

第 2 章

Survey Description on the Japan Survey on Information Society JIS 2001 and JIS 2002

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1 DESCRIPTION OF THE SURVEY

The revolution in Information Technology (IT) or Information and Communication Technology (ICT) in Japan has affected the value, social orientation, psychological functioning, lifestyle, and perceived social image on the information society and aged society. JIS surveys are intended to research the information society, and to analyze the various aspects related to information technology, Internet, and globalization interdisciplinarily. JIS surveys are the products of a program of cross-temporal social science research. The effort began in early 2000 by the Advanced Studies of Human Sciences and Sociology and Social Life Studies, the Graduate School at Osaka University (Naoi *et al.* 2003). In 2001, the Commission of the Japan survey on the Information Society launched the JIS series, designed to provide a regular monitoring of the social, cultural, psychological aspects of the publics of Japan. JIS surveys were carried out in the 2001 fall and 2002 fall. We describe survey design and some of question items measured in JIS surveys such as social stratification, information and communication technologies, social consciousness, lifestyles, values and etc.

Social Stratification in the Information Society: One of our important purposes is to study the relationships between social stratification and ICT, new aspects of social stratification. JIS surveys measure a set of items about social stratification such as educational background, household income and individual income, occupation and occupational prestige. Furthermore, well-designed step-by-step set of question items on the ICT such as image, knowledge, possession, and use are measured. We also research on the validity and the reliability of the question items which measure use of ICT and information literacy.

Work and Personality in the Information Society: We measured various aspects on personality, such as value, social orientation, and psychological functioning. Kohn and Schooler (1983) verified that the job condition is significantly important in the positive relationship between social stratification and personality. These findings are supported by the international comparison of America, Japan and Poland. (Kohn *et al.* 1990) Some of psychological items and social consciousness items are comparable for the research of Kohn and Schooler, such as self-directedness, intellectual flexibility, authoritarian conservatism, anxiety, trustfulness, standards of morality, conformity, self-confidence, etc. (Naoi and Schooler 1985). We also measured the substantive complexity of job, such as complexity of data, people, things, closeness of supervision, and other respects of job conditions. As ICT develops rapidly recently, people are more engaged in touching computers and in information processing both on business and everyday life. We place ICT and information literacy in the research

of work and personality, with the degree of “complexity of information” as a key concept.

Values and life styles: Values and life styles in the information society are getting important more and more. It is often pointed out that the social structure is changing from the industrial to post-industrial and post-modern, and the information and the knowledge become more and more important nowadays. There is important accumulation in the international comparison and the longitudinal survey in the World Value Survey. We measured some Inglehart’s items on post-materialism and materialism (Inglehart 1971) to research the relationship between the ICT and post-materialism.

Socio-demographic items: Socio-demographic items include age, gender, marital status, the respondent’s and spouse’s completed education, the respondent’s and spouse’s occupation, household income and individual income. Other background information was gathered on type of residence, region of residence, size of locality, the number of people residing in the home, exact occupational conditions for Dictionary of Occupational Titles coding, general subjective social class, subjective social class in the information society, etc.

Information and Communication Technology items: Nowadays, people can easily get in contact with various people and various services for various purposes all over the world with ICT such as computers, PDAs, mobile phones, and televisions. These ICT are taking an increasingly prominent place in society, giving access to the advanced information society. Respondents' level of involvement in information use was explored, with questions on using various information equipments, such as stereos, computers or mobile phones, following their use of e-mail both in private and on business, and using the Internet. They were also asked whether they had heard or know anything about the Internet, or the online service network. Questions on the images of information society and aged society included respondents' attitude for or against the information society, how well-informed respondents were about the information society. The survey contains the measurements of information literacy and additional questions covering topics as information- and media-related behavior, knowledge and images, positivism and skepticism in attitudes towards information technology and information society. Respondents were also queried about their interests on the various contents of programs of TV, journals, and homepage. These are included for measuring and comparing the roles and effects of the old and new medias. Opinions were also elicited on the effects of the Information technologies on economic growth, jobs, life, shopping, information retrieval, interpersonal communication, friendship, family communication, changes of the standards of morality, cross-border information flow, the costs of doing business, the privacy concerns, anticipated negative aspects, the degree of convenience in everyday life, and the disparity between the rich and the poor. Computer network privacy issues covered respondents' worries about how business companies use their personal information, and the awareness of importance of privacy of personal information.

