The Cross-Cultural Study on Work Values :
Focus on Religion, Leisure Time, and School Education

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Abstract

In Japan today, research on young people's employment problems has increased, particularly to access why even college graduates cannot find full-time work. Reiko Kosugi (2005) and Yuji Genda (2006) are well known researchers in Japan who focus on young people's labor issues. Many researchers blame the jog losses of young Japanese on the collapse of the country's bubble economy after the 1990s in Japan. However, this study will explain the situation not from an economics perspective but from a work values approach. That is, this research aims to clarify the relationship between gender, age, religion, leisure time, school education, and work values through cross-cultural comparison. Moreover, this paper will verify what has affected young people's work values using ordered regression analysis. Data were collected from the answers of 36,625 respondents to the World Values Survey (WVS). Findings reveal that school education, leisure time and religion have had significant influence on work values in Japan, South Korea, India, Germany and Great Britain. On the other hand, China and Pakistan differ drastically from Japan and the other countries mentioned above. Pakistan considers religion to be very important in its citizens' life, while China does not consider religion to be important at all. Although there is a tentative theory that the influence of educational is stronger than that of religion, in Pakistan, Islam has a powerful effect on young people's work values. It can also be concluded religion has had a major impact on leisure time and gender.

Key words: religion, leisure time, school education, gender, age

1. Introduction

Pakistan, which is adjacent to Afghanistan and lies at the junction of Asia and the Middle East, plays a crucial role in the fight against terrorism. Pakistan's population is 160.9 million, and its per capita gross national income (GNI) was about US $1,085 (in the fiscal year 2007–2008). Thus, around 22.3 % of the people are burdened with poverty, and the country's economic framework depends on the support and investments of foreign countries.

The main industry of Pakistan is agriculture, whose growth is fueled by the fertile granary area fed by the Indus River. The services sector expanded 13.6% in 2007–2008, higher than the rates achieved by manufacturing and finance. Recently, the country has been paying attention to export-oriented manufactures because agriculture has room for reform. Pakistan has abundant fossil fuel deposits (gas) and mining resources (copper) but needs substantial improvement in energy self-sufficiency. In other words, the country needs to develop its energy potential.

Another possible asset for Pakistan is its booming population:184.8million as of 2010—the sixth largest in the world. By 2050, the nation's projected population of 335.2million will have climbed to fourth place, after those of China, India, and the United State, according to *World Population Prospect in 2008* of the United Nations' Department of Economic and Social Affairs, Population Division. A more efficient use of its plentiful resources and the increase in population can boost Pakistan's economic growth. However, the bright prospects of a vibrant consumer market in Pakistan are dimmed by political uncertainty.

The growth discussed in this study is not explained from a macroeconomic angle; rather, the aim is to examine the psychological aspect of the economy in the future by analyzing the relationship between religion, leisure time, and school education and work values. Furthermore, this study searches for the factor that affects work values most strongly.

2. Literature Review

The history of friendly relations between Japan and Pakistan

According to Hirose (2005), Japan and Pakistan have always maintained a friendly relationship since they

established diplomatic ties in 1952. Pakistan participated in the San Francisco Peace Conference, and signed the peace treaty; India had refused to attend the conference. The activation of the treaty opened diplomatic relations between Japan and Pakistan, and since then, the two have had no big point of contention. The rapid economic growth of Japan at that time heightened its interest and presence in South Asia, which centered on Pakistan, where Japanese firms soon became conspicuous. However, in the 1970s and for about five years into 1980s, the Chinese economy expanded quickly, catching the attention of its Asian neighbors. The1990s saw the return of South Asia to the limelight: India shifted policy gears and threw its economy wide open, and India and Pakistan conducted unclear testing. Pakistan's unclear activity earned it a closer look from Japan, whose reaction was to increase its official development assistance (ODA) to South Asia. Pakistan got the lion's share of Japan's ODA —the largest among all recipient countries worldwide— and the Pakistan's pro-Japanese sentiment was higher than ever (Hirose, 2005). Moreover, Hirose (2005) argued that many South Asians, Pakistan is included, have nurtured pro-Japanese feelings because Japan has been the most advanced country in Asia. It was the first to modernize, but it preserved its culture and traditions. Furthermore, the fact that there has never been a war between Japan and Pakistan has kept their relationship smooth. This is especially significant since Pakistan is an Islamic country and its friendly ties with Japan are not grounded on religion.

