An Analysis of Work-Related Values among U.S., Australian and Japanese Workers: for More Effective Intercultural Communication

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Abstract

The present study is an empirical analysis of values of people from three different countries --the U.S., Australia and Japan--focusing on their interaction in business situations. The objectives of this study are 1) to find what kind of work-related values American, Australian and Japanese workers are oriented to today; 2) to determine whether these values are more strongly influenced by national-level culture (country) or by other levels of culture (demographic factors such as ìgenerationî and ìgenderî); and 3) to ascertain possible ways of achieving effective communication among people of all three countries, based upon results of the data analyses for 1) and 2). 187 U.S., 147 Australian, and 212 Japanese white-collar workers participated in the study. According to the results of a Factor Analysis, worker values were divided into four categories: 1) Self-Development; 2) Human-Relations; 3) Security; and 4) Equity. The research has a 3 (cultures) x 2 (age groups) x 2 (age groups) x 4 (values) factorial design. The results of a Oneway ANOVA (Analysis of Variance) indicated that there were significant differences in all four values among U.S., Australian and Japanese workers. This means that workers from those three countries were oriented toward distinctly different work-related values. The results of a Multivariate Analysis of Variance (MANOVA) also showed that only the Culture variable was significantly related to all four values. Based upon these results, some suggestions for improving communication between U.S., Australian and Japanese white-collar workers are offered.

Understanding people with different cultural backgrounds can be achieved by understanding the value systems or perceptual systems which they have acquired through their lives in their own cultures (Samovar, Porter & Jain 1981). Even people who share and understand a common language often face communication gaps between one another. Without learning the other's values or perceptual systems,

communication will never be successful. Failure in communication among people from different cultures will lead to serious performance blunders in various intercultural situations such as business, education and conferences.

The present study is an empirical analysis of values of people from three different countries--
the U.S., Australia and Japan, focusing on their interaction in business situations. American workers can have communication problems with Australian workers in business even though they share and use the same communicative symbols of English. They may ignore or neglect differences because of the apparently small cultural distance between them. On the other hand, since Japanese workers and their American and Australian counterparts do not use the same language in addition to having a large cultural distance, the possibility for miscommunication between them is all the higher. It is generally considered that value systems between Americans and Australians are much closer than value systems between Americans or Australians and Japanese. However, there are still differences in perceptual systems even between Americans and Australians, and ignorance of this fact can cause them to have communication problems .

More important is that culture can be transformed over time. Culture itself can be influenced by various socio-cultural factors in a society--politics, economics, education, and so on. For example, Hofstede (1980) and Punnett, Singh & Williams (1994) indicated a significantly positive correlation between GNP and individualism. Economic strength promotes individualistic values in society. For example, according to the data presented by Hofstede (1980), in the 1970s when Japan's GNP was much lower than that of the U.S., the individualism score was also much lower in Japan than in the U.S. Yet, Japanís GNP surpassed even that of the U.S. in 1987, and there is clear evidence that Japanese have accordingly become more and more individualistic (Watanabe 1994; Yamaguchi 1995a, 1995b and 1997; Yamaguchi & Nanai 1997). The transformation of cultural values holds true for the U.S. and Australia as well as Japan: in terms of the relation between economic growth and people's values, Australians may be much less individualistic than Americans. Thus, it is indispensable for international workers to understand people's current values in order to perform their tasks successfully.

However, even within the same country, people also have various values and misunderstand one another since it is not only national-level culture that influences people's values and perceptions. Hofstede (1991) speculates that people in a given society simultaneously belong to several groups and categories in a society and hence have various values and behavioral patterns called multiple mental programs. Hofstede (1991) presents various levels of culture which can affect people's values: "nationality," "region," "race, religion and language," "gender," "social status," and "organization." Everybody lives in such multiple layers of culture. Gudykunst et al (1996) also distinguish cultural values from

individual values and contend that the influence of culture on individual behavior is mediated by individual self-construals. However, they did not discuss in detail what forms and generates such individual construals and /or values. Presumably, it is the combination of multiple layers of culture to which people belong that form and generate these construals. These different levels of cultures conflict with one another to affect and control people's perceptions and behavior in the various situations they face (Hofstede 1991). Sometimes, opinions, judgment and interpretation are more different between the young and the old and between males and females than between people from different countries. It is undeniable that all levels of culture are a crucial factor for determining people's perceptual systems. Therefore, discerning the effects of these factors on people's values can be an effective strategy for achieving successful communication with people from different cultures as well as with people from the same culture.

This suggests that understanding and achieving good communication with people from different cultures require us to acquire the ability to comprehend current cultural values and to understand the effects of various levels of culture on peopleís value systems and their behavioral patterns. In order to suggest strategies for successful communication among Japanese, American and Australian workers, the present study begins with the following research questions:

RQ1: What kind of work-related values are Japanese, American and Australian workers oriented to today?

RQ2: Are these values more strongly influenced by national-level culture or by other levels of culture?

