 2008). Thus, an implication of these findings for future business research is that cross-national individual-level research based on the full set of 10 values sub-dimensions is a relatively high risk proposition. The individual society results showed that there were only eight societies for which all 10 sub-dimensions had high enough scale reliabilities for statistical analyses. However, researchers may be interested in testing relationships for a subset of these values sub-dimensions, especially if survey questionnaire length is a concern. As such, our individual society results provide guidance as to which are the more internally consistent measures in different societal contexts. For example, our analyses showed cross-national robustness for the universalism value which has been found to be related to business ethics topics such as attitudes towards CSR (e.g., Shafer et al., 2007) and environmental concern (e.g., Schultz and Zelezny, 1998, 1999). Alternatively, our analyses identified that five values sub-dimensions (power, achievement, hedonism, stimulation, self-direction) are less often reliable, especially in countries with lower levels of socioeconomic and sociopolitical development.

In contrast, our analyses support the cross-national construct reliability of both sets of individual-level higher-order values dimensions: (1) collectivism and individualism; and (2) openness to change, conservation, self-enhancement, and self-transcendence. Of these, the collectivism and individualism

dimensional set had the stronger support, which is a finding consistent with the importance attributed to these dimensions in other cross-cultural values instruments (Oyserman et al., 2002). Interestingly, although Schwartz (1992, 1994) initially conceptualized the four higher-order dimensions as a way to more simply describe the value structure, subsequent model validation studies have identified significant intercorrelations among the values within these higher-order groupings (e.g., Perrinjaquet et al., 2007; Schwartz and Boehnke, 2004). One proposal from these studies is for researchers to use higher-order values dimensions that are conceptually meaningful. Our study findings provide empirical support for this recommendation in respect to the two sets of higher-order values dimensions that were examined.

In regards to the seven societal-level values dimensions, we found general support for the crossnational internal consistency of four dimensions (embeddedness, mastery, egalitarianism, and harmony),
and to a lesser extent for the affective autonomy dimension. However, our analyses revealed significant
internal consistency problems for the intellectual autonomy and hierarchy dimensions, with the latter also
having unacceptable interrater agreement levels for 24% of the societies. Schwartz (1999, 2006) theorized
these two cultural values dimensions as anchors for two of the three higher-order values dimensions in the
circumplex societal values model. As such, our findings draw into question the validity of Schwartz's
societal-level values model for working adults in the business sector. These findings for the societal-level
dimensions, in conjunction with the very positive findings for the individual-level higher-order values
dimensions, raise the question: Is there a need for a societal-level cultural values model?

Fischer et al. (2010) addressed this question using SVS student (66 countries) and teacher (53 countries) data. While they found substantial similarity between individual-level and country-level cultural values structures, the degree of overall similarity did not attain a (near-perfect) level of structural isomorphism indicating interchangeable structures at the two levels. Subsequent analyses found that some of this variation was attributable to country level sample size and structural shifts in some individual items (particularly for the teacher samples). One recommendation was that analyses with new data are needed to confirm these findings. They also proposed testing the predictive validity (and usefulness) of the individual-level and societal-level values constructs by conducting analyses with country scores for

both the 10 individual-level values and the 7 societal-level cultural values in single level and multi-level research. In this paper, we support this proposal for future research by providing a full complement of values sub-dimension and dimension scores for 50 diverse societies. In addition to testing the relative merits of each of Schwartz's (1992, 2006) values models, we encourage the use of these data to investigate a wide variety of research questions concerned with the influence of cultural values at both individual and societal levels. In this regard, we provide preliminary findings concerning relationships between societal context (socioeconomic development, polity, and governance) and the values orientations of businesspersons.

## **Concluding Comments**

We have presented a 21<sup>st</sup> century assessment of the values of business professionals across a wide range of cultures and geographic areas. We did so by investigating the internal consistency and withingroup agreement of SVS dimensional sets to determine their appropriateness for 50 societies of interest to international business researchers. These analyses indicate the SVS values measures that might best be avoided when studying the values orientations of business professionals. There have been a number of issues raised regarding other cultural values frameworks (cf Tung and Verbeke, 2010), and in respect to previously published SVS cultural values (e.g., Licht et al., 2007; Schwartz, 1994, 2006), we identified concerns regarding the relevance of the cultural values perspectives of students and schoolteachers for international business research endeavours. Hence, we view an important contribution of this assessment of work values to be the identification of the higher-order, individual-level dimensions as two sets of measures that can be used as referencing points and predictor variables for future multi-level, as well as single-level, cross-cultural research in international business.

#### **NOTES**

- Whereas Schwartz (1994a, 1999) initially labeled this societal-level values dimension as conservatism, he subsequently changed the label to embeddedness (e.g., Schwartz, 2006). Thus, we used the term embeddedness in this paper.
- <sup>2</sup> We followed the lead of Smith et al. (1996) by allocating hedonism to the self-enhancement dimension, while Schwartz (1992) suggested that it could relate to both self-enhancement and openness to change.
- <sup>3</sup> For the 27 societies of this study that had the 57th item (self-indulgence), the 2-item hedonism mean scale reliability was  $\alpha = .53$  (s.d. = .08) with 6 societies having scale reliabilities .60 or higher. For the 3-item hedonism scale, the mean scale reliability was  $\alpha = .58$  (s.d. = .10) with 12 societies having scale reliabilities .60 or higher. For 8 societies the additional item increased the scale reliability to .60 or higher, while for 2 societies the scale reliability decreased to less than .60.

#### REFERENCES

- Bardi, A. and S.H. Schwartz: 2003, 'Values and Behavior: Strength and Structure of Relations', Personality and Social Psychology Bulletin 29, 1207–1220.
- Bello, D., K. Leung, L. Radebaugh, R. Tung and A. Van Witteloostuijn: 2009, 'From the Editors: Student Samples in International Business Research', *Journal of International Business Studies* 40, 361-364.
- Bond, M. H. and V. M.-Y. Chi: 1997, 'Values and Moral Behavior in Mainland China', *Psychologia* 40, 251–264.
- Brislin, R. W.: 1970, 'Back-translation for Cross-cultural Research'. *Journal of Cross-Cultural Psychology* 92, 185-216.
- Brown, R.D. and N.M.A. Hauenstein: 2005, 'Interrater Agreement Reconsidered: An Alternative to rwg Indices', *Organizational Research Methods* 8, 165-184.
- Chinese Culture Connection: 1987, 'Chinese Values and the Search for Culture-free Dimensions of Culture', *Journal of Cross-Cultural Psychology 18*, 143-164.
- Devos, T., D. Spini and S. H. Schwartz: 2002, 'Conflicts Among Human Values and Trust in Institutions', *British Journal of Social Psychology* 41, 481–494.
- Doran, C.: 2009, 'The Role of Personal Values in Fair Trade Consumption', *Journal of Business Ethics* 84, 549-563.
- Feather, N. T.: 2004, 'Value Correlates of Ambivalent Attitude Toward Gender Relations', *Personality and Social Psychology Bulletin* 30, 3–12.
- Fischer, R.: 2004, 'Standardization to Account for Cross-cultural Response Bias: A Classification of Score Adjustment Procedures and Review of Research in JCCP', *Journal of Cross-Cultural Psychology* 35, 263-282.
- 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, 25-29.

- Fischer, R., M.C. Ferreira, E.M.L. Assmar, P. Redford and C. Harb: 2005, 'Organizational Behaviour across Cultures: Theoretical and Methodological Issues for Developing Multilevel Frameworks Involving Culture', *International Journal of Cross Cultural Management* 5, 27–48.
- Fischer, R. and A. Mansell: 2009, 'Commitment Across Cultures: A Meta-analytical Approach. *Journal of International Business Studies* 40, 1339-1358.
- Fischer, R., P.B. Smith, B. Richey, M.C. Ferreira, M. C., E.M.L. Assmar, J. Maes and S. Stump: 2007, 'How Do Organizations Allocate Rewards? The Predictive Validity of National Values, Economic and Organizational Factors Across Six Nations', *Journal of Cross-Cultural Psychology* 38, 3-18.
- Fischer, R., C.-M. Vauclair, J.R.J. Fontaine and S.H. Schwartz: 2010, 'Are Individual-Level and Country-Level Value Structures Different? Testing Hofstede's Legacy with the Schwartz Value Survey',
- Fontaine, J.R.J., Y.H. Poortinga, L. Delbeke and S.H. Schwartz: 2008, 'Structural Equivalence of the Values Domain Across Cultures: Distinguishing Sampling Fluctuations From Meaningful Variation', *Journal of Cross-Cultural Psychology* 39, 345-365.
- Forsyth, D., E. O'Boyle and M. McDaniel: 2008, 'East Meets West: A Meta-Analytic Investigation of Cultural Variations in Idealism and Relativism', *Journal of Business Ethics* 83, 813-833.
- Franke, G. R., and S.S. Nadler: 2008, 'Culture, Economic Development, and National Ethical Attitudes', *Journal of Business Research* 61, 254-264.
- Globerman, S. and D. Shapiro: 2003, 'Governance Infrastructure and US Foreign Direct Investment', *Journal of International Business Studies* 34, 1899-1919.
- Hair, J.F., R.L. Tatham, R.E. Anderson, and W. Black: 1998, *Multivariate Data Analysis*, *5th ed.*, (Prentice Hall, Upper Saddle River, NJ).
- Harzing, A.-W.: 2006, 'Response Styles in Cross-national Survey Research: A 26-Country Study', International Journal of Cross Cultural Management 6, 243-266.
- Hofstede, G.: 1980, *Culture's Consequences: International Differences in Work-related Values*,. (Sage Publications, Newbury Park, CA).
- Hofstede, G.: 2001, Culture's Consequences: Comparing Values, Behaviours, Institutions, and

- Organizations Across Nations (2nd ed.), (Sage Publications, Thousand Oaks, CA).
- Hofstede, G.: 2010, 'The GLOBE Debate: Back to Relevance', *Journal of International Business Studies* 41, 1339-1346.
- House, R.J., P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta (Eds): 2004, *Culture, Leadership and Organizations: The GLOBE Study of 62 Societies*, (Sage Publications, Thousand Oaks, CA).
- Husted, B.W.: 1999, 'Wealth, Culture, and Corruption', *Journal of International Business Studies* 30, 339–360.
- Husted, B.W.: 2000, 'The Impact of National Culture on Software Piracy', *Journal of Business Ethics* 26(3), 197–211.
- Husted, B.W.: 2005, 'Culture and Ecology: A Cross-National Study of the Determinants of Environmental Performance', *Management International Review* 45(3), 349–371.
- Inglehart, R.: 1997, Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies, (Princeton University Press, Princeton, NJ).
- Inglehart, R. and C. Welzel: 2005, *Modernization, Cultural Change, and Democracy: The Human Development Sequence*, (Cambridge University Press, NY).
- Inglehart, R. and C. Welzel: 2010, 'Changing Mass Priorities: The Link between Modernization and Democracy', *Perspectives on Politics* 8(2), 551-567
- Johnson, T., P. Kulesa, I. Llc, Y.I. Cho and S. Shavitt: 2005, 'The Relation Between Culture and Response Styles: Evidence from 19 Countries', *Journal of Cross-Cultural Psychology* 36, 264-277.
- Knafo, A., S. Roccas and L. Sagiv: 2011, 'The Value of Values in Cross-Cultural Research: A Special Issue in Honor of Shalom Schwartz', *Journal of Cross-Cultural Psychology* 42,178-185.
- LeBreton, J.M. and J.L. Senter, Jenell L.: 2008, Answers to 20 Questions About Interrater Reliability and Interrater Agreement', *Organizational Research Methods* 11, 815-852.
- Li, J., J. Moy, K. Lam and W.L. Chris Chu: 2008, 'Institutional Pillars and Corruption at the Societal Level', *Journal of Business Ethics* 83, 327-339.
- Licht, A.N., C. Goldschmidt and S.H Schwartz: 2005, 'Culture, Law, and Corporate Governance',

- International Review of Law and Economics 25, 229-255.
- Licht, A.N., C. Goldschmidt and S.H. Schwartz: 2007, 'Culture Rules: The Foundations of the Rule of Law and Other Norms of Governance', *Journal of Comparative Economics* 35(4), 659-688.
- Marshall, M.G., K. Jaggers and T.R. Gurr: 2010, 'Polity IV Project: Political Regime Characteristics and Transitions, 1800-2009'. Available at: http://www.systemicpeace.org/polity/polity4.htm.
- Martin, K. D., J.B. Cullen, J.L. Johnson, and K.P. Parboteeah: 2007, 'Deciding to Bribe: A Cross-level Analysis of Firm and Home Country Influences on Bribery Activity', *Academy of Management Journal* 50, 1401-1422.
- McSweeney, B.: 2002, 'Hofstede's Model of National Cultural Differences and Their Consequences: A Triumph of Faith a Failure of Analysis', *Human Relations* 55(1), 89-118.
- Ng, S. I., J.A. Lee and G.N. Soutar: 2007, 'Are Hofstede's and Schwartz's Value Frameworks Congruent?', *International Marketing Review* 24, 164-180.
- Nordlund, A. M. and J. Garvill: 2002, 'Value Structures Behind Proenvironmental Behavior', Environment and Behavior 34, 740–756.
- Oyserman, D., H.M. Coon and M. Kemmelmeier: 2002, 'Rethinking Individualism and Collectivism: Evaluation of Theoretical Assumptions and Meta-analyses', *Psychological Bulletin* 128, 3-72.
- Parboteeah, K. P., J.W. Bronson and J.B. Cullen: 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, 123-137.
- Peng, Y.-S. and S.-S. Lin: 2009, 'National Culture, Economic Development, Population Growth and Environmental Performance: The Mediating Role of Education,' *Journal of Business Ethics* 90, 203-219.
- Perrinjaquet, A., O. Furrer, J.-C. Usunier, G. Cestre and P. Valette-Florence: 2007, 'A Test of the Quasi-circumplex Structure of Human Values', *Journal of Research in Personality* 41, 820-840.