The doctrine of Islam and the discipline of an Islamic society

I will now discuss why Japan, which is not Islamic, has managed to sustain its friendly relations with Pakistan. Kagaya and Hamaguchi (1977) point out that Islam was influenced by Muhammad's memoir called *al-hadith*. The believers of Islam are called Muslim or Musalman; they are supposed to adhere to a religious life, follow Sharia (Islamic law), and worship in a mosque. Sharia embodies the ethical and formal discipline that defined the relationship or contact between a believer and God, and is the basis of the social discipline that defines a believer's mutuality. Sharia is derived from the Koran, the sacred book of Islam. It is frequently said that Islam is a social organization that has exceeded religion, because the *al-hadith* refers to social norms. Muslims are said to have comprised 97% of Pakistan's total population in 1961, and the ratio had not changed in population in 1999. Yet, although Pakistan is predominantly Muslim, it has not followed solely the discipline of Sharia in all aspects. The country has in place public laws, such as a constitution, an administrative law, and the crown law, which are influenced by the British modern method. As such, the social norm in Japan and Pakistan likely share many common features because Japan has also been influenced by Britain.

Private statues in Pakistan: family law and an inventory method of calculating income

It seems that Sharia is applied to family law and an inventory method of calculating income in Pakistan. Because Islam has many cults, it is said that readings of family law and the inventory method of calculating income very accordingly. For example, as regards marriage or succession to property, private laws such as the legislation of family and succession are considerably affected by Hindu or local custom in Pakistan.

What affected to people's work values?

Weber's thesis states that capitalism in northern Europe gradually evolved when the Protestant work ethic, particularly the Calvinist branch, convinced a large number of people to work hard in the secular world.Thus, according to Weber (1996), religion affected socio-economic life. However, since Christianity was not able to grasp Eastern capitalism, Weber (1996) faced the difficulty of explaining only the expansion of capitalism and its relationship to Protestantism. Ogasawara (1984) takes a critical stand about Weber's theory on how the stoic Christian spirit developed capitalism. Many critics leaned toward both the stoic spirit and the ambivalent spirit.

Avan, Rahbar and Raza (2007) suggest that people's values are affected by role of co-residents of an extended family environment in early childhood. In Pakistan, their household is the extended family.

Stodolska and Livengood (2006) show that Islam's emphasis on strong family ties affected the leisure behavior of Muslims in the United States. The findings of their study suggest that leisure researchers need to pay more attention to the effect of religion on leisure behavior; they should strive to include religious beliefs in the cultural heritage of minorities.

Saez and Chang (2009) suggest that the variety of literature on capitalism may provide a theoretical foundation for the analysis of emerging multinational markets at the firm level. Developing countries such as China and India, for example, may be moving towards a "hybrid market economy," and capitalism will affect the work values of their young people. Miyoshi and Yoshino (2005) suggest that in China, work values are affected by Maoism and in Japan, by Confucian.

Kiyokawa and Yamane (2004) statistically describe Japan's work values not from ethics but from the data of an attitude survey. They suggest that aside from monetary value of their wages, Japanese receive benefits, such as a sense of accomplishment and their a wage, but also can get ingredients other than wages, such as a sense of accomplishment and satisfaction in their work.

Kiyokawa and Yamane add that people contribute to their society and attain self-actualization through occupation and their relationship with society. Thus, although many researchers have examined work values from religious and economic viewpoint, this paper aims to verify those studies or theories by using World Values Survey (WVS).