METHOD

Subjects and Sampling

The subjects of the present research are white-collar workers of three countries: Japanese white-collar workers who work in Japan (n = 212, collection rate = 75.2%), American white-collar workers in the U.S. (n = 187, collection rate = 53.1%); and Australian white-collar workers in Australia (n = 147, collection rate = 38.4%).

Sampling was conducted in two ways. About half of the samples from each country were collected from a Business school class (almost all of those subjects in the three countries are now or used to be businesspersons). The other half were gathered by persons (ìagentsî) who were asked by the researcher to distribute the questionnaires to white-collar workers with whom they are acquainted. Each agent was sent 10 to 30 questionnaires from the researcher between December 1994 and February 1995. Almost all of the agents and subjects volunteered to administer or answer the questionnaires (the researcher paid only postage to the subjects for

returning the completed questionnaires). The industries to which the subjects belong are also various since the agents work at different companies.

Questionnaires

The data for this research were collected with questionnaires developed by the researcher of this study. He reviewed questionnaires used in the past research on worker motivation and complied an original questionnaire consisting of 60 items. Porterís (1961, 1962) and Alderferís (1969) questions related to human needs, in particular, were included to make the questionnaire of the present study, since they are concerned with human needs which can be generated from people's values. The subjects were asked the following questions for each item concerning work-related orientations with a Likert-type 5-point scale: how important each item is for them (1 = of least importance to 5 = of utmost importance).

Because this research was conducted cross-culturally, a back translation system was adopted in order to remove cultural bias as much as possible in making the questionnaire. Following Brislinís (1986) method, the researcher asked two Americans and two Japanese to translate the questionnaires into English and translate it back into Japanese in the following sequence: Japanese original version → English → Japanese →English.

Types of Work-related Values

There are 60 variables related to work in the questionnaire. In order to integrate some values into the same variable group, Factor Analysis (Varimax Rotation) was conducted. As a result, those values were divided into four dimensions, and 16 of 60 items of which factor loading was less than .4 were eliminated (Table 1). Factor I (22 variables), which represents the values of self-development and growth through task performance, achievement, display of one's ability, autonomy, respect and esteem from others, is hence labeled the Self-Actualization value (*Eigenvalue* = 11.89, 19.85%; *Cronbach's ƒ¿* = .92). Factor II (8 variables), which includes values of good and harmonious relationships and socialization with colleagues and a feeling of identification with oneís company, is hence termed the Human-Relations value (*Eigenvalue* = 4.48, 7.5%; *Cronbachís ƒ¿* = 79.). Factor III (8 variables), which refers to values of stable economic life and financial situations as well as certainty and stress-free conditions concerning work, is thus named the Security value (*Eigenvalue* = 3.37, 5.6%; *Cronbachís ƒ¿* = . 73). Factor IV (6 variables), which comprises values of compensation for job performance and compensation for contribution to a company, is hence designated the Equity value (*Eigenvalue* = 2.83, 4.7%; *Cronbachís ƒ¿* = . 71).

Table 1. The results of Factor Analysis

Factor Loading

I	II	III	IV
Questions (key words)			*(Self-A)*
(Human)	*(Security)*	*(Equity)*	
To use my initiative and original idea		.75	
To hold a position of responsibility		.68	
To improve work procedures and job performance	.67		
To make use of my ability, skills and knowledge	.67		
To exchange opinions frankly with my superiors	.65		
To do worthwhile work			.64
To further my own knowledge and skills	.63		
To have my opinion held in high regard by fellow employees	.63		
To cooperate with fellow workers on assigned projects	.62		
To set my own objectives			.60
To take a leadership role at work		.60	
To be a person whom fellow workers can consult about job	.59		
To express my opinion at work			.59
To have my work rated by my superiors as being of high quality	.59		
To be well respected by my subordinates		.56	
To be trusted by colleagues			.54
To be the one to make the decisions			.54
To cooperate with my colleagues to solve problems at work	.52		
To share my ideas with fellow workers		.52	
To clearly understand my job			.47
To participate in training and study meeting outsides a the company	.44		
To mutually evaluate the results of my and othersí work	.40		
To participate in company parties .72			
To participate in company recreational activities			.70
To associate with work colleagues even on days off			.69
To socialize with fellow colleagues following work hours		.66	
To celebrate the birthdays of departmental colleagues while at work	.58		
To maintain a good relationship with colleagues outside the company	.51		
To share my compensation for personal achievement equally with fellow colleagues	.46		