- Peterson, M. F. and S.L. Castro: 2006, 'Measurement Metrics at Aggregate Levels of Analysis:

  Implications for Organization Culture Research and the GLOBE Project', *Leadership Quarterly* 17, 506–521.
- Prince-Gibson, E. and S. H. Schwartz: 1998, 'Value Priorities and Gender', *Social Psychology Quarterly* 61, 49–67.
- Ralston, D.A., D.A. Holt, R.H. Terpstra, and K.C. Yu: 2008, 'The Impact of National Culture and Economic Ideology on Managerial Work Values: A Study of the United States, Russia, Japan, and China', *Journal of International Business Studies* 39, 8-26.
- Rokeach, M.: 1967, Values Survey, (Halgren Tests, Sunnyvale, CA).
- Rokeach, M.: 1973, The Nature of Human Values, (Free Press, New York).
- Sawyerr, O. O., J. Strauss and J. Yan: 2005, 'Individual Value Structure and Diversity Attitudes: The Moderating Effects of Age, Gender, Race, and Religiosity', *Journal of Managerial Psychology* 20, 498–521.
- Scholtens, B. and L. Dam: 2007, 'Cultural Values and International Differences in Business Ethics', *Journal of Business Ethics* 75, 273-284.
- Schwartz, S. H.: 1992, 'Universals in the Content and Structure of Values: Theory and Empirical Tests in 20 Countries', in M. Zanna (ed.), *Advances in Experimental Social Psychology*, Vol. 25, (Academic Press, New York), pp. 1-65.
- Schwartz, S. H.: 1994a, 'Beyond Individualism/Collectivism: New Cultural Dimensions of Values', in U.Kim, H. C. Triandis, C. Kagitcibasi, S. Choi and G. Yoon (eds.), *Individualism and Collectivism:*Theory, Method, and Applications, (Sage Publications, Thousand Oaks, CA), pp. 85-119.
- Schwartz, S. H.: 1994b, 'Are There Universal Aspects in the Structure and Contents of Human Values?', *Journal of Social Issues* 50(4), 19-45.
- Schwartz, S. H.: 1999, 'A Theory of Cultural Values and Some Implications For Work', *Applied Psychology: An International Review* 48, 23-47.
- Schwartz, S. H.: 2005, 'Robustness and Fruitfulness of a Theory of Universals in Individual Human

- Values', in A. Tamayo and J. B. Porto (Eds.), *Valores e Comportamento nas Organizações*, (Vozes, Petrópolis, Brazil), pp. 56-95.
- Schwartz, S.H.: 2006, 'A Theory of Cultural Value Orientations: Explication and Applications', Comparative Sociology, 5, 137-182.
- Schwartz, S. H.: 2007, 'Universalism Values and the Inclusiveness of Our Moral Universe', *Journal of Cross-Cultural Psychology* 38, 711-728.
- Schwartz, S.H.: 2009, 'Culture Matters: National Value Cultures, Sources and Consequences', in R.S. Wyer, C. Chiu and Y. Hong (Eds.), *Understanding Culture: Theory, Research, and Application*, (Psychology Press, New York), pp. 127-150.
- Schwartz, S.H. and A. Bardi: 1997, 'Influences of Adaptation to Communist Rule on Value Priorities in Eastern Europe', *Political Psychology* 18(2), 386-410.
- Schwartz, S. H. and W. Bilsky: 1987, 'Toward a Universal Psychological Structure of Human Values', *Journal of Personality and Social Psychology* 53, 550–562.
- Schwartz, S.H. and W. Bilsky, W.: 1990, 'Toward a Theory of the Universal Content and Structure of Values: Extensions and Cross-Cultural Replications', *Journal of Personality and Social Psychology* 58, 878-891.
- Schwartz, S. H. and K. Boehnke: 2004, 'Evaluating the Structure of Human Values with Confirmatory Factor Analysis', *Journal of Research in Personality* 38, 230-255.
- Schwartz, S.H. and S. Huismans: 1995, 'Value Priorities and Religiosity in Four Western Religions', Social Psychology Quarterly 58, 88–107.
- Schwartz, S. H., and M. Ros: 1995, 'Values in the West: A Theoretical and Empirical Challenge to the Individualism Collectivism Cultural Dimension', *World Psychology 1*, 91-122.
- Schwartz, S. H. and T. Rubel: 2005, 'Sex Differences in Value Priorities: Cross-Cultural and Multimethod Studies', *Journal of Personality and Social Psychology* 89, 1010–1028.
- Schwartz, S. H. and G. Sagie: 2000, 'Value Consensus and Importance: A Cross-National Study', *Journal of Cross Cultural Psychology* 31, 465-497.

- Schwartz, S. H. and L. Sagiv, L.: 1995, 'Identifying Culture-Specifics in the Content and Structure of Values', *Journal of Cross-Cultural Psychology* 26, 92–116.
- Schultz, P. W., V.V. Gouveia, L.D. Cameron, G. Tankha, P. Schmuck and M. Franek: 2005, 'Values and Their Relationship to Environmental Concern and Conservation Behavior', *Journal of Cross-Cultural Psychology* 36, 457-475.
- Schultz, P. W. and L. Zelezny: 1998, 'Values and Proenvironmental Behavior', *Journal of Cross-Cultural Psychology* 29, 540–558.
- Schultz, P.W. and L.C. Zelezny: 1999, 'Values as predictors of environmental attitudes: Evidence for consistency across 14 countries', *Journal of Environmental Psychology* 19, 255-265.
- Shafer, W., K. Fukukawa and G. Lee: 2007, 'Values and the Perceived Importance of Ethics and Social Responsibility', *Journal of Business Ethics* 70, 265-284.
- Smith, P. B., S. Dugan, and F. Trompenaars: 1996, 'National Culture and the Values of Organizational Employees: A Dimensional Analysis Across 43 Nations', *Journal of Cross-Cultural Psychology*, 27, 231-264.
- Spini, E.: 2003, 'Measurement Equivalence of 10 Value Types from the Schwartz Value Survey Across 21 Countries', *Journal of Cross-Cultural Psychology* 34, 3-23.
- Taras, V., P. Steel and B.L. Kirkman: 2010, 'Negative Practice–Value Correlations in the GLOBE Data: Unexpected Findings, Questionnaire Limitations and Research Directions', *Journal of International Business Studies* 41, 1330-1338.
- Tung, R.L. and A. Verbeke: 2010, 'Beyond Hofstede and GLOBE: Improving the Quality of Cross-cultural Research', *Journal of International Business Studies* 41, 1259-1274.

TABLE 1

Evolution of the Schwartz Values Survey from the Rokeach Values Survey and the Chinese Values Survey

	Schwartz Values Survey <sup>1</sup> (57-items)	Rokeach Values Survey <sup>2</sup> (36-items)	Chinese Values Survey <sup>3</sup> (40-items)
1	Equality (equal opportunity for all)	Equality (brotherhood, equal opportunity for all)	
2	Inner harmony (at peace with myself)	Inner harmony (freedom from inner conflict)	
3	Social power (control over others, dominance)		
4	Pleasure (gratification of desires)	Pleasure (an enjoyable and leisurely life)	
5	Freedom (freedom of action and thought)	Freedom (independence, free choice)	
6	A spiritual life (emphasis on spiritual, not material matters)		
7	Sense of belonging (feeling that others care about me)		
8	Social order (stability of society)		Ordering relationships by status and observing this order
9 10	An exciting life (stimulating experiences) Meaning in life (a purpose in life)	An exciting life (a stimulating, active life)	
11	Politeness (courtesy, good manners)	Polite (courteous, well-mannered)	Courtesy
12	Wealth (material possessions, money)	A comfortable life (a prosperous life)	Wealth
13	National security (protection of my nation from my enemies)	National security (protection from attack)	
14	Self respect (belief in one's own worth)	Self-respect (self-esteem)	
15	Reciprocation of favors (avoidance of indebtedness)		Reciprocation of greetings, favours, and gifts
16	Creativity (uniqueness, imagination)	Imaginative (daring, creative)	
17	A world at peace (free of war and conflict)	A world at peace (free of war and conflict)	
18	Respect for tradition (preservation of time-honored customs)		Respect for tradition
19	Mature love (deep emotional and spiritual intimacy)	Mature love (sexual and spiritual intimacy)	
20	Self-discipline (self-restraint, resistance to temptation)	Self-controlled (restrained, self-disciplined)	Personal steadiness and stability
21	Detachment (detachment from worldly concerns)	<del></del>	
22	Family security (safety for loved ones)	Family security (taking care of loved ones)	
23	Social recognition (respect, approval by others)	Social recognition (respect, admiration)	
24	Unity with nature (fitting into nature)		
25	A varied life (life filled with challenge, novelty and change)		
<b>26</b>	Wisdom (a mature understanding of life)	Wisdom (a mature understanding of life)	
27	Authority (the right to lead or command)		
28	True friendship (close, supportive friends)	True friendship (close companionship)	A close, intimate friend

# **TABLE 1 (continued)**

	Schwartz Values Survey <sup>1</sup> (57-items)	Rokeach Values Survey <sup>2</sup> (36-items)	Chinese Values Survey <sup>3</sup> (40-items)
29	A world of beauty (beauty of nature and the arts)	A world of beauty (beauty of nature and the arts)	
30	Social justice (correcting injustice, care for the weak)		Sense of righteousness
31	Independent (self-reliant, self-sufficient)	Independent (self-sufficient)	
32	Moderate (avoiding extremes of feeling and action)		Moderation, following the middle way
33	Loyal (faithful to my friends, group)		
34	Ambitious (hard working, aspiring)	Ambitious (hardworking, aspiring)	Industry (working hard)
35	Broad-minded (tolerant of different ideas and beliefs)	Broadminded (open-minded)	
36	Humble (modest, self-effacing)		Humbleness
37	Daring (seeking adventure, risk)		Prudence (carefulness) {REVERSE}
38	Protecting the environment (preserving nature)		
39	Influential (having an impact on people and events)		
40	Honoring of parents and elders (showing respect)		Filial piety
41	Choosing own goals (selecting own purposes)		Self-cultivation
42	Healthy (not being sick physically or mentally)		
43	Capable (competent, effective, efficient)	Capable (competent, effective)	
44	Accepting my portion in life (submitting to life's		Contentedness with one's position in life
	circumstances)		
45	Honest (genuine, sincere)	Honest (sincere, truthful)	Resistance to corruption / Sincerity
46	Preserving my public image (preserving my ''face'')		Protecting or saving your "face"
47	Obedience (dutiful, meeting obligations)	Obedient (dutiful, respectful)	
48	Intelligent (logical, thinking)	Intellectual (intelligent, reflective)	
49	Helpful (working for the welfare of others)	Helpful (working for the welfare of others)	
50	Enjoying life (enjoying food, sex, leisure, etc.)		
51	Devout (holding to religious faith and belief)		
52	Responsible (dependable, reliable)	Responsible (dependable, reliable)	Trustworthiness
53	Curious (interested in everything, exploring)		
54	Forgiving (willing to pardon others)	Forgiving (willing to pardon others)	Tolerance of others / Kindness (forgiveness, compassion)
55	Successful (achieving goals)	A sense of accomplishment (lasting contribution)	(101g1veness, compassion)
<b>56</b>	Clean (neat, tidy)	Clean (neat, tidy)	
57	Self-indulgent (doing pleasant things)		
		Cheerful (lighthearted, joyful)	
		Courageous (standing up for your beliefs)	
		Happiness (contentedness)	
		Tappiness (contentedness)	

# **TABLE 1 (continued)**

Schwartz Values Survey <sup>1</sup> (57-items)	Rokeach Values Survey <sup>2</sup> (36-items)	Chinese Values Survey <sup>3</sup> (40-items)
	Logical (consistent, rational)	
	Loving (affectionate, tender)	
	Salvation (saved, eternal life)	
		A sense of cultural superiority
		Adaptability
		Being conservative
		Benevolent authority
		Chastity in women
		Harmony with others
		Having a sense of shame
		Having few desires
		Keeping oneself disinterested/ pure
		Knowledge (education)
		Loyalty to superiors
		Non-competitiveness
		Observation of rites and social rituals
		Patience
		Patriotism
		Persistence (perseverance)
		Repayment of both the good or the evil
		Solidarity with others
		Thrift

Note: The Schwartz Values Survey items which are in **bold italic** font are the cross-culturally valid items used in this study.

