

An Analysis of the Effects of Religiosity on Work Values

Abstract

This study uses international survey data to investigate the effects of religiosity, religious denomination, communist heritage, and socio-economic development on work values. It is found that socio-economic development negatively, whereas religiosity and communist heritage positively, influence extrinsic work values. Further analysis reveals that religiosity has a quadratic relationship with intrinsic work values. Conspicuously, after controlling for the effects of religiosity, no significant association is found between religious denominations and work values. By referring to the theory of basic values, the managerial and theoretical implications are discussed, and some avenues for future research are pointed out.

Keywords: Religiosity, Religion, Work Values, Communist Heritage, Cross-Cultural Management, Comparative Management, International Human Resource Management

1. Introduction

Religion is central to human society, as it deals with the transcendent, defines how humans relate to each other, and ultimately delineates life, morality, and ethics (Rest et al., 1999). Religion promotes social solidarity by providing norms that reduce conflict, by imposing sanctions against antisocial conduct, and more importantly, by legitimizing the established social order (Light, Keller, and Calhoun, 1989). Based on the functionalist theory, religion shapes human values, attitudes, and behaviors (Emmons and Paloutzian, 2003; Pargament et al., 2005; Regnerus and Smith, 2005; Lynn, Naughton, and VanderVeen, 2011). What is more, all major religions, specifically Christianity, Judaism, Islam, Buddhism, and Hinduism, include teachings and rituals which that emphasize certain work values and attitudes (Ali et al. 2000; Friedman, 2000; Lambsdorff, 2002; Paldam, 2001). Thus, it is plausible to consider a close relationship between religion and work values. Even so, among the various determinants of work values, religion remains fairly under-researched (Parboteeah et al. 2009). One explanation might be the popularity of cultural dimensions, and particularly the attractiveness of Hofstede's (1980) dimensions, among organizational researchers. Review of this literature reveals that cultural dimensions represent the most common explanation for cross-national variations in work-related values (Parboteeah and Cullen, 2003; Bond and Smith 1996; Ayman

2000; Kirkman et al. 2006). We argue that, while cultural dimensions are important and useful measures to explain the cross-national differences, other societal factors such as religion should be taken into consideration. Some empirical studies have confirmed the effects of religion on work-related issues such as motivation, job satisfaction, work preferences/goals, job involvement, organizational commitment, life satisfaction, and work centrality (e.g. Harpaz, 1998; Niles, 1999; McClelland, 1961; Vecchio, 1980; Iannaccone, 1998; Parboteeah et al. 2004; Parboteeah et al. 2009; Ros et al. 1999; Chusmir and Koberg, 1988; Bozeman and Murdock, 2007; Dormann and Zapf 2001; Weber, 1958). Nonetheless, a major shortcoming of the previous studies dealing with religion is that they generally investigate the impact of religious denominations in the absence of religiosity and socioeconomic variables (e.g. Parboteeah et al. 2009; Harpaz, 1998; Niles, 1999). Obviously, these studies may involve inaccuracies because the effects of religious denominations could also be influenced by differences in religiosity and economic development (Harpaz, 1998). Building on this ground, the current study aims at investigating the effects that religiosity, religious denominations, communist heritage, and socio-economic development have on work values. We believe that, by including these variables and by bringing insights into the effects of both religiosity and religious denominations, this study could lead to some significant theoretical and managerial implications.

The remainder of this manuscript is organized as follows. First, religiosity and work values are conceptualized. Next, the relationships among these concepts are discussed and the hypotheses, variables, and data are presented. Finally, the results of the empirical

tests are presented and the theoretical and managerial implications, as well as avenues for future research, are discussed.

2. Religiosity Conceptualized

According to Koenig et al. (2000, p. 18), “religion is an organized system of beliefs, practices, rituals, and symbols designed to facilitate closeness to the sacred or transcendent and to foster an understanding of one’s relation and responsibility to others in living together in a community”. Religiosity is the strength of one’s religious conviction (King and Williamson, 2005). In other words, religiosity is defined as the degree to which an individual is a religious person apart from his/her particular religious beliefs, and the way that those beliefs are manifested (Vitell et al., 2009). The concept of religiosity is described as complex and multidimensional (Lenski, 1961; Glock and Stark, 1965; King and Hunt, 1972). For example, Glock and Stark (1965) proposed that within all the world religions there are five universal dimensions: ideological (belief), intellectual (knowledge or cognitive), ritualistic (overt behavior traditionally defined as religious), experiential (experiences defined as religious in the sense of arousing feelings or emotions), and consequential (the effects of the other four dimensions applied in the secular world). In the same vein, Cornwall and Albrecht (1986) identified three principal components to religious behavior: knowing (cognition in the mind), feeling (affect to the spirit), and doing (behavior of the body). The cognitive component is the religious belief. The affective component encompasses feelings toward religious beings, objects, or institutions. The behavioral component is about actions, such as

church/mosque/synagogue attendance, financial contributions, frequency of personal prayer, and study of scripture. Consistent with the previous research (e.g. Cornwall and Albrecht, 1986; Glock and Stark, 1965), and for the purpose of this study, we frame religiosity as a multidimensional concept consisting of the cognitive, behavioral, and affective aspects.

