

Medical Care and Oriental Alternative Medicine in China, Japan, South Korea, and Taiwan

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Purpose of this study

2

1. Overview the health status and health behavior of Chinese, Japanese, South Korean and Taiwanese men and women aged 20-89 : self-rated health status (SF-12), frequency of seeing a doctor, chronic diseases, B.M.I., smoking, alcohol habits, physical activity.
2. Examine the factor structure of self-rated health status of Chinese, Japanese and South Korean.
Previous studies, esp. in U.S.: Physical and Mental Components
Previous Japanese study suggested: the third component, Role/Social
Examine the presence of the third component with Japanese as well as Chinese and Korean data (Taiwanese data lack SF-12).
3. What kind of people use alternative oriental medical care in China, Japan, South Korean and Taiwan: oriental herbal medicine, acupuncture/ moxibation, and acupressure/clinical massage.

Data: East Asian Social Survey 2010 Health Module

Sampling Designs of EASS 2010

3

	Survey Period	Survey Mode	Age	Initial Size	Valid Resp.
China	Jul to Dec, 2010	Interview	18-	5,370	3,866
Japan	Feb to Apr, 2010	Interview & self-admin.	20-89	4,500	2,496
S. Korea	Jun to Aug, 2010	Interview	18-	2,500	1,576
Taiwan	Jul to Apr, 2011/2012	Interview	18-	4,424	2,199

Subtopics of EASS 2010

4

Health Structure	SF-12v2, hopelessness, symptoms/ chronic illness/diseases under treatment, height and weight
Health Behavior	smoking, drinking, exercise, health checkup
Medical Care	doctor's visit, worries about receiving medical care
Medical/Social Security Insurance	types of health insurance
Alternative Medicine	acupuncture or moxibustion (cupping) , oriental herbal medicine, acupressure or clinical massage
Social Support/Social Trust	emotional/financial/instrumental support, support from kin/non-kin/professionals
Environment	pollution, socioeconomic environment
Epidemiology	influenza
Family Care Need Care Management	family members with care needs, care giver role
Worries about Aging	decision-making, financial dependence (GSS)
Addiction	drinking, smoking, gambling, video/internet games

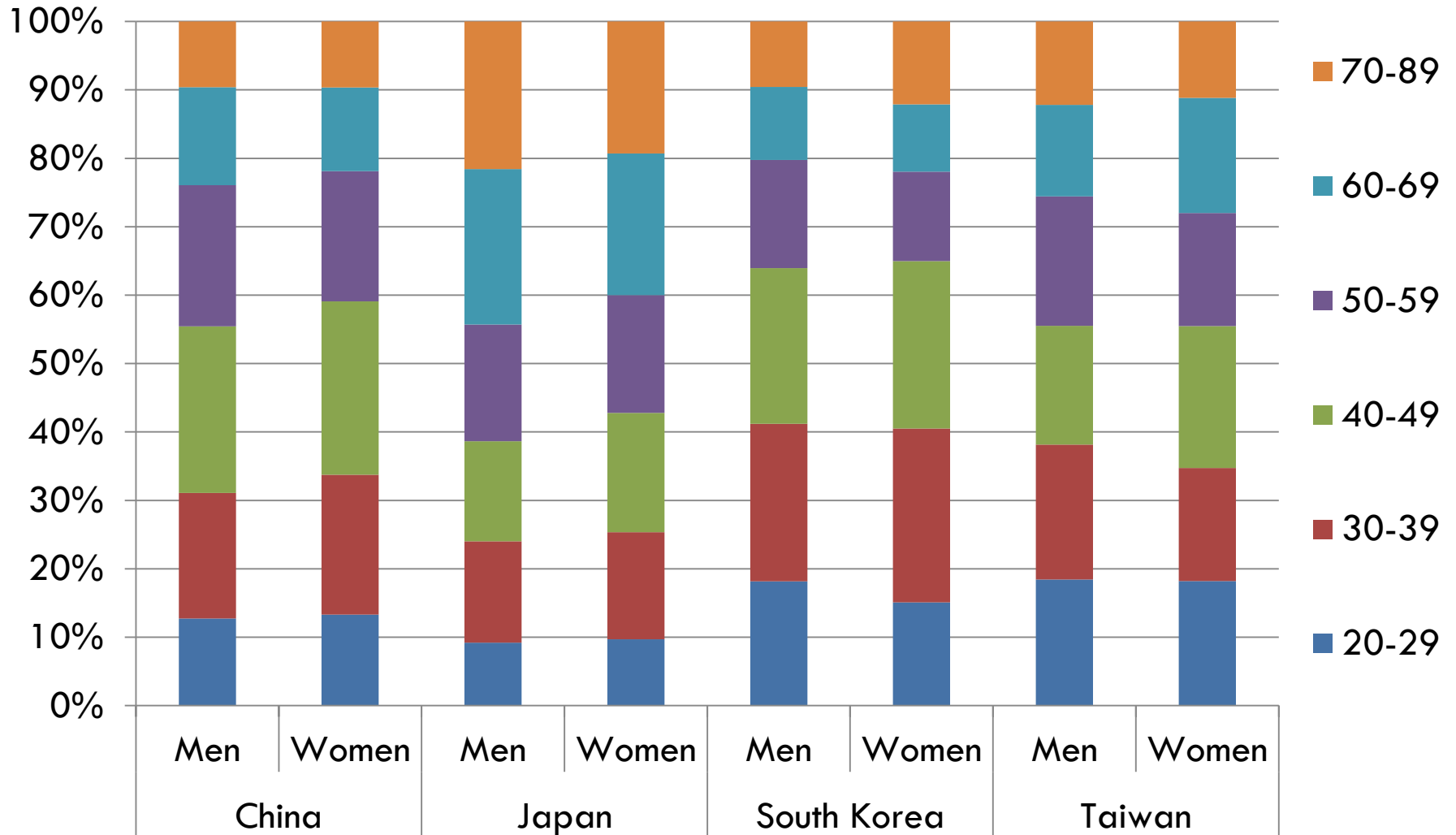
Age Distributions

5

	-18	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-	DK
China	64	495	738	944	753	503	291	74	3	1
Japan	0	236	381	403	428	540	370	138	0	0
S. Korea	43	252	370	360	219	156	128	38	3	7
Taiwan	65	389	384	406	376	321	171	77	10	0
Total	172	1372	1873	2113	1776	1520	960	327	16	8

Age Distributions

6



Respondents (age 20-89)

7

	China	Japan	S. Korea	Taiwan
Mean age	47.6	53.7	45.9	47.4
Sex (Female)	51.7%	53.8%	52.7%	51.0%
Years of schooling M F	9.1 7.8	12.8 12.5	12.7 11.2	12.2 10.6
n	3,798	2,496	1,523	2,124

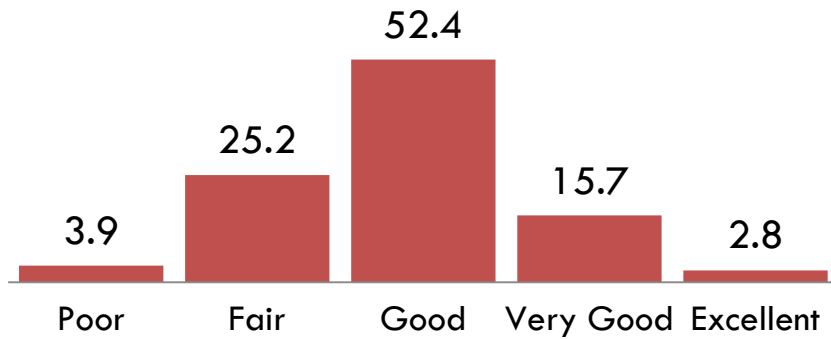
1. Health Status and Health Behavior

Distribution of General Health

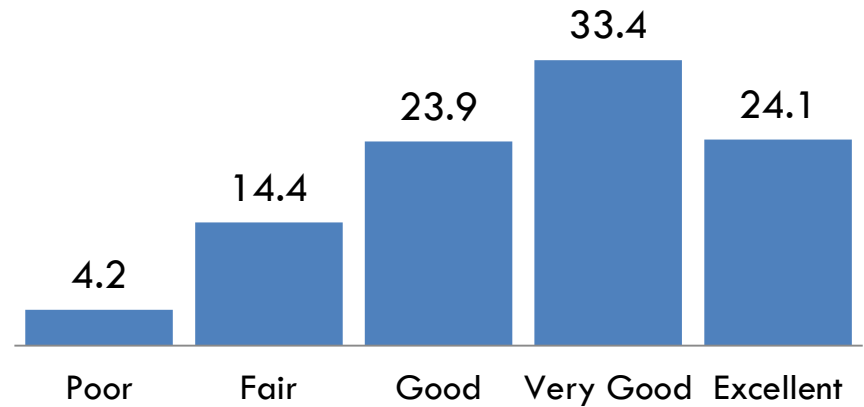
In general, would you say your health is:

9

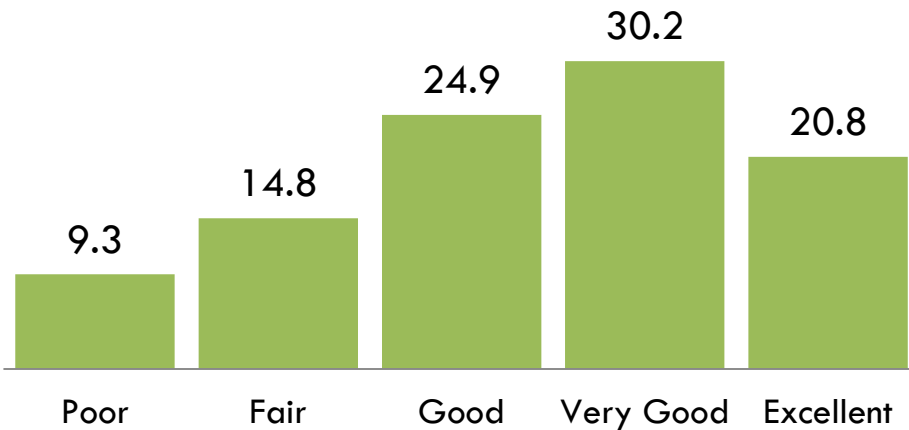
Japan



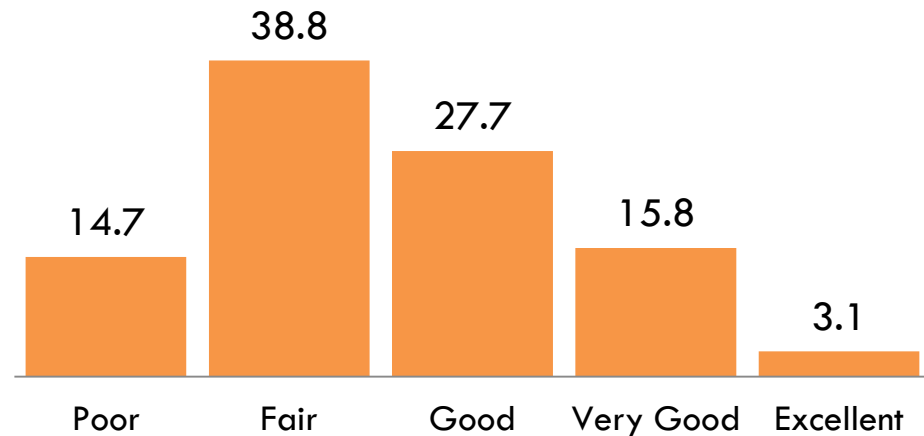
China



Korea

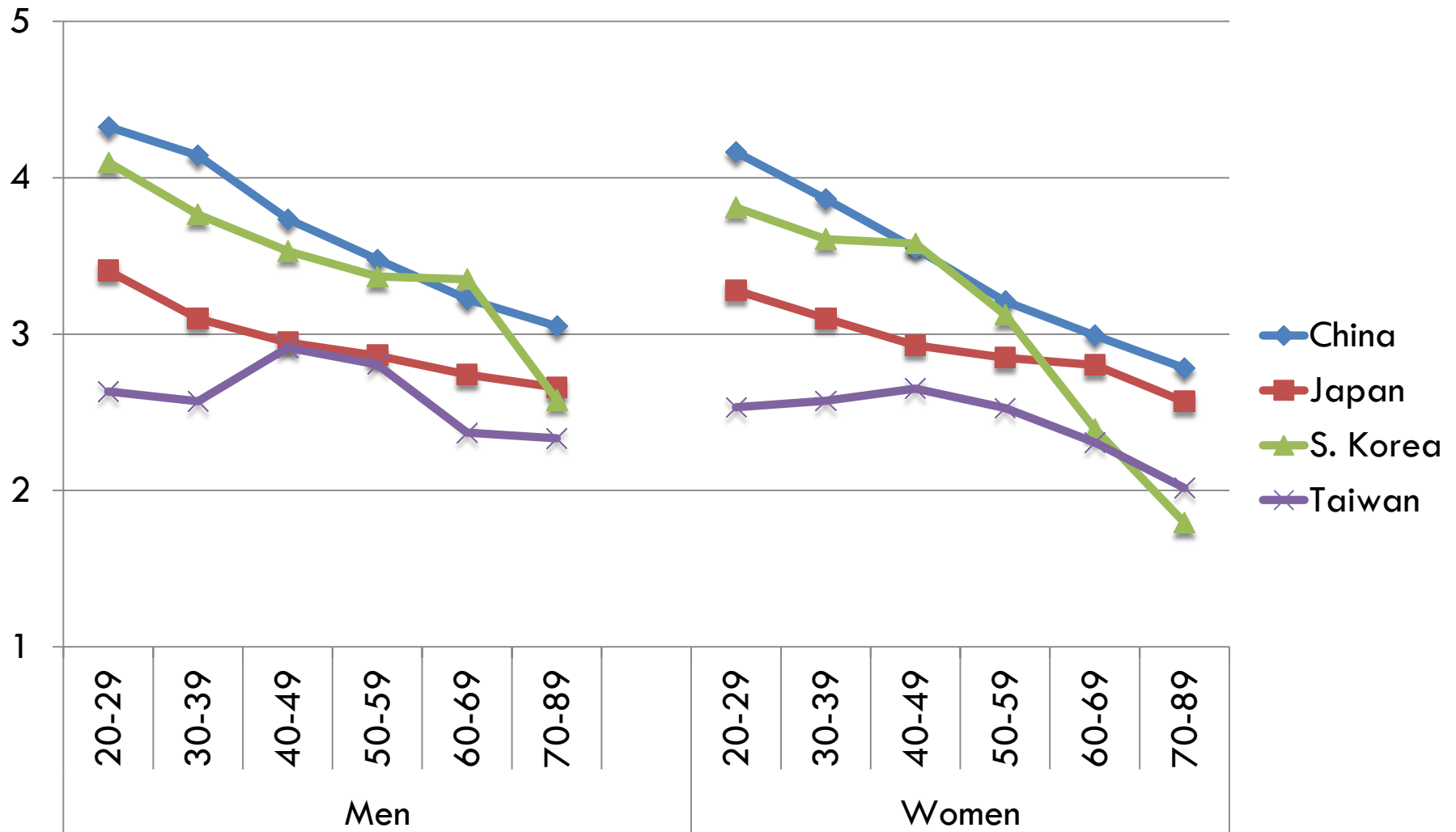


Taiwan



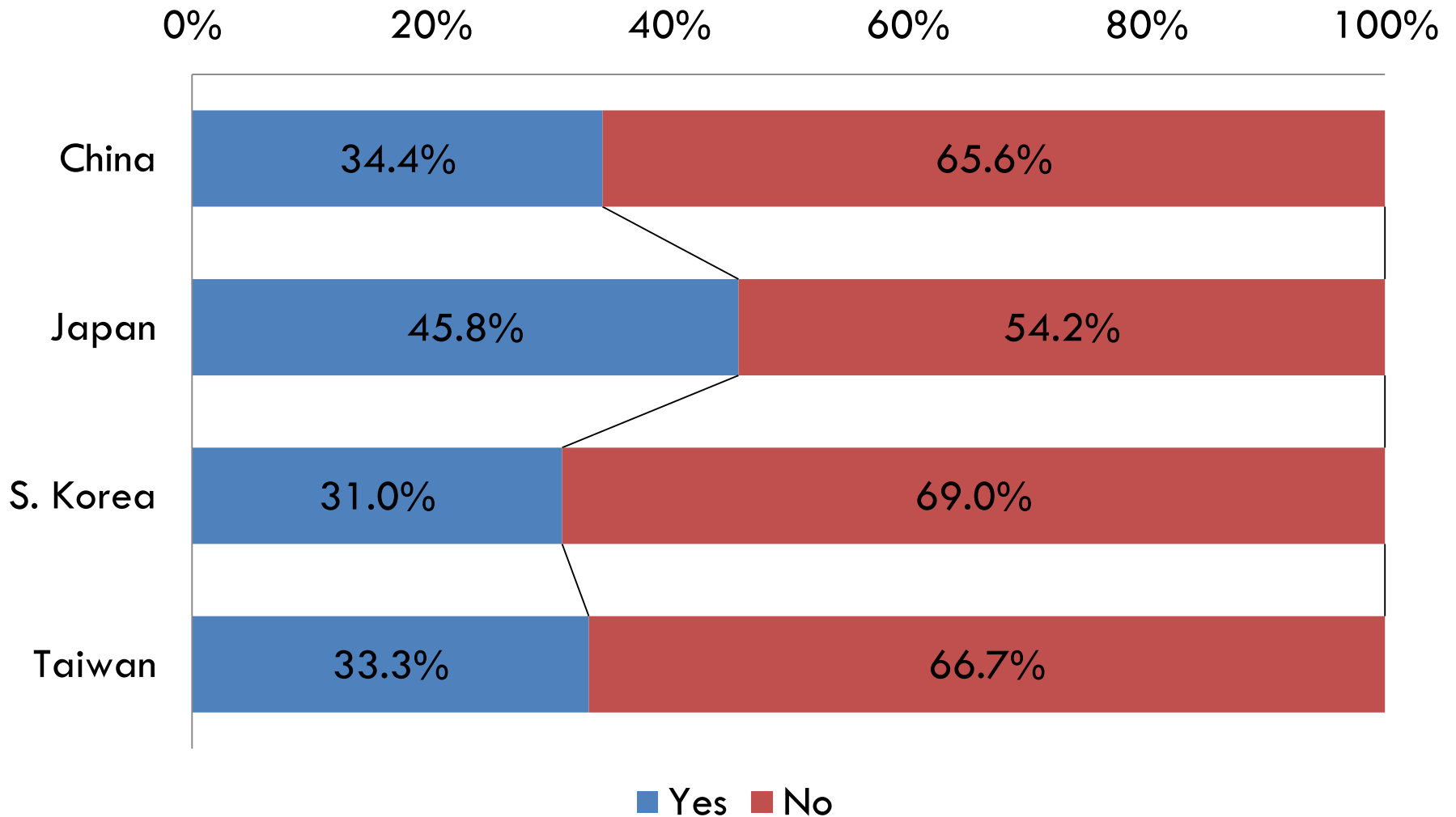
In general, would you say your health is:

10



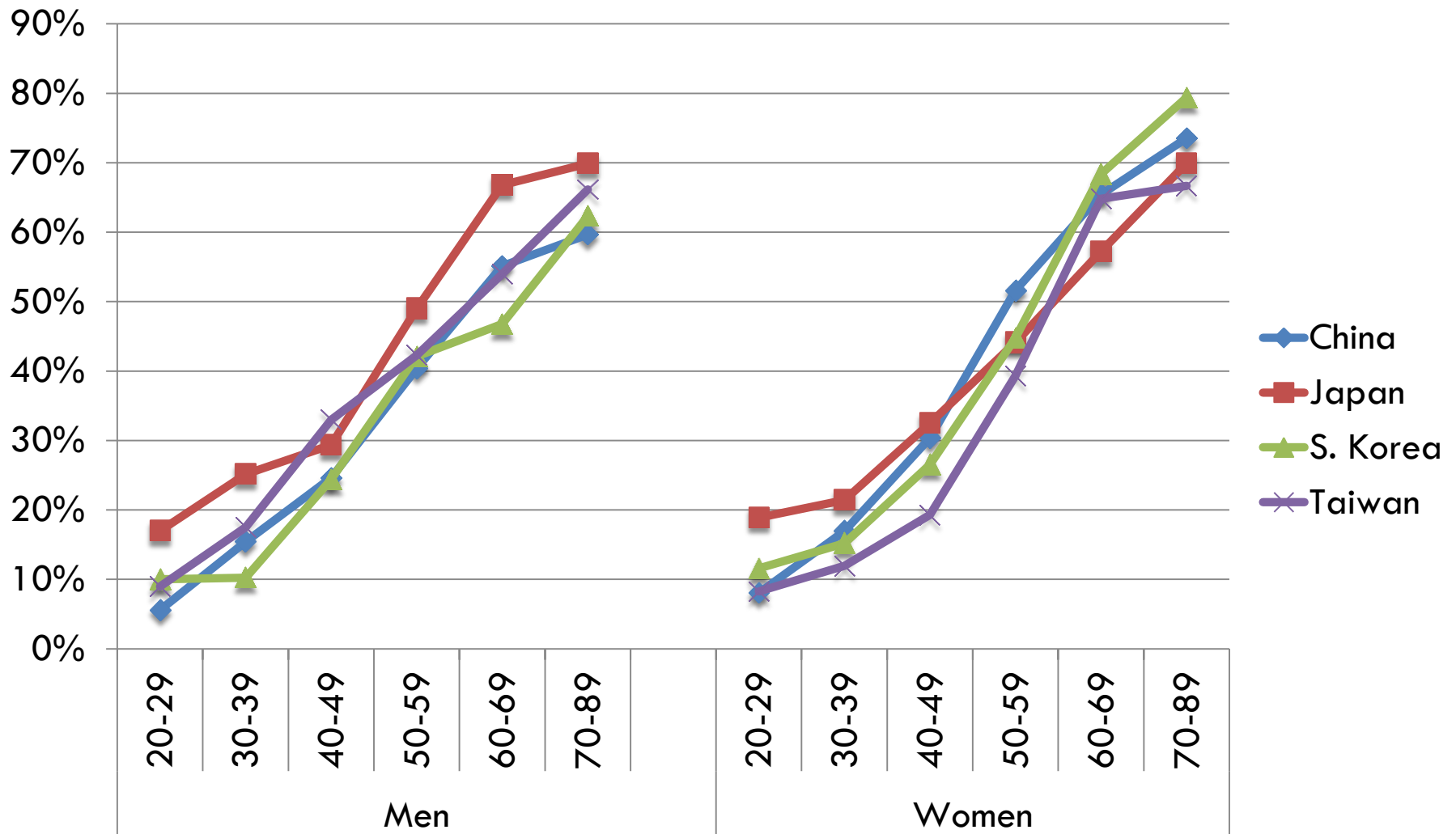
Do you have chronic diseases or longstanding health problems?

11



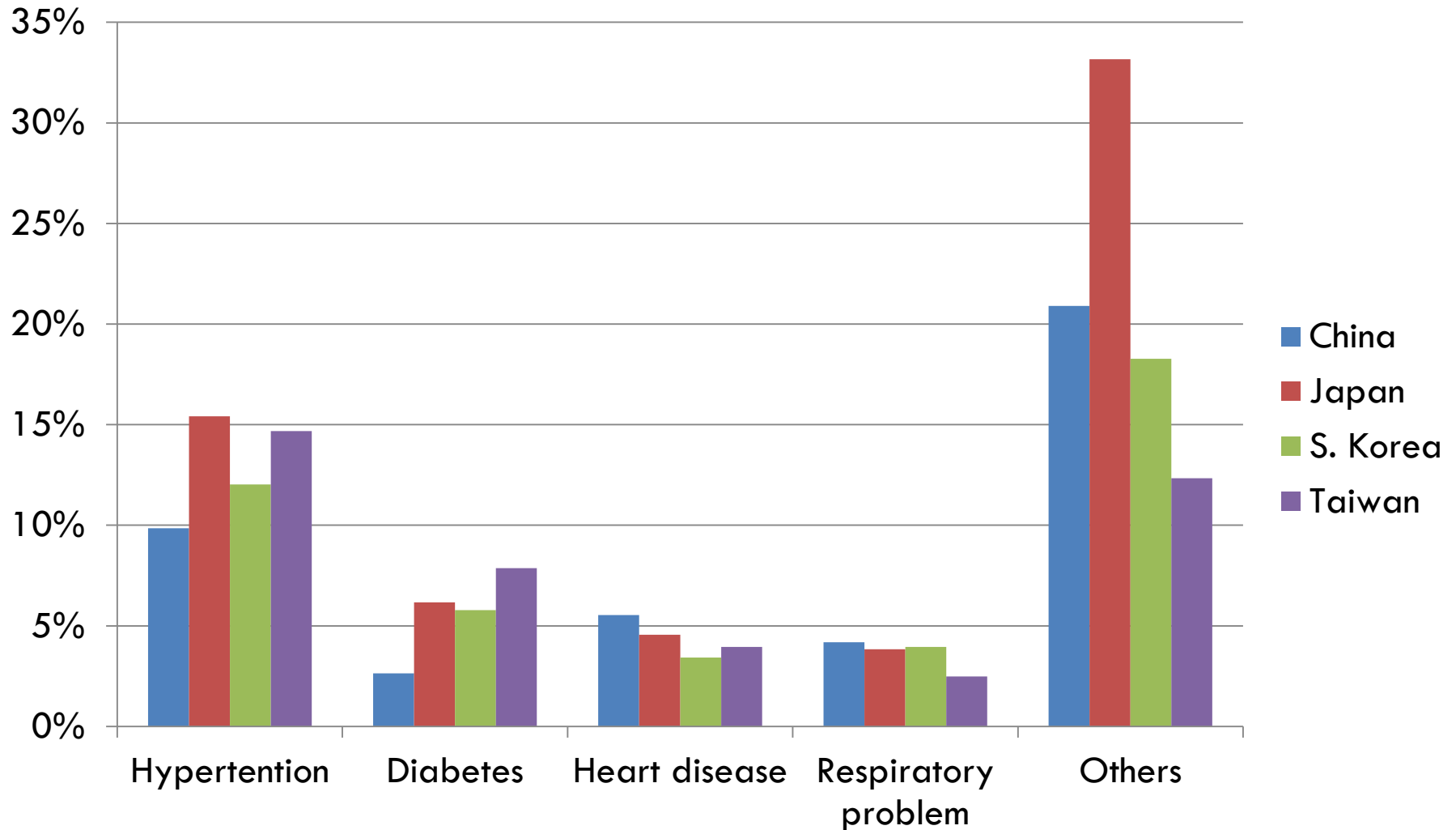
% of those who have chronic diseases or longstanding health problems