Schwartz (1992)
 Rokeach (1967)
 Chinese Culture Connection (1987)

TABLE 2

Individual and Organizational Characteristics of the Society Samples

	N	Mean Age (years)	Gender (% male)	Position	Company size	% Manufacturing
Algeria	98	32.8	82%	2.1	1.7	15%
Argentina	96	44.4	69%	2.4	2.1	24%
Australia	135	28.8	65%	2.1	2.1	14%
Austria	118	33.0	37%	1.3	2.2	34%
Brazil	350	40.4	61%	2.1	2.5	20%
Bulgaria	91	36.0	59%	2.1	1.5	17%
Canada	259	39.7	59%	2.1	2.1	4%
Chile	72	33.2	53%	n/a	2.2	0%
China	350	34.9	72%	2.3	2.0	32%
Colombia	134	37.4	57%	3.1	2.2	20%
Costa Rica	70	32.6	58%	2.2	1.9	23%
Croatia	259	38.4	46%	2.1	1.8	19%
Cuba	350	37.5	46%	1.1	2.0	4%
Czech Rep	307	38.9	44%	1.8	1.7	39%
Egypt	125	36.4	82%	3.1	2.3	46%
Estonia	269	31.7	29%	1.6	1.9	8%
Finland	132	47.8	72%	3.3	1.8	33%
France	350	37.9	50%	2.7	2.2	28%
Germany	326	39.1	68%	2.3	1.8	37%
Hong Kong	302	34.7	43%	2.1	1.8	16%
Hungary	126	38.4	59%	2.3	1.6	22%
India	132	35.0	84%	2.9	2.5	34%
Indonesia	132	37.1	76%	2.1	2.3	33%
Israel	120	33.2	71%	2.1	2.4	18%
Italy	294	43.1	77%	2.4	2.3	26%
Lebanon	96	34.1	59%	3.0	1.9	25%
Lithuania	312	43.6	55%	2.9	1.3	29%
Macau	169	35.9	68%	2.3	2.0	3%
Malaysia	327	34.6	61%	2.1	3.0	100%
Mexico	311	32.8	56%	2.4	1.8	37%
Netherlands	207	37.0	76%	2.7	2.1	53%
New Zealand	80	43.9	50%	2.8	1.8	14%
Pakistan	328	32.7	88%	2.6	2.3	34%
Peru	350	34.1	64%	2.3	2.1	9%
Portugal	350	34.4	54%	2.2	2.1	19%
Russia	224	36.8	62%	2.6	2.2	45%

**TABLE 2 (continued)** 

	N	Age (years)	Gender (% male)	Position	Company size	% Manufacturing
Singapore	350	35.0	46%	2.0	2.0	19%
Slovenia	292	28.5	29%	1.3	1.5	31%
South Africa	297	40.4	59%	2.2	2.5	13%
South Korea	283	39.5	81%	2.0	2.4	20%
Spain	85	40.1	84%	2.6	1.3	27%
Switzerland	350	40.7	77%	2.8	2.0	27%
Taiwan	300	41.3	69%	2.2	2.2	32%
Thailand	280	37.1	43%	2.3	2.0	18%
Turkey	124	40.9	77%	3.2	2.0	52%
UAE	99	33.5	71%	2.1	2.0	8%
UK	244	41.5	50%	3.0	2.2	16%
US	350	34.5	50%	1.7	2.1	10%
Venezuela	134	31.6	31%	1.6	2.0	24%
Vietnam	221	38.6	69%	2.3	1.9	6%
Total	11,160	37.0	59%	2.2	2.0	25%

Position: 1 = professional;  $2 = 1^{\text{st}}$ -level management; 3 = middle management; 4 = top managementCompany size: 1 = less than 100 employees; 2 = 100 - 1000 employees; 3 = more than 1000 employees

		Cronbach	's α <sup>1</sup>	Society	Distribution	(N = 50)
	Mean	(s.d.)	Range	α ≥ .70	.69 ≤ α ≥ .60	α ≤ .59
Individual-level Sub-dimensions						
Power	.65	(.08)	.4175	34%	40%	26%
Achievement	.66	(.09)	.3782	30%	52%	18%
Hedonism	.52	(.13)	.1270	6%	26%	68%
Stimulation	.65	(.11)	.1681	42%	40%	18%
Self-direction	.61	(.10)	.2378	14%	48%	38%
Universalism	.77	(.05)	.5985	92%	4%	4%
Benevolence	.70	(.08)	.3386	56%	40%	4%
Tradition	.58	(.10)	.3274	6%	46%	48%
Conformity	.66	(.09)	.3480	36%	42%	22%
Security	.60	(.09)	.2978	14%	38%	48%
Individual-level Dimensions						
Collectivism	.82	(.05)	.7390	100%	0%	0%
Individualism	.84	(.04)	.6990	98%	2%	0%
Openness to change	.74	(.08)	.3885	74%	20%	6%
Conservation	.80	(.05)	.6988	98%	2%	0%
Self-enhancement	.78	(.06)	.5084	88%	8%	4%
Self-transcendence	.82	(.05)	.6490	98%	2%	0%
Societal-level Dimensions						
Embeddedness	.81	(.05)	.7090	100%	0%	0%
Hierarchy	.51	(.09)	.2767	0%	18%	82%
Mastery	.72	(.08)	.5085	80%	16%	4%
Affective Autonomy	.65	(.09)	.2681	32%	48%	20%
Intellectual Autonomy	.56	(.12)	.1174	6%	42%	52%
Egalitarianism	.70	(.08)	.2881	66%	30%	4%
Harmony	.72	(.08)	.3781	74%	22%	4%

<sup>&</sup>lt;sup>1</sup>Categories of acceptability: (1)  $\alpha \ge .70$  denotes the general threshold of acceptability (2)  $.69 \ge \alpha \ge .60$  denotes acceptable reliabilities for exploratory research denotes unacceptable reliabilities

TABLE 4
Summary Scale Reliability Analysis for Societies: Individual-level and Societal-level Values

				Indi	vidual-level	Values				So	cietal-level V	alues
		alues Sub-dim			Collectivism Individualis	m	S S	penness to cha Conservation elf-enhancemelf-transcende	n, nent, ence	Master Inte Egal	eddedness, Hi y, Affective A ellectual Auto itarianism, H	Autonomy, onomy, armony
	α Mean	α Range	Number $\alpha \ge .60$	α Mean	α Range	Number $\alpha \ge .60$	α Mean	α Range	Number $\alpha \ge .60$	α Mean	α Range	Number $\alpha \geq .60$
Algeria	.50	(.3268)	1	.75	(.7377)	2	.68	(.5678)	3	.58	(.4670)	4
Argentina	.70	(.5885)	9	.89	(.8889)	2	.84	(.7989)	4	.74	(.5886)	6
Australia	.69	(.5382)	8	.86	(.8587)	2	.82	(.7984)	4	.71	(.6283)	7
Austria	.65	(.5174)	8	.81	(.7784)	2	.78	(.7581)	4	.65	(.4679)	5
Brazil	.64	(.5580)	7	.82	(.8084)	2	.78	(.6984)	4	.67	(.5179)	5
Bulgaria	.59	(.4082)	5	.79	(.7484)	2	.72	(.6976)	4	.63	(.3676)	6
Canada	.70	(.6479)	10	.86	(.8686)	2	.82	(.7784)	4	.72	(.6085)	7
Chile	.62	(.2783)	7	.83	(.7788)	2	.81	(.7685)	4	.69	(.4586)	6
China	.60	(.5173)	5	.77	(.7677)	2	.73	(.6780)	4	.61	(.3878)	4
Colombia	.65	(.5478)	7	.85	(.8486)	2	.79	(.6685)	4	.67	(.5884)	6
Costa Rica	.65	(.5280)	6	.86	(.8686)	2	.80	(.7584)	4	.70	(.6182)	7
Croatia	.62	(.5072)	7	.82	(.8084)	2	.77	(.7480)	4	.65	(.3880)	6
Cuba	.60	(.4378)	4	.78	(.7878)	2	.74	(.6982)	4	.63	(.3578)	5
Czech Rep	.64	(.5272)	7	.82	(.7985)	2	.78	(.7682)	4	.66	(.4978)	5
Egypt	.36	(.1259)	0	.71	(.6973)	2	.57	(.3870)	2	.41	(.1173)	2
Estonia	.63	(.3973)	7	.82	(.7985)	2	.76	(.7379)	4	.67	(.5474)	5
Finland	.65	(.4980)	7	.83	(.8185)	2	.78	(.7182)	4	.65	(.3479)	5
France	.68	(.5682)	8	.83	(.8284)	2	.80	(.6988)	4	.68	(.4987)	5
Germany	.69	(.6080)	10	.84	(.8286)	2	.81	(.7686)	4	.71	(.5684)	6

**TABLE 4 (continued)** 

				Indi	vidual-level	Values				So	cietal-level V	alues
	10 Va	ılues Sub-dim	ensions <sup>1</sup>	(	Collectivism : Individualis		Sel	penness to char Conservatio f-enhancement elf-transcender	n, nt, and	Master: Inte	eddedness, Hi y, Affective A ellectual Auto arianism, and	Autonomy, nomy,
	α	α	Number	α	α	Number	α	α	Number	α	α	Number
	Mean	Range	$\alpha \ge .60$	Mean	Range	$\alpha \ge .60$	Mean	Range	$\alpha \ge .60$	Mean	Range	$\alpha \ge .60$
Hong Kong	.69	(.5282)	9	.87	(.8688)	2	.83	(.8086)	4	.72	(.6184)	7
Hungary	.63	(.4981)	6	.81	(.7685)	2	.77	(.7281)	4	.68	(.5181)	5
India	.62	(.1881)	7	.83	(.7987)	2	.80	(.7885)	4	.65	(.3984)	5
Indonesia	.71	(.5781)	9	.89	(.8790)	2	.85	(.8287)	4	.73	(.4990)	6
Israel	.68	(.5482)	8	.84	(.8088)	2	.81	(.7884)	4	.71	(.5382)	6
Italy	.64	(.4676)	7	.83	(.8283)	2	.78	(.7280)	4	.65	(.4780)	5
Lebanon	.67	(.6082)	10	.85	(.8486)	2	.81	(.7686)	4	.67	(.5384)	4
Lithuania	.64	(.5277)	7	.83	(.8283)	2	.79	(.7582)	4	.66	(.4782)	4
Macau	.72	(.6180)	10	.88	(.8788)	2	.83	(.7887)	4	.71	(.5686)	6
Malaysia	.51	(.2976)	2	.81	(.7982)	2	.73	(.6580)	4	.59	(.3380)	4
Mexico	.63	(.5081)	7	.84	(.8484)	2	.79	(.7484)	4	.67	(.5482)	5
Netherlands	.70	(.5580)	9	.85	(.8387)	2	.83	(.8184)	4	.71	(.5586)	6
New Zealand	.69	(.5080)	8	.85	(.8485)	2	.82	(.7785)	4	.69	(.4983)	6
Pakistan	.62	(.4378)	7	.79	(.7484)	4	.84	(.8484)	2	.67	(.4683)	5
Peru	.68	(.6079)	10	.82	(.7986)	4	.87	(.8787)	2	.71	(.6186)	7
Portugal	.67	(.5581)	8	.79	(.7284)	4	.83	(.8283)	2	.68	(.4682)	5
Russia	.62	(.5278)	6	.79	(.7681)	4	.81	(.7686)	2	.65	(.2779)	5
Singapore	.71	(.5081)	9	.85	(.8287)	4	.88	(.8888)	2	.73	(.5886)	6
Slovenia	.65	(.5577)	8	.78	(.6983)	4	.82	(.8084)	2	.66	(.4782)	5
South Africa	.72	(.6180)	10	.84	(.7988)	4	.88	(.8888)	2	.73	(.5387)	6
South Korea	.62	(.3478)	5	.77	(.6884)	4	.81	(.7982)	2	.66	(.5381)	4

