

A Preliminary Exploration of Generational Similarities and Differences in Values between the United States, United Kingdom, Iceland, Japan, Korea, Colombia and the Philippines

Arnel Onesimo O. Uy

De La Salle University
uya@dlsu.edu.ph

Edward F. Murphy, Jr.

Embry Riddle Aeronautical University
murphe23@erau.edu

Regina A. Greenwood

Kettering University
rgreenwo@kettering.edu

Jaime A. Ruiz-Gutierrez

Universidad de Los Andes
jar@adm.uniandes.edu.co

Terrell G. Manyak

Nova Southeastern University
manyak@huizenga.nova.edu

Bahaudin Mujtaba

Nova Southeastern University
multaba@nsu.nova.edu

Generational similarities and differences among working adults in the United States, United Kingdom, Iceland, Japan, Korea, the Philippines, and Colombia were investigated using the Rokeach Value Survey (RVS). Hypotheses were supported for cross-cultural generational differences for 23 of 36 values; there were also generational similarities. Sixteen values were ranked similarly for the 40+ year-old generation; thirteen values were ranked similarly for the 18 to 29 year-old generation; and 13 values were ranked similarly for the 30 to 39 year olds. This study is one of the first to identify values that are similar across cross-cultural generations in Western, Eastern, South American, and European cultures. Implications of these results to managers, businessmen, marketers and entrepreneurs were also explained.

Keywords: Rokeach Value survey, generations, cross-cultural values, values, social conditions & trends

The research literature is replete with studies exploring cross-cultural similarities and differences in national cultures; but few studies have explored cross-cultural generational differences in values, particularly with working adult populations. As the world becomes a global marketplace, generational studies of adult populations are needed in order to provide more meaningful and accurate information to enable better understanding of employee motivation and consumer target markets (DeMooij, 1998). In-depth generational analyses are needed because, as DeMooij's (1998, 2004) research points out, many managers are still trying to motivate employees through the use of money and benefits; and marketers continue to develop marketing and advertising campaigns that are focused on values at the national level instead of focusing on the generational level of analysis. As DeMooij (1998) further notes, "... markets are people, not products. There may be global products, but there are no global people. There may be global brands but there are no global motivations for buying those brands" (p. 3).

Managers and marketers must go below the national level of analysis to explore generational differences in values because of their impact on attitudes and behavior, and, consequently, on employee satisfaction and behavior. Research has shown that one of the most important indicators of attitudes and behavior is value structures, because values are the underlying structures that affect attitudes and subsequent behavior (Ajzen, 1988; DeMooij, 1998; Kahle, 1984; Murphy & Anderson, 2003; Reynolds & Olson, 2001; Rokeach, 1979). Values are the most important construct to explore in cross-cultural and generational studies because as De Mooij (2004) points out, "values are at the root of consumer behavior, so understanding culture's influence is necessary for those who want to succeed in the global marketplace. Culture is pervasive in all aspects of consumption and consumer behavior and should be integrated into all elements of consumer behavior theory" (p. 2).

REVIEW OF THE LITERATURE

There is a large body of literature exploring cross-cultural differences in values, attitudes and behaviors; but few studies have specifically focused on generational similarities and differences. In the late 1960s and early 1970s, cross-cultural researchers like Adler, Allport, Feather, Inglehart, Rokeach, Schwartz, and Triandis, just to name a few, investigated cross-cultural differences in values, attitudes and behaviors using a variety of research instruments.

Hofstede (1980, 1984, 2001) used the Personal Values Questionnaire to explore values worldwide in the 1980s. Hofstede's research results indicated that most countries or nations could be evaluated based on four cultural dimensions: (1) power distance; (2) uncertainty avoidance; (3) individualism or collectivism; and (4) masculinity or femininity. In the late 1980s, a new time dimension was added to Hofstede's framework.

In the 1990s and 2000s Inglehart and his associates were using the World Values Survey to explore values worldwide; Triandis and his associates have been exploring values worldwide using the Hofstede Personal Values Questionnaire; Schwartz has been using his Value Survey Module to explore values in different nations; and in China and Taiwan, Bond and his associates have been using the Chinese Value Survey (CVS) to explore the values of Chinese. Throughout this same time-frame Rokeach, Feather, and other researchers have been using the Rokeach Value Survey (RVS), which is the instrument used in this study, to explore values in different nations throughout the world.

In terms of generational research, Feather's (1975, 1979, 1984, 1986, 1988) studies covering Australia, New Zealand, and Papua New Guinea indicated significant cross-cultural generational differences in values. Using the Rokeach Value Survey, Feather pointed out that regardless of culture, the teenage generation ranked *true friendship* much higher in importance than parents did. On the other hand, *family security* increased

in importance for each succeeding generation, particularly for parents. Their findings suggest that teenagers, regardless of culture, value *true friendship* much higher because they are going through a period of rapid physical and psychological changes. Parents, in turn, value *family security* much higher than single people do, and the importance placed on family security increases as adults age and move from one generation to the other because of their increased responsibility for rearing and caring for their children.

Bond's (1994, 1996) studies using the RVS and the CVS revealed that age and generational differences existed in the value structures of respondents from Hong Kong, Singapore, and China. Bond's studies suggested that each generation was impacted by significant cultural events that led to value differences. More recently, Imamoglu and Ayguen (1999) and Ayguen and Imamoglu's (2002) longitudinal studies suggested that Turkish students' individualistic values increased in importance across the generations from the 1970s to the 1990s. Ralston, Egri, Stewart, Terpstra, and Yu's (1999) study of the different generations in China indicated: "the generation in which one grew up appears to be crucial to understanding the values" (p. 421). Chang, Wong and Koh's (2003) study hinted that Singaporean parents differed significantly from their children, as parents valued the tradition factor while their children valued the modern factor. Eskin's (2003) study illustrated that older students in Sweden and Turkey were more assertive than younger students; and Yu and Miller's (2003) study of generational differences in Taiwan indicated that Baby Boomers were generally collectivist while Generation X respondents were becoming more individualistic in their value structures.

Finally, Murphy, Gordon, and Anderson (2004), exploring age and generation differences in values between the U.S. and Japan, found that cross-cultural and age differences existed between the two nations; but the generations were more similar than different.

The literature clearly indicates that a research gap exists in generational research as few studies have explored generational similarities and differences in more than three nations at one time.

PROBLEM STATEMENT AND METHODOLOGY

The literature review reveals the following: few studies explored generational similarities and differences in more than three nations at one time; few studies used working adult populations in the generational studies; and even fewer used the RVS to explore generational differences in values. This study narrows these research gaps by exploring the generational similarities and differences in values between respondents from Colombia, Iceland, Japan, Korea, the United States, United Kingdom, and the Philippines. Consequently, the following research hypotheses and methodology were developed:

Hypothesis 1 (H₁): There are cross-cultural generational differences in RVS Terminal Values.

Hypothesis 2 (H₂): There are cross-cultural generational differences in RVS Instrumental Values.