To maintain harmony with my fellow workers				
.44				
To make use of welfare facilities provided by the company				
.66				
To expect my company to help find me work after I retire				
.62				
To want a system, whereby age merits wage and the longer I stay with the same company the higher my salary steadily rises				.56
To expect a stable annual bonus from the company				
.56				
To work in an environment that allows me to take sick leave at my own discretion				.52
To work in an environment that lacks occupational stress				
.50				
To clarify my work schedule				
.48				
To avoid risk-taking or the more adventurous business projects				.46
To work overtime for just compensation				
.64				
To expect due compensation for my achievement				
.58				
To expect fair compensation if my ideas and proposals are adopted and used	.54			
To enjoy flex-time				
.50				
To expect the company to give me due compensation for long service	.50			
To want the opportunity to study at university or graduate school on full pay	.45			
Cronbach's				
.92	.79	.73	.71	
Eigenvalues				
11.89	4.48	3.37	2.83	
(19.8%)	(7.5%)	(5.6%)	(4.7%)	

Research Design and Tests

One of the objectives of the present study is to find whether national-level culture (country) or other levels of culture have greater effect on workersí job-related values. In the present study, two of the levels of culture presented by Hofstede (1991), demographic factors of ìgeneration (age)î and ìgender (sex)î were considered in conjunction with national-level culture (country) in terms of

their influences on peopleís values and perception. ìCountry,î ìage,î and ìsexî are thus independent variables. Japan, the U.S., and Australia constitute the three variables of national-level culture, whereas age and sex are treated as the variables of generation-level and gender-level culture. Male and Female can be very divergent groups within the same culture, and sometimes perception of phenomena differs between males and females more than it does between countries. As the times change, society also changes and develops. Since peopleís values are reflected in their social life and since change of the times brings about changes in values, different generations may also be oriented by differing values. Differences in perception among people who were born and grew up in different periods are thus assumed to be very great. Age groups were divided into three in this study: young (age up to 30); younger middle (31--40); and elder middle (41 and above). The basic demographic data of the subjects are as follows:

	Japan (*n* = 212)	U.S. (*n* = 187)	Australia (*n* = 147)
Sex			
male	168 (80%)	115 (62%)	73 (51%)
female	42 (20%)	71 (38%)	71 (49%)
N/A	2	1	3
Age			
young	76 (36%)	89 (48%)	49 (34%)
younger middle	95 (45%)	62 (33%)	54 (37%)
elder middle	41 (19%)	35 (19%)	42 (29%)
N/A	0	1	2

Dependent variables are peopleís values, which as noted earlier were divided into four dimensions (Table 1). The differences in the four dimensions of values were compared among the three cultures, three age groups, and two sexes. Thus, using the research design of 3 (countries) x 3 (age groups) x 2 (sexes) x 4 (value dimensions) a Multivariate Analysis of Variance (MANOVA) was conducted to determine whether national-level culture, generation-level culture or gender-level culture has greater effect on certain types of values. Oneway ANOVA and Student-

Newman-Keuls tests were also carried out on the means of the countries, age groups and sex groups to determine if the differences among them were significant.

RESULTS

Main Effects of Country, Age, and Sex, and Two-way and Three-way Interaction on Four Values

According to the results of Bartlet-Pillais (Table 2), the variable Country indicated significant relationships with the combined dependent variables (F [8, 958] = 27.29, $p < .01$). The results of Univariate F-test (Table 3) also showed that the variable Country was significantly related to each of the dependent variables: to the Self-Actualization value, F [2, 481] = 4.13, $p < .05$; to the Human-Relations value, F [2, 481] = 5.42, $p < .01$; to the Security value, F [2, 481] = 45. 02, $p < .001$; and to the Equity value, F [2, 481] = 20.85, $p < .001$. The variable Age was significantly related to the combined dependent variables (F [8, 958] = 4.74, $p < .01$), and, according to the results of Univariate F-test, to the Human-Relations value (F [2, 481] = 5.73, $p < .01$), to the Security value (F [2, 481] = 6.43, $p < .01$), and to the Equity value (F [2, 481] = 4.22, $p < .05$). The variable Sex was significantly related to the combined dependent variables (F [4, 478] = 2.41, $p < .05$) and only to the Security value (F [1, 481] = 8.67, $p < .01$).

The Age-by-Sex interaction was significantly related to the combined dependent variables (F [8, 958] = 2.53, $p < .01$), and, as a result of Univariate F-test, the interaction was only significantly related to the Self-Actualization value (F [2, 481] = 3.45, $p < .05$). The Country-by-Sex interaction was not significantly related either to the combined dependent variables or to any of the four dependent variables. The Country-by-Age interaction indicated no significant relationship to the combined dependent variable but only to the Security value (F [4,481] =2.41, $p < .05$).

There were significant relationships between the Country-by-Sex-by-Age interaction and the combined dependent variables (F [1924, 16] = 1.79, $p < .05$) . However, as a result of Univariate F-test, the three-way interaction only indicated significant relationships with the Self-Actualization value (F [4, 481] = 3.72, $p = .01$) and the Security value (F [4, 481] = 3.51, $p < .05$).