TABLE 4 (continued)

				Indi	vidual-level	Values				So	cietal-level V	alues
	10 Va	ılues Sub-dim	nensions <sup>1</sup>		Collectivism Individualis		Sel	penness to ch Conservatio f-enhancement elf-transcend	n, nt, and	Master Inte	eddedness, Hi y, Affective A ellectual Auto arianism, and	Autonomy, onomy,
	α Mean	α Range	Number $\alpha \ge .60$	$\begin{array}{cccc} \alpha & \alpha & \text{Number} \\ \text{Mean} & \text{Range} & \alpha \geq .60 \end{array}$			α Mean	α Range	Number $\alpha \ge .60$	α Mean	α Range	Number $\alpha \ge .60$
Spain	.62	(.3677)	4	.77	(.7482)	4	.81	(.7685)	2	.64	(.4977)	5
Switzerland	.66	(.4576)	6	.77	(.7280)	4	.81	(.7883)	2	.66	(.5080)	6
Taiwan	.74	(.5486)	9	.86	(.8390)	4	.90	(.9090)	2	.74	(.6089)	7
Thailand	.54	(.2668)	4	.72	(.6976)	4	.76	(.7576)	2	.56	(.4175)	3
Turkey	.71	(.6183)	10	.82	(.7887)	4	.86	(.8686)	2	.72	(.5784)	6
UAE	.49	(.3873)	2	.62	(.5072)	2	.73	(.7075)	2	.49	(.1472)	2
UK	.71	(.5980)	10	.81	(.7885)	4	.84	(.8285)	2	.72	(.5882)	6
US	.68	(.5775)	9	.79	(.7782)	4	.84	(.8385)	2	.69	(.5680)	6
Venezuela	.65	(.4376)	8	.81	(.7983)	4	.87	(.8588)	2	.71	(.5784)	6
Vietnam	.62	(.4580)	6	.81	(.7486)	4	.87	(.8687)	2	.70	(.5884)	5
Total	.64	(.5179)	9	.78	(.7484)	4	.83	(.8485)	2	.69	(.5784)	5

<sup>&</sup>lt;sup>1</sup>Individual-level SVS subdimensions are: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, and security.

.

TABLE 5 Summary Within-Society Interrater Agreement ( $a_{wg(J)}$  index) for SVS Individual-level and Societal-level Values Dimensions

				Society Dis	tribution of	Interrater Agr	eement Leve	$ls (N = 50)^1$
		$a_{wg(J)}$ Inde	ex	Strong	Mod	lerate	Weak	Lack
-	Mean	(s.d.)	Range	.70 - 1.00	.6069	.5159	.3150	.0030
Individual-level Sub-dimensions								
Power	.55	(.10)	.2782	4%	24%	46%	24%	2%
Achievement	.65	(.06)	.4979	20%	60%	16%	4%	0%
Hedonism	.59	(.09)	.3273	10%	46%	32%	12%	0%
Stimulation	.58	(.10)	.2779	10%	42%	30%	16%	2%
Self-direction	.64	(.07)	.3679	18%	60%	18%	4%	0%
Universalism	.61	(.07)	.4280	6%	60%	28%	6%	0%
Benevolence	.68	(.06)	.5081	48%	40%	10%	2%	0%
Tradition	.53	(.08)	.3776	2%	16%	44%	38%	0%
Conformity	.64	(.07)	.5080	14%	60%	24%	2%	0%
Security	.59	(.08)	.4385	8%	44%	34%	14%	0%
Individual-level Dimensions								
Collectivism	.61	(.06)	.4679	8%	52%	36%	4%	0%
Individualism	.61	(.07)	.3779	6%	56%	30%	8%	0%
Openness to change	.61	(.07)	.4179	8%	52%	34%	6%	0%
Conservation	.58	(.07)	.4479	6%	42%	36%	16%	0%
Self-enhancement	.60	(.08)	.3779	6%	54%	28%	12%	0%
Self-transcendence	.64	(.06)	.4581	8%	70%	20%	2%	0%
Societal-level Dimensions								
Embeddedness	.60	(.07)	.4680	8%	44%	40%	8%	0%
Hierarchy	.56	(.10)	.2584	6%	34%	36%	22%	2%
Mastery	.64	(.07)	.4580	20%	58%	18%	4%	0%
Affective Autonomy	.60	(.09)	.3176	10%	50%	28%	12%	0%
Intellectual Autonomy	.65	(.06)	.4479	28%	52%	18%	2%	0%
Egalitarianism	.65	(.08)	.4880	22%	64%	14%	2%	0%
Harmony	.59	(.08)	.3579	6%	46%	34%	14%	0%

<sup>&</sup>lt;sup>1</sup> Interrater agreement level categories per Brown and Hauenstein (2005) and LeBreton and Senter (2008).

TABLE 6
Correlations between Societal Context and SVS Dimension Scale Reliabilities (Cronbach  $\alpha$ )
Within-Society Interrater Agreement ( $a_{wg(J)}$  index), and Standardized Scores

	Soci	oeconomi	c Develop	ment		Po	olity		i !	Gove	rnance	
	α	$a_{wg(J)}$	Std.	Score	α	$a_{wg(J)}$	Std.	Score	α	$a_{wg(J)}$	Std.	Score
Samples <sup>1</sup>	Total	Valid	Total	Valid	Total	Valid	Total	Valid	Total	Valid	Total	Valid
Indivlevel Sub-dimensions	.36**	$.24^{\dagger}$			.49***	07			.33*	.41**		
Power	.43**	.12	43**	68***	.53***	13	46***	56***	.42**	$.30^{*}$	35*	66***
Achievement	.31**	$.32^{*}$	22	31	.44**	08	02	12	.35**	.46***	11	22
Hedonism	.40**	.42**	.56***	.80***	$.26^{\dagger}$	.20	.33*	.08	.23	.49***	.50***	.68**
Stimulation	.36**	.14	.04	12	.48***	04	$.25^{\dagger}$	05	.34*	$.32^{*}$	.19	02
Self-direction	$.29^{*}$	$.29^{*}$	.51***	.41*	.54***	.08	.66***	$.35^{\dagger}$	.32*	.47***	.42**	$.33^{\dagger}$
Universalism	.16	.19	.21	.26+	.48***	13	06	.02	.13	.35*	.02	.06
Benevolence	.17	.45***	.44**	.40**	.14	01	.39**	.35*	.16	.56***	.41**	.36*
Tradition	.01	06	44**	60*	00	$27^{\dagger}$	18	01	01	.07	47***	57*
Conformity	.21	.17	43**	50**	.40**	10	$25^{\dagger}$	28 <sup>†</sup>	.29*	.37**	29*	39*
Security	.13	.10	21	01	.34*	17	33*	$38^{\dagger}$	.15	.22	22	18
Individual-level Dimensions	.20	.23			.50***	10			.20	.40**		
Collectivism	.04	.17	44***	42**	.17	14	30*	$29^{\dagger}$	.03	.35*	45***	44**
Individualism	.19	.23	$.27^{\dagger}$	.24	.57***	01	.30*	$.26^{\dagger}$	.21	.43**	$.32^{*}$	.28+
Openness to change	.23	.23	.28*	.17	.50***	07	.51***	$.29^{\dagger}$	.26 <sup>†</sup>	.40**	.34*	$.26^{\dagger}$
Conservation	.08	.06	56***	54***	$.27^{\dagger}$	21	49***	47***	.10	.22	56***	54***
Self-enhancement	.31*	$.27^{\dagger}$	.15	.06	.64***	05	03	07	.30*	.43**	.19	.09
Self-transcendence	.11	$.32^{*}$	.41**	.40**	.35*	11	$.32^{*}$	.31*	.08	.43**	.31*	.30*
Societal-level Dimensions	.29*	$.24^{\dagger}$			.51***	07			.25 <sup>†</sup>	.42**		
Embeddedness	.05	.11	55***	53***	.31*	19	49***	48***	.12	$.28^{\dagger}$	52***	51***
Hierarchy	.17	.12	41**	64 <sup>†</sup>	.17	11	44**	77*	.17	$.29^{*}$	38**	59
Mastery	.12	$.29^{*}$	10	$28^{\dagger}$	.32*	04	.08	01	.17	.47***	.04	11
Affective Autonomy	.40**	.30*	.51***	.39*	.42***	.05	.45***	.17	.32*	.42**	.53***	.46**
Intellectual Autonomy	.25	.23	.52***	.43*	.49***	.05	.58***	.43*	.18	.41**	.39**	.31
Egalitarianism	.20	.43**	.36**	.39**	.37**	06	.42**	$.27^{\dagger}$	.22	.51***	$.32^{*}$	.33*
Harmony	.14	.13	.02	.13	.46***	11	09	07	.06	.33*	05	01

<sup>&</sup>lt;sup>1</sup>Total N = 50 societies for socioeconomic development and governance, N = 48 for polity. Valid N for reduced number of societies that have acceptable levels of both scale reliability ( $\alpha \ge .60$ ) and interrater agreement ( $a_{wg(J)} > .50$ ) for a values dimension.

<sup>†</sup> p < .10, \* p < .05, \*\* p < .01, \*\*\* p < .001

#### APPENDIX A

#### Individual-Level Sub-dimensions of the Schwartz Values Survey<sup>1</sup>

Power The motivational goal of power values is the attainment of social status and prestige,

and the control or dominance over people and resources.

[SVS items: 3, 12, 27, 46]

Achievement The primary goal of this type is personal success through demonstrated competence.

Competence is evaluated in terms of what is valued by the system or organization in

which the individual is located. [SVS items: 34, 39, 43, 55]

Hedonism The motivational goal of this type of value is pleasure or sensuous gratification for

oneself. This value type is derived from orgasmic needs and the pleasure associated

with satisfying them. [SVS items: 4, 50, 57]

Stimulation The motivational goal of stimulation values is excitement, novelty, and challenge in

life. This value type is derived from the need for variety and stimulation in order to maintain an optimal level of activation. Thrill seeking can be the result of strong

stimulation needs. [SVS items: 9, 25, 37]

Self-direction The motivational goal of this value type is independent thought and action (for

example, choosing, creating, exploring). Self-direction comes from the need for control and mastery along with the need for autonomy and independence.

[SVS items: 5, 16, 31, 41, 53]

Universalism The motivational goal of universalism is the understanding, appreciation, tolerance, and

protection of the welfare for all people and for nature.

[SVS items: 1, 17, 24, 26, 29, 30, 35, 38]

Benevolence The motivational goal of benevolent values is preservation and enhancement of the

welfare of people with whom one is in frequent personal contact. This is a concern for

the welfare of others that is more narrowly defined than universalism.

[SVS items: 33, 45, 49, 52, 54]

Tradition The motivational goal of tradition values is respect, commitment, and acceptance of the

customs and ideas that one's culture or religion imposes on the individual. A traditional mode of behavior becomes a symbol of the group's solidarity and an expression of its

unique worth and hopefully its survival.

[SVS items: 18, 32, 36, 44, 51]

Conformity The motivational goal of this type is restraint of action, inclinations, and impulses

likely to upset or harm others and violate social expectations or norms. It is derived from the requirement that individuals inhibit inclinations that might be socially disruptive if personal interaction and group functioning are to run smoothly. [SVS

items: 11, 20, 40, 47]

Security The motivational goal of this type is safety, harmony and stability of society or

relationships, and of self. [SVS items: 8, 13, 15, 22, 56]

<sup>&</sup>lt;sup>1</sup> SVS item numbers correspond to the SVS items reported in Table 1.