Survey Instrument

Seven major instruments are generally used in value research: the Rokeach Value Survey (Rokeach, 1983); Chinese Value Survey (Bond, 1994); Schwartz Value Survey (Schwartz & Bilsky, 1987, 1990); Allport Vernon Lindzey Study of Values (Allport, Vernon, & Lindzey, 1960); England's Personal Values Questionnaire (England, 1974); Hofstede's Value Survey Module (1980); and Kahle's Value Survey (Kahle, 1984).

Many experts feel that "the Rokeach Value Survey is the best value system measuring device available" (Sikula, 1973, p. 16) due to its simplicity, ease of use, ease of translation, reliability and

validity in cross-cultural research and ease of statistical analysis. Moreover, others feel that whatever current value survey is chosen, “their theoretical arguments are based mainly on Rokeach’s (1973, 1986) considerations of human nature, motivation, and personality” (Grunert & Scherhorn, 1990, p. 98). Still others feel that the survey “has become the neo-orthodox instrument of value research” (Becker & Connor, 1982, p. 21). Finally, the RVS has been validated in cross-cultural research worldwide with populations ranging from 11 to 70 years of age; and it is one of the easiest instruments to analyze statistically (Feather, 1984; Rokeach, 1973, 1979; Rokeach & Ball-Rokeach, 1989; Murphy, 1994; Murphy, Snow, Carson, & Zigarmi, 1997; Murphy & Anderson, 2003; Murphy, Gordon, & Mullen, 2004). Our decision to use this instrument is based on these studies.

The RVS is divided into 18 terminal values, which Rokeach (1973) labeled “end-state of existence” values (p. 5), and which Murphy and Anderson (2003) explained were “the most important goals each respondent sought in their lives” (p. 118). Rokeach (1973) labeled the 18 instrumental values as “modes of conduct” values (p. 5), what Murphy and Anderson (2003) explained as “behavioral techniques or methods respondents would use to obtain their terminal value goals” (p. 118).

Instructions to those taking the survey are standard. Each individual is asked to arrange the values “in order of importance to you, as guiding principles in your life” (Obot, 1988, p. 367). Rokeach (1973; 1979) and Rokeach and Ball-Rokeach (1989) reported that the test-retest reliability for each of the 18 terminal values considered separately, from seven weeks to eighteen months later, ranged from a low of .51 for *a sense of accomplishment* to a high of .88 for *salvation*. Comparable test-retest reliability scores for instrumental values ranged from .45 for *responsible* to .70 for *ambitious*. Employing a 14- to 16-month test interval, median reliability was .69 for terminal values and .61 for instrumental values.

Research Population

The research population consisted of working adults living in major cities in the United States (U.S.), United Kingdom (U.K.), Iceland, Japan, Korea, the Philippines, and Colombia. The researchers chose working adults as the research population; they have been relatively unexplored in past studies, as the research literature indicates. The surveys were administered from 2002 to 2005 in major cities and industrial centers in each nation.

This study was part of a larger study, begun in 1993, that explores cross-cultural values worldwide. The U.S. population consisted of a database composed of a combination of random and convenience samples of 10,000 properly completed instruments from teenagers and working adults throughout the U.S. A total of 1,050 instruments were randomly drawn from the adult component of that database. Of the other cross-cultural databases, 495 were from U.K., 412 from Iceland, 667 from Japan, 260 from Korea, 128 from Colombia, and 200 from the Philippines. The total population sample was 3,212.

Statistical Analysis Techniques

Researchers using the RVS have a choice of statistical analysis techniques for evaluating their hypotheses. Since the RVS provides rankings or non-normative data, researchers normally evaluate the hypotheses for statistical significance using non-parametric statistical analysis techniques like the Chi-square median test, Kruskal-Wallis Analysis of Variance (ANOVA) test, Mann-Whitney *U* test, and/or Spearman’s Rank Order Correlation Analysis test.

Feather (1984) developed another statistical analysis technique for the RVS that allows researchers to explore the data with parametric analysis techniques. Feather’s *z*-transformation process converts the RVS rank-ordered data to normative data and allows researchers to use normal statistical analysis techniques.

The researchers used Feather’s *z*-transformation process and then analyzed the data for statistical significance using (ANOVA), followed by Multivariate ANOVA (MANOVA) and

Multivariate Analysis of Covariance (MANCOVA). As comparisons, the researchers analyzed the data with the non-parametric techniques Chi-square median test, Kruskal-Wallis Analysis of Variance (ANOVA) test, and Mann-Whitney *U* test; they found no differences that would impact the hypothesis test results. The researchers have put untransformed means and rankings in the tables to make it easier for readers to comprehend the results.

RESEARCH RESULTS FOR CROSS-CULTURAL GENERATIONAL DIFFERENCES

The research results showed cross-cultural generational similarities and differences (see Tables 1 through 6) for the top five most important terminal values and instrumental values across all generations.

Among the top five most important terminal values or most important goals across the generations were *health* and *family security*. *Health* was in the top five of importance (most important values) for all generations. This suggests that *health* might be a universal value across adult generations. *Family security* was in the top five of importance for all generations except for the 18 to 29 year olds in the U.S. This is an interesting and unexplained finding for the U.S. because previous research on U.S. value structures, for all adult age groups, found *family security* to be one of the top five important values in the U.S.

For all nations surveyed except the U.S., *responsible* and *honest* were among the top five values of importance across the generations. This is an interesting and unexplained finding for the U.S. because previous research on U.S. value structures has confirmed that both *family security* and *responsible* have always been in the top five instrumental values of adults in the U.S. (Murphy, Snow, Carson, & Zigarmi, 1997; Murphy, Gordon, & Anderson, 2003, 2004; Murphy, Gordon, & Mullen, 2004; Murphy, Greenwood, & Lawn-Neiborer, 2004). Do these differences come from

normal value changes that take place across the generations? Rokeach (1973) tried to answer this question by proposing that value structures generally followed fourteen generational patterns.

Furthermore, the research results showed that among the seven nations, there were more cross-cultural generational similarities than cross-cultural differences in values (see Tables 1 through 6). For example, for cross-cultural similarities, four values (*family security*, *health*, *honest*, and *responsible*) were ranked in the top five of most important values across all cultures; eight values (*a comfortable life*, *a sense of accomplishment*, *freedom*, *true friendship*, *wisdom*, *broadminded*, *capable*, and *self-controlled*) were ranked from sixth to eighth in importance, or were simply important across the cultures, for a grand total of 12 values that were ranked most important or important across the cultures. This compares well to 40+ year olds, who had 16 values that were ranked in common; 13 values were ranked similarly for the 18 to 29 year olds; and 12 values were ranked similarly for the 30 to 39 year olds (see Tables 1 through 6). The 40+ year olds possessed four values that were ranked one through five (most important) across the cultures (*family security*, *health*, *honest*, and *responsible*); eight values that were ranked six through thirteen (important) across cultures (*a comfortable life*, *a sense of accomplishment*, *inner harmony*, *self-respect*, *wisdom*, *broadminded*, *capable*, and *independent*); and three values that were ranked fourteen to eighteen or unimportant across the cultures (*a world of beauty*, *social recognition*, and *obedient*), for a total of 16 values that were ranked similarly across the cultures. This is an important finding and one of the first in the literature to identify values that are similarly ranked across cross-cultural generations in Western, Eastern, South American, and European cultures.