Comparison: Development of information and communication technology proceeds rapidly on

worldwide scale. International comparative view is important to understand the effect of information and communication technology on society. In other words, in contrast to the United States where led in the information technology revolution, two advanced countries, Germany in Europe and Japan in Asia which both succeeded in rapid economic recovery after the World War II, are important as a comparative object. Some items of JIS 2001 are comparable with German General Social Survey (ALLBUS) 1998.

Replication: It is also important to do a social monitoring repetitively to understand the dynamics and social change of Japanese social structure. JIS surveys are intended to be replicative surveys with standardized question items.

Population: In Japan, aging progresses as rapidly as advanced computerization develops. We find modern Japanese society so interesting, because these social phenomena proceed together. The JIS survey grasps the rapidly developing aged society of Japan, with the target being from 20-89 years old people to carry out future continuous comparison.

2 SAMPLING

A multi-stage random sampling survey of men and women 20-89 years old was carried. Geographical areas are composed of the Hokkaido area, the Tohoku area, the Kanto area, the Hokuriku area, the Tozan area, the Tokai area, the Kinki area, the Chugoku area, the Shikoku area, the Kita-Kyushu area and the Minami-Kyushu area¹⁾. Categories of city size of residential areas for stratified sampling are metropolises, cities having more than 100,000 inhabitants, cities having less than 100,000 inhabitants, and rural areas (towns and villages). 13 metropolises are Sapporo City, Sendai City, Tokyo Metropolis department, Yokohama City, Kawasaki City, Chiba City, Nagoya City, Kyoto City, Osaka City, Kobe City, Hiroshima City, Kita Kyushu City and Fukuoka City.

¹⁾ In this survey, the geographical areas are composed as follows. The Hokkaido area contains Hokkaido Prefecture. The Tohoku area contains Aomori Prefecture, Iwate Prefecture, Miyagi Prefecture, Akita Prefecture, Yamagata Prefecture and Fukushima Prefecture. The Kanto area contains Ibaraki Prefecture, Tochigi Prefecture, Gunma Prefecture, Saitama Prefecture, Chiba Prefecture, Tokyo Metropolis and Kanagawa Prefecture. The Hokuriku area contains Niigata Prefecture, Toyama Prefecture, Ishikawa Prefecture and Fukui Prefecture. The Tozan area contains Yamanashi Prefecture, Nagano Prefecture and Gifu Prefecture. The Tokai area contains Shizuoka Prefecture, Aichi Prefecture and Mie Prefecture. The Kinki area contains Shiga Prefecture, Kyoto Prefecture, Osaka Prefecture, Hyogo Prefecture, Nara Prefecture and Wakayama Prefecture. The Chugoku area contains Tottori Prefecture, Shimane Prefecture, Okayama Prefecture, Hiroshima Prefecture and Yamaguchi Prefecture. The Shikoku area contains Ehime Prefecture, Tokushima Prefecture, Kagawa Prefecture and Kochi Prefecture. The Kita-Kyushu area contains Fukuoka Prefecture, Saga Prefecture, Nagasaki Prefecture and Oita Prefecture. The Minami-Kyushu area contains Kumamoto Prefecture, Miyazaki Prefecture, Kagoshima Prefecture and Okinawa Prefecture.

Table 1: JIS 2001 Stratified sampling (Population, Sample, Points)

	metropolises	cities with 100,000-	other cities	towns,villages	Total
1 Hokkaido area	1,436,206 22(2)	1,334,589 20(2)	709,785 11(1)	1,037,919 16(1)	4,518,499 69(6)
2 Tohoku area	762,900 11(1)	2,321,138 35(2)	1,829,598 28(2)	2,785,465 42(3)	7,699,101 116(8)
3 Kanto area	10,999,069 166(10)	12,988,830 196(11)	4,149,368 63(4)	3,805,192 57(4)	31,942,459 482(29)
4 Hokuriku area		1,680,416 25(2)	1,299,961 20(2)	1,436,883 22(2)	4,417,260 67(6)
5 Tozan area		1,392,544 21(2)	1,094,692 16(1)	1,581,295 24(2)	4,068,531 61(5)
6 Tokai area	1,678,685 25(2)	4,309,198 65(4)	1,842,731 28(2)	1,984,610 30(2)	9,815,224 148(10)
7 Kinki area	4,310,465 65(4)	7,356,294 111(7)	2,484,248 37(3)	2,125,751 32(2)	16,276,758 245(16)
8 Chugoku are	863,645 13(1)	2,395,693 36(2)	1,208,452 18(1)	1,621,550 24(2)	6,089,340 91(6)
9 Shikoku area		1,284,824 19(1)	780,341 12(1)	1,253,976 19(1)	3,319,141 50(3)
10 Kita-kyushu area	1,806,228 27(2)	1,449,332 22(2)	1,550,938 23(2)	1,896,159 29(2)	6,702,657 101(8)
11 Minami-kyushu area		1,812,466 27(2)	1,065,292 16(1)	1,811,023 27(2)	4,688,781 70(5)
Sum Population	21,857,198	38,325,324	18,015,406	21,339,823	99,537,751
Sample(points)	329(22)	577(37)	272(20)	322(23)	1,500(102)