3. Research Method

Data

This paper addresses a number of weaknesses in the extant literature on the relationship between religion and work in showing theoretical and empirical understanding of the complex relationship between country and work or religion. I used cross-sectional data from 1981 to 2007 from a large, globally representative data set that allows for the consideration of detailed values for work and religion, leisure time, and school education. The data came from the WVS and were grouped in five waves: 1981–1984, 1989–1993, 1994–1999, 1999–2004, and 2005–2007. I limited the scope to nine countries: Japan and South Korea were included in all five waves; China and

India in the 2nd to the 5th; Pakistan, in the 3rd and 4th; Germany and Britain, in the 3rd and 5th; and Italy and France, in the 5th. See the details per country in Table 1.

Measures: Indicators of work, religion, and leisure time

The indicators of work, religion and leisure time were measured by values in the World Values Survey from 1981 to 2007 by using the WVS Association's scale. In all waves, the respondents[1] were asked about the values of their work, religion and leisure time, and told to rank their answers as either (1) *"Not at all important"* (2) *"Not very important"* (3) *"Rather important"* (4) *"Very important."* The average age was used to impute except missing values. For details, please refer to the footnotes.

4. Result

The descriptive statistics for the demographic variables are shown in Table 2. The correlations between the study variables are presented in Table 3. Figures 1 and 2 show the results of the multinomial correspondent analysis and Table 4, the results of the regression analysis.

Table 1. Annual Survey of Japan, S. Korea, China, India, Pakistan, Italy, Germany, France, and Great Britain

Wave	Japan	S.Korea	China	India	Pakistan	Italy	Germany	France	G.Britain	Total
1981-1984	1,204	970	0	0	0	0	0	0	0	2,174
1989-1993	1,011	1,251	1,000	2,500	0	0	0	0	0	5,762
1994-1999	1,054	1,249	1,500	2,040	733	0	2,026	0	1,093	9,695
1999-2004	1,362	1,200	1,000	2,002	2,000	0	0	0	0	7,564
2005-2007	1,096	1,200	2,015	2,001	0	1,012	2,064	1,001	1,041	11,430
Total	5,727	5,870	5,515	8,543	2,733	1,012	4,090	1,001	2,134	36,625

Note: The figures on the table are the number of people surveyed.

Table 2. Descriptive Statistics of Demographic Variables

Variables	Sampling Size	Mean	Median	SD	Range
Work (age: 15 to 34 years)	12,449	3.547	4	0.649	1–4
Religion (age: 15 to 34 years)	12,154	2.567	3	1.160	1–4
Leisure time (age: 15 to 34 years)	12,416	2.888	3	0.863	1–4
All sample size for the following:	34,426	41.688	40	15.280	15–99
· Japan	4,517	45.808	45	15.563	18–86
· S. Korea	4,897	39.013	37	13.057	17–91
· China	5,515	41.312	40	13.556	18–87
· India	8,534	38.204	35	13.926	18–99
· Pakistan	2,733	36.670	34	12.446	21–95
· Italy	1,012	45.625	45	15.618	18–74
· Germany	4,083	47.059	46	17.191	18–93
· France	1,001	47.137	45	18.196	18–92
· G. Britain	2,134	45.740	43	18.753	15–95
Sample size (age: 15 to 34 years)	12,965	4.0356	4	2.0877	1–9
· Japan dummy	1,199	0.011	0	0.106	0–1

· South Korea dummy	2,119	0.020	0	0.141	0–1
· China dummy	1,907	0.018	0	0.134	0–1
· India dummy	3,843	0.037	0	0.188	0–1
· Pakistan dummy	1,453	0.014	0	0.117	0–1
· Italy dummy	281	0.003	0	0.052	0–1
· Germany dummy	1,166	0.011	0	0.105	0–1
· France dummy	294	0.003	0	0.053	0–1
· Great Britain dummy	703	0.007	0	0.082	0–1
School education for all	31,003	4.527	5	2.486	1–8
School education (age: 15 to34 years)	11,850	5.201	6	2.334	1–8

Analytic Strategy: Correlation of Work, Religion, Leisure time, and School education

The Table3 shows the correlation of each variable, and the average, standard deviation, range, and alpha. All variables have mutual correlation. Work and school education, religion, and leisure time, and religion and school education have negative correlation.