12

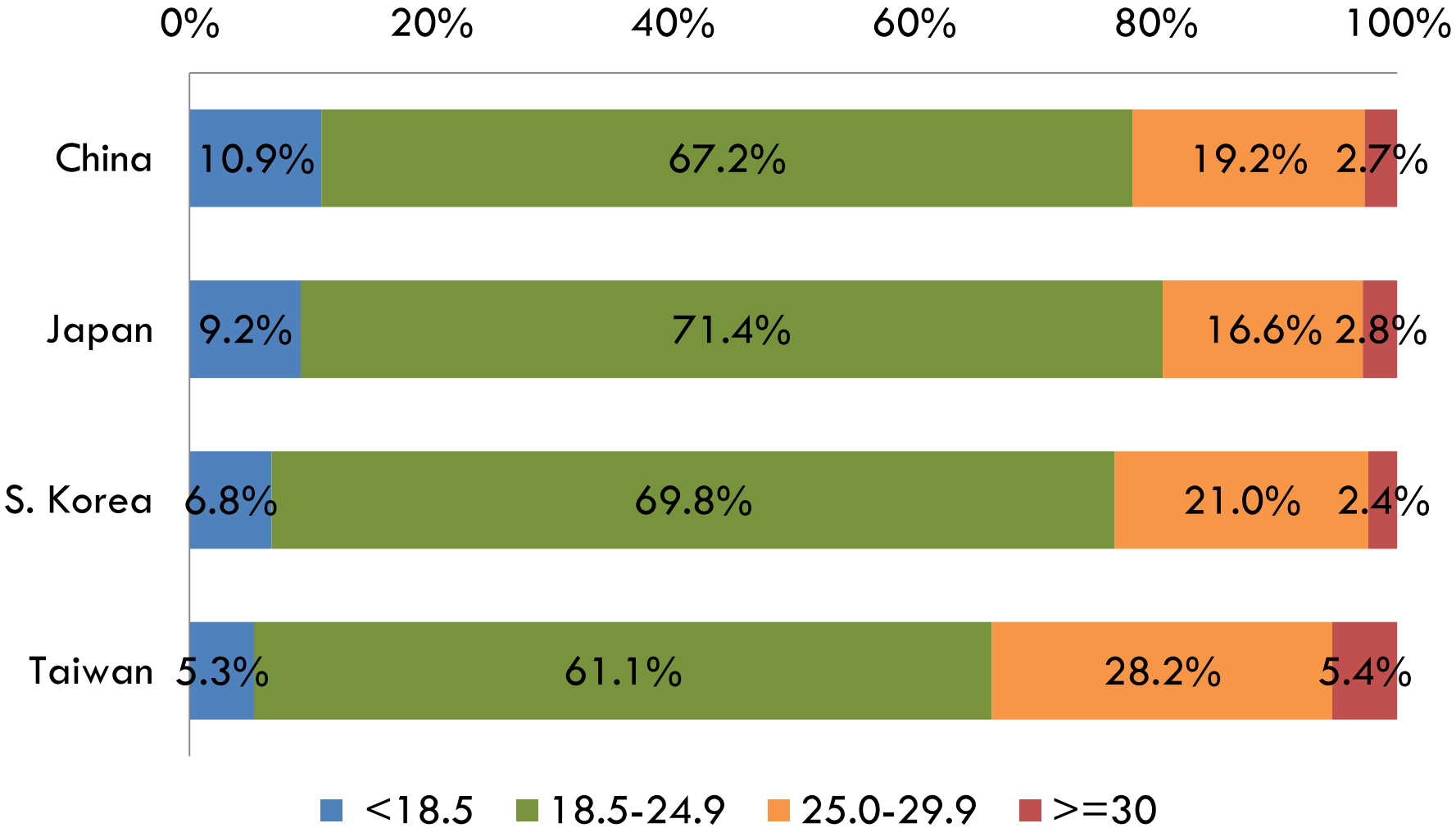


Types of chronic diseases

13

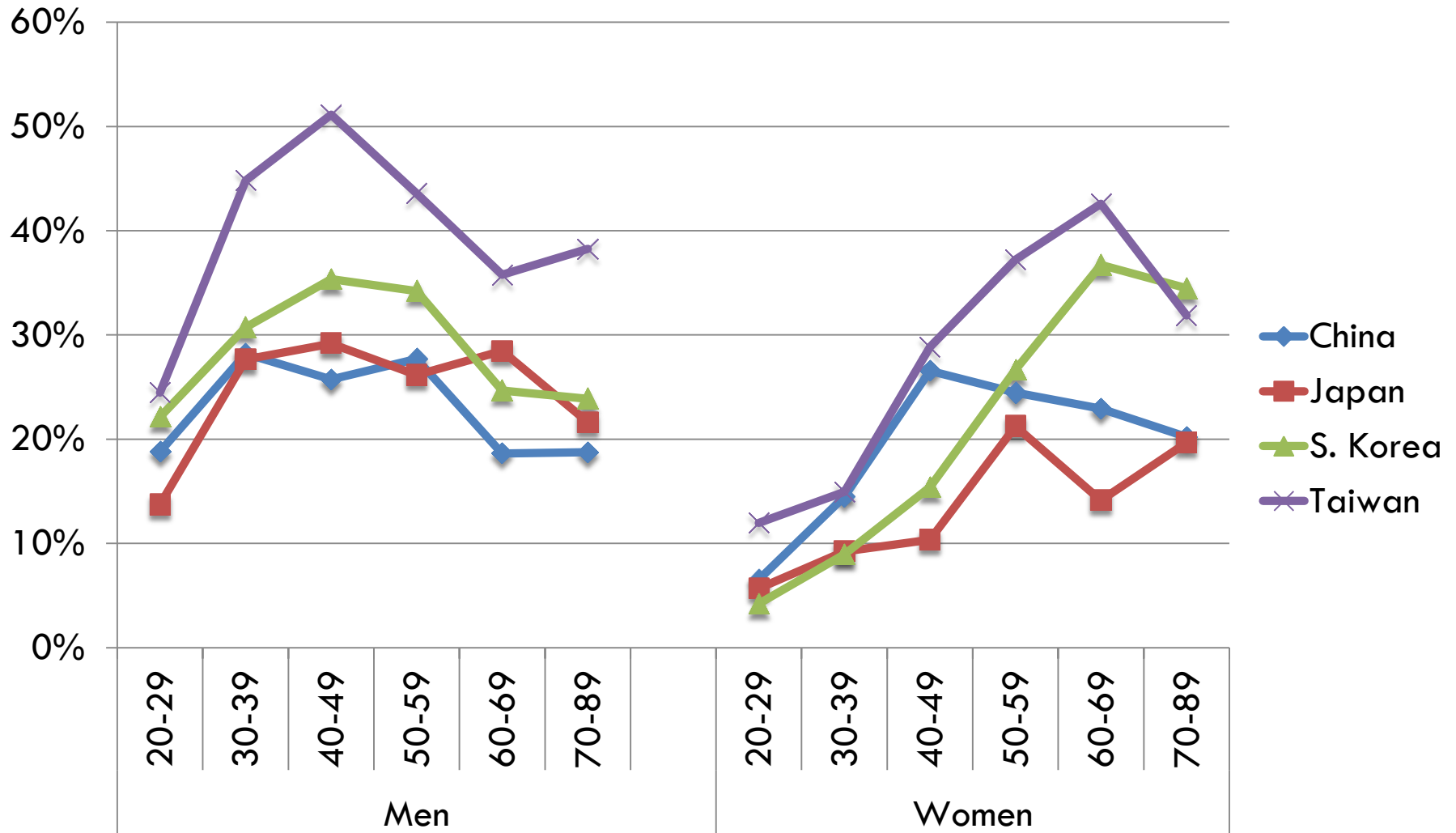


BMI: Body Mass Index



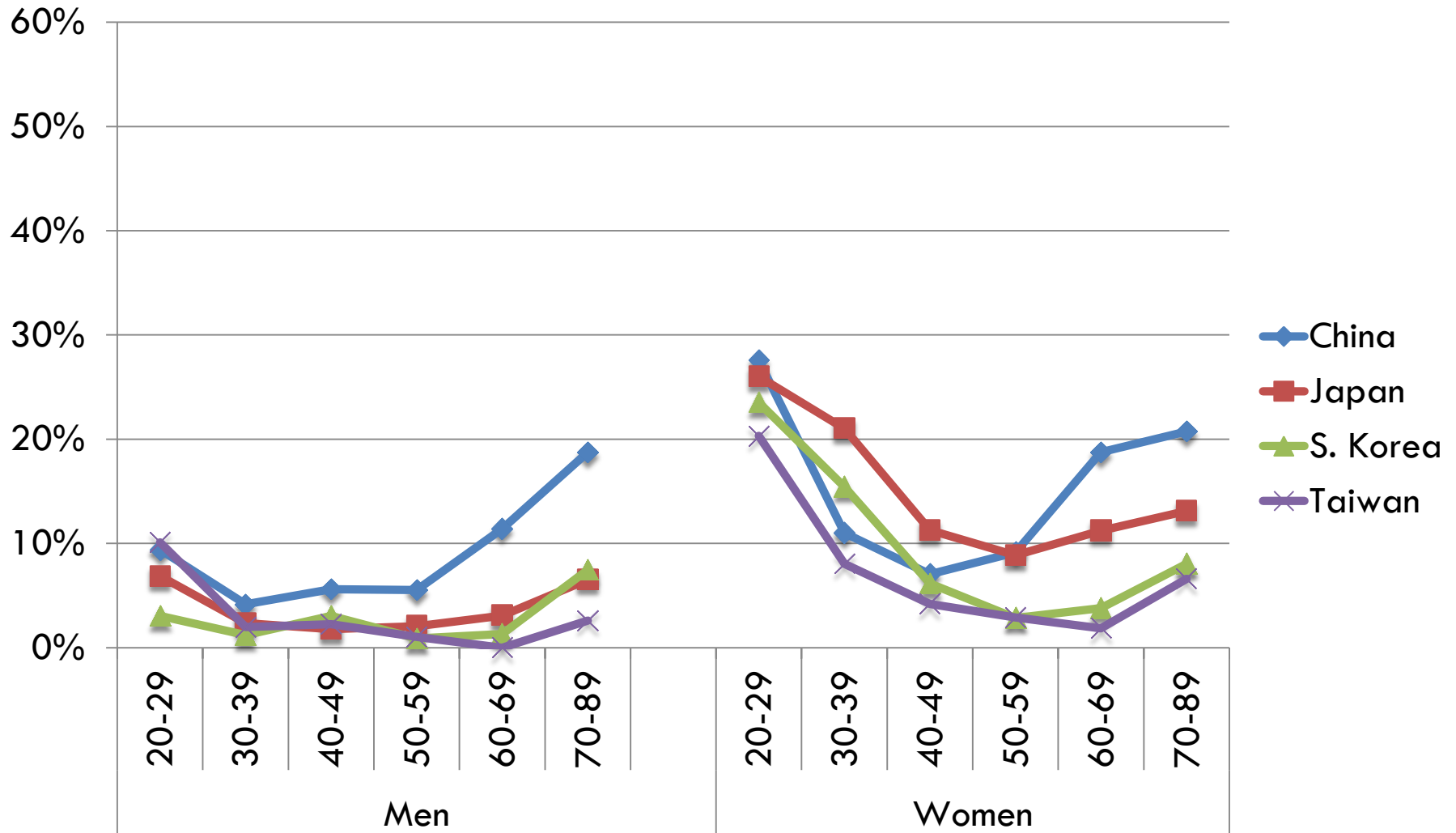
% of "BMI > 25"

15



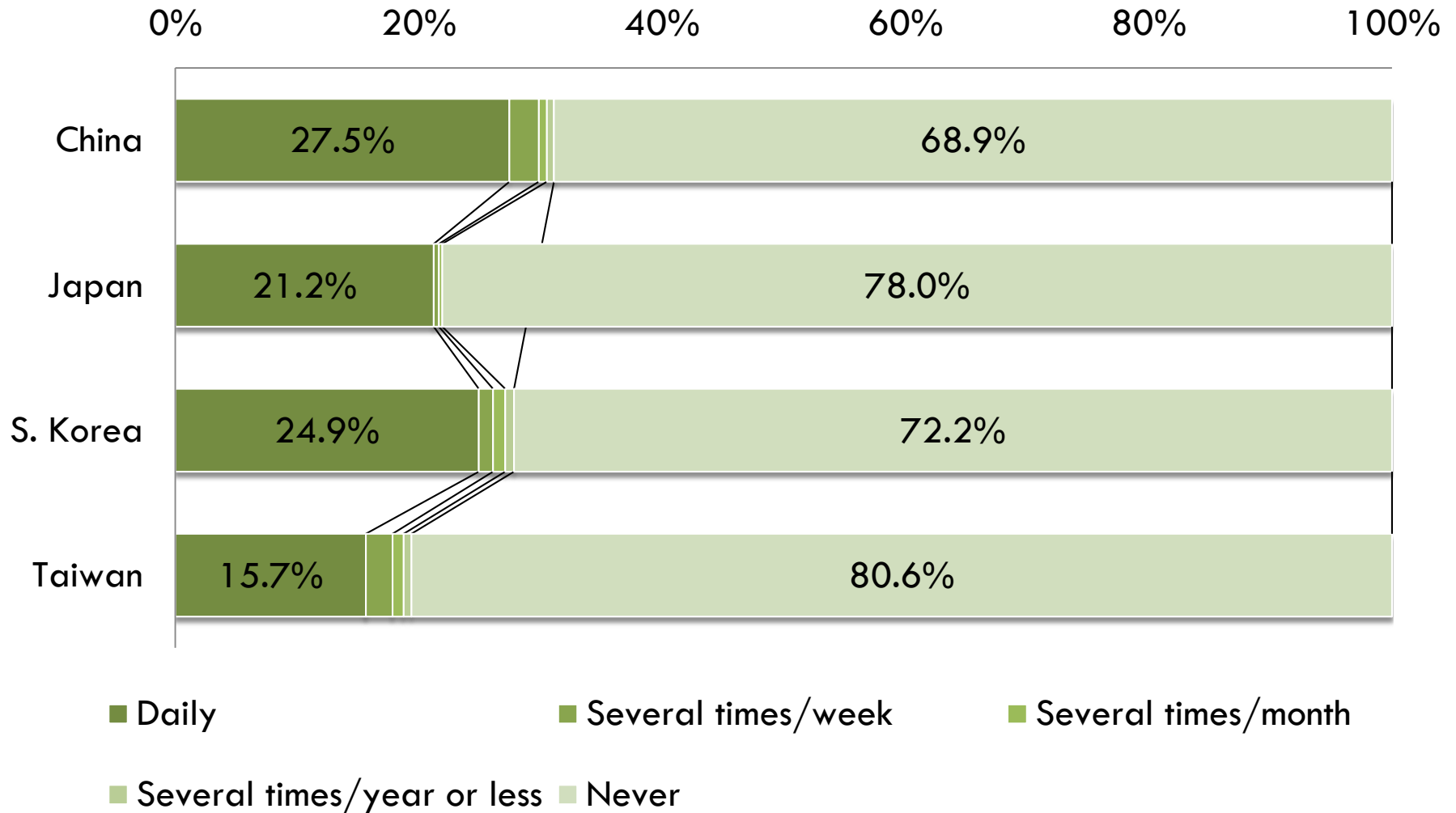
% of “BMI < 18.5”

16



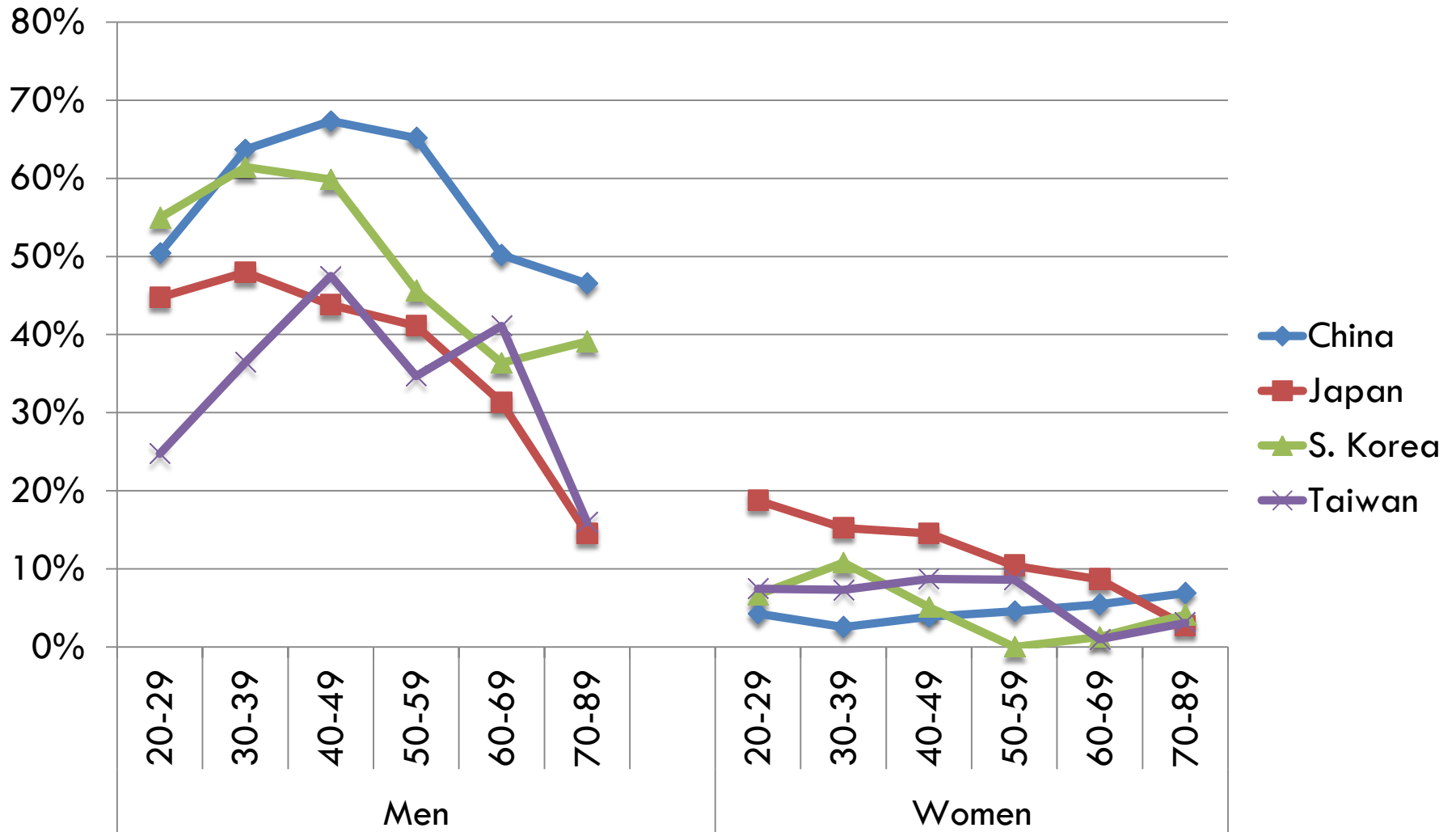
How often do you smoke?

