

Cultural dimensions and social behavior correlates: Individualism-Collectivism and Power Distance

Titre français

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Abstract

This study presents the macrosocial and macropsychological correlates of two cultural dimensions, Individualism-Collectivism and Hierarchy, based on a review of cross-cultural research. Correlations between the culture-level value scores provided by Hofstede, Schwartz and Trompenaars and nation-level indices confirm their criterion validity. Thus power distance and collectivism are correlated with low social development (HDI index), income differences (Gini index), the socio-political corruption index, and the competitiveness index. The predominantly Protestant societies are more individualist and egalitarian, the Confucianist societies are more collectivist; and Islamic soci-

Résumé

Cette étude présente les facteurs macro-sociaux et macro-psychologiques de deux dimensions culturelles, l'Individualisme-Collectivisme et la Hiérarchie ou Distance au Pouvoir, dimensions basées sur certaines révisions des recherches dans le domaine transculturel. Les corrélations entre les valeurs, au niveau culturel, fournies par Hofstede, Schwartz et Trompenaars, et des index socio-économiques confirment la validité de ces dimensions. La distance de pouvoir et le collectivisme sont associés au bas développement social (indice HDI), aux différences de revenus (indice Gini), à l'indice de corruption socio-politique et de compétitivité. Les sociétés majoritairement protestantes sont plus individualistes et égalitaires, les sociétés confucia-

Mots-clés

Culture,
Individualisme,
Collectivisme, Distance
au Pouvoir o
Hiérarchie

Key-words

Culture, Individualism,
Collectivism, Power
Distance

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This study was supported by the following Basque Country University Research Grants MCYT BSO2001-1236-CO-7-01, 9/UPV00109.231-13645/2001, from the University of the Basque Country and Spanish Government.

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eties are more hierarchical. We examine the Individualism-Collectivism consequences for attitudes and self-construals at the collective or national level. Competitive attitudes, an emphasis on Protestant Work Ethics independence and success-centered self-construals are more common in less developed, collectivist and hierarchical societies, and less frequent in individualist societies. A sense of duty and obligation towards the group (group loyalty) are related to collectivism. However, egalitarian interdependence is not associated with collectivism.

nistes sont plus collectivistes, et les sociétés islamiques sont plus hiérarchiques. Nous examinons les conséquences de l'Individualisme-Collectivisme sur les attitudes et les -concepts de soi au niveau collectif ou des nations. Les attitudes compétitives, l'Éthique Protestante du Travail, les concepts de soi – indépendant et centré sur le succès – sont plus fréquents dans les sociétés moins développées, collectivistes et hiérarchiques, et moins fréquentes dans les sociétés individualistes. Le sens du devoir et de l'obligation envers le groupe (loyauté groupale) est en relation avec le collectivisme. Néanmoins, l'interdépendance égalitaire ne s'associe pas au collectivisme.

Introduction

With regard to social relationships, *Individualism-Collectivism* and *Egalitarianism- Hierarchy* are the two most important dimensions for differentiating nations and cultures.

Hofstede's Individualism dimension refers to the priority given to the person or the group (often the extended family). Individualist cultures promote introspection and focus attention on inner experience. In contrast, collectivist cultures do not encourage focusing attention on the inner self – the most salient features of emotional experience are external and interactional (i.e., how one's actions affect others). Research confirms that cultural individualism is correlated with subjective well-being when high income, human rights and equality are controlled (Diener, Diener & Diener, 1995). Examples of collectivist countries are Guatemala, Indonesia and Taiwan, while examples of individualist countries are the USA and the Western European nations (Fiske, Markus, Kitayama & Nisbett, 1998; Hofstede, 1991; Smith & Bond, 1998).

A meta-analysis by Oyserman, Coon and Kimmelmeier (2002) showed that core aspects of individualist beliefs are personal independence and uniqueness. Competition, personal achievement and emphasis on internal attributes are important features, as opposed to other people's opinions and indications, which are unrelated or negatively related to individualism. Differences in individualist beliefs between nations are weaker and less clear than differences in collectivist beliefs. Europeans and Latin Americans score the same in Individualism as North Americans, while the inhabitants of the Indian sub-continent, Africa and, to some extent, Japan score lower. The greatest difference in Individualism is found between Confucianist countries, such as Taiwan, Hong Kong or China, and the USA. Hispanics in the USA do not score significantly lower in Individualism, and Afro-Americans score higher than whites in this dimension. There is no difference in Individualism on comparing Australia and Germany with the USA and Canada, but neither is there a difference between the two latter countries and Indonesia (Oyserman, Coon & Kimmelmeier, 2002).

According to the meta-analysis by Oyserman et al., a core aspect of collectivist beliefs is a sense of duty and obligation towards the group. To a lesser extent, in-group harmony and working in groups are also typical features. Sense of belonging, relatedness and cooperation are unrelated or negatively related to collectivism. Comparisons between nations with regard to collectivist beliefs show that, in general, Confucianist Chinese report sharing more collectivist beliefs than the inhabitants of English-speaking countries. Those from Arab countries, from Eastern Europe and from Africa, and to a lesser extent Latin Americans, report greater endorsement of collectivist beliefs. Despite the fact that the differences are only moderate, they are more pronounced than in the case of individualist beliefs, and the greatest differences are found between North Americans and those from Asian and African countries.

Hofstede's Power Distance dimension refers to the extent to which national cultures expect and accept that power is distributed unequally in society. In high power-distance societies, an important emotional distance separates subordinates from authorities. Respect and formal deference for higher status peo-

ple (e.g., parents, elders) are valued. The power-distance dimension is related to how power is organized in society in general, including differential rewards between high and low status people. Examples of low power-distance countries are Denmark and New Zealand, and of high power-distance countries, Malaysia and Guatemala. An asymmetrical society would be expected to reinforce competitiveness as a means of ascending in the social pyramid (Hofstede, 1998; 2001). Various studies suggest that competitiveness, internality, Protestant Work Ethic beliefs and work centrality are higher in less developed, collectivist and high power-distance cultures in which materialist values are still important (Furnham, Bond, Heaven *et al.*, 1993; Inglehart, Basañez & Moreno, 1998; Smith, Trompenaars & Dugan, 1995; Van de Vliert, 1998).

Like Hofstede, Schwartz, in his cultural values theory, compares the cultural value types of Individualism and the cultural value types of Collectivism, though he uses a different perspective from that of Hofstede in his consideration of two types of individualism and two types of collectivism. Cultures can be distinguished by the cultural emphasis they assign to value types that promote self-enhancement (Mastery) or social change (Intellectual and Affective Autonomy). Cultures that emphasize Mastery give priority to self-assertiveness, and values such as ambition, success, competence or risk-taking are elements of this cultural value type. On the other hand, societies that promote Intellectual and Affective Autonomy give priority to the ideas and thoughts of individuals. Cultures may reinforce two different types of collectivism, Egalitarian Commitment or Conservation and Hierarchy. Cultures that emphasize Egalitarian Commitment socialize their members to commit themselves voluntarily to cooperating with others and to be concerned for their welfare. In contrast, Cultures that stress Conservation promote the maintenance of the status quo, and cultures that give high importance to Hierarchy promote differences in power and hierarchical systems of roles (Schwartz, 1994; Ros & Schwartz, 1995).

The data collected by Trompenaars also yields a two-dimensional cultural theory of values (Smith, Dugan & Trompenaars, 1996). Trompenaars' Egalitarian Commitment means a preference for universalist relations and status based on achievement, with low

scores indicating preferences for personal and particularist relations and ascribed status; the second dimension, Utilitarian Involvement, sets preferences for family loyalty and collective responsibility against an emphasis on negotiated social relations and personal responsibility.

Finally, Inglehart's theory (1991, 1998) states that societies can be categorized according to two bipolar dimensions: Materialism-Postmaterialism and Modernization-Postmodernization. Societies with high Materialism give priority to values of survival and security (economic growth, stable economy, fighting crime, order), while Postmaterialist societies give more importance to values of self-expression and tolerance of minorities (social and political participation, freedom, more humane society). Scarcity of economic resources in a society generates insecurity, and to overcome this it is functional to have materialist priorities; economic well-being, on the other hand, generates security, thus contributing to the development of postmaterialist values. The second dimension, Modernization, implies a change from religious authority to state authority through the processes of secularization and bureaucratization, implying, in turn, a change from a traditional society to a legal-rational society.