Table 3. Correlation of Work, Religion, Leisure Time, School Education of Young People

Variables	(1)	(2)	(3)	(4)
(1) Work	1.0			
(2) Religion	0.244**	1.0		
(3) Leisure time	0.039**	-0.023**	1.0	
(4) School education	-0.033**	-0.130**	0.091**	1.0
Mean	3.609	3.129	3.104	4.844
SD	.642	1.037	.826	2.170
Range	1–4	1–4	1–4	1–8
α	.162	.024	.045	—

**p<.05

Multinomial correspondence analysis (MCA)

This study uses multinomial correspondent analysis (MCA) to examine the similarities between the categories of variables and the association of the variables. MCA offers a geometric representation of a two-way frequency table, as seen in Figures 1 and 2.

The presentation of MCA follows that of Greenacre (2006). MCA seeks to make a geometric representation of the rows and columns of a matrix, with nonnegative entries in a common low-dimensional space, so that the chi-squared distances between the rows and columns are well approximated by the Euclidean distances in the common space.

Let $x_{1, ..., } xq$ be categorical variables on N observations that are active in the analysis. To simplify notation, but without loss of generality, we assume that x_j is coded with consecutive integers $1,...., nj$. Let $Z^{(j)}$ be the $N \times n_j$ binary indicator matrix associated with x_j, $Z_{ih}^{(j)}1=1$ if and only if $x_{ij}=h$. Let

$$Z= (Z^{(1)}, Z^{(2)}, ..., Z^{(q)})$$

be the $N \times J$ indicator matrix of the set of active x-variables, where $J=n_1 + ... + n_q$. I will be consistent in letting i index observations 1, ..., N, j index variables 1, ...,

q, and h index categories 1, ..., n_j, or 1, ..., J.

The $J \times J$ Burt matrix is defined as B=Z'Z, or B=Z' D(w)Z, where w it the weight for the analysis and D(w) is a $J \times J$ square matrix with the weights on the diagonal and 0 off diagonal. The diagonal block of B associated with variable x_j is a diagonal matrix with the frequencies of x_j on the diagonal. The off-diagonal block of B associated with variables x_j and x_k is the two-way cross-tabulation of x_j and x_k.

In an analogous way, I define B*, the Burt matrix with more rows containing cross-tabulation from the supplementary variables. B*=Z*'Z, where Z* is the indicator matrix with more columns for the supplementary variables.

D (v), in general, represents a diagonal matrix with the elements of vector v on the diagonal and 0 off diagonal; 1 is a column vector of ones where length is defined by the context.