Table 2: JIS 2002 Stratified sampling (Population, Sample, Points)

	metropolises	cities with 100,000-	other cities	towns,villages	Total
1 Hokkaido area	1,451,756 29(2)	1,337,080 27(2)	710,158 14(1)	1,035,645 21(2)	4,534,639 91(7)
2 Tohoku area	771,459 15(1)	2,331,922 47(3)	1,842,592 37(3)	2,778,180 55(4)	7,724,153 154(11)
3 Kanto area	11,107,332 222(14)	13,106,787 262(16)	4,249,875 85(5)	3,750,094 75(5)	32,214,088 644(40)
4 Hokuriku area		1,687,424 34(2)	1,302,127 26(2)	1,438,949 29(2)	4,428,500 89(6)
5 Tozan area		1,397,888 28(2)	1,099,740 22(2)	1,587,700 32(2)	4,085,328 82(6)
6 Tokai area	1,686,505 34(2)	4,416,092 88(6)	1,777,611 36(3)	1,995,145 40(3)	9,875,353 198(14)
7 Kinki area	4,331,721 87(6)	7,305,239 146(9)	2,576,207 51(3)	2,132,168 43(3)	16,345,335 327(21)
8 Chugoku are	869,263 17(1)	2,407,251 48(3)	1,209,315 24(2)	1,617,958 32(2)	6,103,787 121(8)
9 Shikoku area		1,290,969 26(2)	825,853 16(1)	1,208,242 24(2)	3,325,064 66(5)
10 Kita-kyushu area	1,820,217 36(3)	1,455,184 29(2)	1,560,765 31(2)	1,901,631 38(3)	6,737,797 134(10)
11 Minami-kyushu area		1,826,162 36(3)	1,105,359 22(2)	1,781,081 36(3)	4,712,602 94(8)
Sum Population	22,038,253	38,561,998	18,259,602	21,226,793	100,086,646
Sample(points)	440(29)	771(50)	364(26)	425(31)	2,000(136)

JIS 2001: The sample of JIS 2001 was selected using Japanese electoral rolls, which contain the names of all registered voters over the age of 20, or by the Basic Resident Register in the case electoral rolls are unavailable, for randomly selected 102 spots. They thus represent the whole territory of Japan according to the distribution of the resident population of in terms of geographical areas and metropolitan, urban and rural areas (Table 1). Fieldwork was conducted on the basis of detailed and uniform instructions from October to December 2001. The original sample size was 1,500 and the completion rate was 67.4 %, yielding 1,011 respondents for JIS 2001 survey. The JIS 2001 had two components. The main one was a questionnaire administered by interviewers, and interviews were conducted face-to-face in respondents' homes. The second was a self-administered supplemental questionnaire, which was left for the respondent's self fulfilled, and the questionnaire was reclaimed afterwards. In each person, both of face-to-face interview and self-administered questionnaire are conducted. The conducted orders of both were relied on the convenience of the respondent and the judgment of the interviewer depending upon the situation.

JIS 2002: The sample of JIS 2002 was selected using Japanese electoral rolls, or by the Basic Resident Register in the case electoral rolls are unavailable, for randomly selected 136 spots (Table 2). Fieldwork was conducted from October 2002. The original sample size was 2,000 and the completion rate was 62.8 %, yielding 1,256 respondents for JIS 2002 survey. The JIS 2002 was composed of a questionnaire administered by interviewers, and interviews were conducted face-to-face in respondents' homes.

The firm responsible for carrying out both JIS surveys is the Central Research Services, INC., CRS (Japan) which is one of the most reliable Japanese corporation aggregate of census, social survey, market and public opinion research.

2. USE RATES OF ICT IN JAPAN

We show use rates of ICT by city size, gender, age, and social stratification such as education, occupation and family income as basic results. We measured about the use of ICT and related equipments by asking "Which of the following items do you usually use? Please say all you use usually in your life." We had 14 equipments listed, but we focus on the use of video recorder, cellular phone, stereo or radio cassette, fax, computer, copy machine, printer, game console, digital camera in this section.