These research results are important for businessmen, entrepreneurs, practitioners, managers, and marketers because these results show the importance of studying values below the cross-cultural level of analysis, down to the

generational level. For instance, if an advertising or marketing manager only used the cross-cultural results for the Japanese as a group, s/he might develop an advertising campaign for the Japanese culture as a whole with an emphasis on the value *a sense of accomplishment* (making a lasting contribution in life), which was one of the top five values of importance for the Japanese as a culture. The marketing campaign aimed at young adults might fail because, although the value *a sense of accomplishment* was a most important value for the Japanese as a cross-cultural group, our research study of generational differences indicates that it was only a most important value for the 18 to 29 and the 40+ year olds.

Similarly, *a comfortable life* was one of the top five values of importance for the Colombians; but when brought to the generational level, it was only most important for the 18 to 29 and the 40+ year olds. For Koreans, *inner harmony* was one of the top five values of importance for their culture; but it was only a top five values of importance for the 18 to 29 and the 30 to 39 year olds. For the U.S., *self-respect* was in the top five values of importance; but was only in the top five for the 30 to 39 and the 40+ year olds. *Self-respect* was ranked in the top five of importance for respondents from Iceland; yet it was ranked only as important for all three generations. Respondents from the Philippines ranked *self-respect* as one of their top five values of importance; but it was only most important for the 18 to 29 and the 30 to 39 year olds.

The same holds true for values that were ranked as important for one culture or another, but in actuality were ranked most important by only one of the generations from that country. For example, *a comfortable life* (having prosperity) was only ranked important at the cross-cultural level of analysis for respondents from the Philippines, Korea, Japan, and U.K.; yet at the cross-cultural generational level of analysis it was one of the top five values of importance for the 18 to 29 year olds from each culture.

These findings further support Rose's (1997) cross-cultural study, which concluded that "if

similar segments of consumers can be identified, economies of scales in advertising production can be realized" (p. 397). The results of this research study showed that advertisers could target their marketing campaigns using the values *health* and *family security* (for all cultures and generations except the U.S. 18 to 29 year olds); *honesty* (all cultures and generations except the U.S. and Colombian 18 to 29 year olds); and *responsibility* (for all cultures and generations except for the U.S. 18 to 29 year olds); because these values were in the top five of importance across at least one of the generations.

In order to compare generations to cultures, we highlighted all values that were important and/or most important or not important across each generation or culture. A total of thirteen were equally valued (ranked most important as one through five; ranked important as six to thirteen; or ranked unimportant as fourteen to eighteen) across the cultures (terminal values: *a comfortable life, a sense of accomplishment, family security, freedom, health, true friendship, wisdom*; instrumental values: *broadminded, capable, honest, obedient, responsible* and *self-controlled*) and between thirteen and fourteen across the generations. We then compared these results for all cultures and generations, highlighting those that matched both cultures and generations. When comparing all three generations to the cultures, we found that the same values that were most important, important or unimportant across the cultures were also most important, important or unimportant for at least one generation. In addition, the terminal values *a world of beauty, inner harmony, mature love, self-respect, and social recognition*, and the instrumental values *capable, independent, and intellectual* were important, most important, or unimportant for at least one generation; but were not equally important across the cultures. Eight more values were equally important for at least one generation that were not important when explored for national culture alone.

This illustrates how important it is to go beneath culture, to explore the generations. A total of eight

more values were identified as important between the generations that were not identified as equally important based on culture alone.

These results are important for practitioners and managers to understand. For example, many managers believe they can motivate their employees through pay raises and benefits. When we explored this concept across the generations using the values *a comfortable life* (which equates to money and benefits), as compared to *family security* (which means taking care of their families and loved ones), we found that a comfortable life was less important than family security across all the generational categories except for the U.S. 18 to 29 year olds. This demonstrates that money is a more significant motivator for U.S. 18 to 29 year olds; while taking care of their families is more important for all the other generation groups. Therefore, in order to motivate these employees, managers could offer time off from work, not more money or benefits. If managers do not understand these value similarities and differences, they could be using ineffective incentive systems.

When we explored the data further, we found that *equality*, or being treated equally on the job, was not important for the Japanese, Korean, and Philippine 18 to 29 year olds; not important for the U.S., Japanese, and Colombian 30 to 39 year olds, and U.S., U.K., and Korean 40+ year olds, showing that practitioners and managers must understand generational difference in order to provide respondents with the required amount of focused treatment they need on the job. Another interesting finding was that the value *mature love*, which means sexual and spiritual intimacy, was important for all generation groups except for the 18 to 29 and the 40+ year olds from the Philippines. Another important finding was that *an exciting life*, or having a stimulating and active life, was important for all generational groups except for the Japanese, Colombian and Philippine 18 to 29 year olds, Colombian and Philippine 30 to 39 year olds, and UK, Icelandic, Japanese and Colombian 40+ year olds. This points out that advertisements that makes use of excitement would

not influence these groups, while they would influence the groups that found excitement important. These results highlight the importance of exploring the values and most important goals across generations and cultures.

Further, researchers must use working adults instead of college students as their research populations because our research study confirms that working adults have different value structures than those of college students; and those differences could significantly impact the motivation of employees and marketing campaigns. Finally, practitioners and researchers must understand that they can reach beneath the attitude and behavioral levels to explore the basic underlying assumptions or root causes of attitudes and behaviors – value structures.

RECOMMENDATIONS FOR FURTHER RESEARCH

The research results strongly suggest that societal values have changed since the research of Rokeach found generational patterns in the 1970s. Since the study only found partial support for the generational patterns he listed, further research needs to explore the new generational patterns that exist in the United States and in other nations. This study suggests that when values are explored across the generations, more similarities exist than when cross-cultural values alone are explored.

Much larger studies in each nation need to verify the results found in this study. Generational research needs to take place in other nations as well in order to identify the values that are important for all generations worldwide. Longitudinal studies should also be conducted cross-culturally, and with a larger variety of populations. Most of the populations we used were from larger cities. Do these same value structures apply for individuals raised in smaller towns? Only further research will confirm the findings in our study.

Studies are needed to explore value, attitude, and leadership style similarities and differences between employees, managers, marketers, and

senior managers in all of these nations. Researchers need to explore the impact of socialization by exploring value similarities and differences between respondents born in one nation, but living in another nation. For example, the value structures of Colombians born in the U.S., but raised in Colombia, could be compared to those of Colombians born in Colombia and raised in the U.S. What about Japanese born in Japan, but raised in the U.S.; and Japanese sojourners living in the U.S.? This research could be conducted for each nation in question in order to explore the impact of socialization. Studies of gender roles and cross-cultural studies of entrepreneurs in each country are also needed.