Table 2. Multivariate Analysis of Variance

Values Approximate F HypothesisDF Error DF Sig. of F

Countries

MANOVA (S=2,M=0.5,N=238)					
Pillais	.37	27.29	8	958	.000
Wilks			.64	29.82	
8	956	.000			

Age MANOVA (S=2,M=0.5,N=238)					
Pillais	.08		4.74	8	
958	.000				
Wilks	.93		4.78	8	
956	.000				

Sex MANOVA (S=1, M=1, N=238)					
Pillais			.02	2.41	
4	478	.048			
Wilks			.98	2.41	
4	478	.048			

Countries by Age MANOVA (S=4, M=-0.5, N=238)					
Pillais			.04	1.16	
16	1924	.295			
Wilks			.96	1.16	
16	1460.95	.296			

Countries by Sex MANOVA (S=2, M=0.5, N=238)					
Pillais			.03	1.51	
8	958	.149			
Wilks			.98	1.51	
8	956	.149			

Age by Sex MANOVA (S=2, M=0.5, N238)					
Pillais		.04	2.53	8	
958	.010				

Wilks			.96	2.53	8	956	.010
Countries by Age by Sex MANOVA (S=4,M=-0.5,N=238)						
Pillais			.06	1.79	16	1924	.028
Wilks			.94	1.80	16	1460.95	.026

Table 3. Univariate Tests of F

	F	*df*	*Hypothesis MS*	*Error MS*	*Sig. of F*
Self-Actualization					
Countries	1.14		.28	.13	(2,481)	.017
Age	.55	.28	2.01	(2,481)	.135
Sex	.00	.28	.01	(1,481)	.924
Country x Age	.31	.28	1.13	(4,481)	.343
Country x Sex	.75	.28	.70	(2,481)	.069
Age x Sex	.95	.28	3.45	(2,481)	.033
Country x Age x Sex	.93	.28	.36	(4,481)	.010
Human-Relations					
Countries	2.42	.47	5.42	(2,481)	.005

Age			2.56		.47	5.73
(2,481)	.003					
Sex			.01		.45	
.01	(1,481)		.908			
Country x Age			.23		.45	
.51	(4,481)		.729			
Country x Sex			.32	.45	.71	(2,481)
.490						
Age x Sex			.49	.45	1.10	(2,481)
.335						
Country x Age x Sex		.12	.45	.26	(4,481)	
.905						
Security						
Countries			15.21	.34	45.02	(2,481)
.000						
Age			2.17		.34	
6.43	(2,481)		.002			
Sex			2.93		.34	8.67
(1,481)	.003					
Country x Age		.81		.34	2.41	(4,481)
.048						
Country x Sex			.19	.34	.57	
(2,481)	.567					
Age x Sex			.67		.34	
1.98	(2,481)		.139			
Country x Age x Sex		.89	.34	2.60	(4,481)	
.035						
Equity						
Countries		8.81	.42		20.85	(2,481)
.000						
Age			1.78		.42	
4.22	(2,481)		.015			
Sex			.48		.42	
1.12	(1,481)		.290			
Country x Age		.43	.42		1.01	(4,481)
.401						
Country x Sex		.70	.42		1.64	(2,481)
.194						

Age x Sex	1.06	.42	2.50	(2,481) .083
Country x Age x Sex	.14	.42	.33	(4,481) .860

Differences in Work-Related Values among Country, Age and Sex groups

The results of both Multivariate tests and Univariate *F*-test showed that the Country variable can affect all four types of values of the subjects, the Age variable can influence the Human-Relations value, the Security value, and the Equity value, and the Sex variable can affect only the Security value. Therefore, a Oneway ANOVA and multiple range tests were conducted to determine if there are significant differences in means of the four types of values among the three countries, the three types of values (i.e., not including the Self-Actualization value) among the Age groups, and the Security values between male and female.

There were significant differences in means of all four dependent variables (four types of values) among three countries (Table 4-a): the Self-Actualization value, F [2, 521] = 3.63, $p < .05$ (Japanese: $M = 4.03$, $SD = .48$; Americans: $M = 4.15$, $SD = .46$; Australians: $M = 4.00$, $SD = .69$); the Human-Relations value, F [2, 530] = 18.27, $p < .001$ (Japanese: $M = 2.66$, $SD = .61$; Americans: $M = 2.99$, $SD = .70$; Australians: $M = 3.03$, $SD = .73$); the Security value, F [2, 524] = 87.61, $p < .001$ (Japanese: $M = 3.44$, $SD = .54$; Americans: $M = 2.74$, $SD = .62$; Australians: $M = 2.73$, $SD = .65$); and the Equity value, F [2, 528] = 84.51, $p < .001$ (Japanese: $M = 3.01$, $SD = .60$; Americans: $M = 3.84$, $SD = .66$; Australians: $M = 3.64$, $SD = .73$) . Furthermore, the results of multiple range tests (Student-Newman-Keuls test) revealed the relationships in four values between the pairs of countries (Table 4-a): there were significant differences (at a level of .05) in the Self-Actualization value between Americans and Japanese and between Americans and Australians, but no significant difference in the value between Japanese and Australians; there were significant differences (at a level of .05) in the Human-Relations value and the Security value between Japanese and Americans and between Japanese and Australians, but no significant difference in the value between Americans and Australians; and there were significant differences (at a level of .05) in the Equity value between all pairs of those three countries.