Figure 1 plots young people's work and religion, according to the result of the MCA. Note that Pakistanis regard religion as very important, but Japanese, Germans, and Chinese consider it to be not at all important in their life. Meanwhile, Indians regard the work as very important.
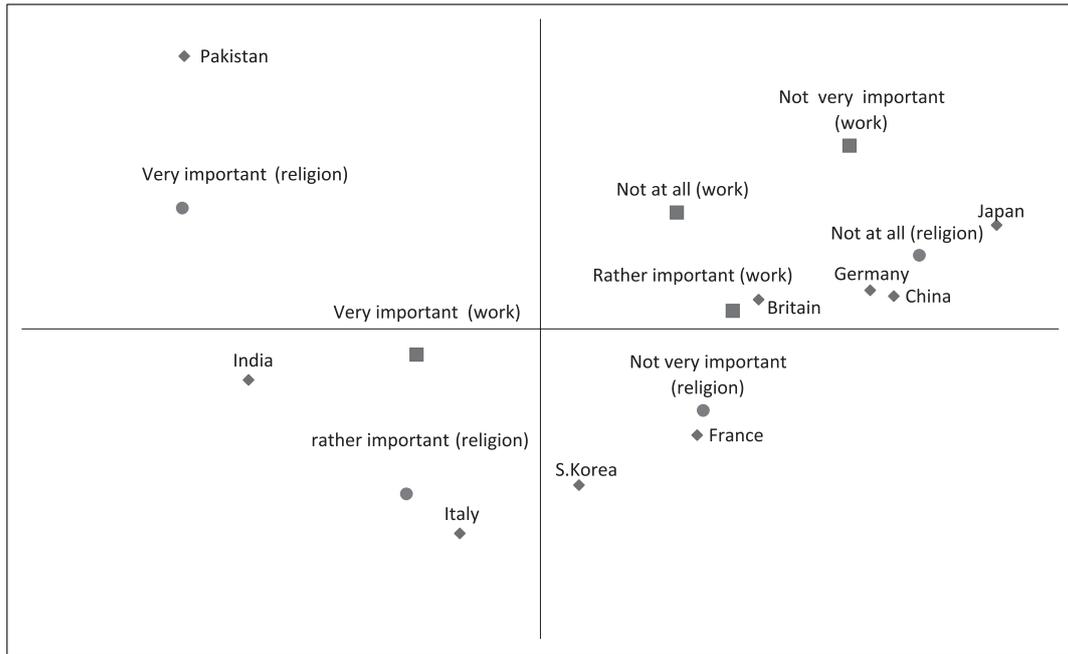
Figure 1. The Relationship between Work and Religion among Young People by Dimension I and Dimension II (Religion (X) and Work (Y)) *Note: Married person were included*

As seen in Figure 2, Pakistanis do not regard leisure time as important in their life, so that the country registers a negative correlation is between religion and leisure time. Being predominantly Muslim, with the Sunni branch comprising 78% and the Shia, the remainder, Pakistan clearly values the religion of Islam more than leisure time.

On the other hand, Italy values leisure time very much. The country's population is mostly Christian—predominantly Catholic; unlike Pakistan, Italy does not put religion above leisure time. The contrasting preferences of the two countries can be explained by either their economic status (Italy is a developed country and Pakistan, a developing country) or the difference in the doctrines of Islam and Christianity. The Muslim, for instance, is required to offer several prayers to Allah in a day.
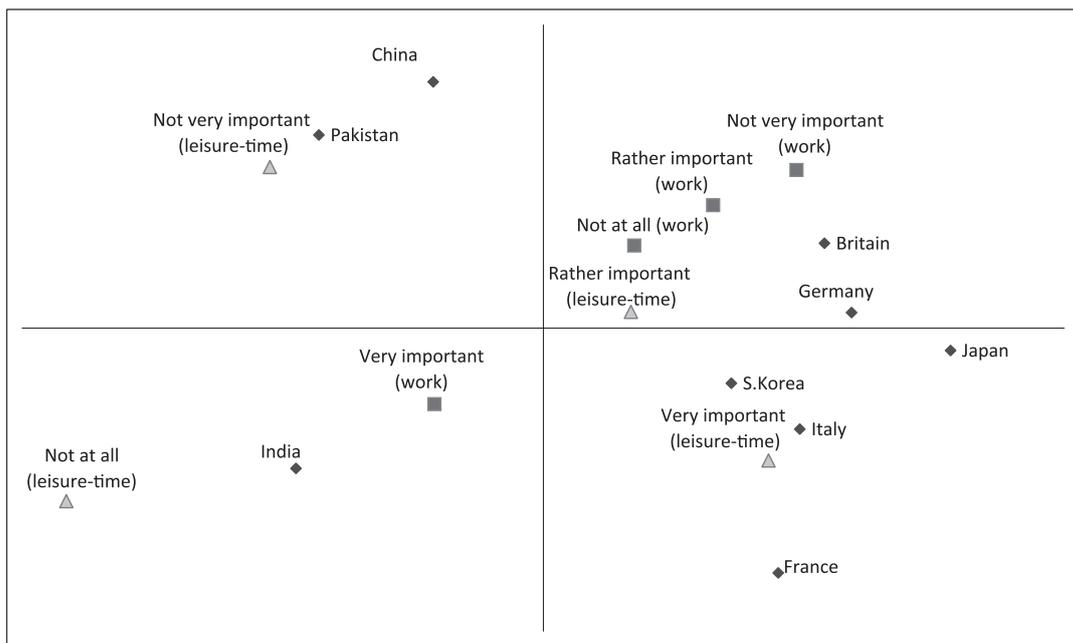
Figure 2. The Relationship between Work and Leisure Time of Young People by Dimension I and Dimension II (Leisure time (X) and Work(Y)) *Note: Married persons were included.*