Murphy, Mullen, and Anderson (2004) report that the values of working adults in the U.S. changed immediately after the terrorist attack on the World Trade Center in New York City. Did the value structures of others also change after the terrorist attack? Further research needs to explore whether the same values changed for all segments of the U.S. population, and for other nations throughout the world. For instance, in France, Muslim teenagers went on a one-week rampage, burning and looting and demanding equal treatment from the French government. Was their behavior a result of 9/11 and other terrorist incidents around the world?

In addition, many of the research studies reviewed here did not report standardized results that could be used by future researchers. Meglino's (1998) review of the value research literature informed the research community that this was a problem in the 1990s. The problem still continues today, because many researchers using the RVS do not report the terminal and instrumental value means, rankings, and top and bottom five values of importance that would allow researchers to make comparisons to their studies in order to add more meaning to their research results.

REFERENCES

- Ajzen, I. (1988). *Attitudes, personality and behavior*. Chicago, IL: The Dorsey Press.
- Adler, N. (1983). A typology of management studies involving culture. *Journal of International Business Studies*, 14, 29-47.
- Ahmed, S. A., & Rojas, J. (1998). *A comparative study of job values of North and South American business students*. Unpublished manuscript. Retrieved on November 1, 2002, from <http://www.sbaer.uca.edu/Research/1998/98sri230.txt>
- Akiba, D., & Klub, W. (1999). The different and the same: Reexamining East and West in a cross-cultural analysis of values. *Journal of Social Behavior and Personality*, 27(5), 467-473.
- Allport, G. W., Vernon, P. E., & Lindzey, G. (1960). *Study of values* (3rd ed.). Boston, MA: Boston University Press.
- Ayguen, A. K., & Imamoglu, E. O. (2002). Value domains of Turkish adults and university students. *Journal of Social Psychology*, 142(3), 333-351.
- Becker, B. W., & Connor, P. E. (1982). The influence of personal values on attitude and store choice behavior. In B. J. Walker et al. (Eds.), *Educators' proceedings* (pp. 21-24). Chicago, IL: American Marketing Association.
- Bond, M. H. (1994). Finding universal dimensions of individual variation in multicultural studies of values: The Rokeach and Chinese value surveys. In B. Apuka (Ed.), *New research on moral development: Moral development a compendium* (pp. 385-391). New York: Garland Publishing.
- Bond, M. H. (1996). Chinese values. In M. Bond (Ed.), *The handbook of Chinese psychology* (pp. 208-226). New York, NY: Oxford University Press.
- Chang, C. M. (1997). A three generation assessment of strengths and needs of African-American, Caucasian, Hispanic and Chinese grand-parents. *Dissertation Abstracts - International, Section-A: Humanities and Social Sciences*, 57(7-A), 2862.
- Cileli, M., & Tezer, E. (1998). Life and value orientations of Turkish university students.

- Adolescence*, 33(129), 219-228.
- Connor, P., Becker, R., Kakuyama, T., & Moore, L. (1993). A cross-national comparative study of managerial values: United States, Canada and Japan. In S. B. Prasad, R. B. Peterson (Eds.), *Advances in international comparative management* (Vol. 8). Greenwich, CT: Jai Press, Inc.
- DeMooij, M. (1998). *Global marketing and advertising: Understanding cultural paradoxes*. Thousand Oaks, CA: Sage Publications.
- DeMooij, M. (2004). *Consumer behavior and culture: Consequences for global marketing and advertising*. Thousand Oaks, CA: Sage Publications.
- Elkhouly, S. M. E., & Buda, R. (1997). A cross-cultural comparison of value systems of Egyptians, Americans, Africans and Arab executives. *International Journal of Commerce and Management*, 7, 102-199.
- England, G. W. (1974). *The manager and the man*. Minnesota: University of Minnesota Press.
- Eskin, M. (2003). Self-reported assertiveness in Swedish and Turkish adolescents: A cross-cultural comparison. *Scandinavian Journal of Psychology*, 44(1), 7-12.
- Farber, M. L. (1955). English and Americans: Values in the socialization process. In D. C. McClelland (Ed.), *Studies in motivation* (pp. 323-330). New York, NY: Appleton-Century-Crofts.
- Feather, N. T. (1970). Educational choice and student attitudes in relation to terminal and instrumental values. *Australian Journal of Psychology*, 22, 2, 127-143.
- Feather, N. T. (1975). Value systems and delinquency: Parental and generational discrepancies in value systems and delinquent and non-delinquent boys. *British Journal of Social and Clinical Psychology*, 14(2), 117-129.
- Feather, N. T. (1979). Human values and the work situation: Two studies. *Australian Psychologist*, 14(2), 131-141.
- Feather, N. T. (1982). Reasons for entering medical school in relation to value priorities and sex of student. *Journal of Occupational Psychology*, 55, 119-128.
- Feather, N. T. (1984). Protestant ethic, conservatism and values. *Journal of Personality and Social Psychology*, 46(5), 1132-1141.
- Feather, N. T. (1986). Value systems across cultures: Australia and China. *International Journal of Psychology*, 21, 697-715.
- Feather, N. T. (1988). From values to actions: Recent applications of the expectancy-value model. *Australian Journal of Psychology*, 40, 105-124.
- Feather, N. T. (1999). *Values, achievement and justice: Studies in the psychology of deservingness*. New York, NY: Kulwer Academic/Plenum Publishers.
- Feather, N. T., & Mckee, L. R. (1993). Global self-esteem and attitudes toward high achievers for Australian and Japanese students. *Social Psychology Quarterly*, 56(1), 65-76.
- Furnham, A., & Albhai, N. (1985). Value differences in foreign students. *International Journal of Intercultural Relations*, 9, 365-375.
- Grunert, S. C., & Scherhorn, G. (1990). Consumer values in West Germany: Underlying dimensions and cross-cultural comparison with North America. *Journal of Business Research*, 20, 97-107.
- Hang, W. C., Wong, W. K., & Koh, J. B. K. (2003). Chinese values in Singapore: Traditional and modern. *Asian Journal of Social Psychology*, 6(1), 5-29.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management and Organization*, 13, 46-74.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values* (Abridged ed.). Newbury Park, CA: Sage Publications.
- Hofstede, G. (2001). *Culture's consequences:*

- Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Hofstede, G., & Bond, M. (1984). Hofstede's culture dimensions: An independent validation using Rokeach's Value Survey. *Journal of Cross-cultural Psychology*, 15(4), 417-433.
- Howard, A., Shudo, K., & Umeshima, M. (1983). Motivation and values among Japanese and American managers. *Personnel Psychology*, 36(4), 883-898.
- Imamoglu, E. O., & Ayguen, Z. K. (1999). Value preferences from the 1970s to 1990s: Cohort, generation and gender differences at a Turkish university. *Turk-Psikoloji-Dergisi*, 14(44), 1-22.
- Kahle, L. R. (1984). Attitudes and social adaptation: A person-situation interaction approach. *International Series in Experimental Social Psychology* (Vol. 8). Oxford: Pergamon Press.
- Kluckhohn, C. (1951). The study of values. In D. N. Barrett (Ed.), *Values in transition* (pp. 17-45). Notre Dame, IN: University of Notre Dame Press.
- Kluckhohn, C. M. (1962). Values and value-orientations in the theory of action. In T. Parsons, E. A. Shils (Eds.), *Toward a general theory of action* (pp. 388-433). New York: Harper and Row.
- Lau, S. (1988). The value orientations of Chinese university students in Hong Kong. *International Journal of Psychology*, 23(5), 583-596.
- Lau, S. (1992). Collectivism's individualism: Value preference, personal control, and the desire for freedom among Chinese in mainland China, Hong Kong, and Singapore. *Personality and Individual Differences*, 13(3), 361-366.
- Lau, S., & Wong, A. (1992). Value and sex-role orientation of Chinese adolescents. *International Journal of Psychology*, 27(1), 3-17.
- Lee, K. (1991). The problem of appropriateness of the Rokeach Value Survey in Korea. *International Journal of Psychology*, 26(3), 299-310.
- Mansfield, E. D. (1995). A comparison of more and less generative adults according to psychological variables, demographic characteristics, and generational types. *Dissertation Abstracts International, Section A, Humanities and Social Sciences*, 56(3-A), 0870.
- Mayton, D., & Furnham, A. (1994). Value underpinnings of antinuclear political activism: A cross-national study. *Journal of Social Issues*, 50(4), 117-128.
- McQuarrie, E. (1989). The impact of a discontinuous innovation: Outcomes experienced by owners of home computers. *Computers in Human Behavior*, 5(4), 227-240.
- Mujtaba, B. G. (2005). *The art of mentoring diverse professionals: Employee development and retention practices for entrepreneurs and multinational corporations*. Hallandale Beach, FL: Aglob Publishing.
- Meglino, B. M. (1998). Individual values in organizations: Concepts, controversies and research. *Journal of Management*, May-June. Retrieved on December 22, 2002, from www.findarticles.com
- Munson, M. J. (1980). Concurrent validity of a modified Rokeach Value Survey in discriminating more successful from less successful students. *Educational and Psychological Measurement*, 40(2), 479-485.
- Munson, M. J., & McIntyre, S. H. (1980). Developing practical procedures for the measurement of personal values in cross-cultural marketing. *Journal of Marketing Research*, 16(1), 48-52.
- Munson, M. J., & Posner, B. Z. (1980). The factorial validity of a modified Rokeach Value Survey for four diverse samples. *Educational and Psychological Measurement*, 40(4), 1073-1079.
- Munson, M. J., & Posner, B. Z. (1980). Concurrent validation of two value inventories in predicting job classification and success for organizational personnel. *Journal of Applied*

- Psychology*, 65(5), 536-542.
- Murphy, E. F., Jr. (1994). Military organizational culture: An investigation of sex and gender differences in the values, sex role stereotype attitudes, and situational leadership II behaviors of Air Force middle-level managers (Doctoral Dissertation, Nova SE University, 1994). *University Microfilms International*. (UMI No. 9525247).
- Murphy, E. F., Jr., & Anderson, T. (2003). A longitudinal study exploring value changes during the cultural assimilation of Japanese student pilot sojourners in the United States. *International Journal of Value-Based Management*, 16(2), 111-129.
- Murphy, E. F., Jr., Eckstat, A., & Parker, T. (1995). Sex and gender differences in leadership. *The Journal of Leadership Studies*, 2, 116-131.
- Murphy, E. F., Jr., Gordon, J. D., & Anderson, T. (2003, November). *An examination of cross-cultural age or generation-based value differences between the United States and Japanese*. Paper presented at the annual meeting of the Southern Management Association in Clearwater, FL.
- Murphy, E. F., Jr., Gordon, J. D., & Anderson, T. (2004). An examination of cross-cultural age or generation-based value differences between the United States and Japanese. *Journal of Applied Management and Entrepreneurship*, 9(1), 21-48.
- Murphy, E. F., Gordon, J. D., & Mullen, A. (2004). A preliminary study exploring the value changes taking place in the US since the September 11, 2001 terrorist attack on the World Trade Center in New York. *Journal of Business Ethics*, 50(1), 81-96.
- Murphy, E. F., Jr., Greenwood, R., & Lawn-Neiborer, L. J. (2004, November). *Sex differences and similarities in cross-cultural values and internet marketing attitudes between the United States, Japan and United Kingdom*. Paper presented at the Southern Management Association meeting in Dallas, TX.
- Murphy, E. F., Jr., Snow, W. A., Carson, P. P., & Zigarmi, D. (1997). Values, sex differences and psychological androgyny. *International Journal of Value-Based Management*, 10, 69-99.
- Ng, A. H. (1993). *Exploring country values and information technology adoption in business schools*. Proceedings of the Academy of Management. Poster session presented at the meeting of the Academy of Management in Atlanta, GA.
- Obot, I. S. (1988). Value systems and cross-cultural contact: The effect of perceived similarity and stability on social evaluations. *International Journal of Intercultural Relations*, 12, 363-379.
- Ralston, R. A., Egri, C. P., Stewart, S., Terpstra, R. H., & Yu, K. (1999). Doing business in the 21st century with the new generation of Chinese managers: A study of generational shifts in work values in China. *Journal of International Business Studies*, 30(2), 515-433.
- Reynolds, T., and Olson, J. (Eds.). (2001). *Understanding consumer decision making: The means-end approach to marketing and advertising strategy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Robertson, C. J., & Hoffman, J. J. (2000). How different are we? An investigation of Confucian values in the United States. *Journal of Managerial Issues*, 12(1), 34-48.
- Rokeach, M. (1973). *The nature of human values*. New York: Free Press.
- Rokeach, M. (1977). Can computers change human values? *Revista Latinoamericana de Psicologia*, 9(3), 449-458.
- Rokeach, M. (1979). *Understanding human values: Individual and societal*. New York: Free Press.
- Rokeach, M. (1983). *Rokeach value survey: Form G*. Palo Alto, CA: Consulting Psychologists Press.
- Rokeach, M. (1986). *Beliefs, attitudes and values: A theory of organization and change*. San Francisco, CA: Jossey-Bass Publishers.
- Rokeach, M., & Ball-Rokeach, S. J. (1989). Stability and change in American value priorities.