3. Work Values Conceptualized

Schwartz (1992) defined values as “desirable states, objects, goals, or behaviors, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behavior” (Schwartz, 1992, p.2). By the same logic, work values can be defined as the desirable states and goals that individuals seek through working (Bu and McKeen, 2001). In other words, work values reflect a wide range of preferences, priorities, choices, attitudes, and decisions with regard to work. Despite the breadth of work values, empirical and conceptual studies have identified a few common categories, like intrinsic or self-actualization values, extrinsic or material values, and social or relational values (e.g. Borg, 1990; Mottaz, 1985; Pryor, 1987). Elizur (1984) identified three types of work values as instrumental, cognitive, and affective. The instrumental values consist of work conditions and benefits, the cognitive values touch on issues such as interest and achievement, and the affective values concern human relations at workplace. According to Ros et al. (1999), these three types of work values respectively correspond to extrinsic, intrinsic, and social values. Intrinsic work values are associated with the pursuit of autonomy, interest, growth, and creativity in work. By contrast, extrinsic work values are related to conservation values like job security and

income. Finally, social work values concern communal relations and contribution to society (Ros et al. 1999).

Consistent with the previous research (e.g. Gahan and Abeysekera, 2009; Parboteeah et al. 2009), and for the purpose of this study, we focus solely on extrinsic and intrinsic work values, which are commonly employed in the empirical studies. According to this classification, extrinsic work values include external and material rewards such as pay, holiday, promotion, and working conditions (Gahan and Abeysekera, 2009). In contrast, intrinsic work values include all those internal benefits like self-actualization, achievement, social responsibility and competence (Ros et al. 1999; Thierry 1990; Gahan and Abeysekera, 2009; Parboteeah et al. 2009).

4. Hypotheses

4.1. Religiosity

Religiosity and secularity are respectively associated with traditional and modern societies (Inglehart, 1997; Inglehart and Baker, 2000). According to Inglehart and Welzel (2005), traditional and religious societies emphasize the importance of conservative values, such as deference to authority, collectivism, respect for tradition, and family security. Generally, traditional or religious societies restrict individual desires, pursue absolute moral standards, and reject divorce, abortion, and euthanasia. In contrast, secular societies are typically modernized and portray values such as individualism, autonomy, curiosity, broadmindedness, and creativity (Inglehart, 1997; Schwartz, 1992; Inglehart and Baker 2000; Inglehart and Welzel 2005). Since work values are expressions of basic

human values in a work setting (Ros et al., 1999), we may assume that, by restricting autonomy, desirability, and individualism, religiosity tends to discourage self-actualization or intrinsic aspects of work. By the same logic, we may suppose that religiosity is likely to encourage extrinsic aspects of a job. Consequently, we may put forward the following hypotheses:

H.1.a: Religiosity is positively associated with extrinsic work values.

H.1.b: Religiosity is negatively associated with intrinsic work values.

4.2. Religious Denominations

It is generally suggested that world religions have important and possibly dissimilar impacts on work-related values (Voert, 1993; Blackwood, 1979; Bouma and Dixon, 1987). For instance, Max Weber (1958) suggested that Protestantism encourages values such as performance. Similarly, Judaism has been connected to hard work and financial success (Harpaz, 1998). Some scholars have proposed that Catholicism might be associated with lower levels of need for achievement and hard work (McClelland, 1961; Harpaz, 1998). In the same vein, it has been mentioned that Islamic teachings promote business and hard work (Parboteeah et al. 2009; Ali et al. 2000). Additionally, religious groups such as Christianity, Judaism, Islam, Buddhism and Hinduism have various teachings about work values and attitudes (Voert, 1993; McClelland, 1961; Harpaz, 1998; Parboteeah et al. 2009; Ali et al. 2000). Therefore, we may hypothesize as following:

H.2: Protestantism, Catholicism, Islam, Orthodox Christianity, Hinduism, and Buddhism influence extrinsic/intrinsic work values.