There were significant differences in means of the Human-Relations value among the three age groups (Table 4-b), F [2, 527] = 6.25, $p < .01$ (young: $M = 3.00$, $SD = .76$; younger middle: $M = 2.77$, $SD = .64$; and elder middle: $M = 2.81$, $SD = .62$), but no significant difference between younger middle and elder middle

groups; there were significant differences in means of the Security value among the three age groups, F [2, 521] = 3.51, $p < .05$ (young: M = 3.11, SD = 67; younger middle: M = 2.98, SD = .68; elder middle: M = 2.91, SD = .73), and also only between young and elder middle groups at a level of .05; there were significant differences in means of the Equity value among the three age groups, F [2, 525] = 10.51, $p < .001$ (young: M = 3.64, SD = .76; younger middle: M = 3.38, SD = .69; and elder middle: M = 3.28, SD = .80), but no significant difference between younger middle and elder middle groups.

There was no significant difference in means of the Security value between male and female (Table 4-c).

Table 4-a. The Results of Oneway ANOVA & Student-Newman-Keuls tests (Country)

	Self-Actualization			*Human-Relations*			*Security*	*Equity*		
	Jap.	*U.S.*	*Aust*	*Jap.*	*U.S.*	*Aust.*		*Jap.*	*U.S.*	*Aust.*
	Jap.	*U.S.*	*Aust.*							
M	4.03	4.15	4.00	2.65	2.99	3.03	3.44	2.74	2.73	3.01
	3.84	3.64								
SD	.48	.46	.69		.61	.70	.73	.54	.62	.65
	.60	.66	.73							
d.f		(2, 521)					(2, 530)		(2, 524)	
		(2, 528)								
F					3.63				18.27	
		87.61			84.51					
sig.		.03			.0000		.0000		.0000	
Jap.		*			ns				*	
		*			*	*	*	*		
U.S.					*				ns	
			ns				*			

Table 4-b. The Results of Oneway ANOVA & Student-Newman-Keuls tests (Age)

	Human-Relations			*Security*
	Equity			

	Y	*Y-M*	*E-M*		*Y*	*Y-M*	*E-M*	
	Y	*Y-M*	*E-M*					
M		3.00	2.77	2.80		3.11	2.98	2.91
	3.64	3.38	3.28					
SD		.76	.64	.62	.67	.68	.73	.76	.69
	.80							
d.f		(2, 527)			(2, 521)				(2, 525)
F		6.25			3.51		10.51		
sig.		.0021			.0306				.0000
Y		*			*	ns	*		*
	*								
Y-M					ns			ns	
		ns							

Table 4-c. The Results of Oneway ANOVA (SEX)

	Security	
	male	*female*
M	3.01	3.01
SD	.69	.69
d.f	(1, 519)	
F	.0011	
sig.	.9732	

NOTE: Jap.= Japan, Aust. =Australia;
Y = young (age up to 30), Y-M = younger-middle (31--40), E-M = elder-middle (41 and above)
* = pairs of groups significantly different at the 0.050 level

Simple Main Effect of Country, Sex and Age

Three-way interaction of the independent variables was found to be significantly related to the Self-Actualization value and the Security value, and two-

way interaction of the Country variable and the Sex variable was not significantly related to any of the dependent variables. Thus, because of no significant correlation between two-way interaction of country and sex variables and any value, further analysis of influences of three-way interaction was not necessary. Furthermore, two-way interaction of the Country variable and the Age variable indicated a significant relationship only with the Security value and that of the Age variable and the Sex variable only with the Self-Actualization value. The Human-Relations value and the Equity value were not related to either two-way or three-way interaction of the independent variables. Therefore, it was necessary to analyze the simple main effect of two-way interaction of the Country variable and the Age variable on the Security value and the simple main effect of the Age variable and the Sex variable on the Self-Actualization value, in order to find which influences those values more strongly (Table 5 a & b).

Table 5-a. Simple Main Effect of Country by Age on the Security value

The Security value

	Young			*Younger-Middle*			*Elder-Middle*
	Japan	*U.S.*	*Australia*	*Japan*	*U.S.*	*Australia*	
	Japan	*U.S.*	*Australia*				
M	3.47	2.91	2.91	3.43	2.65	2.54	
	3.41	2.45	2.80				
SD	.61	.58	.67	.46	.61		.57
	.58						
	.60	.68					
d.f	(2, 111)			(2, 203)			
	(2,201)						
F	23.56			20.38			
	60.13						
sig.	.0000			.0000			
	.0000						