#### APPENDIX B

#### Individual-Level Higher-Order Dimensions of the Schwartz Values Survey

Collectivism Indicates the extent to which it is believed that people are born into groups and they

are expected to look after the interest of their group. This group might be the extended family, the tribe or the village. Implicit is that the freedom to pursue one's

own goals is subservient to the goals of the group.

[Values sub-dimensions: Benevolence, Conformity, Tradition]

Individualism Indicates the extent to which the person looks after self-interests and perhaps those

of the nuclear family. It implies that society leaves individuals a good deal of

freedom to pursue their own interests.

[Values sub-dimensions: Power, Achievement, Hedonism, Stimulation,

Self-direction]

Openness to Change Indicates the extent to which a person is motivated to follow his/her own

intellectual and emotional interests in unpredictable and uncertain ways.

[Values sub-dimensions: Stimulation, Self-direction]

Conservation Indicates the extent to which one is motivated to preserve the status quo and the

certainty that it provides in relationships with others, institutions and traditions.

[Values sub-dimensions: Tradition, Conformity, Security]

Self-Enhancement Indicates the extent to which one is motivated to promote self—interest, even when

they are potentially at the expense of others.

[Values sub-dimensions: Power, Achievement, Hedonism]

Self-Transcendence Indicates the extent to which one is motivated to promote the welfare of others

(both close friends and distant acquaintances) and nature. [Values sub-dimensions: Universalism, Benevolence]

#### APPENDIX C

## Societal-Level Higher-Order Dimensions of the Schwartz Values Survey<sup>1</sup>

Embeddedness Indicates the extent to which a culture embraces social relationships, exhibits in-

group solidarity, and strives toward attaining the goals of the group. [SVS items: 8, 11, 13, 15, 18, 20, 22, 26, 32, 40, 46, 47, 51, 54, 56]

Hierarchy Indicates the extent to which a culture embraces the need for status

differentiation through a hierarchal system based on rules and obligations, with the acceptance of unequal distribution of power being seen as legitimate

[SVS items: 3, 12, 27, 36]

Mastery Indicates the extent to which a culture embraces attaining group or personal goals

through dynamic self-assertion to master and/or change the natural and social

environment.

[SVS items: 23, 31, 34, 37, 39, 41, 43, 55]

Affective Autonomy Indicates the extent to which a culture embraces individuals seeking emotionally

gratifying life-experiences for themselves.

[SVS items: 4, 9, 25, 50]

Intellectual Autonomy Indicates the extent to which a culture embraces individuals' independent pursuit

of their own ideas and intellectual directions.

[SVS items: 5, 16, 35, 53]

Egalitarianism Indicates the extent to which a culture embraces the view that all people are

moral equals and that there should be a commitment and concern for the welfare

of all.

[SVS items: 1, 30, 33, 45, 49, 52]

Harmony Indicates the extent to which a culture embraces accepting the world as it is and

fitting in to it, rather than trying to change or take advantage of it.

[SVS items: 17, 24, 29, 38]

<sup>&</sup>lt;sup>1</sup> SVS item numbers correspond to the SVS items reported in Table 1. Dimension items are based on Schwartz (2006).

APPENDIX D-1

SVS Values Sub-dimensions: Power, Achievement, and Hedonism

		Pov	wer			Achiev	vement			Hedo	onism	
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Algeria	3.53	.52	-0.66	27	4.77	.56	-0.05	44	3.56	.52	-0.64	48
Argentina	2.92	.68	-0.98	46	4.46	.76	-0.06	45	4.99	.58	0.23	6
Australia	3.40	.72	-0.62	21	4.90	.71	0.25	3	5.16	.54	0.38	3
Austria	2.11	.74	-1.06	49	3.98	.66	-0.04	42	4.50	.65	0.21	10
Brazil	2.67	.65	-0.95	43	4.56	.64	0.04	37	4.79	.56	0.17	13
Bulgaria	3.01	.65	-0.43	6	4.24	.60	0.16	18	4.01	.45	0.05	21
Canada	2.60	.71	-0.94	42	4.60	.72	0.22	10	4.55	.65	0.19	12
Chile	3.28	.59	-0.65	26	4.72	.69	0.12	24	4.03	.27	-0.25	41
China	3.15	.51	-0.43	6	4.28	.63	0.24	5	3.86	.51	0.00	23
Colombia	3.52	.73	-0.56	15	4.84	.60	0.22	10	4.26	.55	-0.11	31
Costa Rica	3.25	.74	-0.75	32	4.96	.57	0.22	10	4.83	.58	0.13	16
Croatia	2.63	.50	-0.83	35	4.35	.67	0.08	30	3.76	.67	-0.24	39
Cuba	2.19	.58	-1.10	50	4.32	.58	0.00	40	4.75	.65	0.21	10
Czech Rep	2.65	.63	-0.70	29	3.78	.67	-0.07	46	4.18	.52	0.16	14
Egypt	5.00	.56	-0.22	3	5.80	.37	0.24	5	3.78	.12	-0.94	50
Estonia	3.32	.65	-0.61	17	4.57	.70	0.09	28	4.32	.39	-0.03	25
Finland	2.66	.64	-0.81	34	3.97	.75	-0.02	41	3.86	.58	-0.10	30
France	2.12	.70	-0.96	44	3.85	.67	-0.07	46	4.62	.58	0.32	4
Germany	3.05	.72	-0.61	17	4.48	.67	0.19	14	4.45	.66	0.16	14
Hong Kong	3.38	.69	-0.60	16	4.22	.79	-0.07	46	4.53	.52	0.12	17
Hungary	2.67	.55	-0.76	33	4.21	.55	0.09	28	3.98	.70	-0.02	24
India	3.83	.57	-0.44	9	4.92	.72	0.23	8	4.14	.18	-0.29	42
Indonesia	3.61	.63	-0.50	14	4.63	.75	0.14	20	3.47	.65	-0.56	46
Israel	3.69	.73	-0.44	9	4.90	.82	0.28	1	4.29	.55	-0.09	28
Italy	2.32	.71	-0.88	41	4.10	.67	0.10	27	2.60	.46	-0.75	49
Lebanon	3.56	.69	-0.68	28	5.18	.61	0.24	5	4.04	.60	-0.44	44

## **APPENDIX D-1 (continued)**

		Pow	er			Achiev	ement			Hedo	nism	
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Lithuania	3.13	.68	-0.48	12	4.14	.60	0.07	32	2.94	.56	-0.59	47
Macau	3.54	.72	-0.41	5	4.40	.79	0.13	21	4.39	.61	0.12	17
Malaysia	3.98	.41	-0.48	12	4.74	.52	0.08	30	4.31	.29	-0.22	35
Mexico	3.22	.65	-0.73	31	4.83	.59	0.13	21	4.25	.50	-0.17	34
Netherlands	2.91	.68	-0.83	35	4.41	.75	0.05	35	5.58	.55	0.74	1
New Zealand	2.24	.72	-1.04	47	4.36	.76	0.16	18	4.26	.50	0.11	19
Pakistan	3.90	.57	-0.43	6	4.76	.66	0.13	21	4.43	.43	-0.09	28
Peru	3.59	.71	-0.61	17	4.98	.63	0.25	3	4.20	.60	-0.22	35
Portugal	2.49	.66	-0.84	39	4.51	.68	0.27	2	3.85	.65	-0.11	31
Russia	3.90	.52	-0.23	4	4.34	.67	0.04	37	3.89	.58	-0.22	35
Singapore	3.25	.74	-0.61	17	4.32	.69	0.06	33	4.00	.50	-0.13	33
Slovenia	3.40	.63	-0.62	21	4.88	.61	0.17	16	4.99	.70	0.23	6
South Africa	2.69	.69	-1.04	47	4.86	.77	0.23	8	4.10	.61	-0.22	35
South Korea	2.99	.68	-0.63	24	4.07	.62	0.04	37	4.71	.42	0.43	2
Spain	2.91	.75	-0.70	29	4.09	.62	-0.07	46	4.36	.45	0.07	20
Switzerland	2.24	.73	-0.85	40	3.91	.68	0.06	33	4.27	.53	0.23	6
Taiwan	3.52	.65	-0.63	24	4.36	.82	-0.04	42	4.51	.54	0.05	21
Thailand	2.95	. <b>59</b>	-0.62	21	3.79	.48	-0.16	50	4.00	.26	-0.05	26
Turkey	4.07	.67	-0.45	11	5.03	.67	0.11	26	4.02	.61	-0.49	45
UAE	4.92	.42	0.03	1	4.93	.53	0.05	35	4.64	.38	-0.24	39
UK	2.43	.71	-0.83	35	4.25	.73	0.21	13	4.27	.70	0.22	9
US	2.81	.67	-0.96	44	4.72	.62	0.17	16	4.93	.68	0.29	5
Venezuela	3.26	.63	-0.83	35	5.00	.66	0.12	24	4.69	.43	-0.05	26
Vietnam	3.94	.72	-0.21	2	4.68	.63	0.18	15	3.79	.45	-0.30	43
Total		.69				.68				.51		

<sup>\*</sup> within-subject standardized scores.

**APPENDIX D-2** 

SVS Values Sub-dimensions: Stimulation, Self-Direction, Universalism, Benevolence

		Stimu	llation			Self-Di	rection			Unive	rsalism			Benev	olence	
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Algeria	3.31	.32	-0.78	50	4.75	.48	-0.03	48	5.07	.68	0.14	13	5.03	.55	0.10	48
Argentina	3.31	.72	-0.72	48	5.17	.64	0.35	7	4.94	.85	0.20	5	5.21	.80	0.38	13
Australia	4.45	.69	-0.06	2	5.00	.70	0.31	14	4.55	.82	0.04	30	4.95	.66	0.26	31
Austria	3.19	.71	-0.49	33	4.69	.64	0.33	11	4.31	.70	0.12	15	4.96	.69	0.48	1
Brazil	3.37	.69	-0.57	39	4.98	.55	0.26	22	4.82	.80	0.17	9	5.37	.71	0.46	3
Bulgaria	3.12	.67	-0.38	21	4.32	.55	0.22	29	3.91	.82	-0.01	40	4.25	.63	0.16	46
Canada	3.91	.70	-0.17	8	4.82	.71	0.34	9	4.22	.79	0.00	39	4.93	.72	0.41	11
Chile	3.58	.74	-0.48	32	4.99	.78	0.27	18	4.66	.83	0.08	21	5.11	.67	0.33	21
China	3.28	.52	-0.35	18	4.07	.56	0.11	42	3.95	.72	0.05	28	4.30	.73	0.24	35
Colombia	3.57	.54	-0.56	38	4.92	.57	0.27	18	4.49	.78	0.01	37	5.18	.67	0.45	5
Costa Rica	4.04	.62	-0.34	16	5.16	.59	0.29	15	4.82	.80	0.08	21	5.27	.69	0.33	21
Croatia	3.46	.66	-0.41	25	4.97	.63	0.39	4	4.52	.72	0.16	10	4.72	.63	0.26	31
Cuba	3.60	.73	-0.40	23	4.81	.49	0.24	26	4.95	.78	0.30	1	5.07	.69	0.37	15
Czech Rep	2.96	.72	-0.54	36	4.40	.62	0.27	18	3.98	.72	0.04	30	4.38	.71	0.26	31
Egypt	4.23	.16	-0.68	46	4.87	.23	-0.31	49	5.53	.59	0.09	19	5.75	.33	0.22	38
Estonia	3.81	.70	-0.33	15	4.79	.62	0.22	29	4.43	.73	0.03	33	4.81	.69	0.24	35
Finland	3.01	.69	-0.62	44	4.36	.62	0.22	29	4.25	.80	0.18	7	4.75	.71	0.48	1
France	3.21	.68	-0.43	27	4.70	.56	0.35	7	4.50	.82	0.25	2	4.82	.68	0.41	11
Germany	3.43	.70	-0.42	26	4.75	.64	0.33	11	4.21	.80	0.03	33	4.82	.75	0.38	13
Hong Kong	3.42	.66	-0.57	39	4.49	.69	0.08	44	4.49	.78	0.07	23	4.74	.82	0.22	38
Hungary	2.90	.81	-0.60	43	4.48	.65	0.25	25	4.14	.75	0.06	26	4.59	.70	0.33	21
India	3.88	.76	-0.40	23	4.89	.62	0.19	34	4.57	.81	-0.01	40	4.91	.71	0.22	38
Indonesia	4.33	.68	-0.06	2	4.56	.73	0.09	43	4.23	.79	-0.12	47	4.95	.81	0.35	17
Israel	4.09	.69	-0.22	11	4.90	.69	0.29	15	4.13	.81	-0.15	50	4.94	.70	0.31	26
Italy	2.96	.75	-0.54	36	4.73	.52	0.43	2	4.39	.76	0.23	3	4.72	.66	0.42	10
Lebanon	4.56	.66	-0.14	7	5.11	.62	0.17	37	4.96	.82	0.12	15	5.25	.67	0.29	27