4.3. Socio-economic Development

Many empirical studies support a negative relationship between religiosity and socio-economic development (e.g. Noland, 2005; Tessler, 2002; Barro and McCleary, 2003; Inglehart et al., 2000, 2005). Furthermore, as societies undergo socio-economic development, people benefit from higher levels of well-being, education, urbanization, advances in transportation, and occupational specialization. According to Inglehart et al. (2000, 2005), people in developed economies take survival for granted and increasingly emphasize values like individual autonomy, subjective well-being, self-expression, quality of life, and intellectual or emotional desirability. In contrast, people in less developed societies are more concerned with their daily survival, and accordingly emphasize hard work rather than imagination and desirability. It is plausible to suggest that people in developed societies are more likely to emphasize outcomes of self-actualization gained from working, whereas people in the undeveloped societies tend to emphasize external and instrumental work values. To control for the effects of socio-economic development, we suggest the following hypotheses:

H.3.a: The socio-economic development is negatively associated with extrinsic work values.

H.3.b: The socio-economic development is positively associated with intrinsic work values.

4.4. Communist Heritage

A heritage of communism may have major impacts on religiosity because communist regimes made major efforts to eradicate traditional and religious values to make way for new social structures (Inglehart and Baker, 2000). Moreover, communist regimes restricted or abolished private ownership, establishing centrally-planned systems instead. Under communist rule, all workers joined official unions and the state set wages, prices, and enterprise operations (Blanchflower and Freeman, 1997). These policies have left a legacy, making work-related values and attitudes in ex-communist countries quite different from those in capitalist societies. For instance, Blanchflower and Freeman (1997) found that the workers of former communist countries showed a great desire for job security, expressed dissatisfaction with their jobs, and supported strong trade unions and state intervention in the job market (Blanchflower and Freeman, 1997). Indeed, due to rigid socio-economic systems, workers in communist regimes used to see their jobs as instruments for obtaining external benefits, such as equitable wages, employment security, paid vacation, healthcare, and housing benefits. Thus, we suggest the following hypotheses:

H.4.a: The communist heritage is positively associated with extrinsic work values.

H.4.b: The communist heritage is negatively associated with intrinsic work values.

5. Measures, Variables, and Data

5.1. Work Values

The data for work values come from the pooled World Values Survey (WVS), which is one of the most reliable sources in the social sciences. The WVS includes representative surveys of 97 nations and territories, covering 88 percent of the world's population (see Inglehart, Basañez, Diez-Medrano, Halman, and Luijckx, 2004). From the WVS, we selected 78 countries for which eleven work-related questions were available. More precisely, the eleven questions asked whether the following issues were important to the respondents: 1) good pay, 2) not too much pressure, 3) good job security, 4) a respected job, 5) good hours, 6) an opportunity to use initiative, 7) generous holidays, 8) achieving something, 9) a responsible job, 10) interesting job, and 11) job that meets one's abilities. The respondents' preferences for work outcomes can be interpreted as their work values (Ros et al., 1999; Van Vianen et al., 2007). Thus, the responses to these questions were aggregated at the national level, and the scores were calculated as the percentage of respondents who identified each of the eleven items as important. The correlations among the 11 items justified the use of a data reduction technique, and a high Kaiser-Meyer-Olkin score (0.893) and a significant Bartlett's Test of Sphericity ($\chi^2 = 743.743$, $p < 0.000$) confirmed the adequacy of a factor analysis (Meyers, Gamst, and Guarino, 2006). A principal component factor analysis with Varimax rotation of the aggregate item scores was conducted and two main factors (components) were identified accounting for 74% of the variance in matrix. As shown in Table 1, Factor 1 includes five items that reflect the

inherent aspects of a job that are associated with the use of initiatives, possibility of achievements, sense of responsibility, meeting worker's abilities, and job attractiveness. By contrast, Factor 2 includes six preferences that are associated with extrinsic aspects of a job such as pay, not too much pressure, job security, holidays, good work hours, and a well respected job. Considering the connotations of these two factors, and consistent with the previous research (e.g. Parboteeah et al. 2009; Ros et al., 1999; Van Vianen et al., 2007; Parboteeah and Cullen, 2003), we labeled the two factors as intrinsic and extrinsic orientations, respectively.

Insert Table 1 Here!

5.2. Religiosity

In agreement with the previous studies (Cornwall and Albrecht, 1986; Glock and Stark, 1965), we relied on a multidimensional measurement of religiosity as conducted by the World Value Survey (Inglehart et al., 2004). This measurement includes the cognitive, affective, and behavioral aspects of religiosity, namely: 1) participation in religious services, 2) self-identification as a religious person, 3) belief in God, 4) importance of God in life, and 5) feeling comfort and strength from religion. The Cronbach's Alpha for the five items ($\alpha = .940$) confirmed the high internal reliability of the measure.