	Japan			*U.S .*			*Australia*
	Y	*Y-M*	*E-M*	*Y*	*Y-M*	*E-M*	
	Y	*Y-M*	*E-M*				
M	3.47	3.43	3.41	2.91	2.65	2.45	
	2.91	2.54	2.80				
SD	.61	.46	.57	.58	.61	.57	
	.60	.68					

d.f	(2, 206)		(2,179)
	(2, 130)		
F	.22		
	8.18	4.27	
sig.	.8014	.0004	
	.0161		

The simple main effect of the Country variable on the Security value was significant in all age groups: in the young group (Table 5-a), F [2, 203] = 20.38, $p < .001$; in the younger middle, F [2, 201] = 60.13, $p < .001$; and in the elder middle, F [2, 111] = 23.36, $p < .001$. The simple main effect of Age on this value (Table 5-a) was not significant in Japanese workers, but significant in U.S. (F [2, 179] = 8.17, p < .001) and Australian workers (F [2,130] = 4.27, p < .05).

The simple main effect of Sex on the Self-Actualization value (Table 5-b) was significant only in the younger-middle group (F [1, 198] = 11.90, $p < .001$), but not significant in the young and elder-middle groups. The simple main effect of Age on this value was not significant in any sex group (Table 5-b).

Table 5-b. Simple Main Effect of Age by Sex on the Self-Actualization value

The Self-Actualization value

	Young		*Younger-Middle*		*Elder-Middle*	
	Male	*Female*	*Male*	*Female*		*Male* *Female*
M	4.02		4.05		4.14	
	3.87		4.10	4.08		
SD	.53		.56	.42		.64
	.57	.66				
d.f		(1, 202)			(1,198)	
	(1, 113)					
F		.20				11.90
	.0361					
sig.		.6536				.0007
	.8497					

	Female			*Male*		
	Young	*Younger-Mid*	*Elder-Mid*	*Young*	*Younger-Mid*	*Elder-Mid*
M	4.02	4.14	4.10	4.05	3.87	4.08
SD	.53	.42	.57	.56	.64	.66
d.f	(2, 340)			(2,173)		
F	1.93			1.79		
sig.	.1695			.1468		

DISCUSSION

Current Work-Related Values among Japanese, Americans and Australians

It was found that the orientations of Japanese, American and Australian workers toward certain values differed to great extent. The importance of the Human-Relations value and the Security value were much more similarly perceived between Americans and Australians than between either of them and Japanese, which is consistent with much other research (Bond 1987, Hofstede 1980, Punnett, Singh & Williams 1994) even though the means (mean-values) derived were not as follows: Japan > U.S = Australia, which is not at all in accordance with previous research. The Self-Actualization value was closer between Japanese and Australian workers than between either of them and American workers, which does not accord with general cultural tendencies usually associated with the three countries. The Equity value was valued by workers from the three countries to different degrees: the means (means-values) derived were as follows: U.S. > Australia > Japan, which is in accordance with Leung and Iwawakiís (1988) research and Kim, Park and Suzukiís (1990) research. This result suggests that distances between the three countries vary according to the types of values analyzed, and that even people who share the same communicative code (language) may fail to communicate effectively if they have different cultural backgrounds. In this section, each of the four types of

values is discussed and compared among those three countries in order to ascertain current worker values particular to each.

(1) The Self-Actualization Value

Workers of all three countries marked high scores for this value with a mean of above 4. They are very individualistic, since this value consists of conceptions of individualism as reflected in questions concerning self-growth, autonomy, self-esteem, and so on. Americansí and Australiansí high means of this value were as expected and consistent with general cultural tendencies usually associated with the two countries. However, it was not posited that Japanese would indicate such a high score. This suggests that Japanese are no longer so collectivistic as they are believed to be. Yamaguchi and Nanaiís (1997) research on 340 Japanese white-collar workers in the Tokyo area yielded the same results. In the study, they concluded that Japanese culture has been shifting from collectivism to individualism. Watanabe (1994) also states that modern Japanese have become more strongly oriented toward self-actualization through job performance, which is taken to reflect the individualism value. Another possible reason for the high score of Japanese may lie in their high Masculinity orientation. According to Hofstede (1980), the more people are oriented to the Masculinity value, the stronger achievement motivation they have. The Self-Actualization value includes the concept of achievement of task performance .

It is also not in accordance with general cultural tendencies usually associated with the three countries that there was significant difference in means of this value between Americans and Australians and no significant difference between Japanese and Australians. As mentioned earlier, the economic situation of three countries may be related to this result. Hofstede (1980) and Punnett, Singh & Williams (1994) found a significantly positive correlation between the Individualism score and GNP. Japanís GNP surpassed that of the U.S. in 1987. Thus, Japanese economic growth and their strong Masculinity value could affect Japanese values to make them strongly oriented toward the Self-Actualization value. On the other hand, of the three countries studied Australia has the lowest GNP today, which may result in the significant difference in the means for the Self-Actualization value between Americans and Australians.