Ordered regression analysis for work values

The proposed model was tested to find out what factor affected work values in each country; the results appear in Table 4. This dependent variable, work values, is measured by the ordinal scale. The dependent variables are years of school educational, sex, age (15 to 34 years old), marital status (single or not), leisure time, and religion. All independent variables except school education are dummy variables (see footnotes). The regression model is:

$$\hat{Y}=\beta_0+\beta_1 Educatn+\beta_2 Sex_D+\beta_3 Age_D+\beta_4 Marriage_D+\beta_6 Leisure\ time\ values+\beta_7 Religion\ values\cdots(1)$$

Data analysis reveals how religious values and gender (being male) affect work values. As a common result of many countries, sex[3], religion[7], and school education[2] became clear having affected the work values. Moreover, about leisure time[6], it became clear to have had high positive influence on the work values in Japan, judging from the measurement of a coefficient. Age[4] has had positive influence in common on some countries. Finally, marriage[5] has had negative influence in common on some countries. The main results are as follows:

1. It seems that work value is so important in seven of the countries that educational years or school education is high. Only Japan is significantly negative (-.033, ***$p<.01$).

2. Being male has a significantly positive influence on work values in every country.

3. Young people (from 15 to 34 years old) affect their work values in China (.163, ***$p<.01$), India (.067,* $p<.10$) and Great Britain (.335, ***$p<.01$).

4. Marital status (single or never married) is significantly negative in Pakistan (-.272, ***$p<.01$) Italy (-.225, ***$p<.01$) and Germany (-.146, ***$p<.01$).

5. Leisure time has a significantly positive correlation to work values in Japan (.552, ***$p<.01$), South Korea (.135, ***$p<.01$), India (.163, ***$p<.01$), Germany (.302, ***$p<.01$) and Great Britain (.297, ***$p<.01$).

6. Religion is significant in all countries except China; only Germany has a significantly negative result (-.115, ***$p<.01$).

The results for Japan show that the education level is going up, and it exerts a negative influence on work values. Kiyokawa and Yamane (2004) state that Japanese who have received higher education tend not to ask for the occupation of their choice. Note, therefore, that 24% of the respondents were college graduates.