5.3. Religious Denominations

The data for religious denominations were obtained from the World Value Survey and were coded as six pairs of dummy variables. In line with the World Value Survey, and

consistent with the previous research (Parboteeah et al. 2009), we focused on the six main world religions, namely Protestantism, Catholicism, Orthodox Christianity, Islam, Buddhism, and Hinduism.

5.4.Socio–Economic Development (HDI)

The Human Development Index (HDI) data were obtained from the United Nations Development Program (UNDP, 2001–2010). We utilized the average of the HDI for ten consecutive years, between 2001 and 2010, to avoid any irregularity that might result from using single-year data.

5.5.Communist Heritage

Communist heritage was defined as current or past communist rule and was introduced as a dummy variable that takes the value of ‘1’ when a country has communist heritage and ‘0’ for otherwise. The communist heritage data were obtained from the WVS (Inglehart et al., 2004).

6. Analysis and Results

First, the Pearson correlation coefficients among all variables i.e. religiosity, religious denominations, communist heritage, HDI, and intrinsic and extrinsic orientations were computed. As shown in Table 2, religiosity has a positive correlation with extrinsic orientation ($r = 0.418, p < .001$), but shows negative correlations with HDI ($r = -0.565, p < .001$), and communist heritage ($r = -.280, p < .001$). Table 2 does not show any

significant associations between religiosity and intrinsic orientation. In the next stage, we employed the Ordinary Least Squares (OLS) to estimate the marginal impacts of all independent variables on intrinsic and extrinsic orientations. Since the work values were continuous variables and the collected data were cross-sectional, this method seemed appropriate. At the outset, we utilized histograms for the residuals, normal probability plots, and Skewness and Kurtosis scores to inspect the requisite OLS assumptions (Meyers, Gamst, and Guarino, 2006). While the extrinsic orientation satisfied the requisite OLS assumptions, the data for intrinsic orientation did not show the essential properties, such as linearity and normality, to justify the use of OLS analysis. As a result, we conducted the OLS analysis solely for the extrinsic orientation.

Table 3 presents the results of OLS analyses for the extrinsic orientation. The Mahalanobis distance and Casewise diagnostic techniques identified China as an outlier (Meyers, Gamst, and Guarino, 2006). This finding is not surprising because China is an emerging country that has been undergoing very rapid socio-cultural transformations in the past two decades. As shown in Table 3, there is a significantly positive association between religiosity and extrinsic orientation in all four models. As expected, communist heritage shows a significantly positive association with extrinsic orientation. Furthermore, models 3 and 4 reveal a significantly negative association between HDI and the extrinsic orientation. Surprisingly, as shown in Table 3, we do not observe any significant associations between religious denomination and extrinsic orientation.

A glance at Table 3 shows that the values of Adjusted R Square for models 3 and 4 hang around 50%. Furthermore, according to Table 3, the VIF values for all models are largely

smaller than 10 suggesting that multicollinearity is not present among the independent variables (Allison, 1999). Considering the fuzziness of dependent variables, these scores suggest that the adopted theoretical models can appropriately explain the variation in the extrinsic orientation.

In the next stage, the linear and nonlinear associations between intrinsic orientation and religiosity scores were estimated using a curve estimation approach (Pedhazur, 1997). As depicted in Table 4 and Figure 1, there is a significant quadratic relationship between intrinsic orientation and religiosity variables, suggesting that both higher and lower levels of religiosity are positively associated with intrinsic work values.

Insert Table 2 Here!

Insert Table 3 Here!

Insert Table 4 Here!

Insert Figure 1 Here!

7. Discussion

Based on the empirical analysis, three hypotheses, specifically (H.1.a), (H.3.a), and (H.4.a), are supported. In other words, the empirical analyses confirm that, among all the independent variables, socio-economic development negatively influences, whereas religiosity and communist heritage positively influences the extrinsic work orientation.

The findings concerning the negative association between socio-economic development and extrinsic work values were quite unsurprising. Indeed, extrinsic work values

correspond to basic human needs such as pay, job security, benefits, and working conditions (Ros et al., 1999; Parboteeah et al. 2009). As such, it is argued that people in the developed societies enjoy economic prosperity and are thus less likely to focus primarily on the extrinsic work values that correspond to maintaining their material existence. A higher level of HDI emancipates people from their basic needs and gives them the opportunity to pay attention to their higher needs, which are related to self-actualization (Inglehart and Baker, 2000; Inglehart and Welzel, 2005). People in economically underdeveloped societies emphasize their basic needs like food, shelter, survival, and as a result, emphasize those extrinsic values such as pay and job security. If we assume that extrinsic and intrinsic work values are mutually exclusive, then by the same logic, we should find a positive relationship between the intrinsic orientation and higher levels of HDI. However, our empirical analyses do not confirm such a relationship because the distribution of intrinsic orientation does not follow a linear pattern (see Table 2). In other words, it seems that both developed and undeveloped societies, at least to some extent, prefer the intrinsic work orientation.