Despite the importance of the four cultural value theories of Hofstede, Schwartz, Trompenaars and Inglehart, few studies have made a comparison of them. There are comparisons of Hofstede's theory with that of Schwartz (Schwartz, 1994; Gouveia & Ros, 2000), and of Inglehart's with Schwartz's (Ros 2000), and even of the three theories of Hofstede, Schwartz and Trompenaars (Smith & Bond 1998). Nevertheless, there are no studies comparing the four theories in order to determine their convergent validity, or indeed comparing them in relation to macroeconomic and macrosocial indicators. This is precisely the objective of our study.

The Study

This article examines the convergent validity of the following cultural dimensions: Hofstede's Individualism and Power Distance, Schwartz's Conservatism, Hierarchy, Affective and Intellectual Autonomy; and Egalitarian Commitment (Schwartz and

Trompenaars), Trompenaars' Utilitarian Involvement and Inglehart's Postmaterialism. Moreover it analyses the correlations of these cultural dimensions with some macrosocial indices (Human Development Index – *HDI*, Gross National Product – *GNP*, population density, percentage of immigrant population, mobility, family mean size, income inequality, ethnic diversity, religion, etc. – see Table 2) and with values, attitudes and other psychosocial correlates (attitudes towards Protestant Work Ethic, interest in politics, confidence in trade unions, perception of control over life). These analyses are based on mean scores for nations, and refer, therefore, to the collective or national level of analysis.

First of all, we consider the ecological correlations, by country, between cultural indicators of studies of values. To this end, we consider Hofstede's (1991, 2001) Individualism and Power Distance scores for 74 nations and regions. The regions considered are: Eastern, Central, Northern and Southern Europe, America (North and South), Australia, Asia, the Arab countries and Africa (see Appendix 1). Europe and the developed world are over-represented and Africa is under-represented. In any case, these indices of values are the most complete data published, and the most representative as regards number of countries included. The ratings are based on questionnaires completed by IBM employees throughout the world in the 1970's. Hofstede's dimensions are considered as single dimensions with two poles. The Individualism dimension measures individualism (high or low), while collectivism is explained by Power Distance, since this presents the negative correlation with Individualism (Schwartz 1994; Gouveia & Ros, 2000).

We also include Schwartz's value scores (Schwartz, 1994) on Egalitarian Commitment, Intellectual Autonomy, Affective Autonomy, Hierarchy, Conservatism. Here we used scores from 31 countries, from samples of teachers (Schwartz, 1994). The regions and countries used by Schwartz include countries from Eastern, Central, Northern and Southern Europe, Asia, Africa (Zimbabwe only), and Latin America (Brazil and Mexico), together with the USA, Australia and Israel. Thus, as in the other studies of values, Europe is over-represented and Africa and Central and South America under-represented.

The scores we used in our study from the work of Trompenaars (Smith, Dugan & Trompenaars, 1996), which share values with the Hofstede indexes, are restricted to 38 countries. Those included are from Eastern, Central, Northern and Southern Europe, Asia, Africa, the Arab countries and Latin America, together with the USA, Canada and Australia. As in other databases, Europe is over-represented and Africa, Central and South America and the Arab countries are under-represented.

Finally, from Inglehart's work, in our analyses we consider only the Postmaterialism scores of 30 countries (Inglehart, 1991, 1998) – those that coincide with the countries used by Hofstede. As in the previous cases, there is over-representation of Europe and the developed countries. The Postmaterialism concept results from a factor analysis, which identifies a dimension with a pole represented by postmaterialist values (with items like high subjective well-being, not giving importance to hard work, encouraging tolerance, and trusting people), and an opposite pole representing materialist values, with items such as “rejection of different groups,” “respect for one's parents,” “liking for work,” and “women need to have children to fulfill themselves” (Inglehart, 1998, p.109-115).

Appendix 1 shows mean scores for each country for the values of Hofstede, Schwartz, Trompenaars and Inglehart.

Secondly, we present the ecological correlations between socio-economic, demographic, political and cultural indicators and the values studies. Thirdly, we review cross-cultural studies on individual correlates of beliefs and attitudes, together with the results of our cross-cultural study sampling 29 countries (Fernández, 2001; Páez, Fernández, Basabe, & Grad, 2002). We present attitude and self-construal dimensions obtained with the scales of Triandis and Singelis from an exploratory nation-level factor analysis, with mean scores by country as unit of analysis (see Appendix 2). These means are correlated with the values scores of Hofstede, Schwartz, Trompenaars and Inglehart. In order to obtain these correlations we summarize the results of the different studies that analyze these aspects and supplement them with various secondary analyses of published cross-cultural data, as well as with those of studies carried out by our own team (Basabe, Páez, Valencia *et al.*, 2002; Páez & Zubieta, 2001).

Results

Concurrent Validity of Cultural Value Theories

To check the construct validity of the nation-level scores, a series of collective or ecological correlations were performed between the value scores of the four studies: Hofstede (2001), Schwartz (1994), Smith, Dugan and Trompenaars (1996) and Inglehart's study of the World Values Survey from 1990-91 (Inglehart, 1991, 1998).

TABLE 1:
Intercorrelations of
Cultural Values Across
Nations

Measures	Individualism (Hofstede)	Power Distance (Hofstede)
Conservatism (<i>Schwartz</i>)	-.44*	.37*
Hierarchy (<i>Schwartz</i>)	-.44*	.21
Affective Autonomy (<i>Schwartz</i>)	.35*	-.50*
Intellectual Autonomy (<i>Schwartz</i>)	.36*	-.30*
Egalitarian Commitment (<i>Schwartz</i>)	.46*	-.35*
Egalitarian Commitment (<i>Trompenaars</i>)	.54*	-.58*
Utilitarian Involvement (<i>Trompenaars</i>)	.42*	-.14
Post-materialism (<i>Inglehart</i>)	.64*	-.60*

Note. Pearson product-moment coefficients across nations. A high number on each variable denotes a high score on the variable in question. Countries $n = 31$ (teacher-samples, Schwartz, in Kim et al., 1994); $n = 38$ (Smith, Dugan & Trompenaars, 1996; $n = 30$ (Inglehart 1991, 1998).

* $p \leq .05$ (two-tailed) * $p \leq .10$ (two-tailed).

Hofstede's cultural dimension scores show high convergent validity with current surveys of values and with the recent cross-cultural studies. Hofstede's Individualism correlates with Affective and Intellectual Autonomy, Egalitarian Commitment, Utilitarian Involvement and the Post-materialist "Well-being vs. Survival" dimension. Results show that Hofstede's Individualism is negatively correlated with Conservation and Hierarchy. These results seem to show that Individualism is linked to the development of an autonomous and distinctive self that assumes independent and responsible decisions and that feels committed to others by principles of equality. But Hofstede's Individualism also has a competitive aspect that accounts for its high correlations with Trompenaars' Egalitarian Commitment, which refers to the application of universal norms in social relations and the achievement of status based on personal achievement.

Hofstede's Power Distance scores are correlated positively with Conservatism and negatively with Affective and Intellectual Autonomy, as predicted by Schwartz's theory. They are also negatively correlated with Egalitarian Commitment, which represents preferences for personal and particularist relations and ascribed status, as opposed to universalist relations and status based on achievement. Finally, Power Distance is inversely related to Inglehart's Post-materialism ("Well-being vs. Survival" dimension), due to its emphasis on equality and tolerance of minorities.

Because of the interrelations between the available values measures that are reported above, the correlations with other variables that follow will be grouped into two major groupings. Firstly, we take as indicators of Individualism, Hofstede's Individualism, Schwartz's Autonomy measures and Trompenaars' Egalitarian Commitment and Utilitarian Involvement. Secondly, we take as indicators of Hierarchy, Hofstede's Power Distance and Schwartz's Hierarchy.

Cultural Dimensions and Macrosocial Correlates

In this section we present various socio-economic and demographic indicators from reports published by the United Nations and other international bodies.