17



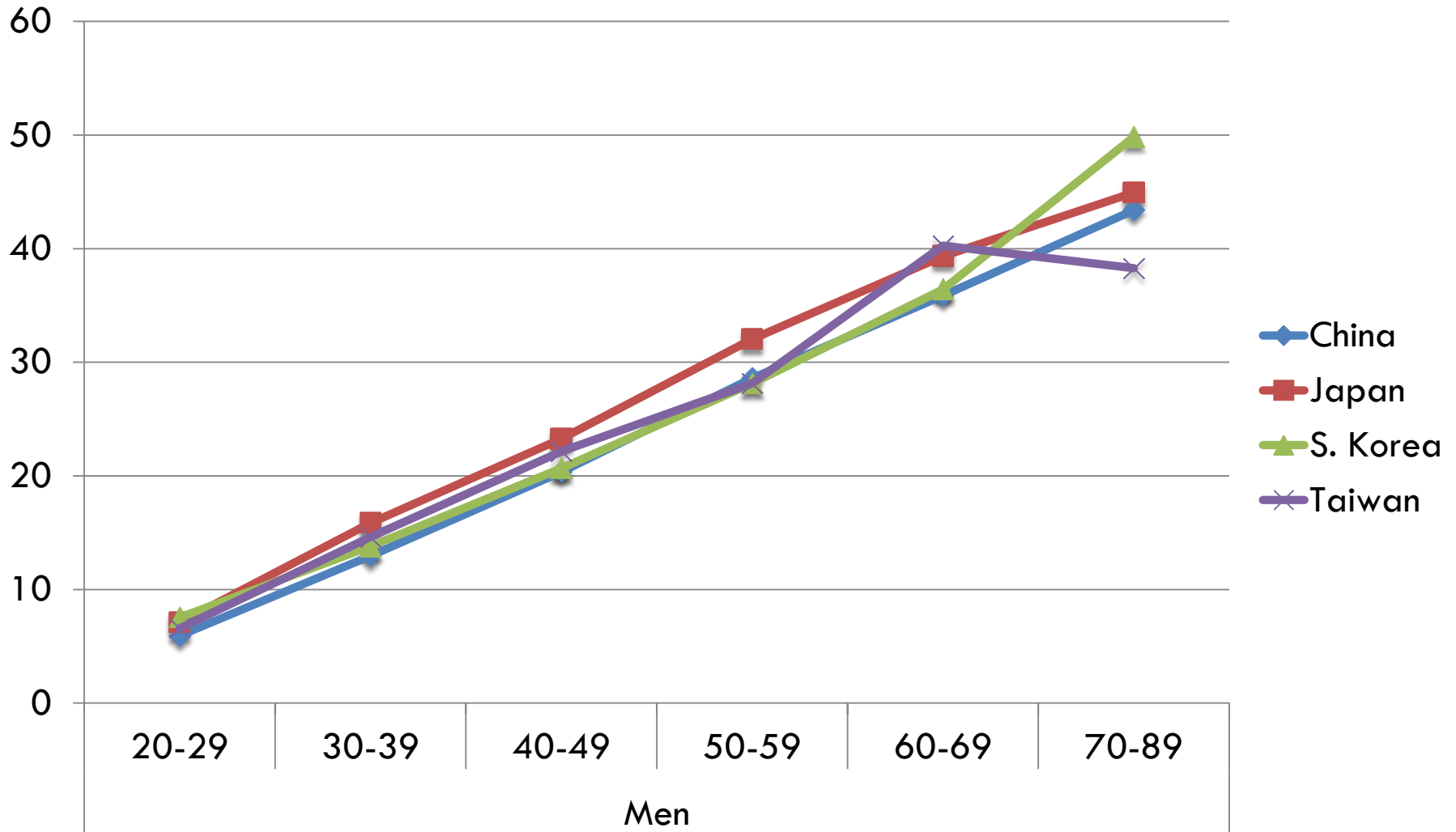
% of Smokers

18



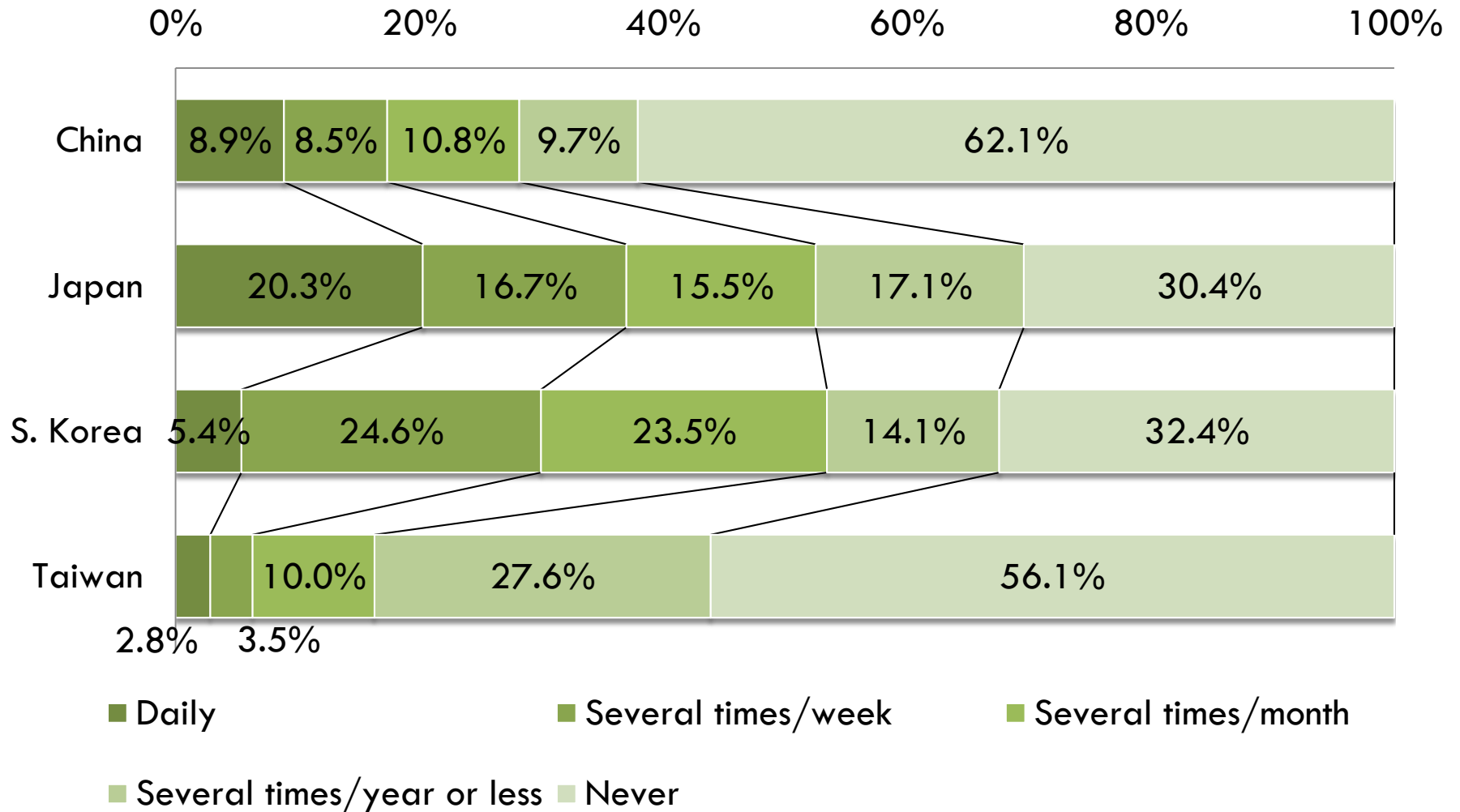
For how many years have you smoked?

19



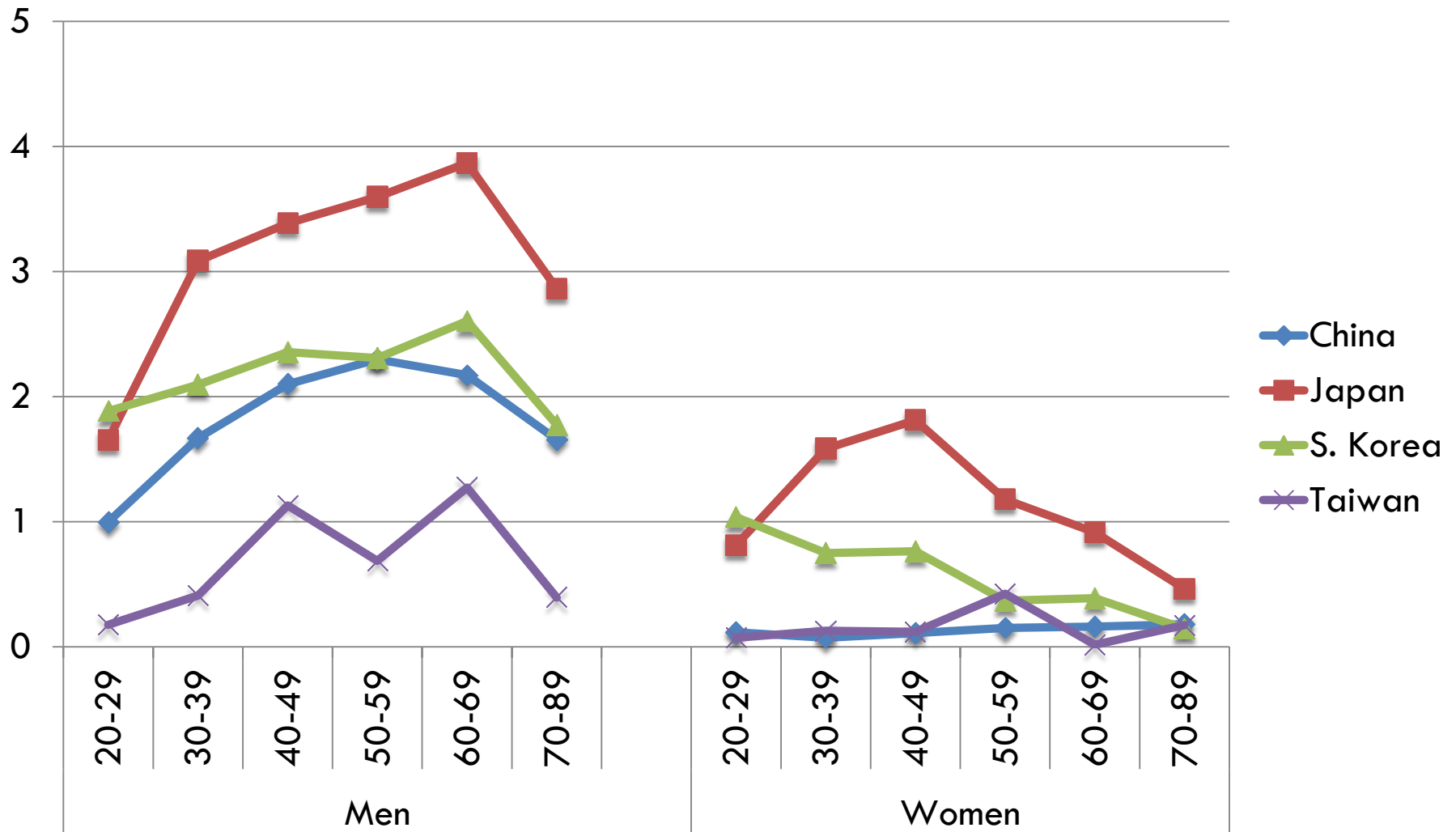
How often do you drink alcoholic drinks?

20



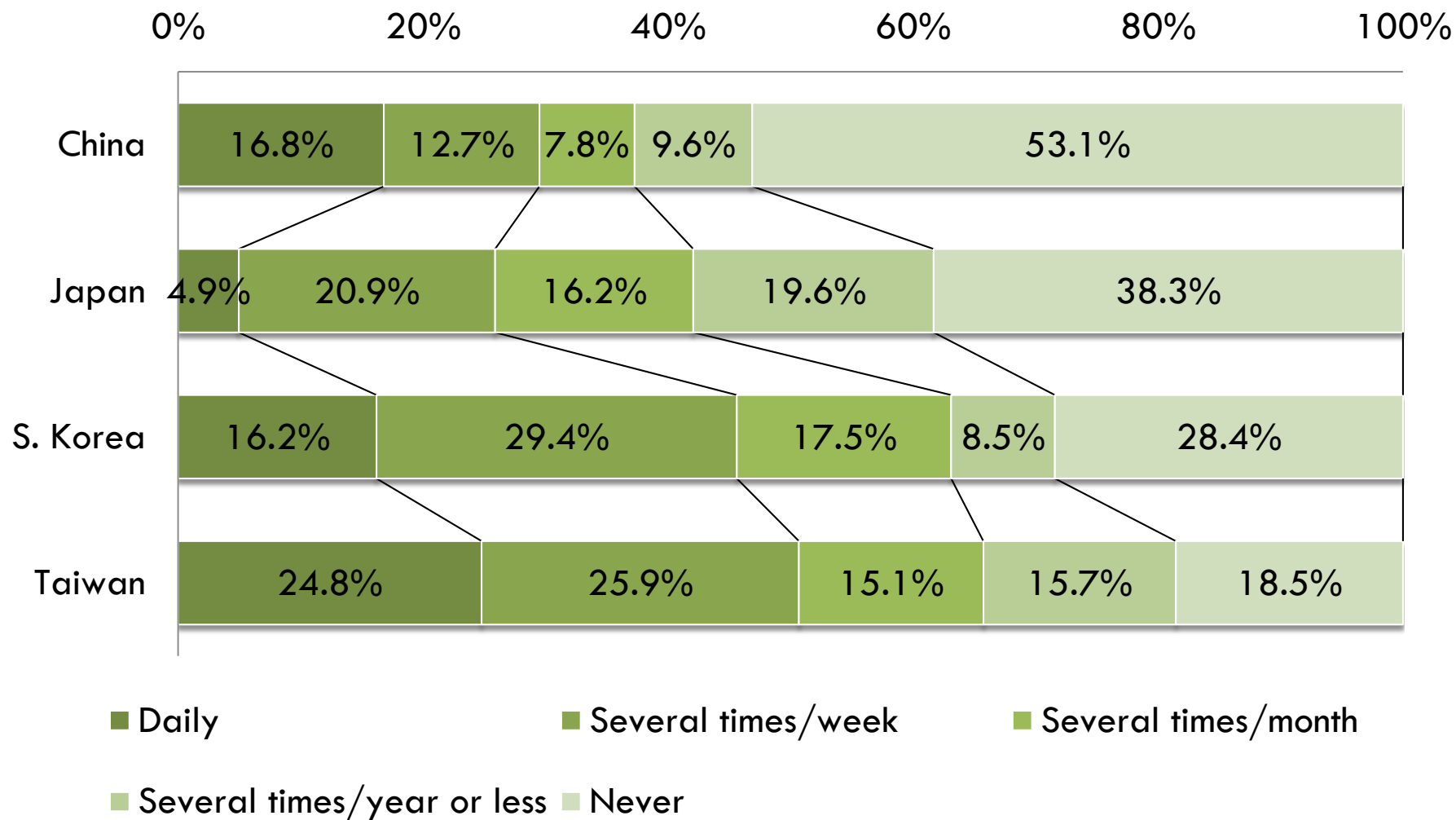
How often do you drink alcoholic drinks?: Mean days per week

21



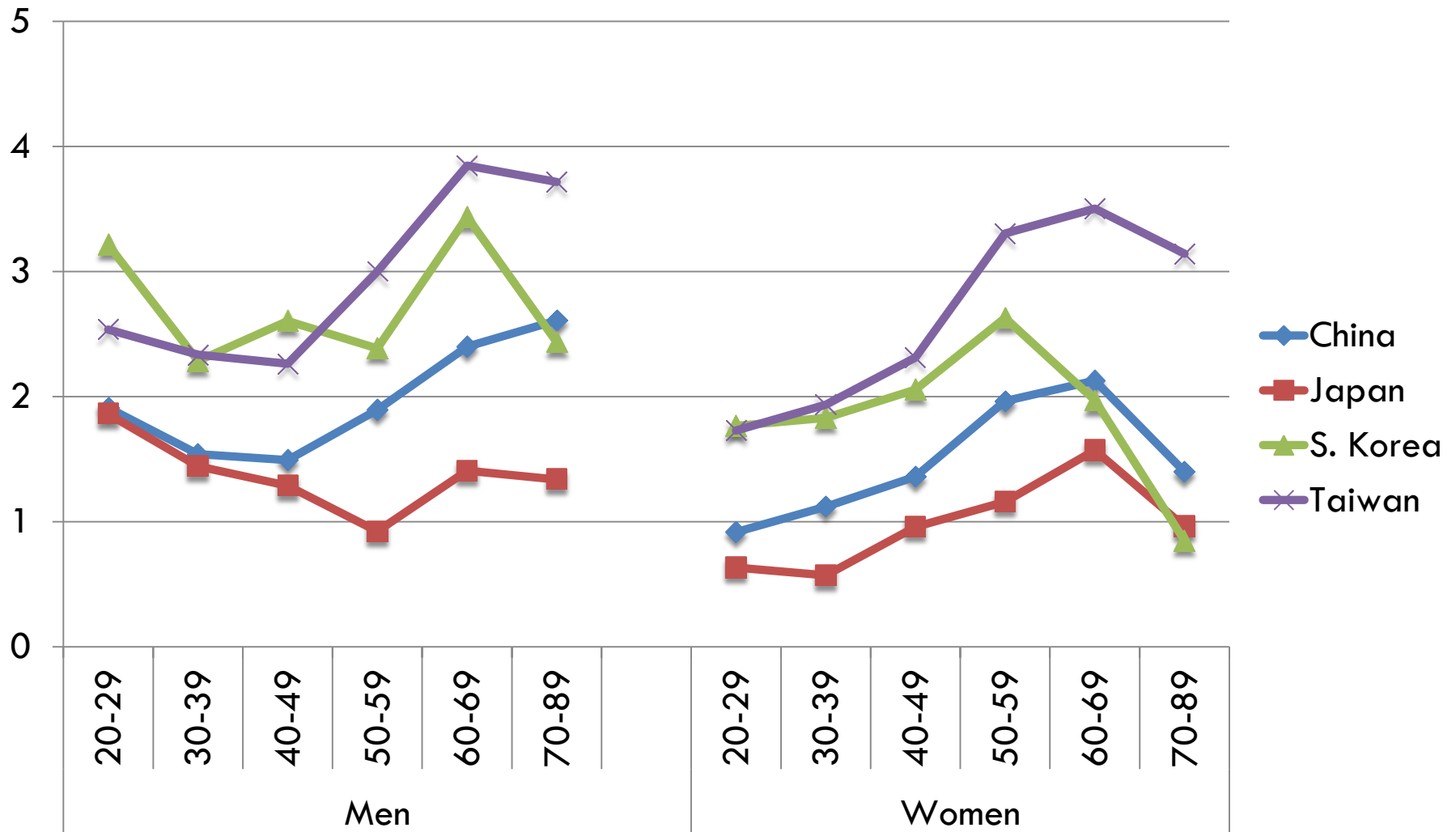
How often do you do physical activity for at least 20 minutes that makes you sweat or breath heavier than usual?

