

## **Description of the MIDJA Study**

The overarching goal of MIDJA (Midlife in Japan) was to a conduct multidisciplinary study of health and well-being in a sample of middle- and older-aged Japanese adults. The design and scientific content of the study were comparable to an ongoing longitudinal study in the U.S., known as MIDUS (Midlife in the U.S., available at <a href="http://www.icpsr.umich.edu/icpsrweb/NACDA/studies?archive=NACDA&q=MIDUS">http://www.icpsr.umich.edu/icpsrweb/NACDA/studies?archive=NACDA&q=MIDUS</a>). Parallels between the two provide opportunities to investigate how cultural differences in self and relational factors predict life course variations in well-being and health.

A first primary aim was to collect survey data on a probability sample of adults from the city of Tokyo, Japan. The sample covered five decades of aging (30-79) and was equally divided by gender. Data collection consisted of a 50-page questionnaire covering sociodemographic information and a comprehensive array of psychosocial factors and health assessments (mental and physical).

A second aim was to recruit a subsample of respondents from the above survey to participate in a related biomarker study. Those data are not yet ready for public release.

The purpose of this document is to explain the composition, data collection protocol, and sample selection and response rate for the MIDJA Survey .

## **Sample Description**

The MIDJA survey data were collected from a total of 1,027 participants. All eligible participants were non-institutionalized, Japanese-speaking adults, aged 30-79 and living in one of the 23 wards of Tokyo from April 2008 – September 2008. The overall response rate was 56.2%. Reasons for non-response included: moved, address unknown, absent during time of survey, illness/injury, hospitalized, deceased. Details about sample selection and response rates are presented below.

All respondents were sent an advance letter that included an explanation of the research and an invitation to complete a self-administered questionnaire (SAQ) approximately 46 pages in length. Monetary incentives were used to maximize participation; individuals completing the survey received 3,000 yen (~\$28-30). Japanese survey research relies on a "deliver and pick-up" method of questionnaire administration, thus written consent was obtained when the SAQ was delivered to the participant's home.

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Table 1 below provides a summary of select demographic characteristics (gender, age, education) for the MIDJA survey sample (N=1027).

Table 1. Demographic Characteristics of the MIDJA Survey Sample.

Characteristic	Descriptives
Age (30-79) (Mean, S.D.)	54.4 (14.1)
Gender	
Male	49.2%
Female	50.8%
Education	
High School or Less	43.0%
Vocational School	13.7%
2 Year College Graduate	8.8%
Some College	2.6%
Bachelors +	32.1%

## **Sample Selection**

Central Research Services (CRS), based in Tokyo, Japan, conducted the MIDJA Survey from April 2008 – September 2008. The sample was selected from the Basic Resident Register Book for the 23 wards in Tokyo, Japan, via two-stage stratified random sampling. Within each ward 5 groups were created based on age (30-39, 40-49, 50-59, 60-69, 70-79) and stratified by gender. Thus, 10 strata, based on gender and age were created. For each strata a total of 100 samples are allotted and proportionally distributed among each ward based on the number of registered residents in the Basic Resident Register Book for Tokyo, as of March 31, 2007. Approximately 10 samples were assigned per sampling spot. The population and sample for each ward, broken out by gender and age, appears in Table 2 below.

The primary sampling unit was based on the basic survey units fixed at the 2005 National Census. The sampling spots were sampled from a table of random numbers. Respondents for each sampling spot were selected from the basic resident register book using a systematic sampling method. Two reserve samples were allotted for per respondent. If the primary selected respondent was ineligible, regardless of reason, the reserve samples were used. To ensure adequate sampling of men from the three youngest decades (30-39, 40-49, and 50-59), three reserve samples were allotted per respondent. If sampling could not be conducted from the basic resident register book, samples were transferred to a different ward within the same area.