The empirical analysis strongly supports hypothesis (H.1.a) and confirms that religiosity has a significantly positive association with the extrinsic orientation. We have found, however, that the religious denomination (religious group) of a country does not have any significant effect on its work values. Therefore, it is suggested that while religiosity tends to encourage the extrinsic work values, religious denomination does not seem to be of importance. The effects of religiosity on the extrinsic work orientation may be explained by referring to the ‘theory of basic values,’ according to which work values are specific

expressions of general human values in the work environment (Schwartz, 1992, 1994; Ros et al. 1999). Apart from its forms and origins, religion has the primary function to subjugate humans to the sacred or transcendent through an organized system of beliefs, convictions, practices, rituals, and symbols (Koenig et al. 2000; Glock and Stark, 1965). Religion regulates and restricts the human psyche and behavior by providing norms, codes, and commandments, and especially by imposing sanctions against sinful conduct (Light, Keller, and Calhoun, 1989). Furthermore, since religion has developed its system throughout history, it acts essentially as an agent of traditional conservation, and by promoting the status quo, ultimately hinders those actions or beliefs that might disturb the existing social order. Indeed, the concept of religiosity shares many characteristics with ‘Conservatism’ and ‘Traditional/Religious’ dimensions as described respectively by Schwartz (1992, 1994) and Inglehart (1997). For instance, according to Inglehart et al. (2000, 2005), religiosity is associated with traditional or conservative cultural values such as collectivism, appreciation of authority, respect for tradition, and family security. In view of all these attributes, it is understandable that religiosity encourages the extrinsic work values which express ‘conservation values’ rather than curiosity, autonomy, and progressiveness (Ros et al., 1999).

The empirical analysis supports hypothesis (H.4.a) and confirms that communist heritage has a significantly positive association with the extrinsic orientation. The communist heritage is marked by the enduring effects of a command economy in which the coordination of economic activity is undertaken through administrative means, directives, and regulations (Aslund, 1995). Thus, the implementation of a command economy

requires a centralized administrative hierarchy, supported by an authoritarian ideology that restricts human free choice (Grossman, 1977; Ericson, 2005). In a command economic system, the enterprises are not allowed to autonomously acquire and apply resources for any purpose outside the ‘approved plan’ (Gaidar, 2007; Grossman, 1977; Aslund, 1995). As a consequence, severe restrictions are imposed on all resources, particularly on human resources, and the employees are reduced to simple cogwheels. Ideologically, the communist goal is providing the employees with resources to meet their basic needs (Gaidar, 2007). Accordingly, the cogwheels are employed, nourished, and their basic needs are satisfied, but they are not encouraged to pursue their own intellectual or emotional desires. That is why, in the command economies, qualities such as individual motivation, achievement, personal responsibility, ambition, and initiative are stifled, while promotions are awarded for political considerations rather than workers’ abilities in the job (Longenecker and Popovski, 1994; Lange, 2008; Dijkstra, 1997). As a result of these enduring effects, people in the ex-communist societies prefer the extrinsic work values that correspond to their basic needs. Our empirical analyses not only supported this assertion, but also showed that despite the nonlinear distribution of data, the ex-communist countries are ranked very low in the intrinsic work orientation (see Figure 1).

The empirical analyses do not support a linear association between the independent variables and the intrinsic orientation; thus, hypotheses (H.1.b), (H.3.b), and (H.4.b) are rejected. Nevertheless, the curve estimation analysis shows a significant quadratic relationship between the intrinsic orientation and religiosity. As depicted in Figure 1 and

Table 4, both higher and lower levels of religiosity are associated with the intrinsic orientation. A closer look at Figure 1 exposes three groups: the first group consists of chiefly secular and modern countries of the Western/Northern Europe that are ranked high in the intrinsic orientation. The second group includes mainly ex-communist countries that are very low in both religiosity and intrinsic values. Finally, the third group includes a wide range of predominantly religious and traditional countries ranked from moderate to high in the intrinsic orientation. This curve shows that intrinsic values are shared by both secular and religious societies.