22

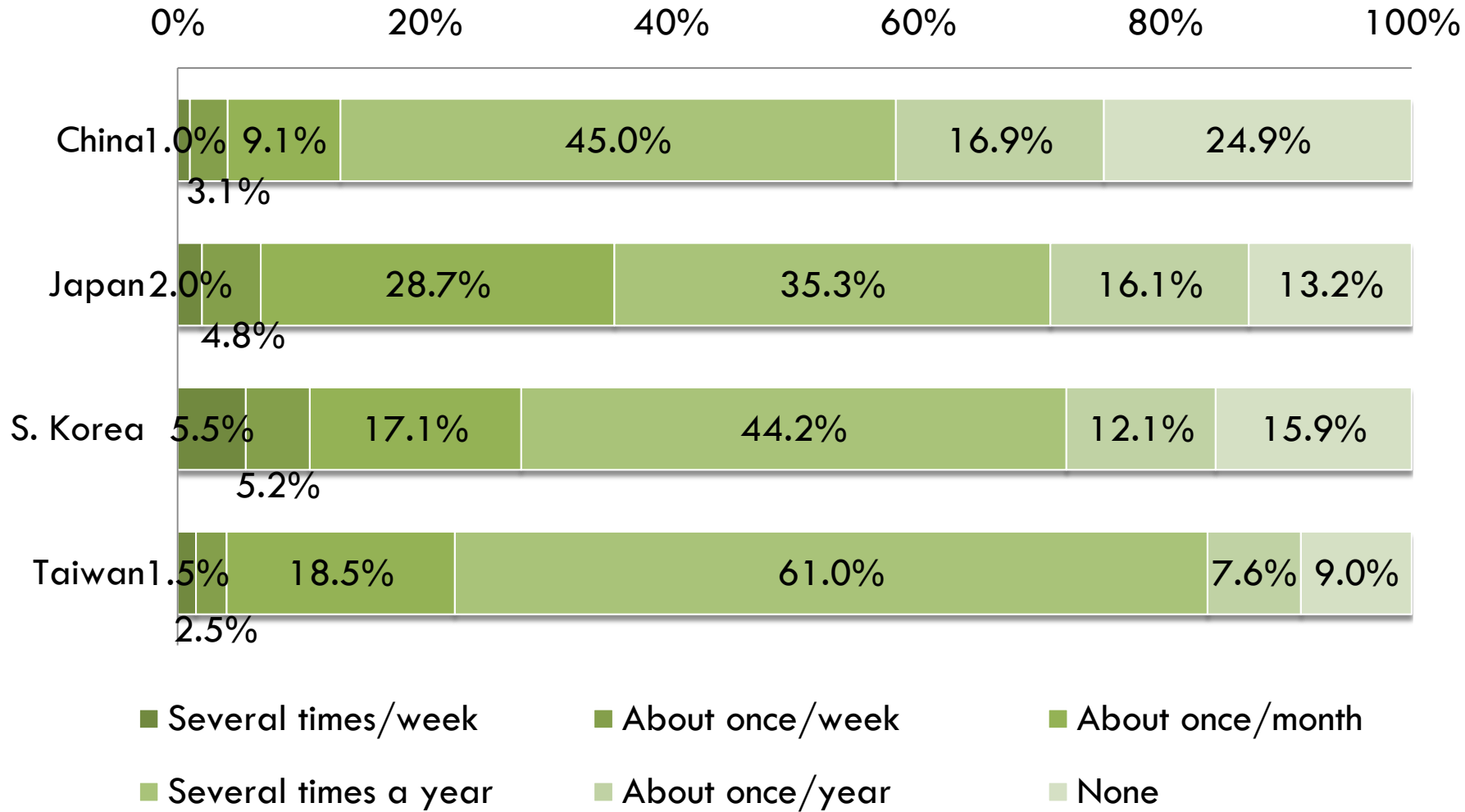


How often do you do physical activity?: Mean days per week

23

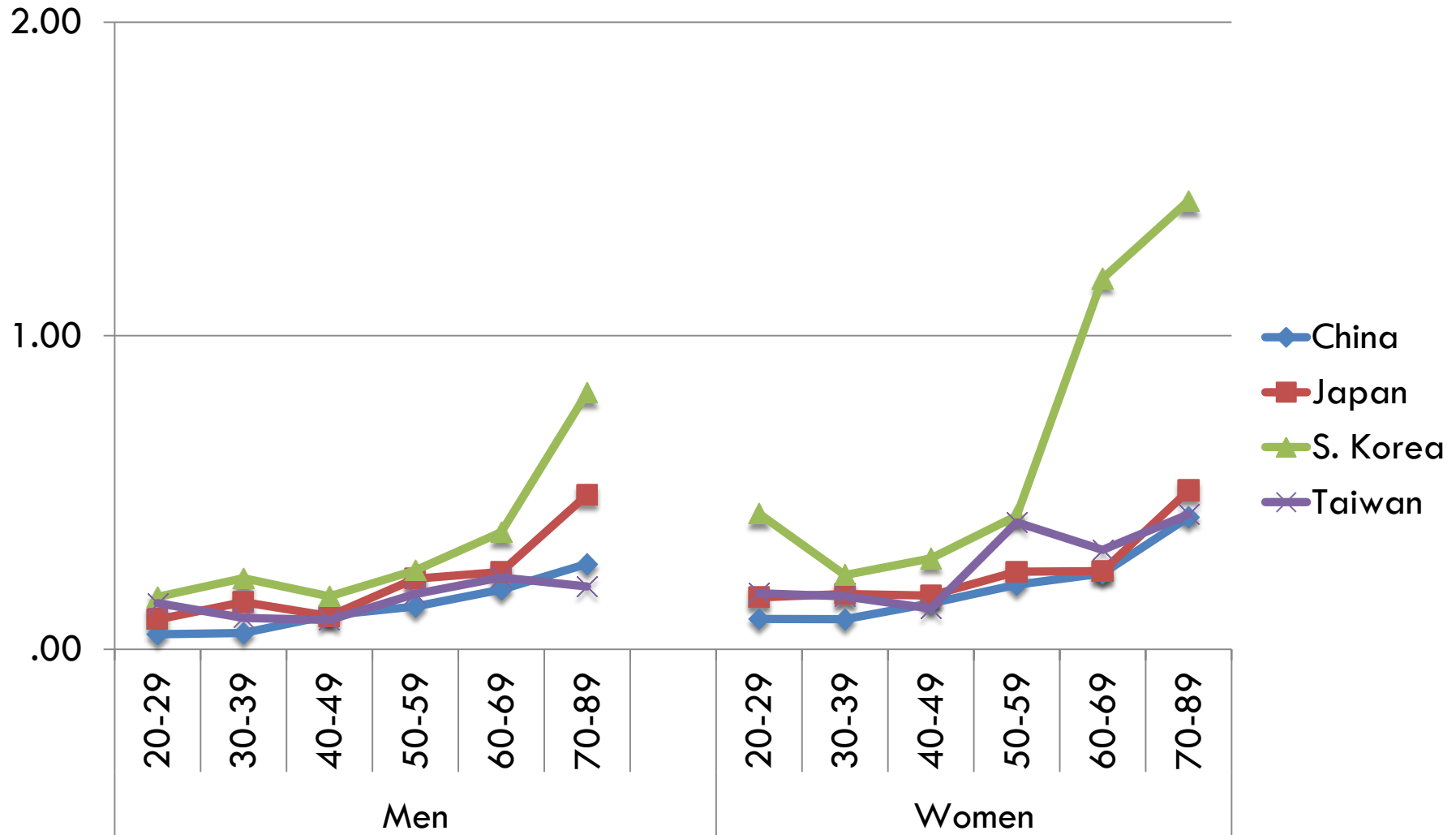


During the last 12 months, how often did you go to see a doctor?



How often did you go to see a doctor?: Mean scores per week

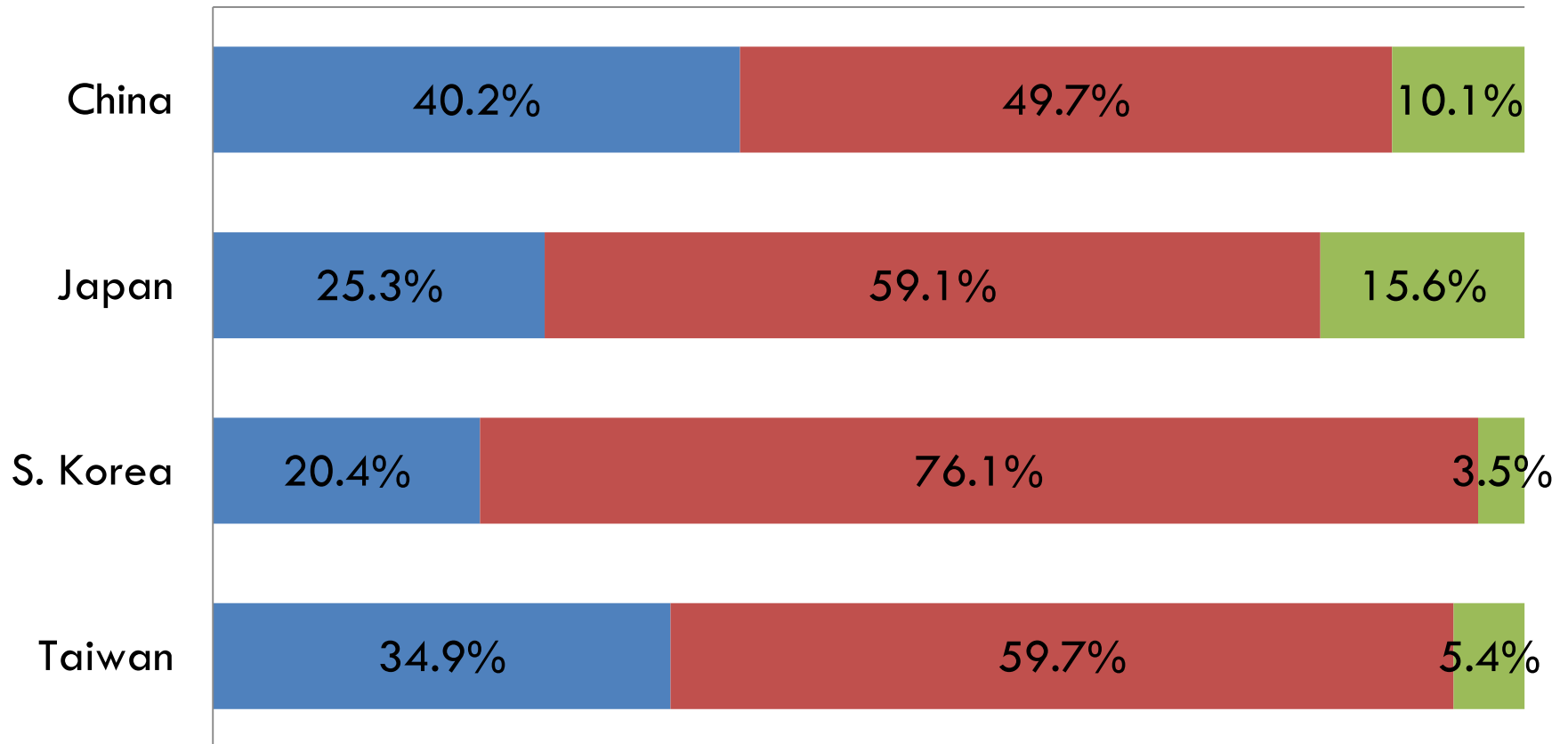
25



During the last 12 months, did you refrain from going to see a doctor even though you were ill or injured?

26

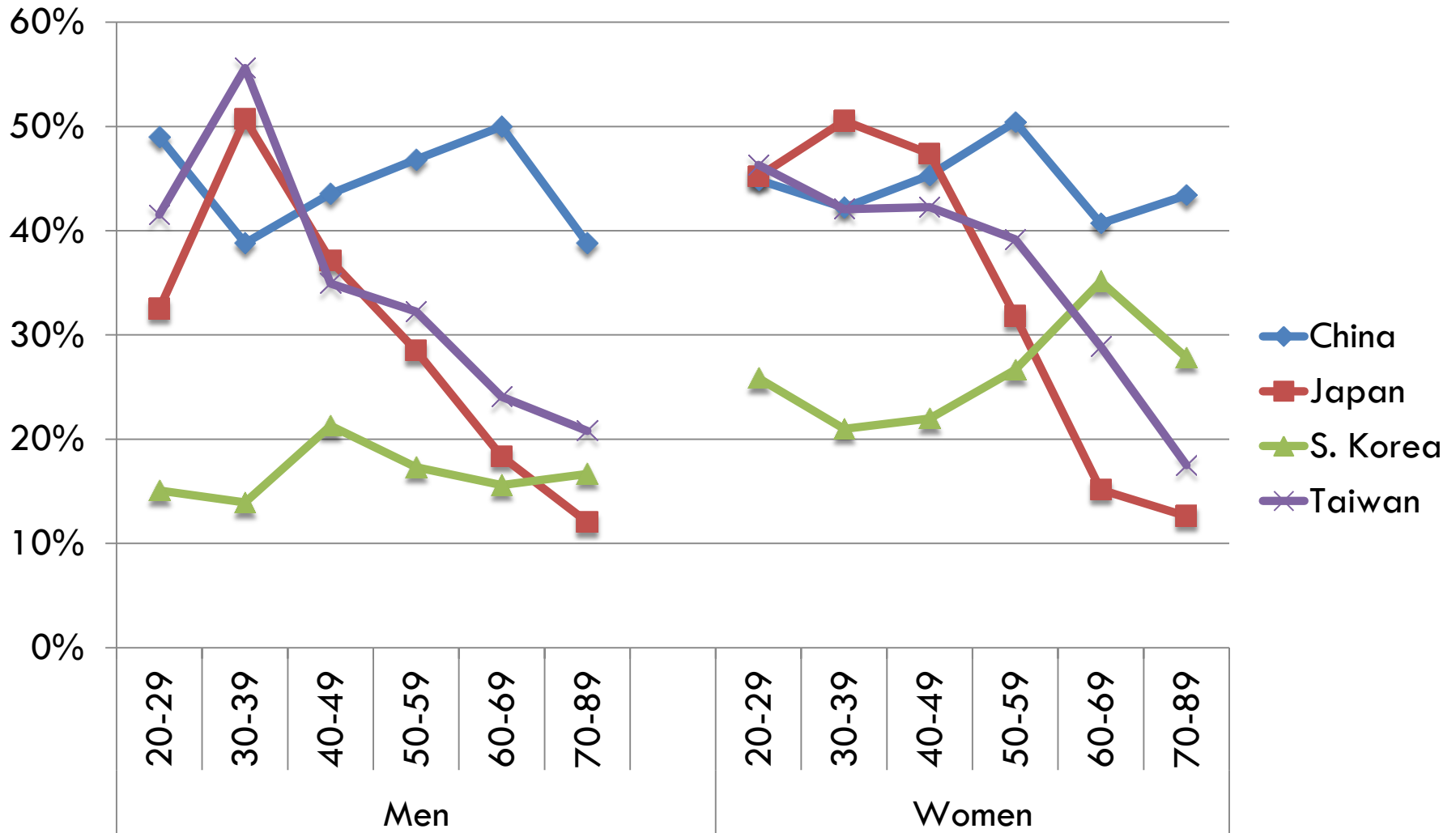
0% 20% 40% 60% 80% 100%



■ Yes, I did ■ No, I did not ■ I was not ill or injured during the last 12 months