(2) The Human-Relations value

The concepts of the Human-Relations value are related to collectivistic cultural traits. The results showed that the means of American and Australian workers were around the midpoint (3) and that of Japanese was between 2 and 3. This result also implies the transformation of Japanese culture from collectivism to

individualism especially regarding human relations and a feeling of identification with one's company. This does not agree with general cultural tendencies usually associated with the three countries. However, a survey conducted by Meiji Life Insurance Company on 512 salaried men and women in Tokyo also suggested that Japanese no longer care about a feeling of identification with or loyalty to a company: asked what they would do if a big disaster occurred in Tokyo, only 2.2% of those salaried workers said they would go to their company first, while more than 70% replied that they would give the security of their families and themselves priority over loyalty to their companies (*Yomiuri* newspaper, March 8, 1995).

As expected, Americansí and Australiansí scores were almost the same (no significant difference between them). The score was a little higher than expected in terms of their high individualism in Hofstede's (1980) data. However, Fukuyama (1995) states that Americans prize socialization with others very much, which is a concept of the Human-Relations value. Americans have developed many community organizations and actively engage themselves in various community activities, and , thus, they are surprisingly cooperative and sociable in corporations, volunteer groups, church, university, and so on (Fukuyama, 1995). If Americans in the present research identified the Human-Relations value with "socialization with co-workers," they may well mark around the midpoint in means for this value. Also Gudykunst et al's (1996) research, which focused on the relationship between cultural Individualism-Collectivism value and Hallís (1976) LC and HC communication styles, found Australians were more collectivistic in their communication styles than was expected.

(3) The Security value

The variables of this value are associated with the concept of stability in financial situations and job-security. This concept can also be found in the Uncertainty Avoidance value presented by Hofstede (1980). According to his research, Japanese have an extremely high Uncertainty Avoidance score whereas Americans and Australians have a low one. Also in the current research, Japanese workers indicated much higher mean in this value than their American and Australian counterparts. Japanese felt this value to be important while Americans and Australians (no significant difference between them) did not perceive it to be important to the same degree. As discussed above, although Japanese have become individualistic and more and more motivated by the pursuit of their own purposes and the achievement of their own growth and development, they seem to want to do such in an environment where they are secured against economic and job-related instabilities. In relation to the Self-Actualization value, they thus want to devote themselves to self-actualization without worrying about job-security and a stable

economic life. On the other hand, Americans and Australians may not hesitate to take a risk in pursuing their own life and job goals (e.g. changing oneís job, quitting oneís job and going back to university or to graduate school, and so on).

(4) The Equity value

Equity is a concept of fairness in the sense that only people that make effort for a group or an organization can get a share of the profit and, under an equity system, they can get a share according to their contribution to an organization and its project. Equality is very different from Equity. Under an equality system, a member of a group can receive the same amount of share of profit regardless of his/her contribution and effort. In the present research, the equity-value variables consist of a compensation for task performance. According to both Leung and Iwawaki's (1988) research and Kim, Park and Suzukiís (1990) research on reward allocations in the U.S., Japan and Korea, groups in Japan and Korea tended to use an equality rule while groups in the U.S. were more likely to employ an equity system.

The present study produced the same result. Japanese workers marked almost the midpoint (3) in this value while American and Australian workers indicated close to point 4 although there was significant difference in means of this value between them. Thus, also in this research, Americans and Australians were more oriented toward the Equity value than Japanese.

An Equity system is usually employed in an individualistic society and an Equality system is usually adopted in a collectivistic society (Leung and Iwawaki, 1988; Kim and Park Suzuki, 1990). In this respect, Japanese thus still exhibited their collectivistic cultural traits. Although Japanese surely have become less oriented toward human relations, they are assumed to have not been as individualistic as Americans and Australians concerning group activities and group dynamics.

As a conclusion of this section, current values of Americans, Australians and Japanese can be summarized as follows:

* Japanese are in the middle of changing their value systems from Collectivism to Individualism. Although they are less oriented toward to human relationships, they are still strongly oriented to collectivism regarding group activities.
* Americans are individualistic, which is consistent with general cultural tendencies usually associated with U.S. culture. However, we have to notice that Americans perceive socialization with other ingroup members far more important than is often believed to be the case.

* Australians are not as individualistic as Americans even though many other researchers suggest that they are. The cultural distance between Japanese and Americans seems to have been decreased.

The Effect of National Culture (Country) or Demographic Factors (Age and Sex) on Japanese, American and Australian Work-Related Values

Although the result of the present study proved that national culture strongly affects peopleís values or work-related orientations, other levels of culture (i.e. demographic factors such as age and sex) also influence some types of values. In order to achieve effective communication with people from different countries (in this study, Japanese, Americans and Australians), we should be able to distinguish the effects of national culture from the effects of other levels of culture on peopleís perception. Doing so will help enable us to know what can cause Japanese, American, and Australian workers to interpret the same words, things and phenomena differently and thus misunderstand one another.