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Table 2. Population and Sample for Each Ward by Gender	r and Age Group	าเก
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Region	Ward	30-39	40-49	50-59	60-69	70-79	30-39	40-49	50-59	60-69	70-79	Total
	1. Chiyoda	3,998	3,032	2,996	2,318	1,614	3,809	3,117	2,896	2,594	2,291	28,725
		1	1	1	1	0	0	1	1	1	1	8
	2. Chuo	11,483	7,931 1	6,260	5,017 1	3,229	12,399	7,878 1	6,158 1	5,671 1	4,577 1	70,603 11
	3. Minato	19,268	14,266	11,711	9,206	6,103	21,575	14,814	12,473	10,815	8,941	129,132
	3. William	2	2	2	2	2	3	3	2	2	2	22
	4. Shinjuku	27,687	19,341	19,126	15,243	10,310	24,185	17,327	17,528	16,621	14,768	182,136
EA		3	3	3	3	3	3	3	3	3	4	31
AR	5. Bunkyo	16,596	12,564	11,850	9,205	6,639	17,015	13,116	12,103	10,601	9,456 2	119,145
RE	6. Taito	14,686	11,112	12,760	-	8,155	12.068	2 9,772	10,754	2 10,914	9,413	20 112,050
9	o. Tano	14,080	11,112	12,760	11,516 2	8,133	12,968 2	9,772	10,734	10,914	9,413	112,030
CENTER CORE AREA	7. Sumida	21,455	15,801	17,574	14,576	9,866	19,064	13,866	15,609	15,459	12,322	155,592
INS		3	3	3	3	3	2	3	3	3	3	29
CE	8. Koto	41,817	29,759	32,057	26,836	15,993	38,992	26,220	30,843	27,708	20,287	290,512
	10 01 11	5	5	6	6	5	5	5	6	5	5	53
	13. Shibuya	20,529	14,288	12,393	9,217	6,677 2	21,043	14,493	12,418	11,130	9,822	132,010 24
	16. Toshima	24,323	16,279	17,012	13,401	9,070	19,979	14,457	15,334	14,498	12,969	157,322
	101 100111111	3	3	3	3	3	3	3	3	3	3	30
	18. Arakawa	15,510	12,111	14,003	11,786	8,247	14,105	10,475	12,199	11,789	10,503	120,728
		2	2	2	3	3	2	2	2	2	2	22
	9. Shinagawa	33,757	23,468	23,819	19,389	12,325	32,131	21,532	22,677	20,509	17,348	226,955
	10. Meguro	4 24,082	4 17,914	4 15,064	4 12,107	4 8,586	4 26,581	4 18,530	4 15,847	4 14,081	12,186	40 164,978
ŒA	10. Wegulo	3	3	3	3	3	20,381	3	3	3	3	31
AF	11. Ota	62,344	46,938	48,238	40,093	24,972	56,345	40,879	43,865	40,622	33,194	437,490
IRN IRN		8	8	8	9	8	7	8	8	8	8	80
出	12.`Setagaya	77,554	60,311	49,774	38,618	28,027	82,505	60,243	51,429	44,468	38,454	531,383
JR1	1.4 N-1	10	10	10.040	15 201	9	11	11 18,527	10	9	9	96
EAST/NORTHERN AREA	14. Nakano	31,121	20,502	19,049 3	15,201	11,184	26,858 4	18,527	18,420 4	16,796 3	15,494 4	193,152 35
AST	15. Suginami	49,698	36,157	32,784	25,287	18,492	49,069	35,194	32,999	28,890	25,909	334,479
E/		6	6	6	5	6	7	7	6	6	6	61
	20. Nerima	62,553	50,101	43,574	34,872	26,738	59,417	45,855	41,899	39,787	33,608	438,404
	45.77	8	9	8	7	8	8	8	8	8	8	80
	17. Kita	27,791 4	20,074	23,796 4	20,572	14,461 4	24,032 3	17,916 3	21,749 4	22,406 4	20,047 5	212,844 38
$\frac{8}{N}$	19. Itabashi	47,388	34,641	36,931	30,112	19,885	42,365	30,995	34,351	31,814	26,224	334,706
HE	17. Itabushi	6	6	7	6	6	6	6	6	6	6	61
UT	21. Adachi	56,512	43,309	44,589	41,840	28,116	49,524	37,080	40,472	44,573	33,000	419,015
WEST/SOUTHERN AREA		7	7	8	9	9	7	7	8	9	8	79
EST	22. Katsushika	38,167	30,235	31,292	26,755	18,875	34,093	26,840	27,923	28,454	23,361	285,995
W.	22 E4	5	5	6	6	22.969	59 122	5	5	6	6	54 416 105
	23. Edogawa	65,916 8	47,369 8	42,336	36,800 8	22,868 7	58,122 8	39,470 7	38,281 7	38,331 8	26,702 6	416,195 74
	Population	794,235	587,463	568,988	469,967	320,432	746,176	538,656	538,227	508,531	420,876	5,493,551
Total	Sample Size	100	100	100	100	100	100	100	100	100	100	1,000

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Response rate according to gender is as follows.

Table 3. Response Rate by Gender

Gender	Sample Size	Invalid Samples	Valid Response	Response Rate
Male	1,093	167	505	54.5%
Female	1,009	108	522	57.9%
Total	2,102	275	1,027	56.2%

Response rate according to gender/ age is as follows.