## **APPENDIX D-2 (continued)**

		Stimu	lation			Self-Di	irection			Unive	rsalism			Benev	olence	
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Lithuania	3.70	.57	-0.17	8	4.71	.67	0.38	6	4.15	.77	0.07	23	4.37	.70	0.19	44
Macau	3.14	.63	-0.67	45	4.46	.73	0.15	38	4.28	.79	0.04	30	4.59	.80	0.24	35
Malaysia	4.00	.45	-0.46	30	4.65	.42	0.01	46	4.63	.76	0.02	36	4.80	.63	0.14	47
Mexico	<i>3.68</i>	.63	-0.47	31	5.11	.63	0.26	22	4.86	.81	0.12	15	5.16	.69	0.28	28
Netherlands	4.15	.80	-0.13	5	5.02	.68	0.39	4	4.40	.78	0.03	33	5.07	.71	0.43	8
New Zealand	4.06	.74	-0.02	1	4.83	.61	0.41	3	4.51	.80	0.22	4	4.90	.79	0.45	5
Pakistan	4.38	.61	-0.13	5	4.80	.61	0.15	38	4.51	.78	-0.04	43	4.86	.73	0.20	43
Peru	3.97	.66	-0.38	21	4.96	.66	0.26	22	4.68	.79	0.07	23	5.08	.70	0.32	24
Portugal	3.12	.72	-0.51	34	4.54	.55	0.28	17	4.30	.81	0.15	12	4.86	.70	0.46	3
Russia	3.62	.63	-0.37	20	4.74	.66	0.27	18	4.19	.78	-0.04	43	4.24	.60	-0.01	50
Singapore	3.69	.71	-0.34	16	4.43	.71	0.13	40	4.04	.80	-0.12	47	4.78	.81	0.35	17
Slovenia	3.58	.61	-0.53	35	5.17	.55	0.32	13	4.92	.77	0.18	7	4.99	.67	0.22	38
South Africa	4.02	.71	-0.26	12	4.87	.65	0.22	29	4.66	.80	0.10	18	5.02	.78	0.32	24
South Korea	3.29	.54	-0.45	29	4.36	.59	0.20	33	4.01	.78	-0.02	41	4.39	.72	0.22	38
Spain	3.12	.58	-0.59	42	4.56	.59	0.18	35	4.61	.77	0.20	5	5.06	.66	0.43	8
Switzerland	3.27	.70	-0.32	14	4.66	.57	0.44	1	4.15	.76	0.16	10	4.66	.66	0.45	5
Taiwan	4.02	.66	-0.29	13	4.63	.75	0.13	40	4.50	.83	0.05	28	4.69	.86	0.18	45
Thailand	2.79	.68	-0.72	48	4.20	.46	0.06	45	3.98	.66	-0.05	46	4.58	.63	0.28	28
Turkey	4.25	.72	-0.35	18	5.16	.66	0.18	35	4.98	.83	0.09	19	5.25	.78	0.25	34
UAE	4.11	.57	-0.71	47	4.70	.38	-0.17	50	4.12	.59	0.14	13	4.95	.73	0.05	49
UK	3.71	.72	-0.10	4	4.50	.67	0.34	9	4.74	.80	-0.14	49	4.53	.64	0.37	15
US	4.08	.73	-0.21	10	4.86	.66	0.24	26	4.39	.75	-0.04	43	5.06	.74	0.35	17
Venezuela	3.97	.75	-0.43	27	5.20	.64	0.23	28	4.90	.76	0.06	26	5.43	.73	0.34	20
Vietnam	3.28	.63	-0.58	41	4.30	.49	-0.04	47	4.40	.78	0.01	37	4.88	.80	0.27	30
Total		.65				.61				.79				.72		

<sup>\*</sup> within-subject standardized scores.

APPENDIX D-3

SVS Values Sub-dimensions: Tradition, Conformity, and Security

		Trad	lition			Confo	rmity			Secu	urity	
	Score		Std.*		Score		Std.*		Score		Std.*	
	(raw)	α	Score	Rank	(raw)	α	Score	Rank	(raw)	α	Score	Rank
Algeria	4.69	.32	-0.08	1	5.29	.57	0.25	8	5.60	.50	0.39	6
Argentina	4.08	.67	-0.31	10	4.65	.71	0.03	34	4.76	.61	0.11	29
Australia	3.23	.74	-0.71	36	4.33	.76	-0.06	41	4.35	.53	-0.06	48
Austria	2.46	.51	-0.87	46	3.92	.63	-0.08	43	4.55	.59	0.27	13
Brazil	3.16	.58	-0.69	33	4.87	.63	0.19	16	4.56	.60	0.04	41
Bulgaria	2.95	.40	-0.48	20	3.66	.57	-0.13	45	4.22	.52	0.17	24
Canada	2.94	.64	-0.73	38	4.32	.71	0.07	29	4.39	.66	0.11	29
Chile	3.32	.38	-0.66	31	5.03	.64	0.29	5	4.37	.65	-0.07	49
China	2.48	.57	-0.81	41	4.01	.61	0.08	27	4.46	.64	0.36	7
Colombia	3.90	.69	-0.35	13	4.46	.72	0.01	36	4.48	.61	0.02	42
Costa Rica	4.09	.65	-0.33	12	4.39	.70	-0.14	47	4.71	.52	0.05	39
Croatia	3.10	.65	-0.59	29	3.89	.54	-0.17	48	4.60	.53	0.21	22
Cuba	3.63	.43	-0.37	15	3.92	.53	-0.22	50	4.51	.52	0.09	34
Czech Rep	2.46	.56	-0.81	41	4.00	.65	0.05	31	4.41	.56	0.28	11
Egypt	5.03	.58	-0.21	7	5.81	.34	0.25	8	6.27	.29	0.53	1
Estonia	2.79	.58	-0.89	48	4.42	.68	0.04	33	4.87	.59	0.29	9
Finland	3.16	.62	-0.51	21	3.99	.59	0.02	35	4.41	.49	0.28	11
France	2.63	.65	-0.70	35	3.87	.76	-0.05	40	4.16	.73	0.11	29
Germany	2.94	.60	-0.69	33	4.10	.71	-0.03	38	4.38	.60	0.13	26
Hong Kong	3.49	.60	-0.54	26	4.72	.71	0.22	11	4.91	.66	0.34	8
Hungary	2.30	.51	-0.95	49	4.19	.61	0.08	27	4.49	.49	0.26	14
India	3.84	.54	-0.43	18	5.26	.63	0.40	2	4.71	.63	0.11	29
Indonesia	3.77	.57	-0.41	17	4.95	.78	0.36	3	4.62	.72	0.16	25
Israel	3.23	.62	-0.68	32	4.59	.67	0.11	23	4.79	.54	0.24	17
Italy	3.25	.57	-0.38	16	4.05	.65	0.05	31	3.94	.65	0.00	46
Lebanon	<i>3.78</i>	.69	-0.53	23	4.89	.71	0.09	25	5.15	.65	0.20	23

## **APPENDIX D-3 (continued)**

		Trad	lition			Confo	rmity		Security					
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank		
Lithuania	2.44	.52	-0.85	45	4.30	.69	0.16	17	4.79	.66	0.43	5		
Macau	3.24	.65	-0.59	29	4.52	.75	0.20	14	4.56	.72	0.23	20		
Malaysia	4.37	.57	-0.16	5	4.95	.50	0.26	7	4.76	.56	0.12	28		
Mexico	4.36	.65	-0.15	4	4.65	.62	0.01	36	4.63	.51	0.02	42		
Netherlands	2.65	.64	-0.98	50	4.48	.76	0.10	24	4.21	.69	-0.05	47		
New Zealand	2.64	.59	-0.83	43	3.99	.75	-0.06	41	4.08	.63	0.01	45		
Pakistan	4.18	.60	-0.24	8	4.73	.66	0.12	22	4.65	.59	0.07	36		
Peru	4.05	.70	-0.32	11	4.65	.69	0.06	30	4.70	.67	0.09	34		
Portugal	2.62	.62	-0.77	40	4.27	.69	0.14	20	4.05	.57	0.02	42		
Russia	3.00	.56	-0.72	37	4.65	.56	0.22	11	5.05	.61	0.46	2		
Singapore	3.65	.60	-0.36	14	4.54	.77	0.20	14	4.57	.70	0.24	17		
Slovenia	3.02	.55	-0.83	43	4.32	.63	-0.13	45	5.02	.64	0.25	16		
South Africa	3.64	.71	-0.47	19	4.71	.80	0.16	17	4.51	.72	0.05	39		
South Korea	3.23	.34	-0.51	21	3.99	.57	-0.03	38	4.42	.65	0.24	17		
Spain	3.66	.36	-0.30	9	4.39	.49	0.09	25	4.50	.58	0.13	26		
Switzerland	2.47	.45	-0.74	39	3.50	.68	-0.17	49	3.65	.58	-0.09	50		
Taiwan	3.62	.67	-0.56	27	4.78	.79	0.24	10	5.06	.78	0.44	4		
Thailand	3.74	.46	-0.18	6	4.56	.60	0.28	6	4.53	.56	0.26	14		
Turkey	3.85	.67	-0.57	28	5.22	.70	0.22	11	5.57	.73	0.46	2		
UAE	2.33	.66	-0.88	47	5.36	.58	0.42	1	5.14	.47	0.23	20		
UK	4.73	.59	-0.13	3	3.73	.67	-0.09	44	4.07	.65	0.11	29		
US	3.52	.60	-0.53	23	4.70	.70	0.15	19	4.57	.57	0.07	36		
Venezuela	4.61	.62	-0.11	2	5.03	.63	0.14	20	4.92	.59	0.07	36		
Vietnam	<i>3.45</i>	.62	-0.53	23	4.97	.69	0.31	4	4.90	.58	0.29	9		
Total		.64				.69				.65				

<sup>\*</sup> within-subject standardized scores.