- American Psychologist*, 44, 775-784.
- Rokeach, M., & Regan, J. F. (1980). The role of values in the counseling situation. *Personnel and Guidance Journal*, May: 576-588.
- Rose, G. M. (1997). Cross-cultural values research: Implications for international advertising. In L. R. Kahle, L. Chiagouris (Eds.), *Values, lifestyles and psychographics* (pp. 389-400). Mahwah, NJ: Lawrence Erlbaum Associates.
- Ruiz-Gutierrez, J. (2005, August). *Change and organizational demography: The case of 30 Colombian companies*. Paper presented at the annual meeting of the Academy of Management in Honolulu, HI.
- Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53, 550-562.
- Schwartz, S. H., & Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, 58, 878-891.
- Sekaran, U. (1983). Methodological and theoretical issues and advances in cross-cultural research. *Journal of International Business Studies*, 14, 61-73.
- Sikula, A. F. (1973). The values and value systems of governmental executives. *Public Personnel Management*, January-February, 16-22.
- Sikula, A. F., and Costa, A. D. (1994). Are age and ethics related? *The Journal of Psychology*, 6(128), 659-689.
- Yu, H. C., and Miller, P. (2003). The generation gap and cultural influence: A Taiwan empirical investigation. *Cross-Cultural Management*, 10(3), 23-41.
- Weinberg, S. J. (1986). Decision making style of Japanese and American managers. *Asian American Psychological Association Journal*, 62-64.
- Williams, R. M., Jr. (1979). Change and stability in values and value systems: A sociological perspective. In M. Rokeach (Ed.), *Understanding human values: Individual and societal* (pp. 15-46). New York: Free Press.

Table 1
Comparison of Cross Cultural Generation-Based Differences in Differences in Terminal Values

	18-29 US (N=350) Mean Rank	18-29 UK (N=111) Mean Rank	18-29 ICE (N=148) Mean Rank	18-29 JA (N=254) Mean Rank	18-29 KA (N=90) Mean Rank	18-29 CO (N=51) Mean Rank	18-29 PI (N=115) Mean Rank	18-29 COMBINED (N=1119) Mean Rank	P
A comfortable life	3.609(1)	7.360(4)	10.584(12)	8.708(5)	8.037(5)	4.822(1)	7.463(4)	8.390(6)	***
An exciting life	8.272(6)	7.711(5)	10.628(13)	10.592(14)	9.018(9)	12.860(17)	11.634(14)	10.263(12)	***
Accomplishment	10.287(13)	6.630(3)	8.871(10)	8.507(4)	9.593(10)	9.303(8)	10.317(12)	9.039(8)	***
A world at peace	9.233(8)	10.405(12)	10.152(11)	10.273(13)	14.294(15)	10.784(13)	9.000(9)	10.377(13)	***
A world of beauty	11.672(16)	13.657(18)	13.451(16)	13.274(17)	14.313(18)	11.886(14)	12.536(17)	12.806(17)	***
Equality	13.284(18)	12.837(15)	11.633(14)	10.090(12)	9.682(11)	12.037(15)	11.609(13)	10.954(14)	***
Family security	10.015(11)	5.396(2)	4.014(2)	4.212(2)	3.476(1)	6.367(4)	5.780(2)	5.022(2)	***
Freedom	5.504(2)	8.603(8)	7.793(5)	8.106(3)	7.429(4)	9.443(10)	8.292(7)	7.604(3)	***
Health	6.952(4)	4.369(1)	3.900(1)	3.607(1)	3.593(2)	4.911(2)	5.634(1)	4.075(1)	***
Inner harmony	6.366(3)	10.828(13)	8.553(9)	8.893(7)	8.397(6)	6.037(3)	10.097(10)	9.137(10)	***
Mature love	9.877(10)	10.000(11)	8.250(8)	9.089(8)	8.733(8)	7.658(6)	11.780(15)	9.209(11)	***
National security	9.802(9)	11.099(14)	14.325(17)	13.896(18)	13.065(16)	10.569(12)	12.390(16)	12.657(16)	***
Pleasure	11.415(18)	9.450(10)	7.512(4)	8.801(6)	10.172(12)	9.341(9)	13.975(18)	9.086(9)	***
Salvation	10.669(14)	13.477(17)	15.728(18)	12.659(16)	13.032(15)	15.531(18)	7.609(5)	14.485(18)	***
Self-respect	10.027(12)	9.351(9)	7.832(6)	9.305(10)	6.803(3)	7.139(5)	6.317(3)	8.265(5)	***
Social recognition	8.836(7)	12.927(16)	12.128(15)	11.579(15)	11.584(14)	12.822(16)	10.268(11)	12.628(15)	***
True friendship	11.860(17)	8.324(6)	6.912(3)	9.282(9)	11.112(13)	10.468(11)	8.463(8)	8.043(4)	***
Wisdom	8.018(5)	8.558(7)	8.242(7)	10.014(11)	8.658(7)	8.822(7)	7.829(6)	8.692(7)	***

* = p < .05 ** = p < .001 *** p < .0001 NS = Not Significant

Table 2
Comparison of Cross Cultural Generation-Based Differences in Instrumental Values

	18-29 US (N=350) Mean Rank	18-29 UK (N=111) Mean Rank	18-29 ICE (N=148) Mean Rank	18-29 JA (N=254) Mean Rank	18-29 KA (N=90) Mean Rank	18-29 CO (N=51) Mean Rank	18-29 PI (N=115) Mean Rank	18-29 COMBINED (N=1119) Mean Rank	p
Ambitious	8.035(3)	10.171(11)	9.769(10)	11.926(16)	8.565(6)	6.582(2)	8.536(5)	10.144(12)	***
Broadminded	8.284(4)	11.342(14)	8.184(4)	7.376(4)	6.785(5)	8.379(8)	8.487(4)	7.803(4)	**
Capable	9.267(7)	8.738(7)	7.949(3)	10.233(12)	8.992(9)	6.848(4)	10.585(13)	8.527(5)	***
Clean	9.444(11)	14.909(18)	12.917(17)	10.766(14)	11.425(15)	8.481(9)	10.121(12)	12.334(17)	***
Courageous	11.098(16)	10.531(12)	10.633(15)	8.455(5)	8.757(7)	8.291(7)	11.756(17)	8.950(6)	***
Forgiving	9.776(13)	12.072(16)	10.478(13)	10.502(13)	11.939(16)	13.417(17)	9.365(9)	10.407(14)	***
Helpful	10.504(15)	9.414(9)	9.798(11)	9.701(9)	9.411(10)	12.468(15)	9.463(10)	9.384(8)	***
Honest	9.342(8)	6.225(3)	4.672(1)	4.845(1)	6.649(4)	8.164(6)	5.512(1)	5.066(1)	***
Imaginative	6.158(1)	9.144(8)	10.912(16)	10.070(11)	9.630(11)	9.531(11)	13.658(18)	10.851(15)	NS
Independent	11.962(17)	8.351(6)	8.878(6)	9.950(10)	11.107(14)	7.215(5)	10.658(14)	9.529(10)	***
Intellectual	8.296(5)	11.045(13)	9.543(8)	9.041(7)	8.827(8)	5.924(1)	9.219(8)	9.613(11)	***
Logical	9.750(12)	11.819(15)	9.242(7)	11.406(15)	9.920(12)	9.075(10)	11.073(15)	10.889(16)	***
Loving	9.374(9)	7.216(4)	10.070(12)	6.641(3)	6.476(3)	12.075(14)	7.512(3)	7.144(3)	***
Loyal	8.420(6)	8.054(5)	8.490(5)	12.251(17)	14.644(17)	10.645(13)	8.634(6)	10.382(13)	***
Obedient	9.403(10)	14.630(17)	13.582(18)	14.013(18)	16.551(18)	14.227(18)	9.780(11)	14.703(18)	**
Polite	12.764(18)	4.225(1)	10.570(14)	9.164(8)	10.196(13)	12.696(16)	11.365(16)	9.093(7)	***
Responsible	10.056(14)	5.216(2)	5.635(2)	5.785(2)	5.177(1)	6.797(3)	6.390(2)	6.376(2)	***
Self-controlled	7.449(2)	9.909(10)	9.754(9)	8.711(6)	6.042(2)	9.848(12)	8.878(7)	9.678(9)	**