For each country we used the Gross National Product (GNP), and the Human Development Index (*HDI*), which measures national well-being and trends by combining three basic components of human development: longevity (mean life expectancy in the nation), knowledge (rate of literacy and school population), and standard of living (Gross National Product per capita, *GNP*). These indices were obtained from the United Nations Program for Development (UNPD) (Codelier & Didiot, 1997; PNUD, 1999).

Other social, demographic and economic indicators employed were as follows: population density (persons per square mile in the 1980s), percentage of urban population, percentage of immigrant population (population percentage in the 1990s originally from foreign countries), mean family size per nation in the 1990s (UNESCO, 1999; Vandello & Cohen, 1999), social mobility indices (percentage of people prepared to move to another city or coun-

try between 1990 and 1993 in 42 countries, from the World Values Survey, Inglehart, 1998), and the immobility index (extent to which parents' profession predicts children's profession (Casi, 1997).

The indices used by Diener, Diener and Diener (1995) are the income inequality or Gini index (ranging from 27 – perfect equality – to 60 – a few individuals have all the resources and the others have none), and the ethnic diversity index (ranges from 1 – nations with nearly homogeneous ethnic composition – to 5 – fragmented nations with many small ethnic groups). The indicator used from Lynn and Martin (1985) is the competitiveness index, which ranges from 12 to 22, and from Levine (1998) the slowness of social life index (median quickness of pedestrians per country), which ranges from quickness (=1) to slowness (=31).

Inglehart's study, carried out with surveys on random samples from several countries, provides indices such as percentage of agreement, from 7 to 10 on a scale of 1 to 10, with confidence in trade unions (from 8% to 67%), with attitudes towards the Protestant Work Ethic (percentage according to the emphasis on determination, thrift, effort and hard work as a quality that children should be encouraged to learn at home, from 27.5% to 69.5%), and with perception of control over life (the question was "How much freedom of choice do you feel you have over the way your life develops?") (from 28% to 79%) (Hofstede, 2001; Inglehart, 1991, 1998).

The political indicators are as follows: the Transparency International (1998) index of corruption perception, which ranges from low transparency, 14, in Cameroon, to high transparency, 98, for Denmark; the Human Rights Index, taken from Diener, Diener and Diener (1995), (a score related to the extent to which a nation possesses 40 different human rights (HR); a low score represents more rights, thus, Sweden (high HR) = 4.41, China (low HR) = 9); and two indices from the UNESCO International Social Survey Program (1999): percentage of people in agreement with the defense of human rights (ranging from 5 to 83) and percentage of people with an interest in politics (ranging from 9 to 79).

Finally, a group of dummy variables was created for religion: the type of historically predominant religion in each country: Protestant, Confucian, and Islamic (see also Table 2).

***Individualism-Collectivism and Power Distance:
macrosocial correlates***

The causal or antecedent factors of individualism postulated by authors such as Hofstede (2001) and Triandis (1995) are economic development, low population density, urbanization, migration, and the move from the extended to the nuclear family. All of these processes increase people's resources, capacity for choice and alternatives, and facilitate personal autonomy from ascribed groups, such as the family (Triandis, 1995). Hofstede's (1991) longitudinal data suggest that increasing economic development promotes Individualism. When a country's wealth increases, people have access to resources, which provide them with more privacy and individual choices, thus reinforcing Individualism. Inglehart's (1998) hypothesis also suggests that economic development increases social well-being and post-materialist values. As Inglehart's research has shown, cross-national cultural variation is closely associated with a society's level of economic development and its cultural heritage. Economic development promotes secular and self-expression values, while economic collapse will push in the opposite direction (Inglehart & Baker, 2000, p. 40-1).

Other classic causes of Individualism are the republican democratic tradition, with its respect for individual rights, and religions in which there is the possibility of individual salvation, such as Protestantism, where the emphasis is on saving and the generation of wealth as a criterion of moral goodness, which Weber argued was one of the causes of the development of capitalism (Bellah, Madsen, Sullivan, Swidler & Tipton, 1985).

Economic and social development

Among the different indicators of Individualism, the Hofstede index presents the highest correlation with the per capita wealth of a country. Also correlated to this statistic, but slightly less strongly, are Trompenaars' Egalitarian Commitment and

TABLE 2:
Correlations between
measures of
Individualism and
Hierarchy and Social
Indices Across Nations

Measures	Individualism				Hierarchy	
	IDV ⁽²⁾	AA+IA ⁽⁶⁾	EC-T ⁽⁷⁾	UI ⁽⁷⁾	PDI ⁽²⁾	HIE ⁽⁶⁾
HDI Human Development Index ⁽⁵⁾ <i>n</i> =75-23	.48*	.45*	.36*	.10	-.43*	-.63*
Gross National Product , in USA dollars ⁽⁵⁾ <i>n</i> =43-27 ⁽³⁾	.82*	.55*	.69*	.32	-.71*	-.54*
Population Density ⁽⁸⁾ <i>n</i> = 68-37	-.13	-.16	-.26*	-.44*	.08	.17
Percentage of Urban Population ⁽⁸⁾ <i>n</i> =68-30	.34*	.03	.30*	.10	-.25*	-.19
Percentage of Immigrant Population ⁽⁸⁾ <i>n</i> =66-27	.34*	-.06	.19	-.08	-.37*	.10
Mobility=percentage of people prepared to move to another city ISSP-1995, ⁽⁹⁾ <i>n</i> =22-11	.66*	-.11	.56*	-.13	-.08	-.30
Mobility= percentage of people prepared to move to another country ISSP-1995, ⁽⁹⁾ <i>n</i> =22-11	.41*	-.25	.37*	-.13	-.10	-.50
⁽⁴⁾ Immobility index <i>n</i> = 26-11, ⁽⁸⁾	.06	.56*	-.12	-.23	.16	-.31
Family Mean Size ⁽⁸⁾ <i>n</i> = 63-28	-.62*	-.57*	-.56*	-.47*	.48*	.44*
Income inequality years 90-Gini ⁽¹⁾ <i>n</i> =28-18	-.65*	-.60*	-.27	-.50*	.66*	.34
Ethnic diversity index ⁽¹⁾ <i>n</i> =46-18	-.46*	-.12	-.44*	-.36*	.56*	.14
Slowness of pedestrians per country ⁽¹⁰⁾ <i>n</i> =26-16	-.65*	-.71*	-.62*	-.03	.56*	.50*
Transparency International ⁽²⁾ <i>n</i> =58-28	.69*	.44*	.73*	.11	-.74*	-.44*
Competitiveness Index ⁽⁴⁾ <i>n</i> =38-20	-.45*	-.68*	-.48*	-.36*	.49*	.33
Confidence in Trade Unions ⁽³⁾ <i>n</i> =36-16	-.12	.02	.05	-.34	.01	.05
^(b) Attitudes towards Protestant Work Ethic ⁽³⁾ <i>n</i> =35-19	-.43*	-.44*	-.69*	.04	.33*	.53*
Perception of control over life ⁽³⁾ <i>n</i> =36 -19	.27	.22	.51*	-.03	-.40*	-.16
Human Rights violations ⁽¹⁾ <i>n</i> =47-24	-.64*	-.63*	-.73*	.01	.53*	.68*
Percentage according to Human Rights ⁽⁸⁾ <i>n</i> =40-18	-.34*	-.22	-.30	-.10	.09	-.38
% Interest in politics (very or same) ⁽⁸⁾ <i>n</i> =38-17	.13	.00	.07	.13	-.31*	.47
Predominantly Protestantism (no=1, yes=2) <i>n</i> =74-28	.56*	.46*	.62*	.35*	-.53*	-.42*
Predominantly Confucianism (no=1, yes=2) <i>n</i> =74-28	-.32*	-.31*	-.41*	-.43*	.14	.62*
Predominantly Islam (no=1, yes=2) <i>n</i> =74-28	-.17	-.26	-.20	-.28*	.31*	.22

Note. Pearson product-moment coefficients across nations. * $p \leq .05$ (two-tailed) *n* = number of countries included in the analysis.

IDV=Individualism and PDI Power Distance Index, Hofstede, AA= Affective Autonomy + IA=Intellectual Autonomy, Schwartz, EC-T=Egalitarian Commitment and UI=Utilitarian Involvement, Trompenaars. A high number on each variable denotes a high score on the variable in question. Countries *n*= 75-15.