APPENDIX E-1

SVS Individual-Level Values Dimension: Collectivism and Individualism

		Collec	tivism		Individualism						
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank			
Algeria	5.00	.73	0.09	5	3.98	.77	-0.43	50			
Argentina	4.65	.89	0.03	13	4.17	.88	-0.23	45			
Australia	4.17	.85	-0.17	42	4.57	.87	0.05	1			
Austria	3.78	.77	-0.16	39	3.69	.84	-0.21	36			
Brazil	4.46	.80	-0.02	22	4.08	.84	-0.21	36			
Bulgaria	3.62	.74	-0.15	36	3.74	.84	-0.08	8			
Canada	4.06	.86	-0.08	30	4.10	.86	-0.07	5			
Chile	4.49	.77	-0.01	20	4.12	.88	-0.20	32			
China	3.60	.77	-0.16	39	3.73	.76	-0.09	11			
Colombia	4.51	.86	0.04	12	4.22	.84	-0.15	22			
Costa Rica	4.58	.86	-0.05	25	4.45	.86	-0.09	11			
Croatia	3.90	.80	-0.17	42	3.84	.84	-0.20	32			
Cuba	4.21	.78	-0.07	30	3.93	.78	-0.21	36			
Czech Rep	3.61	.79	-0.17	42	3.59	.85	-0.18	27			
Egypt	5.53	.73	0.09	5	4.74	.69	-0.38	49			
Estonia	4.00	.79	-0.21	49	4.16	.85	-0.13	18			
Finland	3.97	.81	0.00	18	3.57	.85	-0.27	46			
France	3.77	.84	-0.11	33	3.70	.82	-0.16	23			
Germany	3.95	.82	-0.11	33	4.03	.86	-0.07	5			
Hong Kong	4.32	.86	-0.03	23	4.01	.88	-0.21	36			
Hungary	3.69	.76	-0.18	47	3.65	.85	-0.21	36			
India	4.67	.79	0.06	9	4.33	.87	-0.14	20			
Indonesia	4.56	.87	0.10	4	4.12	.90	-0.18	27			
Israel	4.25	.80	-0.09	30	4.37	.88	-0.03	3			
Italy	4.01	.82	0.03	13	3.34	.83	-0.33	48			
Lebanon	4.62	.86	-0.06	28	4.57	.84	-0.12	17			

## **APPENDIX E-1 (continued)**

		Collec	tivism		Individualism						
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank			
Lithuania	3.70	.82	-0.17	42	3.73	.83	-0.16	23			
Macau	4.11	.87	-0.05	25	3.99	.88	-0.13	18			
Malaysia	4.71	.82	0.08	7	4.33	.79	-0.21	36			
Mexico	4.72	.84	0.05	11	4.22	.84	-0.20	32			
Netherlands	4.06	.83	-0.15	36	4.41	.87	0.04	2			
New Zealand	3.84	.85	-0.15	36	3.95	.84	-0.08	8			
Pakistan	4.59	.84	0.03	13	4.46	.84	-0.07	5			
Peru	4.59	.87	0.02	16	4.34	.87	-0.14	20			
Portugal	3.90	.82	-0.06	28	3.69	.83	-0.18	27			
Russia	3.97	.76	-0.17	42	4.09	.86	-0.10	16			
Singapore	4.32	.88	0.06	9	3.94	.88	-0.18	27			
Slovenia	4.11	.80	-0.25	50	4.40	.84	-0.09	11			
South Africa	4.46	.88	0.00	18	4.11	.88	-0.21	36			
South Korea	3.87	.79	-0.11	33	3.88	.82	-0.08	8			
Spain	4.37	.76	0.07	8	3.81	.85	-0.22	44			
Switzerland	3.54	.78	-0.16	39	3.67	.83	-0.09	11			
Taiwan	4.37	.90	-0.05	25	4.21	.90	-0.16	23			
Thailand	4.30	.76	0.13	1	3.55	.75	-0.30	47			
Turkey	4.78	.86	-0.03	23	4.51	.86	-0.20	32			
UAE	5.01	.75	0.11	3	4.66	.70	-0.21	36			
UK	3.53	.82	-0.20	48	3.83	.85	-0.03	3			
US	4.43	.83	-0.01	20	4.28	.85	-0.09	11			
Venezuela	5.02	.85	0.12	2	4.46	.88	-0.17	26			
Vietnam	4.43	.87	0.02	16	4.00	.86	-0.19	31			
Total		.84				.85					

<sup>\*</sup> within-subject standardized scores.

APPENDIX E-2

SVS Individual-Level Values Dimension: Openness to Change, Conservation, Self-Enhancement, Self-Transcendence

	Ope	enness	to Chan	ge		Conse	rvation		Se	lf-Enh	ancemen	ıt	Self-Transcendence				
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	A	Std.* Score	Rank	
Algeria	4.03	.56	-0.41	48	5.19	.70	0.19	1	3.95	.68	-0.45	49	5.05	.78	0.12	38	
Argentina	4.24	.79	-0.18	39	4.49	.85	-0.06	19	4.12	.82	-0.27	37	5.08	.89	0.29	11	
Australia	4.72	.79	0.13	2	3.97	.84	-0.28	46	4.46	.82	0.00	1	4.75	.83	0.15	29	
Austria	3.94	.75	-0.08	22	3.64	.78	-0.23	44	3.53	.81	-0.30	41	4.63	.77	0.30	9	
Brazil	4.18	.69	-0.16	38	4.19	.79	-0.16	34	4.01	.78	-0.24	30	5.09	.84	0.31	7	
Bulgaria	3.72	.69	-0.08	22	3.61	.69	-0.14	31	3.76	.76	-0.07	7	4.08	.75	0.07	48	
Canada	4.36	.77	0.09	6	3.88	.84	-0.18	37	3.92	.82	-0.17	17	4.58	.84	0.21	15	
Chile	4.29	.85	-0.11	30	4.24	.77	-0.15	33	4.01	.76	-0.26	33	4.88	.85	0.21	15	
China	3.67	.68	-0.12	34	3.65	.77	-0.12	30	3.76	.67	-0.06	6	4.13	.80	0.15	29	
Colombia	4.25	.66	-0.15	37	4.28	.85	-0.11	26	4.21	.80	-0.15	16	4.83	.84	0.23	13	
Costa Rica	4.60	.75	-0.03	15	4.40	.84	-0.14	31	4.35	.79	-0.13	12	5.04	.83	0.21	15	
Croatia	4.21	.74	-0.01	13	3.86	.80	-0.18	37	3.58	.77	-0.33	46	4.62	.78	0.21	15	
Cuba	4.20	.69	-0.08	22	4.02	.72	-0.17	36	3.75	.73	-0.30	41	5.01	.82	0.33	1	
Czech Rep	3.68	.76	-0.13	36	3.63	.77	-0.16	34	3.52	.78	-0.21	24	4.18	.82	0.15	29	
Egypt	4.55	.38	-0.50	50	5.70	.70	0.19	1	4.86	.56	-0.31	43	5.64	.64	0.15	29	
Estonia	4.30	.74	-0.06	20	4.03	.73	-0.19	39	4.07	.79	-0.18	20	4.61	.79	0.13	36	
Finland	3.68	.71	-0.20	41	3.86	.80	-0.07	21	3.49	.79	-0.31	43	4.50	.82	0.33	1	
France	3.95	.69	-0.04	16	3.55	.88	-0.21	42	3.53	.78	-0.24	30	4.66	.85	0.33	1	
Germany	4.09	.76	-0.05	17	3.81	.81	-0.19	39	3.99	.82	-0.09	10	4.51	.86	0.20	20	
Hong Kong	3.96	.80	-0.24	44	4.37	.82	0.00	13	4.05	.83	-0.18	20	4.61	.86	0.15	29	
Hungary	3.69	.78	-0.18	39	3.66	.72	-0.20	41	3.62	.76	-0.23	27	4.37	.81	0.20	20	
India	4.39	.79	-0.10	27	4.60	.78	0.02	12	4.30	.78	-0.17	17	4.74	.85	0.10	43	
Indonesia	4.45	.82	0.02	10	4.45	.87	0.04	6	3.90	.84	-0.31	43	4.59	.87	0.12	38	
Israel	4.50	.78	0.04	9	4.20	.79	-0.11	26	4.29	.84	-0.08	9	4.53	.83	0.08	45	
Italy	3.84	.72	-0.05	17	3.75	.80	-0.11	26	3.00	.79	-0.51	50	4.55	.79	0.33	1	
Lebanon	4.90	.76	0.05	8	<i>4.58</i>	.84	-0.09	22	4.30	.79	-0.27	37	5.07	.86	0.19	25	

## **APPENDIX E-2 (continued)**

	Ope	Openness to Change				Conse	rvation		Se	lf-Enh	ancemen	ıt	Self-Transcendence			
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Lithuania	4.21	.75	0.10	5	3.84	.81	-0.09	22	3.40	.78	-0.33	46	4.26	.82	0.13	36
Macau	3.80	.78	-0.26	45	4.11	.84	-0.05	18	4.10	.84	-0.05	3	4.44	.87	0.14	34
Malaysia	4.32	.65	-0.22	43	4.70	.78	0.07	5	4.34	.69	-0.21	24	4.71	.80	0.08	45
Mexico	4.40	.74	-0.10	27	4.55	.81	-0.04	17	4.10	.78	-0.26	33	5.01	.84	0.20	20
Netherlands	4.59	.82	0.13	2	3.78	.84	-0.31	49	4.30	.81	-0.02	2	4.73	.83	0.23	13
New Zealand	4.45	.77	0.19	1	3.57	.83	-0.29	47	3.62	.82	-0.26	33	4.70	.85	0.33	1
Pakistan	4.59	.74	0.01	11	4.52	.82	-0.02	14	4.37	.77	-0.13	12	4.68	.84	0.08	45
Peru	4.47	.79	-0.06	20	4.47	.86	-0.06	19	4.26	.80	-0.19	22	4.88	.84	0.19	25
Portugal	3.84	.72	-0.11	30	3.63	.81	-0.21	42	3.58	.78	-0.24	30	4.58	.84	0.31	7
Russia	4.18	.76	-0.05	17	4.23	.78	-0.02	14	4.04	.80	-0.14	14	4.22	.81	-0.03	49
Singapore	4.06	.82	-0.11	30	4.25	.86	0.03	9	3.86	.83	-0.23	27	4.41	.87	0.11	42
Slovenia	4.38	.69	-0.11	30	4.12	.80	-0.24	45	4.42	.79	-0.07	7	4.95	.83	0.20	20
South Africa	4.44	.79	-0.02	14	4.28	.88	-0.09	22	3.88	.83	-0.34	48	4.84	.85	0.21	15
South Korea	3.82	.68	-0.12	34	3.88	.77	-0.10	25	3.92	.78	-0.05	3	4.20	.84	0.10	43
Spain	3.84	.74	-0.20	41	4.18	.75	-0.03	16	3.79	.82	-0.23	27	4.83	.78	0.32	6
Switzerland	3.96	.72	0.06	7	3.20	.77	-0.33	50	3.47	.80	-0.19	22	4.40	.80	0.30	9
Taiwan	4.33	.83	-0.08	22	4.49	.88	0.04	6	4.13	.84	-0.21	24	4.60	.90	0.12	38
Thailand	3.50	.69	-0.33	47	4.28	.76	0.12	4	3.58	.69	-0.28	39	4.28	.75	0.12	38
Turkey	4.70	.79	-0.09	26	4.88	.84	0.04	6	4.37	.78	-0.28	39	5.12	.87	0.17	27
UAE	4.41	.56	-0.44	49	5.08	.72	0.17	3	4.83	.50	-0.05	3	4.85	.70	-0.05	50
UK	4.11	.78	0.12	4	3.36	.82	-0.29	47	3.65	.80	-0.14	14	4.32	.85	0.25	12
US	4.47	.77	0.01	11	4.26	.80	-0.11	26	4.15	.78	-0.17	17	4.73	.82	0.16	28
Venezuela	4.59	.79	-0.10	27	4.85	.83	0.03	9	4.31	.80	-0.26	33	5.17	.82	0.20	20
Vietnam	3.79	.74	-0.31	46	4.44	.83	0.03	9	4.14	.79	-0.11	11	4.64	.86	0.14	34
Total		.74				.83				.79				.84		

<sup>\*</sup> within-subject standardized scores.

APPENDIX F-1

SVS Societal-Level Values Dimensions: Embeddedness, Hierarchy, and Mastery

	1	Embed	dedness			Hier	archy		Mastery					
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank		
Algeria	5.16	.70	0.17	4	3.44	.46	-0.69	26	4.53	.62	-0.16	50		
Argentina	4.51	.86	-0.05	24	3.08	.58	-0.88	41	4.35	.78	-0.12	49		
Australia	4.07	.83	-0.22	48	3.57	.67	-0.53	16	4.74	.76	0.15	4		
Austria	3.71	.79	-0.19	44	2.13	.58	-1.06	48	4.02	.74	-0.02	37		
Brazil	4.33	.79	-0.08	35	2.74	.51	-0.91	43	4.37	.71	-0.06	42		
Bulgaria	3.84	.73	-0.03	20	2.68	.36	-0.61	24	4.10	.64	0.10	12		
Canada	3.99	.85	-0.12	40	2.81	.60	-0.82	33	4.42	.76	0.11	9		
Chile	4.42	.86	-0.05	24	2.98	.45	-0.82	33	4.60	.79	0.05	23		
China	3.78	.78	-0.05	24	3.27	.38	-0.36	5	4.23	.72	0.20	1		
Colombia	4.34	.84	-0.07	33	3.60	.60	-0.52	15	4.52	.68	0.02	29		
Costa Rica	4.39	.82	-0.14	42	3.50	.67	-0.62	25	4.72	.63	0.07	18		
Croatia	4.19	.80	-0.01	18	2.02	.38	-1.16	49	4.29	.76	0.04	26		
Cuba	4.03	.73	-0.16	43	2.55	.35	-0.92	45	4.18	.60	-0.08	44		
Czech Rep	3.75	.78	-0.09	36	2.52	.50	-0.77	30	3.84	.74	-0.04	39		
Egypt	5.78	.73	0.24	1	4.70	.63	-0.40	9	5.29	.46	-0.06	42		
Estonia	4.30	.74	-0.03	20	2.86	.54	-0.87	38	4.43	.73	0.01	33		
Finland	4.02	.79	0.04	10	2.54	.34	-0.91	43	3.91	.77	-0.05	41		
France	3.57	.87	-0.21	45	2.35	.49	-0.85	36	3.80	.71	-0.10	47		
Germany	3.91	.84	-0.13	41	2.91	.56	-0.69	26	4.30	.72	0.08	15		
Hong Kong	4.41	.84	0.03	14	3.60	.61	-0.47	12	4.26	.83	-0.04	39		
Hungary	3.93	.75	-0.06	30	1.92	.51	-1.17	50	4.06	.71	0.02	29		
India	4.58	.82	0.01	15	3.92	.40	-0.40	9	4.78	.84	0.14	5		
Indonesia	4.68	.90	0.19	3	3.55	.49	-0.55	19	4.48	.82	0.05	23		
Israel	4.27	.81	-0.07	33	3.80	.53	-0.38	6	4.75	.82	0.19	2		
Italy	3.77	.80	-0.10	38	2.52	.48	-0.78	31	3.93	.70	0.00	34		
Lebanon	4.70	.84	-0.03	20	3.73	.55	-0.59	22	5.08	.77	0.17	3		