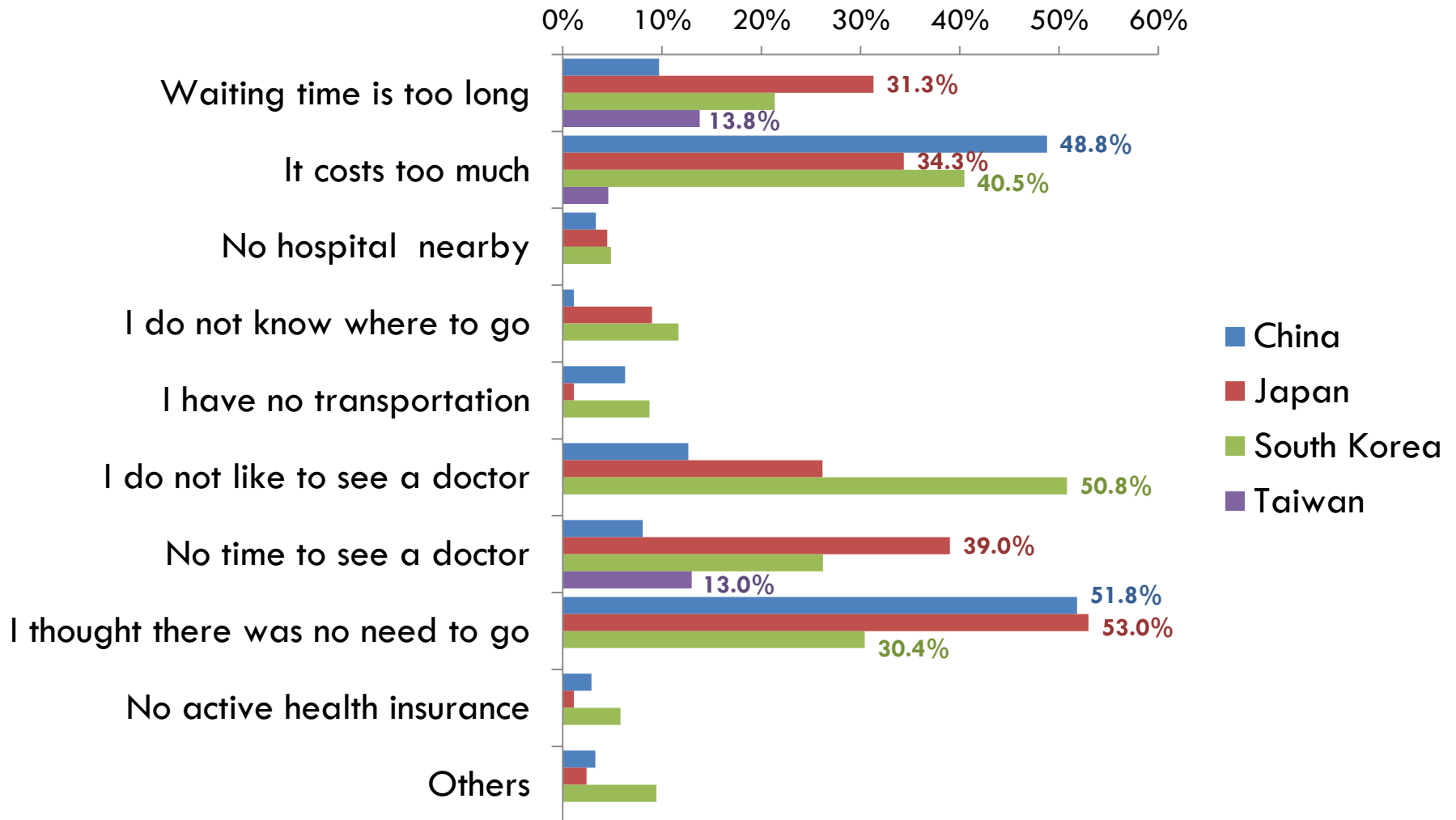
% of those who refrain from going to see a doctor

27



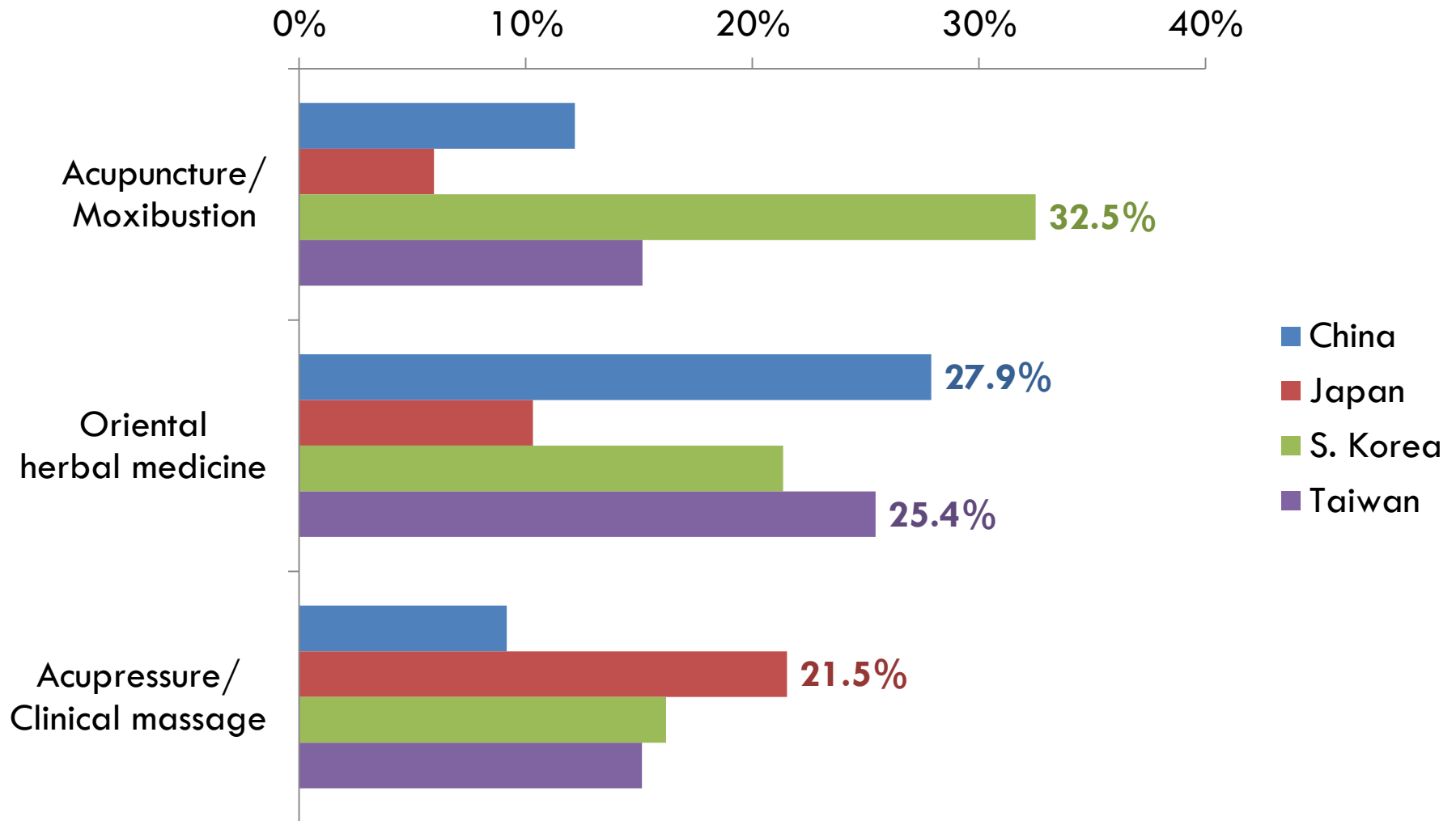
Why did you refrain from going to see a doctor?

28



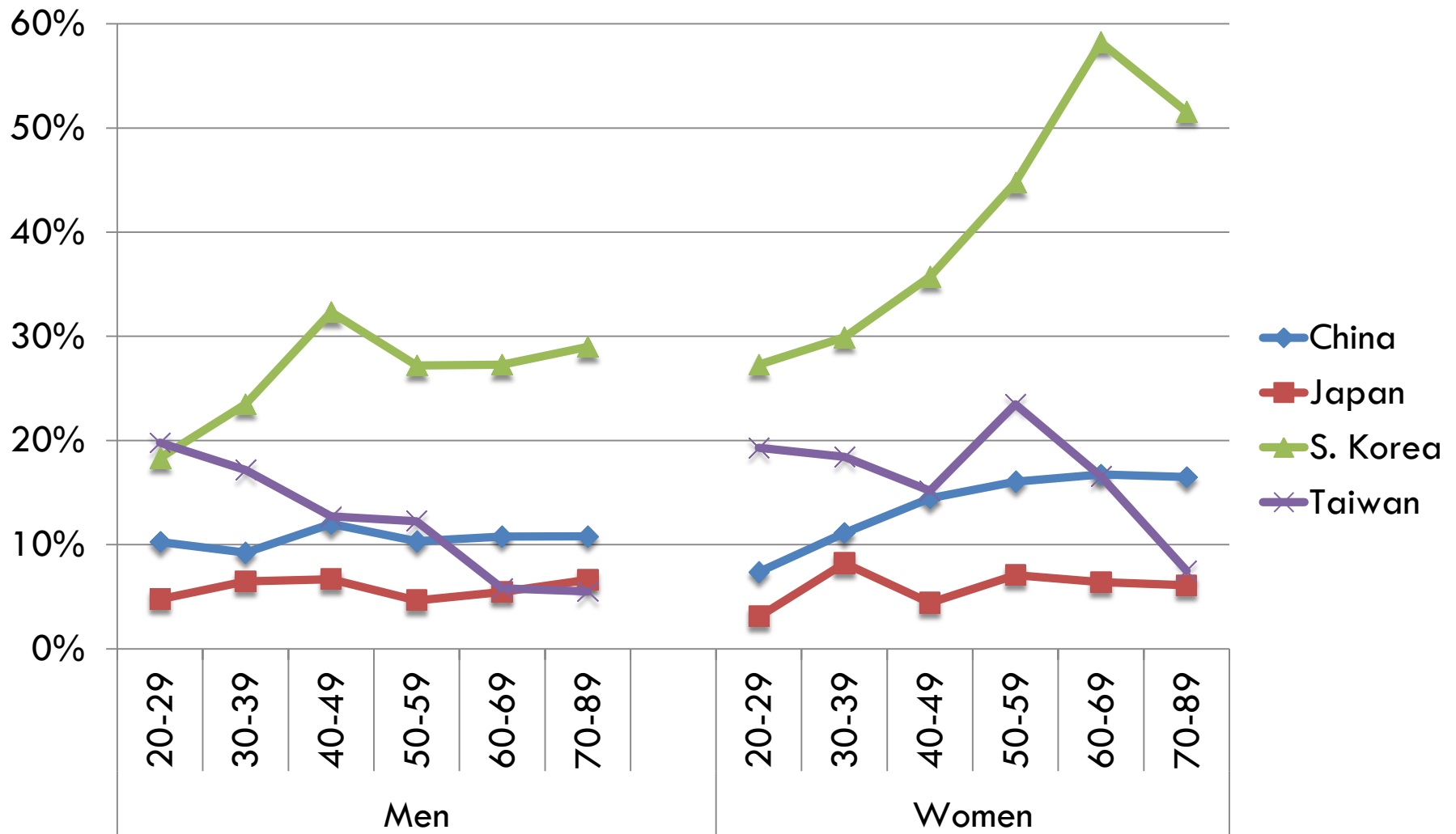
During the last 12 month, did you receive the followings?

29



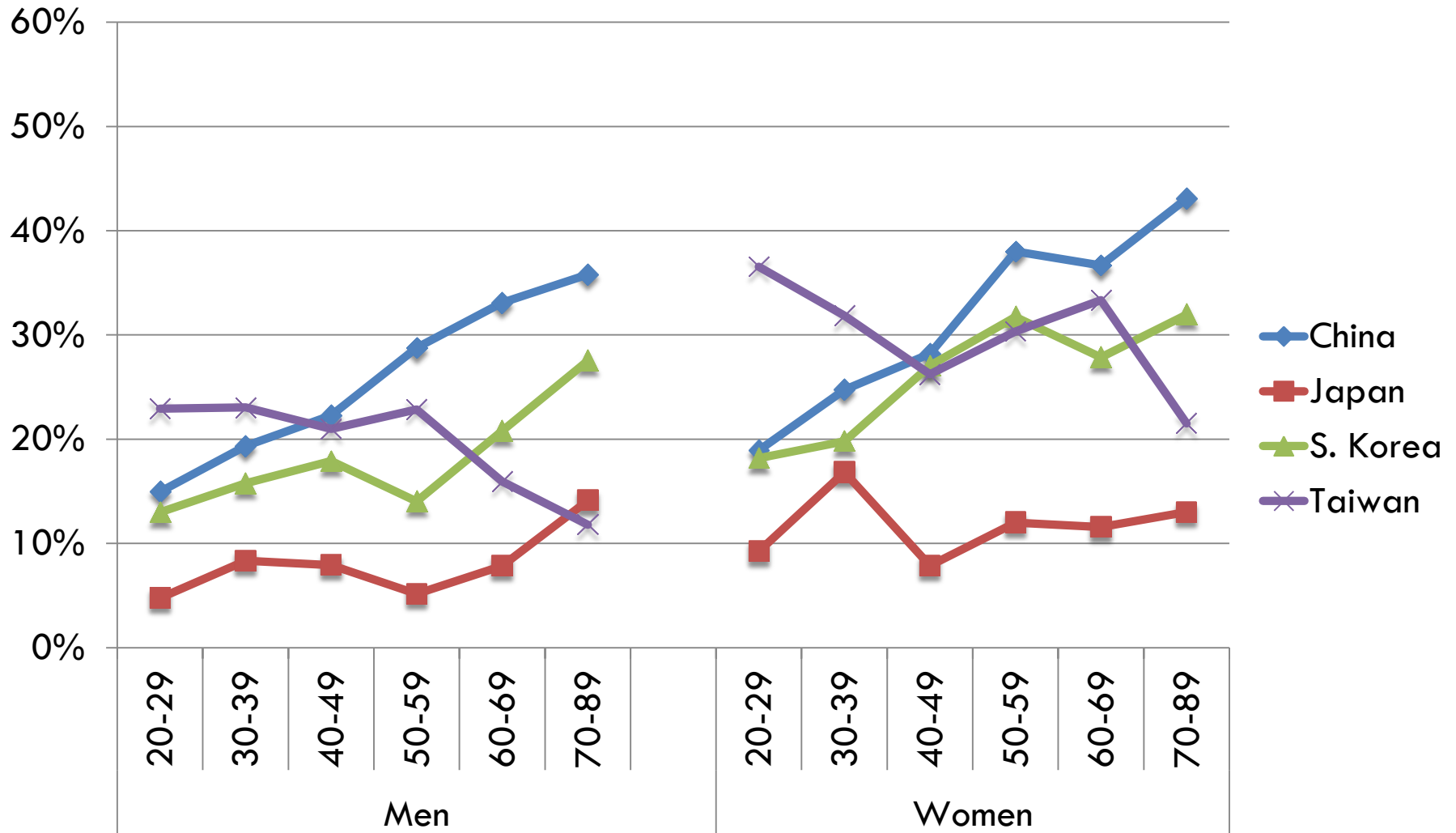
% of those who did acupuncture or moxibustion (cupping)