Immobility index (extent to which parents' profession predicts children's profession, higher score indicates lower social mobility in the country)

Percentage according to the emphasis on determination, thrift, effort and hard work as qualities that children should be encouraged to learn at home

Source Data: (1)Diener *et al.*, 1995; (2) Hofstede, 2001; (3)Inglehart, 1991, 1998; (4)Lynn & Martin, 1985; (5)PNUD, 1999; (6) Schwartz, 1994; (7) Smith, Dugan & Trompenaars, 1996, (8) Unesco, 1999, (9) Cais , 1997, (10) Levine 1998

Schwartz's Intellectual and Affective Autonomy. This shows that the Individualism indices of Hofstede and Trompenaars share competitive values based on personal achievement, while the Schwartz indices reflect other aspects, such as openness to change.

Socioeconomic development is also related to the social hierarchy of societies. As can be seen in Table 2, the strongest correlation with GNP is found for Hofstede's Power Distance, and there is also a strong link between GNP and the Hierarchy values of Schwartz, which also show the strongest association with *HDI*. All of this suggests that countries high in Power Distance and Hierarchy have low levels of economic development. Hofstede (2001) argues that cultures with high hierarchical distance are characterized by large income differences between social strata. The correlations between socioeconomic indicators and the Hofstede's Power distance index support this thesis: countries with larger hierarchical distance indexes have lower HDI and GNP; the difference in income or Gini index is higher, and they have lower percentages of urban population and immigrants.

Similarly, other studies indicate the direct relationship between Hofstede's Individualism, Schwartz's Intellectual and Affective Autonomy and GNP, as well as the inverse relationship between Power Distance, Conservation and GNP (Gouveia & Ros 2000). Recently, Ros (2002) compared the scores on Schwartz's values (Intellectual and Affective Autonomy and Egalitarianism) and those of Inglehart (Postmaterialism) and the indices of economic development (GNP) for 43 countries. By means of a multiple regression analysis, she showed the impact of these values (which had been measured in the 1990s) and GNP (from 1985) on GNP in the year 1995. On the whole, the wealth of countries and their values ($R^2 = 0.95$) were responsible for subsequent economic development. Approximately half of that influence was related to previous GNP and the other half to the impact of values such as Affective Autonomy, Egalitarianism and Postmaterialism. The HDI index (see Table 2) is positively related to Hofstede's Individualism, to Schwartz's Intellectual and Affective Autonomy and to Trompenaars' Egalitarianism, and is negatively associated with Hierarchy and Power Distance. In the study by Ros (2002), the results show that the Egalitarianism val-

ues and previous HDI explain 95% of the variance of HDI in 1995, and that while the 1985 HDI is the most important factor (standardized $\beta = .79$, $p \leq .01$), only the Egalitarianism values are related (standardized $\beta = .26$, $p \leq .01$) to subsequent development of HDI up to 1995.

Urbanization

A positive relationship is found between degree of urbanization and Hofstede's Individualism and Trompenaars' Egalitarianism, while the relationship between urbanization and Power Distance is negative. Nevertheless, there is no relationship between this aspect and the values of Intellectual and Affective Autonomy. Urbanization, associated with industrialization, with the development of the market, with modernization and with greater complexity of social life, appears to reinforce instrumental individualism. According to Triandis (1995), on the other hand, life in small towns and rural life in dense communities reinforces social control and collectivism (Triandis, 1995). However, multiple regressions controlling for the interrelations of HDI and urbanization did not confirm the specific influence of this factor on Hofstede's Individualism and Power Distance (beta weights were not significant, not shown in this paper).

Demographic Characteristics: Density and Ethnicity

According to Triandis (1995), dense populations exert pressure toward a need for coordination and collectivism, and conversely, sparsely populated locations and frontiers exert pressure toward looseness and self-reliance (and hence individualism). Nevertheless, Individualism is not associated with population density, and neither is there a relationship between the indicator of Power Distance and population density. This absence of relationship, for the majority of the indicators, may be attributable to the fact that there are countries with collectivist cultures but low population density (e.g., Bolivia), and individualist with high density (such as European countries). There is only a correlation between countries' population density in the 1980s with Trompenaars' values for the 1990s (lower Egalitarian Commitment in countries with high population density), and this appears to indicate that population density is related to prefer-

ence for particularist relations and ascribed status (negative scores of Trompenaars' Egalitarian Commitment), and to preference for family loyalty and collective responsibility (see Table 2). A positive correlation is found between Power Distance and ethnic diversity of the population, which can be considered as an indicator of the variability and diversity of the population (see Table 2). With regard to ethnic diversity, it is probable that societies that must organize large masses with great cultural diversity reinforce rules of authority and status differences. People in countries with large populations have to accept a more distant and less accessible political power than those in smaller societies, who are much closer to the exercise of power (Hofstede, 2001). Hofstede reports a positive correlation with population size.

The indicators of Hofstede and Trompenaars for Individualism are negatively related to ethnic diversity. Collectivist nations are more heterogeneous (probably because they were later in constructing a national state, and because they are more segmented), in contrast to the suggestions of Chan, Gelfand, Triandis and Tzeng (1996). These latter authors probably generalized the supposed ethnic homogeneity of collectivist countries using a result that is restricted to a comparison of the relative heterogeneity of the USA with the relative cultural homogeneity of China. Multiple regressions computed to control for the interrelations of HDI and ethnic diversity confirm the specific influence of this factor on Hofstede's Individualism and Power Distance. (Individualism standardized β (42) = -.28, $p \leq .08$ and Power Distance standardized β (42) = .40, $p \leq .01$).

Geographical mobility

Relationships are found only between Hofstede's Individualism, Trompenaars' Egalitarian Commitment and geographical mobility (moving to another location or another country), and between Hofstede's Individualism and immigration. Emigration, which implies a project of individual mobility, of breaking with one's original ties, is consistent with the fact that the immigrant societies of the New World are characterized by greater individualism. The possibility of changing place of residence, job and class also results in less control by and dependence upon groups, in comparison with communities that are more stable geographically

and with lower social mobility. Tocqueville, in his classic essay on the USA – in the mid-19th century, before the Civil War and industrialization –, mentioned that the mobile and egalitarian nature of the North American communities facilitated easy contact, open relationships and strong sociability, though at the same time making it more probable that interpersonal relationships were more superficial and fleeting. All of this reinforced individualism (Bellah, Madsen, Sullivan *et al.*, 1985). Even so, individualist countries tend to be more developed, and this encourages immigration (both legal and illegal) into them. Nevertheless, while it is true that 8.7% of the population of North America and 5.4% of that of Europe were born elsewhere (both individualist regions, according to the values studies), more collectivist geographical areas, such as Arab countries and sub-Saharan Africa, have 6.8% and 3.8%, respectively, of immigrant population (UNESCO, 1999). A multiple regression analysis was carried out on percentage of immigrants in the population, using Hofstede's Individualism and Power Distance and socio-economic development index (*HDI*) as predictors. The Multiple R^2 was .18, with the most important predictor as socio-economic development (*HDI*) (standardized β (62) = .25, $p \leq .05$), and cultural individualism showing no specific influence (standardized β (62) = -.02, $p \leq .87$). Moreover, Hofstede's Individualism and Trompenaars' Egalitarian Commitment are positively related to mobility, or percentage of the population prepared to change city and country (see Table 2). Finally, it was determined whether there was a relationship between indicators of cultural individualism and an indicator of social immobility, defined as the ability of parents' occupation to predict children's occupation (the higher the score the lower the social mobility in that country). There was no association with the indicators of Hofstede or Trompenaars, and the relationship was contrary to expectations for Schwartz's indicators of Individualism (the lower the social mobility, the greater the Affective and Intellectual Autonomy). Among these countries are France, Spain and Germany, with low internal social mobility and relatively high values for Autonomy, while at the other extreme are countries such as Israel, Hungary and Brazil, with high indices of social mobility and, at the same time, relatively low values for Autonomy.

Family size

Smaller nuclear family size is found in individualist societies, and all the indicators of individualism of Hofstede, Schwartz and Trompenaars are associated with smaller mean family size; likewise, hierarchical societies show larger mean family size, as indicated by the correlations with both Power Distance and the Hierarchy values (see Table 2).