8. Conclusion

This study was aimed at investigating the effects of religiosity, religious denomination, communist heritage, and socio-economic development on work values. To this end, we conceptualized work values as the extrinsic and intrinsic orientations, and we relied on the World Value survey to obtain data for 78 countries. Our empirical analyses revealed that socio-economic development negatively influences, but religiosity and communist heritage positively influences the preference for extrinsic orientation. Furthermore, we found that religiosity has a quadratic association with the intrinsic orientation. Conspicuously, the empirical analyses confirmed that, after controlling for the effects of religiosity and socio-economic development, religious denominations do not seem to have any significant impacts on work values. We referred to the ‘theory of basic values’ (Schwartz, 1992, 1994; Ros et al. 1999), to explain the positive influence of religiosity and communist heritage on the extrinsic orientation. Indeed, both religiosity and

communism regulate the human mind and behavior, and restrict autonomy by imposing commandments and sanctions. As we mentioned, religiosity is associated with traditional or conservative cultural values such as deference to authority, collectivism, and family security. As such, it tends to encourage the extrinsic work values, which express ‘conservation values’ rather than inquisitiveness and autonomy (Ros et al., 1999). Similarly, communist rule restricts human autonomy and diminishes the workers to passive cogwheels deprived of individual motivation, sense of achievement, personal responsibility, and ambition. Under these circumstances, the self-actualization aspects of the job are neglected or repressed, and the extrinsic work values, such as pay, holiday, and working conditions, receive more attention.

The findings of this study draw attention to a few key theoretical and managerial implications. First of all, this study exemplifies the applicability and utility of religiosity as an important explanatory variable in cross-cultural research. Furthermore, while many researchers (e.g. Parboteeah et al. 2009; Harpaz, 1998) have studied the effects of ‘religious affiliations’ in the absence of ‘religiosity’ and ‘socio-economic development,’ this study emphasizes the concurrent inclusion of these variables into the research design. For instance, without taking into consideration the effects of religiosity, Parboteeah et al. (2009) studied the effects of religious groups and reported that the main world religions, with the exception of Christianity, are correlated with extrinsic work values. While this finding is quite useful, we argue that the lack of correlation between Christianity and extrinsic work values might be attributed to the relatively lower levels of religiosity among Christians. Indeed, this study suggests that, at least with regard to work values,

religiosity (the strength of one's conviction for their religion) is more important than religious denomination (Protestantism, Catholicism, Islam, Orthodox Christianity, Hinduism, and Buddhism). As we explained, all religions are comparable as, despite their apparent multiplicity, they consist of beliefs, practices, rituals, and symbols to relate humans to a sacred or transcendent entity (Koenig et al. 2000; Glock and Stark, 1965).

This study contributes to the literature by conceptualizing, measuring, and incorporating various variables into the research design and by providing insights into the influence of religion on work values. Since work values are associated with work goals and expectations, they are important in determining issues like job satisfaction and organizational performance (Gahan and Abeysekera, 2009; Ros et al. 1999; Black 1994; Huff and Kelley 2004). Thus, at the practical level, by understanding the determinants of work-related values, managers can more appropriately design their staffing, compensation, appraisal, training, and development policies. For instance, based on the findings of this study, it can be suggested that the use of intrinsic rewards might be less appropriate in the societies marked by communist heritage or high religiosity. On the contrary, these societies may embrace more extrinsic work values associated with direct, restrictive, and tangible aspects of work.

It is important to mention that the current analysis relies only on national/societal level data and overlooks the effects of independent variables (religiosity and communist heritage) at the individual level. Furthermore, the methodologies and measurements of religiosity and work values are of a limited scope, and may involve inaccuracies. Thus, future studies may look into the effects of religiosity on work values at the individual

level and apply other conceptualizations and measures to test the validity of our results. Lastly, considering that this study focuses only on two categories of work values, future studies may incorporate other categories such as relational, prestige, or power work values.

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Appendix-1: The seventy eight countries included in the study