30



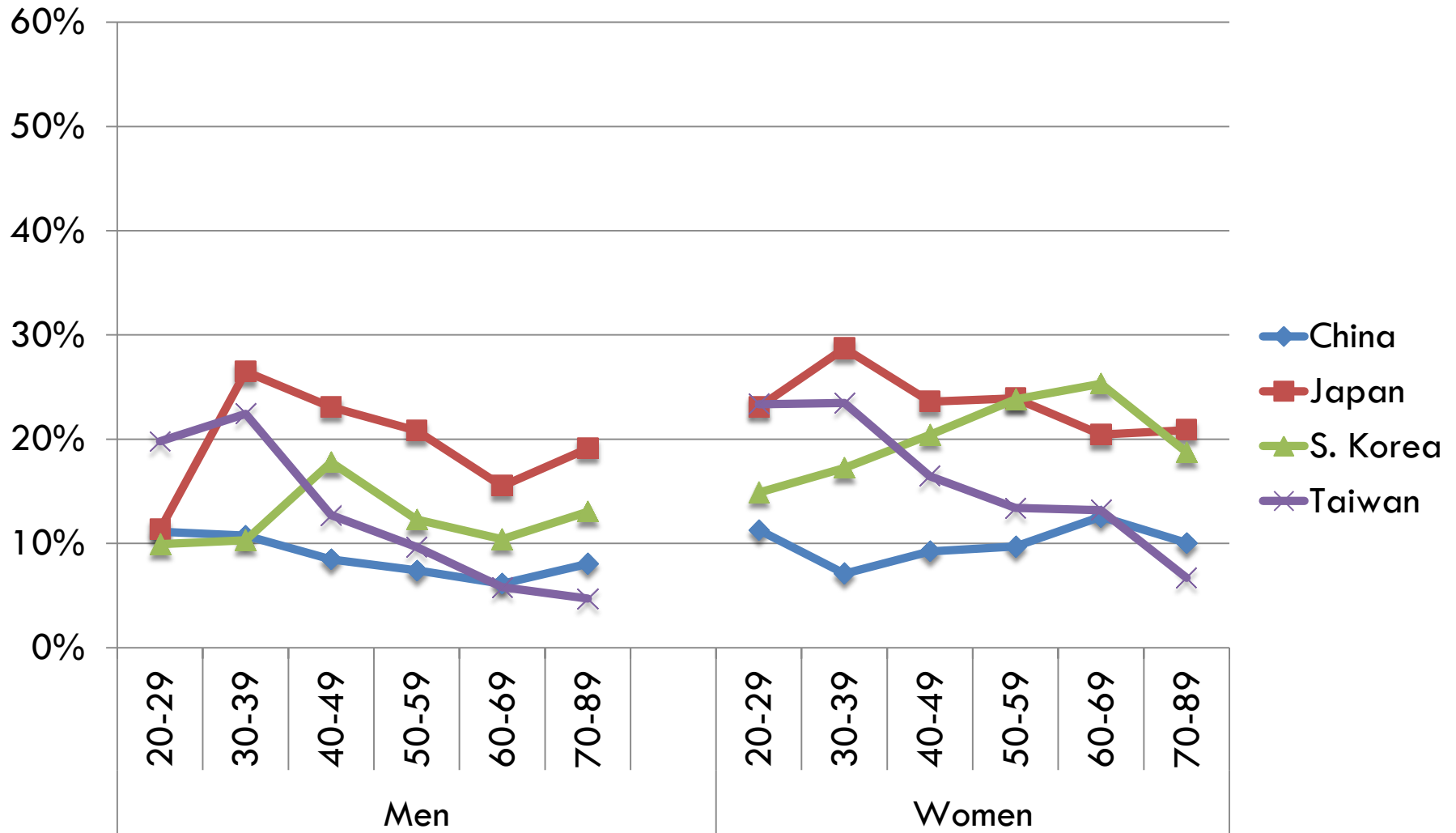
% of those who used oriental herbal medicine

31



% of those who did acupressure or clinical massage

32



2. Factor Structure of Self-rated Health Status : physical, mental, role/social?

SF-12

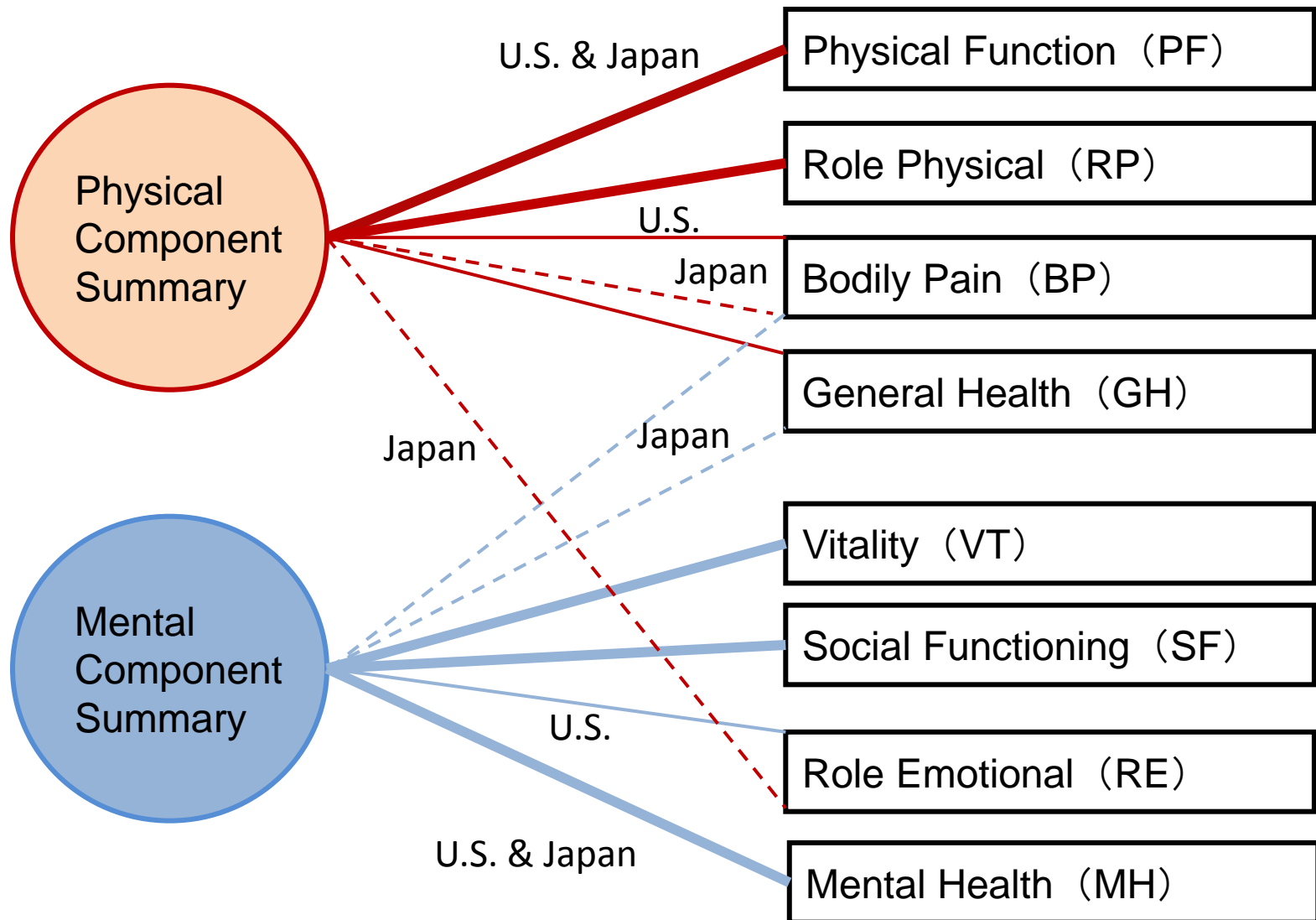
- A shorter version of medical outcome Study Short-form 36-Item Health Survey (SF-36).
- Originally developed in the United States and came to use in more than 140 countries through psychometric evaluation and national-norm data in International Quality of Life Assessment Project (IQOLA); translated into more than 120 languages.
- Assess general health-related quality of life, and is suitable for cross-national studies because the scores have been standardized for each population.
- Both SF-12 and SF-36 capture general Health-related Quality of Life, independent of specific ages or diseases (McHorney, Ware, & Raczek, 1993; Ware, Kosinski, & Keller, 1996).
- Validity of the Japanese SF-36 Health Survey was confirmed by Fukuhara, Ware, Kosinski, Wada and Gandek (1998); validity of the Japanese SF-12 Health Survey was also confirmed but not yet officially announced.

Factor structure of SF-12

- Previous studies in the United States conducted the factor analyses and found two factors: physical component and mental component (Ware, Kosinski, Bayliss, et al., 1995) which have been used as summary scores (PCS and MCS).
- Several studies which conducted factor analyses with data collected by SF-36 in non-English speaking countries also confirmed the presence of these two factors.
- However, Fukuhara et al. (1998) who tested the validity of the SF-36 in Japan found somewhat different pattern of factor loadings: there are two factors, but “bodily pain” loaded almost equally on PCS and MCS; “general health” loaded more on MCS than PCS; “vitality” loaded much heavier on MCS in Japan than in U.S.; “social functioning” loaded much less on MCS in Japan than in U.S.; and “role emotional” loaded more on PCS than MCS
- These differences in the structure of factors have been also found in China (Li et al., 2003, Yu et al., 2003), Singapore (Thumboo et al., 2001), and in Taiwan (Fuh et al., 2000).
- Recently, Suzukamo, Fukuhara, Green, Kosinski, Gandak, and Ware (2011) proposed a three-component model fit better in Japan and also in other Asian countries: PCS, MCS, and Role-social component summary (RCS).
- Using Japanese, Chinese and South Korean data, I will examine this point.

Conceptual model of SF-12

two summary scores and eight subscale scores based on 1990 U.S. and 1995 Japan surveys



6 items and 4 subscales for Physical Component Summary

Physical Functioning: PF

Does **your health** now **limit you in these activities**? If so, how much?

- Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf (3-point)
- Climbing several flights of stairs (3-point)

Role-Physical: RP

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of your physical health**?

- Accomplished less** than you would like (5-point)
- Were **limited in the kind of work or other activities** (5-point)

Bodily Pain: BP

During the past 4 weeks, how much did **pain interfere with your normal work** (including both work outside the home and housework)? (5-point)

General Health: GH

In general, would you say **your health is**: (5-point)

6 items and 4 subscales for Mental Component Summary

Vitality: VT

How much of the time during the past 4 weeks...

-Did you have **a lot of energy**? (5-point)

Social Functioning: SF

During the past 4 weeks, how much of the time has **your physical health or emotional problems interfered with your social activities** (like visiting friends, relatives, etc.)? (5-point)

Role Emotional: RE

During the past 4 weeks, how much of the time have you had any of the following problems with your work or other regular daily activities **as a result of any emotional problems** (such as feeling depressed or anxious)?

-**Accomplished less** than you would like (5-point)

-Did work or other activities **less carefully than usual** (5-point)

Mental Health: MH

How much of the time during the past 4 weeks...

-Have you felt **calm and peaceful**? (5-point)

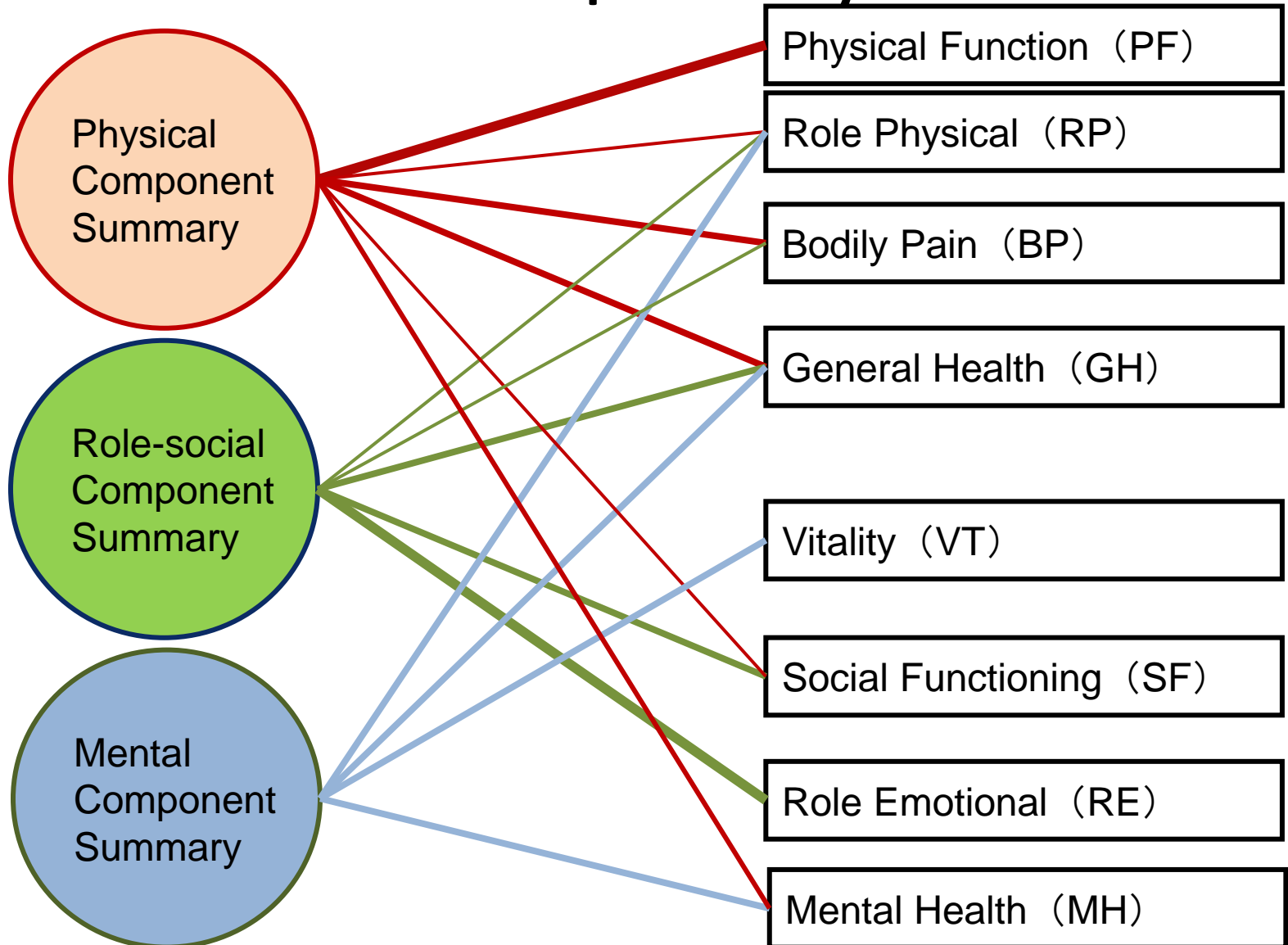
-Have you felt **downhearted and depressed**? (5-point)

Japanese norm-based scores in 2007(mean, standard deviation) and factor loadings for calculating two component summary scores for U.S. (1990) and Japan (1995)

	Japanese norm-based scores in 2007		Factor loadings			
			United States in 1990		Japan in 1995	
	mean	s.d.	PCS	MCS	PCS	MCS
Physical Functioning (PF)	89.19	18.86	0.42	-0.23	0.43	-0.18
Role Physical (RP)	88.67	19.56	0.35	-0.12	0.50	-0.22
Bodily Pain (BP)	83.60	22.45	0.32	-0.10	0.14	0.11
General Health (GH)	55.85	21.56	0.25	0.00	-0.01	0.24
Vitality (VT)	56.71	27.57	0.03	0.24	-0.19	0.42
Social Functioning (SF)	85.61	21.84	-0.01	0.27	0.07	0.17
Role Emotional (RE)	87.11	20.62	-0.19	0.43	0.33	-0.07
Mental Health (MH)	71.26	20.78	-0.22	0.49	-0.25	0.46

Conceptual model of SF-12

three summary scores and eight subscale scores based on
2002 Japan survey



Japanese norm-based score in 2007 (mean, standard deviation) and factor loadings in 2002 survey for calculating three component summary scores

	Japanese norm-based scores in 2007		Factor loadings (Japan in 2002)		
	mean	s.d.	PCS	MCS	RCS
Physical Functioning (PF)	89.19	18.86	0.68	-0.20	-0.13
Role Physical (RP)	88.67	19.56	0.22	-0.27	0.40
Bodily Pain (BP)	83.60	22.45	0.37	0.15	-0.22
General Health (GH)	55.85	21.56	0.37	0.34	-0.42
Vitality (VT)	56.71	27.57	-0.08	0.46	-0.13
Social Functioning (SF)	85.61	21.84	-0.31	0.07	0.49
Role Emotional (RE)	87.11	20.62	-0.14	-0.16	0.61
Mental Health (MH)	71.26	20.78	-0.33	0.45	0.10

Scoring procedure for SF-12

Data entry



Coding missing values



Reverse scoring



Calculating subscale scores following the rule of the SF-12



Converting subscale scores into Z scores



Converting Z scores into norm-based score

Calculating subscale scores

Using raw score as it is: seven questions (Physical Functioning, Role Physical, Social Functioning, Role Emotional and one item of Mental Health.