Nevertheless, the relationship between nuclear family, capitalism and individualism is not a linear one. Thus, historical studies show that the nuclear family pre-existed capitalism, and that the extended family was not common in poor sectors due to the difficult conditions of life; also, family size remained relatively stable in Europe during the industrial revolution (Cicchelli-Pugeault & Cicchelli, 1998). According to Triandis, if the family is large, the need to share resources and coordinate activities reinforces collectivism. Modernization during the twentieth century has reduced family size, thus contributing to the development of individualism. Multiple regressions computed to control for the interrelations of HDI and family size confirm the specific influence of this factor on Hofstede's Individualism and Power distance (standardized β (57) = -.56, $p \leq .01$ and standardized β (57) = .29, $p \leq .05$, respectively).

In order to calculate the effect of socio-economic development (HDI) on mean family size, controlling for cultural variables, a multiple regression analysis was carried out. The findings included a specific effect of both HDI (standardized β (57) = -.48, $p \leq .01$) and Hofstede's Individualism (standardized β (57) = -.43, $p \leq .01$), but the relationship with the Power Distance index disappeared (standardized β (57) = -.05, $p \leq .68$); *Multiple R*² was .56.

Democratic-republican tradition

Individualism was associated with more Human Rights (Diener, Diener & Diener's 1995 Human Rights Index is used) and with less corruption (assessed by Transparency International). Similarly, the level of political corruption is higher in hierarchical societies, as shown by the associations between the TI index and Power Distance and Hierarchy values. Multiple regressions computed to control for the interrelations of HDI, human rights and corruption confirm the specific influence of these factors on

Hofstede's Individualism (Human Rights standardized β (45) = -.39, $p \leq .03$ and TI standardized β (45) = .45, $p \leq .02$, *Multiple R*² was .57.) and Power Distance (TI standardized β (45) = -.62, $p \leq .01$, *Multiple R*² was .56).

Multiple regression analyses controlling for the influence of social development and of the other cultural dimensions, showed that individualism predicted a greater respect for human rights (standardized β (33) = -.64, $p \leq .01$) (*Multiple R*² was .54.). Likewise, level of political corruption (TI) was explained first of all by level of social development (HDI β (48) = .39, $p \leq .01$) and by Individualism (β (48) = .19, $p \leq .01$), controlling the rest of Hofstede's cultural dimensions (*Multiple R*² was .81). As can be seen in these results, the level of social development (HDI) was a better predictor of a low corruption level than Individualism. The relationship between individualism and the percentage of people "reasonably or very interested" in politics in each country, according to The International Social Survey Program (1990), was positive but not significant (see Table 2). Interest in politics is only negatively related to Power Distance, and in cultures in which power distance is more highly valued we find less interest in politics, possibly due to the lack of motivation to participate deriving from the legitimacy of hierarchical differences.

The percentage of people in agreement with the defence of human rights in 1990 (also according to the ISSP) is negatively associated with cultural Individualism, that is, it was higher in the collectivist countries. Respect for human rights – the extent to which a country respects a set of 40 basic rights according the index of Diener *et al.* (1995) – is greater in the developed countries (HDI, r (47) = -.62, $p \leq .01$) and the individualist countries (see Table 2), while rejection of violation of rights is somewhat higher in the collectivist countries, as already pointed out. Likewise, violation of Human Rights (HR) is greater in the hierarchical societies that emphasize inequalities of power – index of HR violation is related to Power Distance and to Hierarchy (see Table 2).

Religions of individual salvation, reform and individualism

The predominance of Protestantism is associated with Individualism, though the latter is not associated with the Protestant Work Ethic (see Table 2). That is, the institutional and historical dominance of Protestantism is associated with individualist values, but these are not currently associated with the classic attributes of the Protestant Work Ethic (thrift, effort, determination and work). The proportion of Protestants in each nation in the 1990s correlated positively with Hofstede's individualist values of the 1970s, with Schwartz's values of Affective and Intellectual Autonomy of the 1990s, and with Trompenaars' Egalitarian and Utilitarian values (personal responsibility versus loyalty to the group and shared responsibility) of the 1990s. It has been claimed that Protestantism, which permits the believer to speak to and interpret God directly, reinforces more horizontal and democratic relationships in society than Catholicism, which is more gregarious and hierarchical (Mendras, 1998). Nevertheless, Inglehart's (1998) measure of emphasis on determination, thrift, effort and hard work – as qualities that children should be encouraged to learn at home (all typical attributes of the Protestant Work Ethic) was negatively associated with Hofstede's Individualism, with Schwartz's Affective and Intellectual Autonomy and with Trompenaars' Egalitarianism values (see Table 2). Two other studies in 41 and 13 countries respectively, have found that agreement with a scale of beliefs associated with the Protestant Work Ethic was greater in the collectivist countries and strongly associated with Hierarchical Distance (Smith & Bond, 1998), and these results are confirmed in our study with the two values associated with collectivism, namely Power Distance and Hierarchy.

The predominance of Confucianism is associated with collectivism, is negatively related to the Hofstede's Individualism, to Intellectual and Affective Autonomy and to Trompenaars' Egalitarian Commitment and Utilitarian Involvement, and is positively related to Hierarchy; for its part, the predominance of Islam in a country is negatively related to Trompenaars' Utilitarian Involvement dimension and positively related to Power Distance (see Table 2). Lay religions such as Confucianism, which stress

relations of obedience to the Emperor, to one's parents, etc., and which affirm the social order as based on unequal relationships, would be the antecedent for hierarchical cultures. Islamic cultures are Collectivist and with high Power Distance. In these cultures, the theocratic organization of social relations is associated with obedience to the divine will, which defines destiny, independently of a person's actions. In a general way, Hofstede claims that the predominance of religious and philosophical ideologies emphasizing stratification and hierarchy is a key element in the difference between cultures with high and low Power Distance (Hofstede, 2001). A comparison that dichotomized cultures into Confucian and "others" (yes = 2, others = 1) failed to confirm the association between Confucianism and Hofstede's Power Distance, even though the correlation was positive as expected; nevertheless, the Hierarchy values of Schwartz did show a high correlation with the predominance of Confucianism. Societies in which Islam predominates are also more hierarchical cultures. In contrast, dominance of the Protestant religion is associated with low Power Distance (see Table 2).

Cultural Values, Attitudes and Self- Construals

Cultural dimensions and competitiveness, perception of control, protestant work ethic beliefs

As already noted in Table 2, higher competitiveness, internal locus of control and agreement with Protestant work ethic beliefs are stressed in developing, collectivist and high power distance countries. These results are partially based on samples of students and managers, and may reflect situations in which elitist groups in poor, developing and collectivist countries tend to be more competitive and have higher internal locus of control. In fact, perception of life control as measured in Inglehart's World Value Surveys was related to high social development – as might be expected from studies linking high social status and internal control (Sastrey & Ross, 1998). However, using Inglehart's nationally representative samples from 26 countries, we found that the emphasis on hard work as a quality that children should be encouraged to learn at home was related to Collectivism and to high Power Distance and to Hierarchy (see also Table 2). In post-industrial societies, individualist and low power distance cultures,

post-materialist values are related to self-actualization and quality of life, and are more important than work and material success: for instance, Schwartz found that work is more central in cultures high in Hierarchy and Mastery; the same probably also occurs in cultures high in Masculinity and Power Distance, given that Hofstede's scores for Masculinity and Power Distance are strongly related to Mastery and Hierarchy, respectively (Hofstede, 2001). Inequalities of power associated with strongly hierarchical societies are also expressed through the higher incidence of human rights violations (see Table 2); moreover, an indicator of interest in politics shows that this is lower in such societies. Likewise, there is more politico-social corruption (see Table 2), and some indicators reveal a climate of greater stress in hierarchical societies: higher levels of competitiveness (Lynn & Martin, 1985) and of the speed of social life (measured by the index of slowness of pedestrians per country, Levine 1998), lower perception of control, and fewer feelings of being able to make choices about one's life (see Table 2).