The individual use rate of various information equipments in JIS 2001 are shown in Table 3, and use rates in JIS 2002 are shown in Table 4. Several use rates in JIS 2002 are greater than in JIS 2001, and several use rates in JIS 2002 are smaller than in JIS2002 partially due to sampling error. But there is one certain stable phenomenon: the consistent patterns of "digital divide" among socio-demographic variables. There exist differences of use rates of ICT among population size of residential area, gender, age, education, occupation and family income both in JIS 2001 and JIS 2002, which will lead us for further future detailed research.

Table 3: Use Rates (%) of ICT (JIS 2001)

Variables	ICT									
	video recorder	cellular phone	stereo etc.	fax	computer	copy machine	printer	game console	digital camera	n
WHOLE SAMPLE	66	57	53	39	38	28	28	18	16	(1009)
CITYSIZE										
metropolis	74	69	64	47	46	31	36	25	22	(217)
more than 100,000 inhabitants	67	56	54	40	42	28	31	18	16	(407)
less than 100,000 inhabitants	63	55	53	39	35	29	28	16	15	(174)
towns,villages	57	47	40	32	25	25	14	10	13	(211)
GENDER										
men	72	69	57	43	47	34	38	23	21	(489)
women	60	46	49	36	29	22	19	12	13	(520)
AGE										
20-39 years old	86	86	76	44	58	32	37	38	28	(301)
40-59 years old	70	67	58	53	43	38	36	13	17	(384)
60-89 years old	41	18	26	19	13	12	10	4	6	(324)
EDUCATION										
Univ. or junior college -	80	78	70	60	69	47	53	21	24	(319)
High school completed -	67	58	53	38	31	25	21	18	15	(467)
Compulsory completed	43	24	27	14	7	8	6	11	9	(208)
OCCUPATION										
Professional & Managerial	81	80	70	64	79	53	67	21	37	(121)
Clerical & Sales	75	75	63	56	58	42	38	18	17	(261)
Blue collar & Agricultural	68	63	53	35	25	24	19	22	16	(278)
Unemployed	51	30	39	22	20	12	14	12	10	(344)
FAMILY INCOME										
more than 10 million yen	75	71	62	70	60	54	50	13	23	(111)
6.5-10 million yen	72	67	66	54	53	45	41	15	19	(167)
3.5-6.5 million yen	76	63	60	35	38	21	27	23	23	(200)
less than 3.5 million yen	48	40	36	21	17	12	13	14	9	(192)

Table4: Use rates (%) of ICT (JIS 2002)

Variables	ICT									
	video recorder	cellular phone	stereo etc.	fax	computer	copy machine	printer	game console	digital camera	n
WHOLE SAMPLE	61	56	49	37	36	25	27	17	19	(1256)
CITYSIZE										
metropolis	62	64	57	49	46	28	30	19	23	(239)
more than 100,000 inhabitants	63	57	52	40	41	28	32	17	23	(470)
less than 100,000 inhabitants	64	52	50	33	33	22	25	18	14	(242)
towns,villages	54	52	38	26	26	21	19	14	15	(305)
GENDER										
men	68	61	51	39	41	27	33	20	22	(579)
women	56	52	47	36	32	23	22	14	17	(677)
AGE										
20-39 years old	86	88	74	44	60	33	42	41	34	(314)
40-59 years old	69	68	52	49	49	33	36	15	23	(443)
60-89 years old	38	26	31	22	11	13	10	4	7	(499)
EDUCATION										
Univ. or junior college -	79	82	68	59	66	45	50	24	34	(428)
High school completed -	63	53	49	33	30	20	22	18	15	(521)
Compulsory completed	32	24	22	13	5	7	4	6	4	(294)
OCCUPATION										
Professional & Managerial	82	87	67	70	82	56	67	15	45	(141)
Clerical & Sales	75	77	63	60	57	47	44	28	27	(275)
Blue collar & Agricultural	63	57	43	28	25	15	17	19	15	(355)
Unemployed	46	35	40	21	19	11	13	10	11	(478)
FAMILY INCOME										
more than 10 million yen	76	71	64	68	59	47	49	19	35	(127)
6.5-10 million yen	68	71	53	52	57	40	46	20	26	(180)
3.5-6.5 million yen	72	63	55	39	36	19	24	21	18	(310)
less than 3.5 million yen	43	29	30	16	11	10	7	8	6	(254)

Acknowledgement: We would like to thank Dr. Ekkehard Mochmann and his colleagues at the Z.A., Professor Dr. Wolfgang Jagodzinski at the Cologne University, and Professor Dr. Peter Ph. Mohler and his colleagues at the ZUMA, for their valuable help. However, all defects in this paper due to us.

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