The Self-Actualization value was influenced by culture independently and also by the interaction of age and sex. However, differences in the strength of this value between male and female were found only in younger-middle workers, and the main effect of sex on this value was not found. Furthermore, in both male and female workers, differences in importance scores for this value were not found among young, younger-middle and elder-middle workers. As a result, it can be said that national culture is assumed to be a stronger determinant for Japanese, American and Australian workersí Self-Actualization value than demographic factors of age and sex. They are all highly oriented toward this value, but Americans are more motivated to work harder by being provided with incentives related to this value than their Japanese and Australian counterparts.

The Human-Relations value and the Equity value were not influenced by any interaction of national culture, age and sex, but by national culture and by age independently of each other. Therefore, in a situation where Japanese, Americans and Australians work together, we should consider their orientations toward these values in terms of either culture difference or age difference. We cannot deny the influence of both on this value. Japanese workers do not have to be provided with as many opportunities for socializing with colleagues as do their American and Australian counterparts. Among workers of the three countries, Americans were most motivated by an equity reward allocation rule, while Japanese desired this rule least. Japanese prefer an equality rule to an equity rule. Young workers require chances for socializing with colleagues and prefer an equity allocation rules more than do younger-middle and elder-middle workers.

All national culture, age and sex variables were proved to affect the Security value independently, but between male and female there was no significant

difference in this value. The interaction of national culture and age influenced this value. In all age groups, national culture was found to influence this value; age was found to influence this value among American and Australian workers but not Japanese. A comparison of means for the Security value among the three countries found no significant difference between each of Americans and Australians, but a significant difference between each of them and Japanese. This suggests that we should first treat Japanese workers and their American and Australian counterparts differently, and then differentiate American and Australian workers according to age groups. Young American workers were oriented toward this value more strongly than both younger-middle and elder-middle American workers. Young Australian workers indicated a stronger orientation toward this value than younger-middle workers.

Some Suggestions for Effective Communication among Japanese, American and Australian Workers

The cause of failures in communication with others lies in differences of values and in perception gaps (Samovar, Porter and Jain, 1981). Differences in values exist in all levels of culture and hence communication failures occur not only in intercultural situations where people use different communicative codes but also within a single culture where people are assumed to share similar perceptions and use the same language. The results of the present research suggest that although national culture is a very strong determinant for Japanese, Americans and Australians' values and behavioral patterns, other levels of culture (ìgenerationî and ìgender”) in these societies can also influence and foster some types of value systems. Gudykunst et al (1996) found that individual level factors were better predictors of low- and high-context communication styles across cultures than cultural individualism-collectivism. Therefore, understanding how national culture and other levels of culture can exert influence on values may help us to recognize perception gaps and avoid miscommunication among people in intergroup and intercultural communication. In conclusion, applied to the result of this research, some suggestions for having effective communication among various age groups of male and female Japanese, American and Australian workers can be summarized as follows:

* Japanese, Americans, and Australians should all be shown respect regarding their autonomy, ability, expertise. However, Americans desire such respect much more strongly than do Japanese and Australians. Japanese and Australians may be able to easily understand one another regarding this aspect and thus have better communication.

* Japanese, American and Australian workers do not perceive human relationships with colleagues or identification with their companies important. Japanese, in particular, are not as willing to socialize with co-workers outside the company as is commonly believed. American and Australian colleagues thus do not have to fraternize with Japanese colleagues more than is necessary. Nowadays, managers may not be so easily able to ask Japanese subordinates to work after hours or on weekends, since today feelings of identification with and loyalty with oneís company are not as strong as they once were.
* Workers of all age groups regardless of culture do not want to socialize with colleagues after hours or outside the company. However, workers younger than 30 years old like to have informal, interpersonal communication with co-workers a bit more than those older than 30.
* Managers need to provide Japanese workers regardless of age and sex with clear job schedules, instructions, and information to give them confidence about their employment and salary stability. Although Americans and Australians, as a whole, do not care about this kind of uncertainty as a whole, their age or generation should be taken into consideration. American workers under 30 require this kind of information more than those above 30. Australian workers below 30 seek it more than those between 31 and 40.
* Opportunities and rewards should be allocated equally among Japanese workers regardless of their contribution to a section or a department. Individual achievements or accomplishments should not be announced publicly. Tasks should not be assigned to an individual but to a team, a section, or a department, and achievement should be regarded as the results of cooperation with other members of a work-team. Americans desire to be evaluated in terms of their own contribution to a group, and thus an equity reward allocation is a kind of symbol which expresses their ability. Therefore, individual achievement should be emphasized. Australians desire this type of communication much more strongly than do Japanese yet less so than do Americans. Americans and Australians should not emphasize their achievements when communicating with Japanese colleagues, whereas Japanese should accept such a communication style and information content when communicating with Americans and Australians.
* Workers below 30 years old regardless of culture should not emphasize their achievements when communicating with colleagues above 30, while the latter should accept such a communication style and content when communicating with the former.

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