Cultural Dimensions and Self-Construals

In order to shed further light on the correlates of nation-level variations in values, we utilized data from two studies of national-level differences in self-construal that are described more fully in other papers within this issue (Fernández, Páez & González, in press; Green, in press). Green made a nation-level factor analysis of student responses from 29 nations to the individualism-collectivism scale developed by Triandis, Bontempo, Villareal, Asai and Lucca, 1988). She identified two nation-level factors, which she named as Success Orientation and Self-Reliance. Fernandez et al used the same sample of students from 29 nations and identified four factors among responses to Singelis' (1994) measure of self-construal (see Appendix 2). They identified four factors, which they named as Uniqueness and Independence; Low Context Assertive Self; Egalitarian Independence; and Group Loyalty.

Table 3 shows the four dimensions or factors resulting from Fernández et al's factor analysis. The number assigned to each factor from F1 to F4 follows the order of the dimensions resulting from the analysis, but for a clearer description we shall present the results related to the different self-construals according to whether they can be considered as individualist or collectivist.

TABLE 3:
National-level Factor
Analysis of Singelis
Items

Singelis Items	Egalitarian Interde- pendence F1	Group Loyalty F2	Low Context Assertive F3	Uniqueness Indepen- dence F4
1. It is important for me to maintain harmony within my group	.83	.34		
2. My happiness depends on the happiness of those around me.	.35	.42	-.70	
3. I respect people who are modest about themselves.	.78	-.33		
4. I will sacrifice my self-interest for the benefit of the group I am in.		.71		
5. I often have the feeling that my relationships with others are more important than my own accomplishments.				-.80
6. It is important for me to respect decisions made by the group.	.58	.54		.34
7. I would stay in a group if they needed me, even if I were not happy with the group.		.90		
8. I'd rather say "no" directly, than risk being misunderstood.			.72	
9. I am comfortable with being singled out for praise or rewards.			.79	
10. I act the same way no matter who I am with.		.53	.40	.47
11. I enjoy being unique and different from others in many respects.		-.34		.62
12. My personal identity is independent of others, is very important for me.	.61			.56
13. I prefer to be direct and forthright when dealing with people I've just met.	.60		.48	

Note. Factor analysis of mean scores by country: Principal components, Rotation varimax, imposed 4 factors, saved factorial scores > .30. Method (ML). $n = 29$ countries. Data: Fernández, 2001.

The individualist self-construal variables are:

a) *Success Orientation* and *Self-reliance* from Green's factor analysis The *Success* dimension is represented by items like "I feel winning is important in both work and games," "Doing your best isn't enough; it is important to win," "Success is the most important thing in life," "Winning is everything," or "...if you want something done right, you've got to do it yourself."

b) Green's *Self-reliance* dimension is made up of items such as "In the long run the only person you can count on is yourself," "To be superior a man must stand alone," "Only those who depend on themselves get ahead in life," "...to co-operate with

someone whose ability is lower than oneself is not as desirable as doing the thing on one's own," or "It annoys me when other people perform better than I do."

c) Fernandez *et al's Uniqueness and Independence* factor characterizes personal identity as independence from others, as an autonomous self that enjoys being unique, and as a consistent person with low field dependence. This construal (*F4*) is the result of factor loads from items such as: "I often have the feeling that my relationships with others are more important than my own accomplishments" (item 5, negative loading); "I enjoy being unique and different from others in many respects" (item 11); or "My personal identity is independent of others, it is very important for me" (item 12) (see Table 3).

d) Fernandez *et al's Low context and Assertive self* portrays a self that is assertive and low in field dependence. This construal (*F3*) is the result of factor loading from items such as: "I am comfortable with being singled out for praise or rewards" (item 9); "I'd rather say «no» directly than risk being misunderstood" (item 8); "My happiness depends on the happiness of those around me" (negative loading, item 2); or "I prefer to be direct and forthright when dealing with people I've just met" (item 13).

With data from our cross-cultural research (Fernández, 2001; Páez, Fernández, Basabe & Grad, 2002; Páez & Zubieta, 2001), a series of correlations were performed between the national means for self-construal factors and country-level scores, using country scores on HDI as well as Inglehart, Schwartz and Hofstede values. As can be seen in Table 4, the number of countries used in these correlations varied from 29 to 13. The number of countries with data for self-construal is 29, including 10 countries from Europe (Russia, Turkey, Latin Europe and Francophone Europe), the USA, 11 countries from Latin America (Central and South America), Africa (Ghana and Nigeria), Arab countries (Iran and Lebanon), and Asia (Taiwan, China, Singapore). Africa and Asia are under-represented, as are Northern and Central Europe. Similarly, in some analyses, which are presented as those referring to the relationship between Schwartz's cultural values and self-construals, the number of countries is reduced to 13 or 15, with over-representation of Europe (eight countries). Latin America is limited to Mexico and Brazil, and Arab countries to the

Lebanon, Asia is represented by the same three countries and there are no values for Africa. Country scores for self-construal can be found in the article by Fernández, Páez and González (in press).

TABLE 4:
Correlation between
Mean Self-Construals
and Cultural Values

	Success	Self-reliance	Uniqueness Independence	Low Context Assertive	Egalitarian Interdependence	Group Loyalty
HDI	-.69*(28)	-.36*(28)	-.15 (28)	-.27 (28)	.12 (28)	-.44*(28)
IDV	-.71*(29)	.05 (29)	-.19 (29)	-.36* (29)	-.12 (29)	-.43*(29)
AA+IA	-.63*(15)	-.11 (15)	-.18 (15)	-.30(15)	.14 (15)	-.32*(15)
EC-T	-.37 (16)	-.50* (16)	.03 (16)	-.02 (16)	.43& (16)	-.14 (16)
PDI	.60*(29)	.15 (29)	.40*(29)	.05 (29)	-.06 (29)	.08 (29)
HIE	.43 (13)	.64*(13)	.00 (13)	.35 (13)	-.38 (13)	.03 (13)
POST	-.60*(16)	-.33 (16)	-.01 (16)	-.38 (16)	.41& (16)	-.56*(16)

Note. Pearson product moment coefficients on collective-nations scores, and (*n*) number of countries in parenthesis. A high number on each variable denotes a high score on the variable as named. Collective variables: Hofstede's values: IDV=Individualism, PDI=Power distance; Schwartz's values: AA+IA= Autonomy Affective and Intellectual, HIE=Hierarchy; Trompenaars: EC-T=Egalitarian Commitment; POST=Inglehart's postmaterialism values * $p \leq .05$, ** $p \leq .10$ (two-tailed).

As Table 4 shows, *Success* was positively related to Hofstede's Power Distance and negatively related to Hofstede's Individualism, Affective and Intellectual Autonomy, Postmaterialist values and Human Development (HDI). Multiple regression computed to control for the interrelations of HDI, Individualism and Power distance confirms the specific influence of Power Distance and low social development (Power Distance and HDI beta weights were significant, (HDI standardized β (28) = -.40, $p \leq .01$); Power Distance standardized β (28) = .27, $p \leq .07$; and Individualism standardized β (28) = -.31, $p \leq .07$); *Multiple R*² was .67.). These data show that competitive success-centered attitudes are more common in collectivist, hierarchical, materialist and less developed societies. *Self-Reliance* is also positively associated with Hierarchy and negatively associated with Trompenaars Egalitarian Commitment and HDI; it is not related to Individualism, and is associated with less developed countries rather than developed ones. However, it is unrelated to GNP (see Green's article in this number). *Uniqueness and Independence* (F_4 , see Table 4) is related only to Power Distance.

Low Context and assertive-self factor scores ($F3$, see Table 4) were negatively related to Hofstede's Individualism.

Self-construal variables deemed to be collectivist are (see Table 3):

a) *Egalitarian Interdependence*: this dimension takes into account the values of interdependence, egalitarianism and individualism. It results from factor scores for items such as: "It is important for me to maintain harmony within my group" (item 1); "I respect people who are modest about themselves" (item 3); "It is important for me to respect decisions made by the group" (item 6); "My personal identity is independent of others, it is very important for me" (item 12); or "I prefer to be direct and forthright when dealing with people I've just met" (item 13).

b) *Group Loyalty*, which refers to a person who defines the self by loyalty to and dependence upon groups. This construct ($F2$) comprises items such as: "I would stay in a group if they needed me, even if I were not happy with the group" (item 7); "I will sacrifice my self-interest for the benefit of the group" (item 4); "It is important for me to respect decisions made by the group" (item 6); or "I act the same way no matter who I am with" (item 10).