Albania (ALB), Algeria (ALG), Argentina (ARG), Armenia (ARM), Australia (AUS), Austria (AUT), Azerbaijan (AZR), Bangladesh (BNG), Belarus (BRU), Belgium (BEL), Bosnia and Herzegovina (BOS), Brazil (BRZ), Bulgaria (BUL), Canada (CAN), Chile (CHL), China (CHN), Colombia (CMB), Croatia (CRT), Czech Republic (CZE), Denmark (DEN), Dominican Republic (DOM), Egypt (EGY), El Salvador (SAL), Estonia (EST), Finland (FIN), France(FRA), Georgia (GRG), Germany (GER), Great Britain (UKK), Greece (GRC), Hungary (HNG), Iceland (ICE), India (IND), Indonesia (INO), Iran (IRN), Ireland (IRE), Italy (ITL), Japan (JAP), Jordan (JOR), Latvia (LAT), Lithuania (LIT), Luxembourg (LUX), Macedonia (MAC), Malta (MAL), Mexico (MEX), Moldova (MOL), Morocco (MOR), Netherlands (NLD), New Zealand (NZN), Nigeria (NGR), Norway (NOR), Pakistan (PAK), Peru (PER), Philippines (PHI), Poland (POL), Portugal (POR), Puerto Rico (RIC), Romania (ROM), Russian Federation (RUS), Serbia (SER), Singapore (SING), Slovak Republic (SLK), Slovenia (SLV), South Africa (SAF), South Korea (SKO), Spain (SPN), Sweden (SWD), Switzerland (SWZ), Taiwan China (TAI), Tanzania (TAN), Turkey (TUR), Uganda (UGA), Ukraine (UKR), United States (USA), Uruguay (URU), Venezuela (VEN), Vietnam (VTN), Zimbabwe (ZIM).

Table 1: The Rotated Component Matrix

| | | Components | |
|--------------------|---|------------|------|
| | | 1 | 2 |
| <i>Work Values</i> | | | |
| INTRINSIC | Important in a job: An opportunity to use initiative | .914 | .247 |
| | Important in a job: A job in which you feel you can achieve something | .868 | .296 |
| | Important in a job: A responsible job | .855 | .337 |
| | Important in a job: A job that meets one's abilities | .710 | .528 |
| | Important in a job: A job that is interesting | .670 | .188 |
| EXTRINSIC | Important in a job: Good pay | .000 | .902 |
| | Important in a job: Not too much pressure | .567 | .694 |
| | Important in a job: Good job security | .480 | .686 |
| | Important in a job: Generous holidays | .388 | .683 |
| | Important in a job: A job respected by people in general | .474 | .667 |
| | Important in a job: Good hours | .569 | .663 |

Notes:

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 3 iterations.

Table 2: The Correlation Coefficients among Independent and Dependent Variables

| Variables | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|-------------------------|---------------|----|------|--------|---------|---------|---------|---------|---------|---------|--------|-------|
| 1) Religiosity | Pearson | 1 | .100 | .418** | -.565** | -.280* | .093 | .422** | -.024 | -.169 | -.238* | .033 |
| | Sig. 2-tailed | . | .388 | .001 | .000 | .014 | .426 | .000 | .834 | .144 | .038 | .781 |
| | N | 76 | 76 | 76 | 74 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 2 Intrinsic Work Values | Pearson | | 1 | .000 | .055 | -.467** | -.306** | .299** | -.307** | .264* | .137 | .192 |
| | Sig. 2-tailed | | . | 1.000 | .644 | .000 | .007 | .009 | .007 | .021 | .237 | .101 |
| | N | | 76 | 76 | 74 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 3 Extrinsic Work Values | Pearson | | | 1 | -.493** | .262* | -.144 | .406** | .159 | -.417** | .103 | .017 |
| | Sig. 2-tailed | | | . | .000 | .022 | .214 | .000 | .170 | .000 | .375 | .888 |
| | N | | | 76 | 74 | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 4 HDI | Pearson | | | | 1 | -.036 | .257* | -.393** | -.183 | .214 | .006 | -.203 |
| | Sig. 2-tailed | | | | . | .761 | .027 | .001 | .118 | .066 | .962 | .087 |
| | N | | | | 74 | 74 | 74 | 74 | 74 | 74 | 74 | 74 |
| 5 Communist Heritage | Pearson | | | | | 1 | -.050 | -.129 | .465** | -.333** | -.101 | -.112 |
| | Sig. 2-tailed | | | | | . | .669 | .267 | .000 | .003 | .385 | .342 |
| | N | | | | | 76 | 76 | 76 | 76 | 76 | 76 | 76 |
| 6 Catholic | Pearson | | | | | | 1 | -.332** | -.350** | -.384** | -.236* | -.138 |
| | Sig. 2-tailed | | | | | | . | .003 | .002 | .001 | .040 | .242 |
| | N | | | | | | 76 | 76 | 76 | 76 | 76 | 76 |
| 7 Islam | Pearson | | | | | | | 1 | -.178 | -.195 | -.120 | -.066 |
| | Sig. 2-tailed | | | | | | | . | .124 | .091 | .300 | .577 |
| | N | | | | | | | 76 | 76 | 76 | 76 | 76 |
| 8 Christian Orthodox | Pearson | | | | | | | | 1 | -.206 | -.127 | -.073 |
| | Sig. 2-tailed | | | | | | | | . | .075 | .275 | .535 |
| | N | | | | | | | | 76 | 76 | 76 | 76 |
| 9 Protestant | Pearson | | | | | | | | | 1 | -.139 | -.081 |
| | Sig. 2-tailed | | | | | | | | | . | .231 | .495 |
| | N | | | | | | | | | 76 | 76 | 76 |
| 10 Buddhist | Pearson | | | | | | | | | | 1 | -.034 |
| | Sig. 2-tailed | | | | | | | | | | . | .772 |
| | N | | | | | | | | | | 76 | 76 |
| 11 Hindu | Pearson | | | | | | | | | | | 1 |
| | Sig. 2-tailed | | | | | | | | | | | . |
| | N | | | | | | | | | | | 76 |