Table 4. Response Rate by Gender and Age Group

Gender/Age	Sample Size	Invalid Samples	Valid Response	Response Rate	
Male/ 30-39	234	48	100	53.8%	
40-49	240	42	100	50.5%	
50-59	215	25	100	52.6%	
60-69	195	28	100	59.9%	
70-79	209	24	105	56.8%	
Female/ 30-39	236	29	100	48.3%	
40-49	190	16	115	66.1%	
50-59	188	19	106	62.7%	
60-69	196	19	100	56.5%	
70-79	199	25	101	58.0%	
Total	2,102	275	1,027	56.2%	

## **Sample Recruitment**

Japanese survey research relies on a "deliver-and-pick-up" method of questionnaire administration. Randomly selected respondents were sent a recruitment mailing that included a cover letter and an "Instruction Manual" describing the research in a question and answer format. Individuals completing the survey received 3,000 yen (~\$28-30). Interviewers traveled to the respondent's home to answer any questions the respondent might have. If the respondent agreed to participate, the interviewer obtained written consent, and returned one week later to pick up the completed questionnaire. **Survey Response Rates** 

The overall response rate was 56.2% calculated according to the following equation:

Response rate (%) = 2,102 (Total number of samples) – 75 (Number of invalid samples)

Invalid samples refer to instances where sampling could not be completed for the reasons listed in Table 4 below. Gender and Gender by Age distributions of reasons for non-completion are summarized in Tables 6 and 7 below.

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Table 5. Reasons for Non-Response in MIDJA Survey

Reason	Number of cases
Moved	119
Address unknown	60
Absent during time of survey	38
Illness, injury	35
Hospitalized	20
Deceased	3

Table 6. Reasons for Uncollected Data by Gender

Gender	Moved	Absent during the time of survey	Unable to be in contact	Address unknown	Refused to answer	Hospitalized	Illness/ injured	Deceased	Total
Male	76(12.9)	31(5.3)	85(14.5)	30(5.1)	336(57.2)	10(1.7)	17(2.9)	3(0.5)	588(100.0)
Female	43(8.8)	7(1.4)	57(11.7)	30(6.2)	322(66.1)	10(2.1)	18(3.7)	0(0.0)	487(100.0)
Total	119(11.1)	38(3.5)	142(13.2)	60(5.63)	658(61.2)	20(1.9)	35(3.3)	3(0.3)	1,075(100.0)

Table 7. Reasons for Uncollected Data by Gender and Age Group

Gender/Age	Moved	Absent during the time of survey	Unable to be in contact	Address unknown	Refused to answer	Hospitalized	Illness/ injured	Deceased	Total
Male/ 30-39	25(18.7)	9(6.7)	31(23.1)	12(9.0)	55(41.1)	0(0.0)	2(1.5)	0(0.0)	134(100.0)
40-49	27(19.3)	7(5.0)	24(17.2)	7(5.0)	74(52.9)	0(0.0)	1(0.7)	0(0.0)	140(100.0)
50-59	8(7.0)	7(6.1)	16(13.9)	6(5.2)	74(64.4)	1(0.9)	2(1.7)	1(0.9)	115(100.0)
60-69	12(12.6)	5(5.3)	8(8.4)	3(3.2)	59(62.1)	4(4.2)	2(2.1)	2(2.1)	95(100.0)
70-79	4(3.9)	3(2.9)	6(5.8)	2(1.9)	74(71.2)	5(4.8)	10(9.6)	0(0.0)	104(100.0)
Female/ 30-39	15(11.0)	2(1.5)	27(19.9)	10(7.4)	80(58.8)	0(0.0)	2(1.5)	0(0.0)	136(100.0)
40-49	6(8.0)	0(0.0)	7(9.3)	7(9.3)	52(69.3)	2(2.7)	1(1.3)	0(0.0)	75(100.0)
50-59	9(11.0)	2(2.4)	12(14.6)	5(6.1)	51(62.2)	1(1.2)	2(2.4)	0(0.0)	82(100.0)
60-69	8(8.3)	2(2.1)	6(6.3)	5(5.2)	71(74.0)	1(1.1)	3(3.1)	0(0.0)	96(100.0)
70-79	5(5.1)	1(1.0)	5(5.1)	3(3.1)	68(69.4)	6(6.1)	10(10.2)	0(0.0)	98(100.0)
Total	119(11.1)	38(3.5)	142(13.2)	60(5.6)	658(61.2)	20(1.9)	35(3.3)	3(0.3)	1,075(100.0)

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