Egalitarian Interdependence self-construal ($F1$) was not associated with any of the cultural variables, nor with HDI. *Loyalty towards in-groups* ($F2$, Table 4) was negatively related to Hofstede's Individualism, to lower HDI and to materialist values. Multiple regression computed to control for the interrelations of HDI, Individualism and Power Distance suggest the specific influence of collectivism (beta weight was marginally significant, standardized β (28) = -.34, $p \leq .11$); *Multiple R*² was .27).

To sum up, only one of the two of collectivist self-construal measures shows convergence with cultural collectivist values. Group Loyalty shows a clear relationship with Collectivism and with poorer societies.

Among the self-construal measures, Success is related to Group Loyalty (r (29) = .53, $p \leq .01$) and Uniqueness (supposedly an attribute typical of individualist values) (r (29) = .41, $p \leq .02$), while Self-Reliance is associated negatively with Egalitarian Interdependence (r (29) = -.52, $p \leq .01$). It would appear that attitudes focused on success are compatible, on the one hand,

with a collectivist value, group loyalty, and on the other, with the attributes of uniqueness and independence, while the only clear relationship of Self-Reliance is its link with hierarchy. Finally, Uniqueness is only related to societies high in Power Distance.

Discussion and Conclusion

In complex societies, the more the development, the more the individualism. On the whole, a positive relationship has been found between indicators of wealth (*GNP*) and social development (*HDI*) and diverse indicators of cultural individualism. However, the existing evidence suggests that wealth reinforces Individualism. Moreover, economic development is associated with Post-materialism, that is, with a decline of the Protestant Work Ethic and utilitarian individualism and an increase in expressive individualism.

Urbanization is positively associated with the predominance of individualist values, but is related specifically to social development.

Multivariate analysis confirms the specific influence of family size, human rights, corruption and ethnic diversity on Hofstede's Individualism and Power Distance. Although the nuclear family pre-existed industrial development, in communitarian cultures, family size is greater in more collectivist countries.

Individualism is associated with lower levels of nepotism and greater respect for political freedom and civil rights – though level of social development is also an important factor. In contrast, in hierarchical societies, which emphasise social and power inequalities, there is more violation of human rights and higher incidence of political corruption.

Less developed societies, with less education, lower life expectancy and income, less urbanisation, and in which there are large income differences between rich and poor, are characterized by a more authoritarian or hierarchical culture, where differences of status and power are more accepted and legitimated. Cultures with larger populations and cultural or ethnic diversity are also characterized by a system with greater hierarchical distance.

Hierarchical values are less common in societies with a majority of Protestants, and are more often present in Islamic societies than in others. Likewise, Hofstede values showed no overall differences between Confucian societies and the rest of the countries. However there are differences for the hierarchy values of Schwartz – so that the difference between Confucian societies (supposedly more hierarchical) and the rest is not so clear. It should be borne in mind that the Hofstede indicator has more validity, in considering 60 countries, as opposed to Schwartz's 28. This result may be due to the fact that there are other societies, such as those of Islam, with strong traditional values of hierarchy, deference to authority and gerontocracy. In sum, as Inglehart has noted, religious traditions appear to have had an enduring impact on the contemporary value systems of societies (Inglehart & Baker, 2000).

The classical attributes of the Protestant Work Ethic, which in previous eras characterized capitalist and modern societies, are now more typical of collective societies with greater hierarchical distance. This is also congruent with the greater presence of competitive attitudes in developing, collectivist and hierarchical countries (Lynn & Martin, 1985). With regard to competition and personal achievement, Oyserman, Coon and Kimmelmeier (2002) remark that when competition was included in the studies, the difference between North Americans and Japanese disappeared, suggesting that competitiveness is unrelated to cultural individualism – as indeed Mead concluded in an ethnographic review (Fiske, 2002). One explanation of the prevalence of competitive attitudes in collectivist samples is the fact that our participants are students (as are those in most of the studies reviewed by Oyserman *et al.*). It would not be surprising if students in collectivist nations were more individualist than the general population.

Oyserman, Coon and Kimmelmeier (2002) conclude that core aspects of individualism are personal independence and uniqueness. US respondents scored higher in public self-consciousness than Japanese and Korean respondents, confirming a relationship between individualism and presenting oneself in public as an individual (Hofstede, 2001). Nevertheless, in our data, both Uniqueness and Independence and Self-Reliance were only

related only to hierarchical values, with no relation to the individualism/collectivism dimensions.

Our data suggest that competition and personal achievement are related to hierarchical and less developed societies. In our results, “individualist” attributes such as personal achievement, Success (as measured on Green’s items), and competitive attitudes were more highly valued in developing countries and collectivist and hierarchical cultures than in post-materialist, developed, more egalitarian and contractual societies. In a complementary way, the differentiation between Success-centered attitudes and Self-reliance shows that Success was clearly related to Collectivism, but Self-reliance was not, and was more common, in contrast to the individualist assumptions, in less developed countries. Congruent with the association between collectivism, power distance, success and competition, a competitiveness scale was related to collectivism and to power distance in a 42-nation study (Van de Vliert, 1998), and Triandis *et al.* posit that competition is related to vertical individualism and not to horizontal individualism (Oyserman, Coon & Kimmelmeier, 2002).

Group Loyalty shows a relation with collectivism and economic development, and presents the highest and most negative correlation with Hofstede’s individualist cultural values. Oyserman, Coon and Kimmelmeier’s (2002) meta-analysis confirms that individualist North Americans score lower than other samples on scales emphasizing a sense of duty towards the in-group. However, when the scale included items on relatedness, on sense of belonging and on seeking other people’s advice, North Americans reported higher scores. Waterman (1984) argues that interdependence and individualism are associated, because individualist values reinforce generalized trust and voluntary coordination towards compatible and coordinated goals, which facilitates pro-social and cooperative behavior. In our data, relational interdependence was unrelated to cultural indices.

The correlations between cultural variables and self-construals as well as Oyserman *et al.*’s conclusion confirm that a core aspect of collectivism is a sense of duty and obligation towards the group, that relational interdependence is unrelated to collectivism, and that success and competition are related to collectivist, hierarchical and less developed societies. In less developed, hierarchical

and collectivist societies, the relative scarcity of resources, a hard struggle for social survival, and acceptance of inequalities all impose strong in-group solidarity, generalized competitiveness and an emphasis on personal effort and reward. In developed, egalitarian, individualist and post-materialist societies, material stability, lack of ascribed group membership and expressive individualism de-emphasize competition and probably reinforce the importance of social relationships, as suggested by the association between interpersonal trust, individualism and egalitarian values.

In this line it would be necessary to consider the costs and effects of competitive attitudes, strongly centered on the quest for success and on the values of the Protestant Work Ethic, which appear to characterize societies that are currently in the process of development, and are collectivist, hierarchical and focused on material values, such as economic growth.

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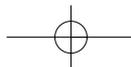
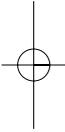
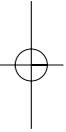


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Appendix 1: Index Scores for Countries from Hofstede, Schwartz, Trompenaars and Inglehart