# **APPENDIX F-1 (continued)**

	]	Embed	dedness			Hiera	archy		Mastery					
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank		
Lithuania	4.08	.82	0.04	10	2.75	.47	-0.69	26	4.20	.71	0.10	12		
Macau	4.18	.86	-0.01	18	3.65	.56	-0.34	3	4.25	.82	0.03	28		
Malaysia	4.66	.80	0.04	10	4.17	.33	-0.34	3	4.69	.71	0.05	23		
Mexico	4.52	.82	-0.05	24	3.49	.54	-0.60	23	4.63	.70	0.02	29		
Netherlands	3.95	.86	-0.21	45	2.57	.55	-1.05	47	4.46	.76	0.07	18		
New Zealand	3.69	.83	-0.22	48	2.57	.49	-0.87	38	4.29	.77	0.11	9		
Pakistan	4.55	.83	0.00	17	3.96	.46	-0.39	7	4.68	.76	0.08	15		
Peru	4.50	.86	-0.03	20	3.64	.62	-0.58	20	4.68	.75	0.07	18		
Portugal	3.82	.82	-0.11	39	2.47	.46	-0.86	37	4.19	.69	0.09	14		
Russia	4.41	.79	0.09	5	3.63	.27	-0.39	7	4.41	.77	0.08	15		
Singapore	4.28	.86	0.04	10	3.55	.58	-0.42	11	4.32	.78	0.06	22		
Slovenia	4.40	.82	-0.09	36	2.81	.47	-0.95	46	4.82	.70	0.14	5		
South Africa	4.33	.87	-0.06	30	3.00	.53	-0.87	38	4.59	.79	0.07	18		
South Korea	3.96	.81	-0.05	24	3.19	.54	-0.51	14	4.05	.70	0.02	29		
Spain	4.15	.77	-0.05	24	3.14	.54	-0.58	20	4.01	.72	-0.11	48		
Switzerland	3.31	.80	-0.27	50	2.19	.50	-0.88	41	3.81	.71	-0.01	35		
Taiwan	4.53	.89	0.07	7	3.74	.60	-0.49	13	4.40	.86	-0.02	37		
Thailand	4.20	.75	0.08	6	3.10	.41	-0.53	16	3.92	.55	-0.09	46		
Turkey	4.93	.84	0.06	9	3.95	.57	-0.53	16	5.04	.78	0.11	9		
UAE	5.14	.72	0.23	2	4.62	.42	-0.23	1	4.80	.66	-0.08	44		
UK	3.51	.82	-0.21	45	2.53	.58	-0.78	31	4.11	.75	0.12	8		
US	4.34	.80	-0.06	30	3.02	.56	-0.84	35	4.51	.68	0.04	26		
Venezuela	4.82	.84	0.01	15	3.51	.57	-0.70	29	<i>4.77</i>	.77	-0.01	35		
Vietnam	4.51	.84	0.07	7	3.86	.67	-0.27	2	4.59	.75	0.13	7		
Total	4.20	.84	-0.05		3.10	.57	-0.68		4.36	.73	0.04			

APPENDIX F-2
SVS Societal-Level Values Dimensions: Embeddedness, Affective Autonomy, Intellectual Autonomy, and Hierarchy

	Aff	ective	Autonon	ıy	Inte	llectua	l Autono	my	]	Egalita	rianism		Harmony				
	Score		Std.*		Score		Std.*		Score		Std.*		Score		Std.*		
	(raw)	α	Score	Rank	(raw)	α	Score	Rank	(raw)	α	Score	Rank	(raw)	α	Score	Rank	
Algeria	3.70	.53	-0.58	50	4.73	.51	-0.04	46	5.43	.60	0.31	29	4.85	.67	0.03	8	
Argentina	4.35	.70	-0.13	23	5.23	.65	0.39	4	5.36	.79	0.46	10	4.55	.80	-0.04	15	
Australia	5.03	.65	0.30	2	4.95	.70	0.28	11	5.03	.62	0.31	29	4.06	.73	-0.25	41	
Austria	4.14	.66	0.02	11	4.55	.46	0.25	15	5.00	.63	0.49	7	4.12	.68	0.03	8	
Brazil	4.32	.70	-0.08	18	4.86	.55	0.19	27	5.54	.67	0.54	2	4.55	.78	0.03	8	
Bulgaria	3.78	.76	-0.05	16	3.82	.60	-0.03	45	4.20	.70	0.13	48	3.87	.60	-0.05	16	
Canada	4.50	.68	0.17	4	4.70	.67	0.27	13	4.91	.72	0.40	16	3.76	.78	-0.26	43	
Chile	3.94	.67	-0.29	40	4.91	.60	0.23	17	5.23	.68	0.40	16	4.28	.80	-0.13	25	
China	3.46	.47	-0.24	34	4.07	.51	0.12	35	4.35	.73	0.28	37	3.59	.68	-0.16	29	
Colombia	4.14	.62	-0.18	26	4.86	.58	0.23	17	5.20	.65	0.46	10	3.95	.72	-0.33	47	
Costa Rica	4.59	.67	-0.02	14	5.05	.61	0.22	22	5.32	.73	0.36	21	4.42	.78	-0.15	27	
Croatia	3.76	.71	-0.25	35	4.74	.63	0.26	14	4.83	.62	0.32	26	4.33	.67	0.06	7	
Cuba	4.38	.72	0.01	12	5.00	.53	0.33	8	5.09	.67	0.38	19	4.79	.78	0.22	1	
Czech Rep	3.73	.70	-0.10	20	4.06	.49	0.08	39	4.30	.72	0.22	43	4.05	.70	0.08	5	
Egypt	4.42	.26	-0.56	49	4.51	.11	-0.51	50	5.79	.28	0.24	42	5.64	.37	0.16	2	
Estonia	4.44	.68	0.03	10	4.80	.56	0.22	22	4.75	.73	0.22	43	4.04	.71	-0.20	37	
Finland	3.55	.71	-0.28	37	4.37	.51	0.23	17	4.72	.69	0.47	8	4.06	.72	0.07	6	
France	4.20	.65	0.09	8	4.91	.53	0.45	3	5.04	.75	0.53	4	4.21	.75	0.11	3	
Germany	4.19	.72	0.01	12	4.65	.62	0.28	11	4.82	.77	0.38	19	3.91	.74	-0.15	27	
Hong Kong	3.99	.63	-0.22	30	4.49	.61	0.07	40	4.83	.81	0.28	37	4.11	.72	-0.16	29	
Hungary	3.54	.81	-0.26	36	4.42	.57	0.22	22	4.58	.71	0.32	26	4.04	.73	0.01	12	
India	4.05	.61	-0.32	43	4.76	.39	0.10	37	5.02	.72	0.28	37	4.42	.76	-0.10	21	
Indonesia	3.95	.63	-0.28	37	4.52	.74	0.06	41	4.75	.74	0.22	43	4.04	.77	-0.23	40	
Israel	4.37	.62	-0.04	15	4.81	.69	0.23	17	4.91	.74	0.30	33	3.41	.79	-0.58	50	
Italy	3.09	.68	-0.47	48	4.78	.47	0.46	2	4.93	.71	0.53	4	3.91	.68	-0.03	13	
Lebanon	4.31	.55	-0.29	40	5.08	.53	0.16	30	5.48	.62	0.42	13	4.46	.81	-0.16	29	

# **APPENDIX F-2 (continued)**

	Aff	fective	Autonon	ny	Inte	l Autono	my	]	Egalita	rianism		Harmony				
	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank	Score (raw)	α	Std.* Score	Rank
Lithuania	3.45	.58	-0.31	42	4.65	.59	0.34	7	4.56	.70	0.29	35	3.82	.73	-0.10	21
Macau	3.83	.60	-0.23	33	4.42	.65	0.13	34	4.68	.79	0.30	33	3.89	.67	-0.20	37
Malaysia	4.25	.40	-0.28	37	4.49	.40	-0.11	47	4.90	.75	0.22	43	4.32	.73	-0.19	34
Mexico	4.18	.64	-0.21	28	5.05	.56	0.22	22	5.23	.70	0.32	26	4.39	.74	-0.13	25
Netherlands	5.02	.70	0.40	1	4.98	.65	0.37	6	5.05	.71	0.42	13	3.98	.73	-0.21	39
New Zealand	4.39	.64	0.17	4	4.78	.60	0.38	5	5.04	.74	0.54	2	4.06	.74	-0.05	16
Pakistan	4.46	.60	-0.07	17	4.78	.56	0.15	31	4.96	.73	0.26	41	4.15	.73	-0.28	44
Peru	4.26	.69	-0.19	27	4.94	.61	0.25	16	5.14	.72	0.36	21	4.30	.73	-0.17	33
Portugal	3.65	.72	-0.22	30	4.56	.57	0.30	10	5.05	.72	0.57	1	3.84	.75	-0.10	21
Russia	3.89	.69	-0.21	28	4.38	.64	0.06	41	4.29	.64	0.01	49	4.11	.72	-0.09	20
Singapore	3.87	.68	-0.22	30	4.21	.69	-0.01	44	4.71	.75	0.31	29	3.56	.75	-0.43	49
Slovenia	4.38	.72	-0.10	20	4.85	.53	0.14	33	5.15	.70	0.31	29	4.77	.71	0.10	4
South Africa	4.30	.74	-0.09	19	4.76	.62	0.15	31	5.16	.76	0.41	15	4.15	.78	-0.19	34
South Korea	4.08	.58	0.04	9	4.31	.53	0.17	29	4.52	.70	0.29	35	3.56	.75	-0.29	45
Spain	3.91	.61	-0.17	25	4.66	.49	0.22	22	5.18	.62	0.50	6	4.14	.73	-0.03	13
Switzerland	4.11	.69	0.14	7	4.74	.60	0.48	1	4.68	.69	0.45	12	3.91	.66	0.03	8
Taiwan	4.26	.62	-0.13	23	4.70	.73	0.18	28	4.70	.71	0.19	47	4.26	.79	-0.11	24
Thailand	3.48	.55	-0.34	44	4.12	.41	0.02	43	4.68	.60	0.34	23	3.41	.62	-0.36	48
Turkey	4.10	.66	-0.44	45	5.03	.62	0.10	37	5.48	.76	0.39	18	4.71	.80	-0.06	18
UAE	4.41	.57	-0.45	46	4.71	.14	-0.16	48	4.87	.50	-0.03	50	4.57	.44	-0.29	45
UK	4.27	.75	0.22	3	4.43	.63	0.31	9	4.71	.77	0.47	8	3.63	.77	-0.16	29
US	4.74	.74	0.17	4	4.64	.63	0.11	36	5.04	.74	0.34	23	4.03	.67	-0.25	41
Venezuela	4.56	.72	-0.11	22	5.22	.62	0.23	17	5.44	.69	0.34	23	4.43	.75	-0.19	34
Vietnam	3.54	.58	-0.45	46	3.96	.58	-0.22	49	4.89	.76	0.28	37	4.24	.69	-0.07	19
Total	4.09	.64	-0.12		4.64	.57	0.18		4.91	.73	0.35		4.11	.74	-0.12	

<sup>\*</sup> within-subject standardized scores.