Table 4. Factors That Affected Work Values

	Japan (n=2,055)	S. Korea (n=4,849)	China (n=3,607)	India (n=8,180)	Pakistan (n=2,614)	Italy (n=973)	Germany (n=3,820)	G.Britain (n=911)
Independent Vaiable								
School education[2]	-0.033***	0.032***	0.017**	0.039***	0.002	0.005	0.015***	0.027**
	(-0.009)	(-0.006)	(-0.007)	(-0.004)	(-0.007)	(-0.013)	(-0.005)	(-0.011)
Sex_D[3]	0.264***	0.175***	0.168***	0.136***	0.505***	0.270***	0.106***	0.192**
	(-0.052)	(-0.035)	(-0.04)	(-0.032)	(-0.05)	(-0.081)	(-0.037)	(-0.075)
Age_D[4]	-0.009	-0.071	0.163***	0.067*	-0.099	-0.082	-0.009	0.335***
	(-0.073)	(-0.048)	(-0.047)	(-0.035)	(-0.06)	(-0.109)	(-0.047)	(-0.09)
Marriage_D[5]	-0.023	-0.068	0.032	-0.027	-0.272***	-0.225**	-0.146***	0.041
	(-0.084)	(-0.051)	(-0.069)	(-0.048)	(-0.064)	(-0.108)	(-0.053)	(-0.097)
Leisure T_D[6]	0.552***	0.135***	0.04	0.163***	-0.036	0.177	0.302***	0.248**
	(-0.092)	(-0.049)	(-0.039)	(-0.031)	(-0.05)	(-0.117)	(-0.052)	(-0.117)
Religion_D[7]	0.318***	0.068*	0.053	0.328***	0.344***	0.357***	-0.115***	0.297***
	(-0.065)	(-0.035)	(-0.053)	(-0.038)	(-0.098)	(-0.093)	(-0.041)	(-0.077)
$\chi^2(6)$	87.97***	74.31***	50.87***	244.92***	150.87***	35.31***	71.56***	51.42***
R^2	.021	.009	.007	.025	.033	.023	.009	.023

*$p<.10$, **$p<.05$, ***$p<.01$. (Two-tailed tests)*

Notes: (1) The numerical value of the upper row shows co efficiency and ( ) shows standard error.

(2) France is not mentioned in Table4 because the regression model is not significant.

4. Conclusion and Discussion

I made a comparative analysis about young people's work values by using the World Values Survey. It is said that the answers in an attitude survey are generally influenced by the installation of the parent population and the extraction method of a sample. Moreover, the result depends on whether the respondent understands the question, the method of translation, and the procedure of the interview. Considering these things, the WVS questions would have slight differences in translation for each country. If the results of precedent research were

considered, it would seem that the work values and meaning or value of school education in Japan are different from those in other countries. Why does school education have a negative influence on Japanese work values? As the level of education rises, more people can choose a good occupation that pays well. I often hear in Japan that an occupation is a place of self-actualization. Therefore, work values in this country may be related to self-actualization. When young Japanese chose an occupation, it seems they do not put so much importance on the salary. However, this premise was not clarified in this research.

Religion had a positive influence on work values in Japan, Pakistan, and India, which have different predominant creeds. Japan's main religion is Buddhism, Pakistan's is Islam, and India's is Hinduism. It is only in China that religion has not affected work values.

Leisure time has not affected the work values of China and Pakistan. Perhaps it is because their meaning or value of leisure time differs greatly from those of other countries.

Thus, I have analyzed the factors that affect work values. Although the effect of the factors varied from country to country, it became clear that only males have had a positive influence on work values. I will consider such make influence for my next research.

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Notes

1. (Introduction by interviewer):
   Hello. I am from the _____ (mention name of the interview organization). We are carrying out a global study of what people value in life. This study will interview people representing most of the world's places. Your name has been selected at random as part of a representative sample of the people in _____ (mention country in which interview is conducted). I'd like to ask your views on a number of different subjects. Your input will be treated strictly confidential but it will contribute to a better understanding of what people all over the world believe and want out of life (Show Card A). For each of the following, indicate how important it is in your life. Would you say it is (read out and code one answer for each):

	Not at all important	Not very important	Rather important	Very important
Work	1	2	3	4
Leisure time	1	2	3	4
Religion	1	2	3	4

2. Education means number of years in school. Graduation from primary school or the equivalent level = 6, graduation from junior high school or the equivalent level = 9, graduation from high school or the equivalent level = 12, and graduation from university or the equivalent level = 16
3. Sex dummy is male = 1, female = 0
4. Age dummy is young people (from 15 to 34 years old) = 1, the others = 0

5. Marriage dummy is single or never married = 1, the other = 0

6. Leisure time dummy = 1 (wherein leisure time is very important or rather important in your life), the other is 0

7. Religion dummy=1 (wherein religion is very important or rather important in your life), the others = 0

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