* = p < .05 ** = p < .001 *** = p < .0001 NS = Not Significant

Table 3
Comparison of Cross Cultural Generation-Based Differences in Differences in Terminal Values

	30-39 US (N=300)	30-39 UK (N=168)	30-39 ICE (N=117)	30-39 JA (N=197)	30-39 KA (N=90)	30-39 CO (N=40)	30-39 PI (N=42)	30-39 COMBINED (N=954)	p
	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	
A comfortable life	5.431(4)	9.294(10)	11.581(14)	7.548(4)	7.538(6)	7.370(3)	8.800(7)	8.953(6)	***
An exciting life	8.937(11)	8.308(7)	9.529(11)	9.573(9)	10.138(9)	15.555(18)	12.800(16)	9.982(11)	***
Accomplishment	9.275(10)	10.250(12)	8.811(8)	10.071(12)	11.753(15)	8.518(6)	10.000(10)	9.479(10)	***
A world at peace	10.537(15)	11.235(14)	10.025(12)	9.984(11)	11.492(14)	8.851(8)	10.400(11)	11.377(13)	***
A world of beauty	13.137(18)	12.029(15)	13.170(17)	14.086(18)	14.553(18)	9.000(9)	14.200(18)	14.141(18)	***
Equality	13.183(14)	7.147(5)	11.393(13)	11.253(14)	11.153(13)	10.703(15)	9.933(9)	11.522(14)	***
Family security	8.554(1)	3.926(1)	4.153(1)	4.416(2)	3.600(1)	4.111(1)	3.533(1)	4.133(1)	***
Freedom	5.224(2)	7.426(6)	8.427(7)	7.558(5)	7.123(4)	9.851(11)	10.800(13)	6.946(3)	***
Health	6.324(3)	5.352(2)	4.940(2)	4.370(1)	3.738(2)	5.185(2)	6.466(3)	4.773(2)	***
Inner harmony	7.027(12)	8.720(8)	8.837(9)	7.451(3)	7.184(5)	7.592(4)	8.866(8)	8.493(5)	***
Mature love	8.889(7)	10.882(13)	7.786(5)	10.472(13)	10.230(10)	8.629(7)	10.733(12)	9.219(9)	***
National security	9.748(13)	12.794(16)	12.846(16)	13.903(17)	12.553(17)	10.259(13)	12.666(17)	11.927(16)	***
Pleasure	11.280(16)	8.926(9)	8.871(10)	9.395(8)	10.076(8)	9.778(10)	12.133(15)	10.268(12)	***
Salvation	10.874(9)	16.308(18)	16.025(18)	11.441(15)	10.646(12)	12.185(16)	7.000(5)	11.629(15)	***
Self-respect	8.726(5)	5.838(3)	7.829(6)	8.659(6)	7.000(3)	7.777(5)	6.866(4)	7.601(4)	***
Social recognition	10.784(17)	15.455(17)	12.299(15)	11.446(16)	11.907(16)	13.555(17)	11.933(14)	12.801(17)	***
True friendship	11.194(8)	7.117(4)	7.179(4)	9.233(7)	10.400(11)	10.370(14)	7.733(6)	8.925(8)	***
Wisdom	8.347(6)	9.985(11)	6.803(3)	9.852(10)	9.907(7)	10.000(12)	6.133(2)	8.644(7)	***

* = p < .05 ** = p < .001 *** p < .0001 NS = Not Significant

Table 4
Comparison of Cross Cultural Generation-Based Differences in Instrumental Values

	30-39 US (N=300) Mean Rank	30-39 UK (N=168) Mean Rank	30-39 ICE (N=117) Mean Rank	30-39 JA (N=197) Mean Rank	30-39 KA (N=90) Mean Rank	30-39 CO (N=40) Mean Rank	30-39 PI (N=42) Mean Rank	30-39 COMBINED (N=954) Mean Rank	p
Ambitious	8.302(3)	14.220(17)	8.358(3)	13.482(17)	12.323(16)	8.777(9)	7.466(4)	10.430(13)	***
Broadminded	8.876(11)	6.720(5)	8.957(10)	6.939(4)	6.907(5)	8.481(7)	6.600(2)	8.177(5)	**
Capable	9.101(4)	10.661(12)	8.376(4)	12.629(15)	12.138(15)	8.296(6)	12.200(17)	9.910(10)	***
Clean	11.095(16)	16.617(18)	12.564(17)	9.730(11)	9.753(10)	7.888(4)	9.866(12)	12.102(17)	***
Courageous	10.671(8)	5.470(3)	11.196(16)	8.644(6)	8.846(6)	9.259(10)	11.066(15)	8.962(6)	***
Forgiving	10.073(15)	7.632(7)	11.341(15)	10.253(13)	10.307(12)	12.962(16)	9.766(11)	10.548(14)	***
Helpful	10.091(12)	9.426(9)	10.461(14)	9.025(8)	10.400(13)	11.481(14)	10.066(14)	10.137(12)	***
Honest	7.564(2)	3.632(2)	5.478(1)	4.187(2)	4.584(1)	5.333(1)	6.466(1)	4.602(1)	***
Imaginative	8.503(17)	12.117(14)	9.991(11)	9.512(10)	8.938(7)	8.666(8)	14.000(18)	10.684(15)	NS
Independent	10.678(5)	10.044(10)	8.478(5)	9.969(12)	10.846(14)	8.037(5)	9.200(7)	9.268(7)	***
Intellectual	9.146(10)	11.073(13)	8.521(6)	9.142(9)	9.692(9)	6.444(3)	9.533(8)	9.608(8)	***
Logical	9.715(14)	13.985(15)	8.726(8)	11.421(14)	10.261(11)	9.296(11)	11.333(16)	10.042(11)	***
Loving	9.342(7)	2.955(1)	10.324(12)	6.010(3)	5.769(4)	11.851(15)	8.000(5)	7.753(3)	***
Loyal	8.135(6)	8.735(8)	9.871(9)	13.065(16)	14.276(17)	9.481(12)	8.933(6)	10.775(16)	***
Obedient	10.820(18)	14.205(16)	13.094(18)	15.015(18)	16.584(18)	15.037(18)	10.000(13)	14.451(18)	**
Polite	11.899(13)	6.926(6)	10.427(13)	8.898(7)	9.353(8)	14.185(17)	9.633(9)	9.789(9)	***
Responsible	8.283(1)	6.308(4)	6.230(2)	5.030(1)	4.830(2)	5.481(2)	7.200(3)	5.598(2)	***
Self-controlled	7.446(9)	10.264(11)	8.598(7)	7.670(5)	4.969(3)	9.740(13)	9.666(10)	7.974(4)	**