Country	IDV	A. A.	A. I.	CON	PDI	HIE	EC(S)	EC (T)	UI (T)	Post Mat
Africa East (1)	38	-	-	-	64	-	-	-	-	-
Africa West (1)	20	-	-	-	77	-	-	-	-	-
Arab Countries (1)	38	-	-	-	80	-	-	-	-	-
Argentina	46	-	-	-	49	-	-	-38	4	19
Australia	90	3.50	4.12	4.06	36	2.36	4.98	182	4	-
Austria	55	-	-	-	11	-	-	79	-31	22
Bangladesh	20	-	-	-	80	-	-	-	-	-
Belgium	75	-	-	-	65	-	-	84	12	27
Bolivia	12	-	-	-	64	-	-	-	-	-
Brazil	38	3.30	4.13	3.97	69	2.64	4.92	66	-22	19
Bulgaria	30	3.13	3.78	4.43	70	3.07	4.83	-164	94	-
Canada	80	-	-	-	39	-	-	-	-	25
Chile	23	-	-	-	63	-	-	-	-	19
China	20	3.32	4.27	3.97	80	3.70	4.49	-220	99	07
Colombia	13	-	-	-	67	-	-	-	-	-
Costa Rica	15	-	-	-	35	-	-	-	-	-
Croatia	33	-	-	-	73	-	-	-	-	-
Czech Republic	58	-	-	-	57	-	-	-103	214	-
Denmark	74	4.01	4.58	3.64	18	1.86	5.52	217	109	23
Ecuador	8	-	-	-	78	-	-	-	-	-
Estonia	60	3.08	3.93	4.26	40	2.00	4.96	-	-	-
Finland	63	3.51	4.62	3.84	33	2.03	5.26	109	20	33
France	71	4.41	5.15	3.35	68	2.16	5.45	111	-9	27
Germany (2)	67	4.03	4.75	3.42	35	2.27	5.37	138	54	25
Great Britain	89	-	-	-	35	-	-	142	5	24
Greece	35	3.96	4.09	3.68	60	2.01	5.35	31	-86	-
Guatemala	6	-	-	-	95	-	-	-	-	-
Hong Kong	25	3.11	4.08	4.04	68	2.83	4.85	-73	-70	-
Hungary	80	3.34	4.44	3.97	46	2.42	4.87	-74	159	12
India	48	-	-	-	77	-	-	-31	-36	13
Indonesia	14	-	-	-	78	-	-	-241	-87	-
Iran	41	-	-	-	58	-	-	-	-	-
Ireland	70	-	-	-	28	-	-	104	6	22
Israel	54	3.62	4.31	4.51	13	2.83	4.88	-	-	-
Italy	76	2.95	4.60	3.82	50	1.69	5.57	39	-1	27
Jamaica	39	-	-	-	45	-	-	-	-	-
Japan	46	3.54	4.68	3.87	54	2.86	4.69	-64	-41	25
Korea (South)	18	-	-	-	60	-	-	-171	-109	18
Luxembourg	60	-	-	-	40	-	-	-	-	-
Malaysia	26	3.16	4.07	4.46	104	2.43	4.66	-	-	-
Malta	59	-	-	-	56	-	-	-	-	-
Mexico	30	3.23	4.20	4.03	81	2.35	4.99	68	-50	21
Morocco	46	-	-	-	70	-	-	-	-	-
Netherlands	80	3.51	4.44	3.68	38	2.26	5.39	123	51	32

Country	IDV	A. A.	A. I.	CON	PDI	HIE	EC(S)	EC (T)	UI (T)	Post Mat
New Zealand	79	3.98	4.36	3.73	22	2.38	5.15	-	-	-
Nigeria	20	-	-	-	77	-	-	-8	-40	13
Norway	69	-	-	-	31	-	-	160	96	20
Pakistan	14	-	-	-	55	-	-	56	-90	-
Panama	11	-	-	-	95	-	-	-	-	-
Peru	16	-	-	-	64	-	-	-	-	-
Philippines	32	-	-	-	94	-	-	33	-66	-
Poland	60	3.13	4.09	4.31	68	2.53	4.82	-14	127	13
Portugal	27	3.54	4.12	3.76	63	2.08	5.62	91	-18	17
Romania	30	-	-	-	90	-	-	-126	140	-
Russia	39	-	-	-	93	-	-	-232	131	11
El Salvador	19	-	-	-	66	-	-	-	-	-
Serbia	25	-	-	-	86	-	-	-	-	-
Singapore	20	3.04	3.68	4.38	74	2.75	4.79	-60	-193	-
Slovakia	52	2.76	4.03	4.28	104	2.11	4.98	-	-	-
Slovenia	27	3.76	5.03	4.27	71	1.76	4.36	-	-	-
South Africa	65	-	-	-	49	-	-	-	-	18
Spain	51	3.97	4.90	3.42	57	2.03	5.55	3	-53	25
Surinam	47	-	-	-	85	-	-	-	-	-
Sweden	71	-	-	-	31	-	-	129	94	25
Switzerland	68	4.24	5.33	3.25	34	2.20	5.19	-	-	30
Taiwan	17	3.21	3.93	4.31	58	2.85	4.68	-	-	-
Thailand	20	3.62	4.08	4.22	64	3.32	4.34	29	-92	-
Trinidad	16	-	-	-	47	-	-	-	-	-
Tunisia	38	-	-	-	80	-	-	-	-	-
Turkey	37	3.25	4.12	4.27	66	3.30	5.12	-	-	-
USA	91	3.65	4.20	3.90	40	2.39	5.03	196	15	22
Venezuela	12	-	-	-	81	-	-	-	-	-
Vietnam	20	-	-	-	70	-	-	-	-	-
Yugoslavia	27	-	-	-	76	-	-	-300	44	-
Zimbabwe(3)	65	3.85	3.82	4.21	49	3.14	4.48	-	-	-

Mean scores by country. Hofstede's Data n = 74; Schwartz's Data n = 31; Trompenaars' Data n = 38; Inglehart's Data n = 30

(1) Hofstede's scores from East Africa = Ethiopia, Kenya, Tanzania, Zambia; and from West Africa = Ghana, Nigeria, Sierra Leone; Arab Countries = Egypt, Iraq, Kuwait, Lebanon, Libya, Saudi Arabia

(2) Schwartz' scores from West Germany; (3) Hofstede's score from Zimbabwe = South Africa.

Data = Hofstede (2001, pp.500-02); Schwartz (1994, in Kim, Triandis *et al.*, pp: 112-115); Trompenaars in Smith, Dugan & Trompenaars, 1996)

Hofstede's Data: IDV = Individualism and PDI = Power Distance, Schwartz' Data: AA = Affective Autonomy, IA = Intellectual Autonomy, CON (S) = Conservatism, EC (S) = Egalitarian Commitment; Trompenaars' Data: EC (T) = Egalitarian Commitment and UI = Utilitarian Commitment; Inglehart's Data: PostMat = Post-Materialist values. A high number in each variable denotes a high level in the variable in question.

Appendix 2: Means by country for nation-level factor analysis of Self-construals

Country	Egalitarian Interdependence F1	Group Loyalty F2	Low Context Assertive F3	Uniqueness Independence F4
Argentina	0.4216	0.4887	-1.0088	-0.2868
Belgium	-0.4106	-1.1676	-1.4869	-0.2911
Bolivia	0.7373	1.0358	0.0159	0.5512
Brazil	0.8306	1.5950	-0.2596	-0.6419
Chile	-0.3183	0.1691	0.4551	0.2568
China	-0.7630	0.0906	1.1800	-1.1338
Colombia	-0.1771	-0.0728	0.4101	1.0311
France	0.5170	-1.7545	-1.2824	-0.3643
Germany	0.8750	-0.0062	2.12935	-1.5793
Ghana	-2.9886	0.3110	0.3285	-0.7291
Greece	0.5090	-0.5914	-0.2524	-0.5253
Guatemala	-0.0929	1.1218	0.6589	0.8111
Iran	0.2056	-0.8501	0.2696	-0.7711
Italy	0.1834	-0.8465	-0.2715	0.3539
The Lebanon	1.4885	-0.4589	0.5103	-0.2331
Mexico	-0.4278	-0.9332	1.8149	2.0973
Nigeria	0.0323	1.1158	0.1343	1.1420
Panama	1.4274	-0.0798	0.6499	1.7983
Peru	0.9945	0.2376	0.3203	0.1181
Russia	-2.3069	0.0555	-0.3149	0.2653
El Salvador	0.8736	2.2952	-0.7633	0.1500
Singapore	-0.7830	0.6220	-1.3637	-0.5419
Spain	-0.3125	0.7479	-0.7853	-0.9454
Switzerland	0.7334	-1.8070	-1.6648	-0.4186
Taiwan	0.3387	-1.2510	2.2297	-1.6810
Turkey	-0.3646	-1.5177	-0.6922	1.6609
USA	-1.5671	0.3746	-0.4800	0.7957
Venezuela	0.4089	0.3721	0.0586	0.7420

Note. Factor analysis of mean scores by country with Singelis Items: Principal components, Rotation varimax, imposed 4 factors, saved factorial scores $> .30$. Method (ML). $n = 29$ countries. Data: Fernández, 2001.