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

Table 3: The OLS Results for Extrinsic Work Value Orientation

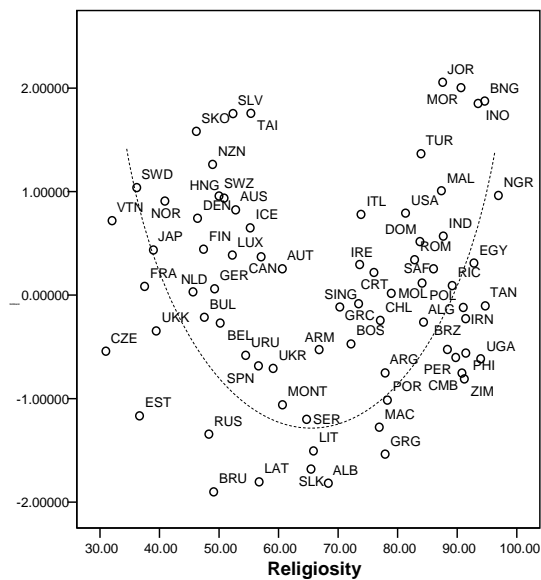
| | Model-1: Religiosity (Bivariate) | | Model-2: Religiosity + Communist Heritage | | | | | Model-3: Religiosity + Communist Heritage + HDI | | | | | Model-4: Religiosity + Communist Heritage + HDI + Religious Denominations | | | | |
|---------------|----------------------------------|------|---|------|--------|------|-------|---|------|--------|------|-------|---|------|--------|------|-------|
| | R | Sig | Beta | SE | T | Sig | VIF | Beta | SE | T | Sig | VIF | Beta | SE | T | Sig | VIF |
| Constant | | | .390 | | -5.207 | .000 | | .958 | | .275 | .784 | | .977 | | -.179 | .859 | |
| Religiosity | .418 | .001 | .506 | .005 | 4.975 | .000 | 1.059 | .307 | .006 | 2.460 | .016 | 1.694 | .319 | .007 | 2.336 | .023 | 2.578 |
| Communism | | | .374 | .216 | 3.677 | .000 | 1.059 | .329 | .218 | 3.186 | .002 | 1.155 | .354 | .245 | 3.036 | .004 | 1.887 |
| HDI | | | | | | | | -.308 | .825 | -2.564 | .013 | 1.563 | -.237 | .873 | -1.813 | .075 | 2.375 |
| Catholicism | | | | | | | | | | | | | -.028 | .502 | -.112 | .911 | 8.772 |
| Islam | | | | | | | | | | | | | .190 | .561 | .960 | .341 | 5.445 |
| Orthodoxy | | | | | | | | | | | | | -.042 | .482 | -.231 | .818 | 4.663 |
| Protestantism | | | | | | | | | | | | | -.164 | .529 | -.765 | .447 | 6.333 |
| Buddhism | | | | | | | | | | | | | .289 | .644 | 2.200 | .112 | 2.393 |
| Hinduism | | | | | | | | | | | | | .072 | .873 | .687 | .494 | 1.510 |
| | | | Adjusted R Square=.307 | | | | | Adjusted R Square=.447 | | | | | Adjusted R Square=.552 | | | | |
| N | 76 | | | | | | 74 | | | | | | | | | | 73 |

Notes: Dependent variable: Extrinsic Orientation, ** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

Table 4: The Curve Estimation Analysis for Intrinsic Orientation

| Dependent | Method | Rsq | d.f. | F | Sig. | b0 | b1 | b2 |
|------------------------------|-----------|------|------|------|--------------|--------|--------|-------|
| Intrinsic Orientation | Linear | .002 | 72 | .13 | .720 | -.1027 | .0022 | |
| Intrinsic Orientation | Quadratic | .068 | 71 | 2.60 | .082* | 3.2536 | -.1084 | .0008 |

Figure 1: The Quadratic Relationship between Religiosity and Intrinsic Orientation



Note: For country abbreviations see Appendix-1.