* = p < .05 ** = p < .001 *** = p < .0001 NS = Not Significant

Table 5
Comparison of Cross Cultural Generation-Based Differences in Differences in Terminal Values

	40+ US (N=400)	40+ UK (N=216)	40+ ICE (N=147)	40+ JA (N=216)	40+ KA (N=80)	40+ CO (N=37)	40+ PI (N=43)	40+ COMBINED (N=1139)	p
	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	Mean Rank	
A comfortable life	8.363(7)	8.428(8)	10.843(12)	10.662(13)	9.500(11)	6.239(4)	7.928(7)	9.204(10)	***
An exciting life	9.752(11)	11.236(14)	11.816(15)	11.870(15)	6.500(4)	14.690(18)	11.357(13)	10.565(12)	***
Accomplishment	7.800(6)	9.617(10)	9.020(8)	6.319(3)	5.500(3)	8.295(6)	8.500(8)	7.820(4)	***
A world at peace	12.490(15)	8.289(7)	9.523(11)	9.083(7)	13.500(14)	10.746(14)	10.214(10)	11.008(13)	***
A world of beauty	14.520(18)	11.444(15)	12.265(16)	13.754(18)	17.500(18)	11.732(15)	14.714(18)	13.788(18)	***
Equality	12.952(16)	12.882(16)	11.074(13)	10.277(12)	15.000(17)	10.056(12)	10.428(11)	12.173(15)	***
Family security	4.192(1)	5.250(2)	3.115(2)	2.430(1)	2.000(1)	4.746(1)	4.214(2)	3.725(1)	***
Freedom	6.450(3)	7.085(4)	7.795(5)	8.898(6)	8.500(9)	8.521(8)	11.071(12)	7.272(3)	***
Health	4.976(2)	4.202(1)	3.102(1)	3.115(2)	3.500(2)	4.859(2)	4.142(1)	4.204(2)	***
Inner harmony	9.421(10)	9.037(9)	8.102(6)	9.564(8)	7.500(7)	5.802(3)	6.714(3)	9.127(9)	***
Mature love	8.967(9)	10.492(12)	9.346(10)	8.750(4)	7.100(6)	8.442(7)	11.428(14)	9.067(8)	***
National security	10.701(12)	10.757(13)	14.809(17)	13.509(17)	14.000(15)	10.408(13)	13.285(16)	11.955(14)	***
Pleasure	11.378(14)	9.731(11)	7.217(3)	8.888(5)	10.500(12)	9.585(10)	14.428(17)	10.060(11)	***
Salvation	10.970(13)	16.627(18)	15.775(18)	12.467(16)	11.500(13)	12.408(16)	6.857(4)	12.551(16)	***
Self-respect	7.709(5)	7.731(6)	8.442(7)	9.939(10)	7.000(5)	7.873(5)	7.285(6)	8.237(6)	***
Social recognition	13.556(17)	13.513(17)	11.605(14)	11.791(14)	14.500(16)	13.802(17)	12.000(15)	12.962(17)	***
True friendship	8.745(8)	6.683(3)	7.346(4)	10.018(11)	9.000(10)	10.014(11)	9.285(9)	8.616(7)	***
Wisdom	7.458(4)	7.632(5)	9.095(9)	9.810(9)	8.000(8)	9.394(9)	7.142(5)	8.203(5)	***

* = p < .05 ** = p < .001 *** p < .0001 NS = Not Significant

Table 6
Comparison of Cross Cultural Generation-Based Differences in Instrumental Values

	40+ US (N=400) Mean Rank	40+ UK (N=216) Mean Rank	40+ ICE (N=147) Mean Rank	40+ JA (N=216) Mean Rank	40+ KA (N=80) Mean Rank	40+ CO (N=37) Mean Rank	40+ PI (N=43) Mean Rank	40+ COMBINED (N=1139) Mean Rank	p
Ambitious	8.141(4)	10.005(12)	11.387(16)	12.611(18)	10.000(8)	8.549(8)	10.928(13)	9.792(9)	***
Broadminded	10.120(12)	8.130(6)	7.931(4)	9.092(7)	11.000(12)	8.985(10)	7.714(5)	9.454(8)	**
Capable	8.098(3)	7.154(4)	7.768(3)	10.421(12)	9.000(5)	6.478(3)	9.428(9)	8.451(4)	***
Clean	13.654(17)	11.643(16)	12.387(17)	9.930(10)	10.400(9)	7.028(5)	11.857(17)	12.343(17)	***
Courageous	8.563(8)	9.827(11)	11.000(14)	9.027(6)	9.400(6)	7.816(6)	10.142(11)	9.102(6)	***
Forgiving	10.170(13)	9.606(10)	9.585(8)	11.592(16)	10.500(10)	12.028(16)	8.571(7)	10.347(15)	***
Helpful	10.938(15)	7.417(5)	9.204(6)	9.194(8)	13.500(16)	10.563(13)	11.500(16)	10.085(14)	***
Honest	4.501(1)	3.375(1)	3.836(1)	3.273(1)	1.500(1)	5.338(1)	5.928(1)	3.961(1)	***
Imaginative	12.723(16)	12.920(17)	11.068(15)	11.217(13)	11.300(13)	9.267(11)	14.928(18)	12.119(16)	NS
Independent	8.436(5)	9.356(9)	10.775(13)	8.564(4)	9.600(7)	8.605(9)	8.357(6)	8.884(5)	***
Intellectual	9.792(11)	10.917(13)	9.570(7)	9.430(9)	11.400(14)	6.042(2)	10.285(12)	9.800(10)	***
Logical	9.261(9)	11.180(14)	10.462(12)	11.537(15)	10.600(11)	8.098(7)	11.357(15)	10.046(13)	***
Loving	8.450(6)	6.965(2)	10.129(9)	7.268(3)	5.000(3)	11.535(15)	8.642(8)	8.241(3)	***
Loyal	8.480(7)	9.236(7)	7.993(5)	11.333(14)	14.500(17)	9.830(12)	6.571(3)	9.276(7)	***
Obedient	13.716(18)	14.984(18)	12.959(18)	11.884(17)	17.000(18)	14.943(18)	11.071(14)	13.481(18)	**
Polite	10.425(14)	9.242(8)	10.176(10)	8.925(5)	11.500(15)	14.154(17)	10.000(10)	10.059(12)	***
Responsible	5.800(2)	7.079(3)	4.653(2)	5.333(2)	5.100(4)	6.887(4)	6.071(2)	5.654(2)	***
Self-controlled	9.738(10)	11.303(15)	10.197(11)	10.212(11)	2.500(2)	11.084(14)	9.081(4)	9.820(11)	**

* = p < .05 ** = p < .001 *** = p < .0001 NS = Not Significant