Reverse scoring: four questions (Bodily Pain, Vitality and one item of Mental Health.

Reverse scoring and rescaling: General Health

In general, would you say your health is ?

Response categories	raw score	reverse scoring/rescaling
Excellent	1	5.0
Very good	2	4.4
Good	3	3.4
Fair	4	2.0
Poor	5	1.0

Calculation of summary scores for SF-12: Three kinds of formula

- Formula with U.S. coefficients: Two factors
- Formula with Japanese coefficients: Two factors
- Formula with Japanese coefficients: Three factors

Physical and Mental Component Summary Scores for Japan, China and South Korea

Scores using U.S. coefficients

	PCS		MCS	
	mean	s. d.	mean	s. d.
Japan	48.449	10.774	48.884	9.703
China	47.612	14.485	49.289	9.200
S. Korea	45.247	16.670	48.376	11.168

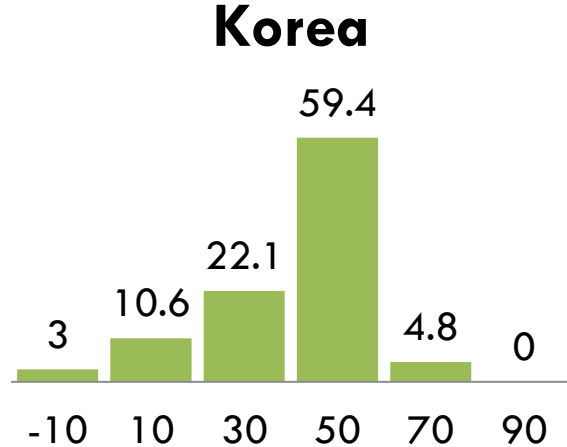
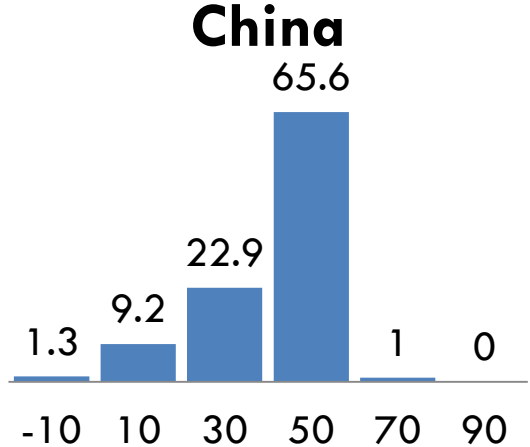
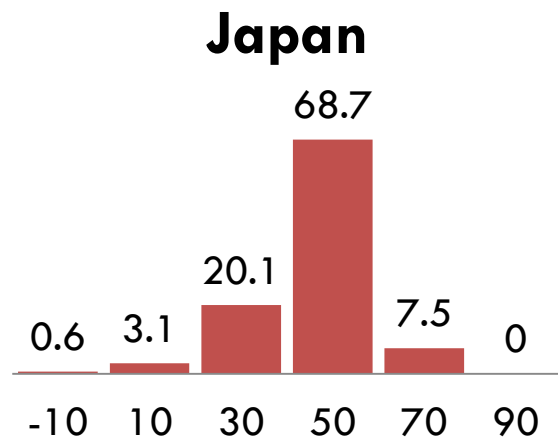
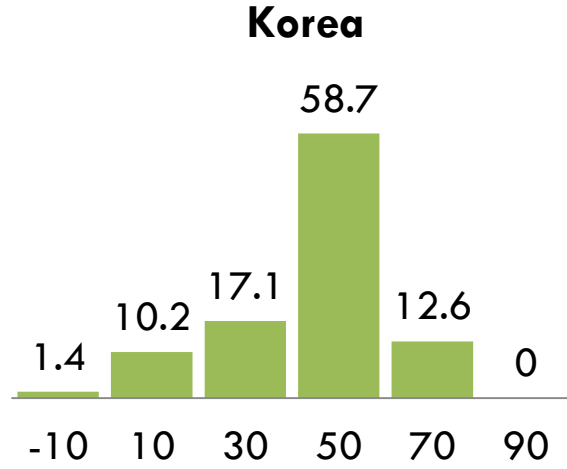
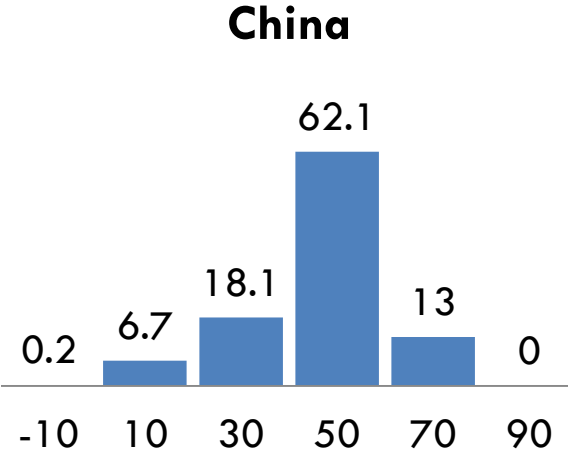
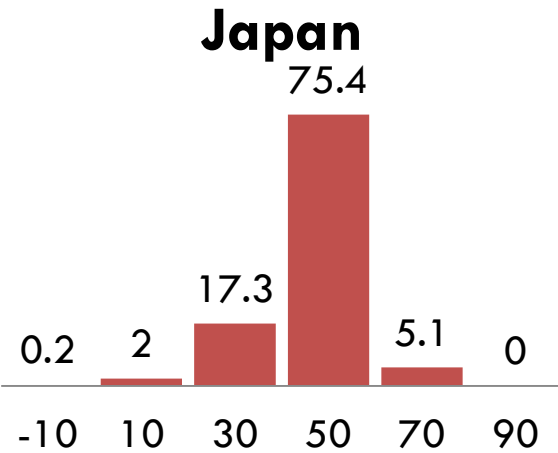
Scores using Japanese coefficients

	PCS		MCS	
	mean	s. d.	mean	s. d.
Japan	47.170	12.414	49.929	8.584
China	41.340	14.407	54.750	8.243
S. Korea	41.090	16.838	51.763	9.812

Distribution of Physical Component Summary Scores

Upper: scores using U.S. coefficients

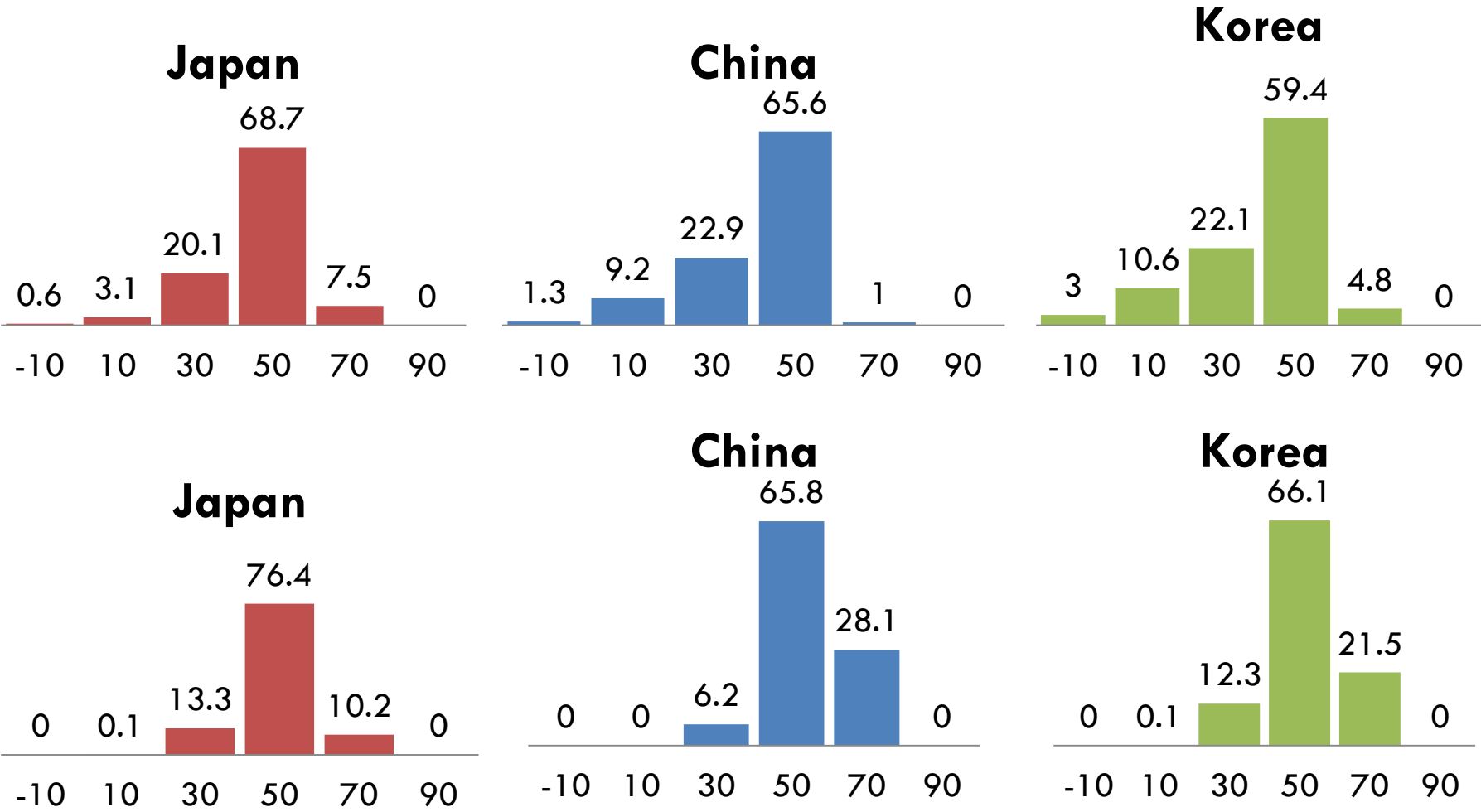
Lower: scores using Japanese coefficients: skewed more



Distribution of Mental Component Summary Scores

Upper: scores using U.S. coefficients

Lower: scores using Japanese coefficients



Physical and Mental Component Summary Scores for Japan, China and South Korea

Two factors v.s. Three factors

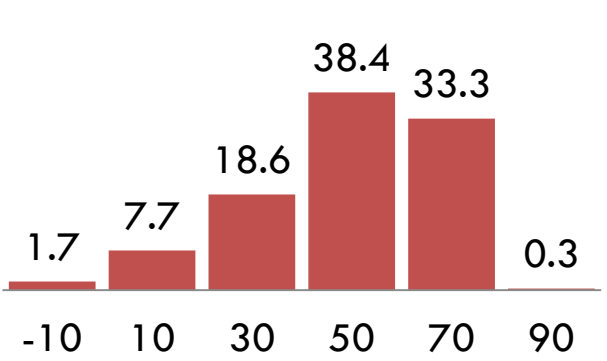
Scores using Japanese coefficients for two factors

Scores using Japanese coefficients for three factors

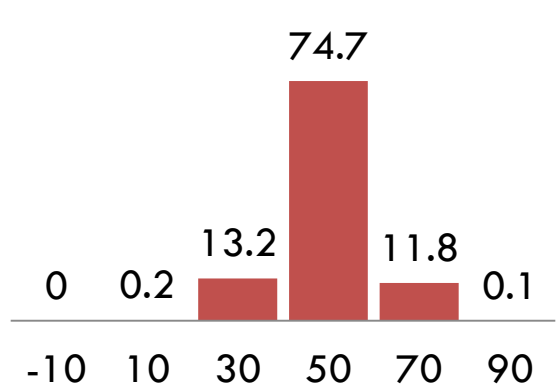
		mean	s. d.
2-component Model	PCS	47.197	12.414
	MCS	49.927	8.584
3- Component model	PCS	47.657	19.843
	MCS	50.147	8.922
	RCS	47.944	11.413

Distribution of Mental Component Summary Scores for Japan: Two Components v.s. Three Components

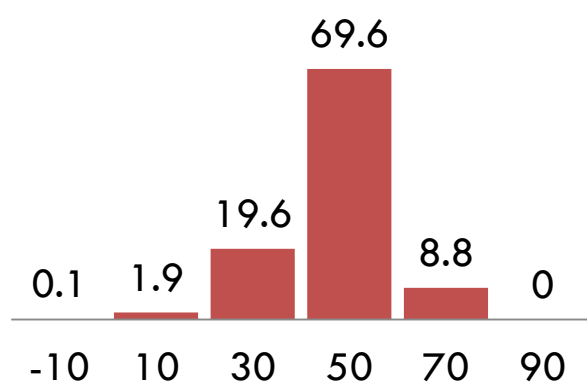
PCS_3



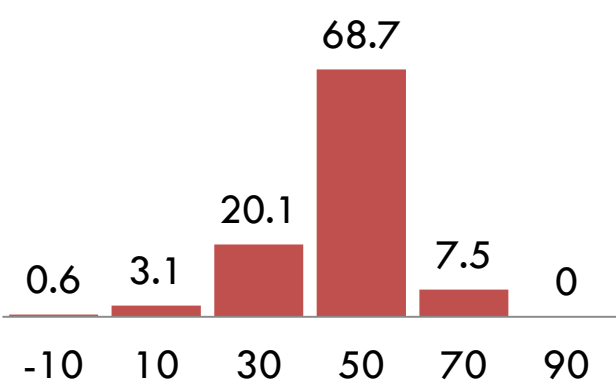
MCS_3



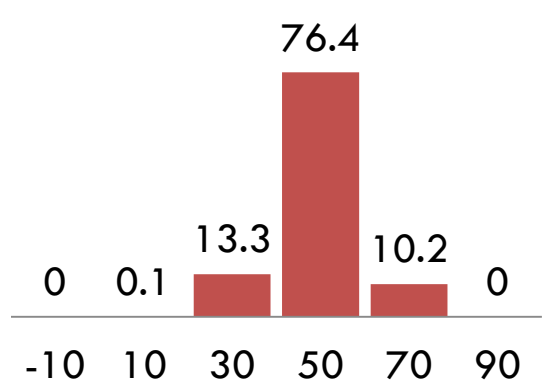
RCS_3



PCS_2



MCS_2



Factor Matrix of SF-12

principal factor solution/varimax rotation

	China		Japan			South Korea	
	Physical	Mental		Physical		Physical	Mental
PF1: Moderate activities	0.758	0.192	0.119	0.667	-0.100	0.784	0.171
PF2: Climbing stairs	0.777	0.194	0.071	0.718	-0.059	0.744	0.150
RP1: Accomplished less	0.784	0.396	0.521	0.658	-0.128	0.803	0.305
RP2: Work limitation	0.696	0.378	0.488	0.661	-0.122	0.827	0.278
BP: Interference with normal work due to pain	-0.740	-0.370	-0.276	-0.511	0.221	-0.747	-0.304
GH	-0.643	-0.308	-0.161	-0.409	0.375	-0.635	-0.274
VT: Had a lot of energy	-0.427	-0.474	-0.153	-0.224	0.672	-0.305	-0.513
SF: Interference with social activities due to health problems	0.578	0.436	0.419	0.288	-0.276	0.582	0.427
RE1: Accomplished less	0.325	0.770	0.858	0.268	-0.230	0.230	0.810
RE2: Work limitation	0.218	0.808	0.865	0.243	-0.239	0.233	0.820
MH1: Felt calm and peaceful	-0.188	-0.563	-0.227	-0.027	0.758	-0.147	-0.514
MH2: Felt downhearted and depressed	0.321	0.568	0.440	0.065	-0.397	0.205	0.660
	58%		56%			58%	

Japan: three factors; China and South Korea: two factors

50 3-component model may not fit for China and South Korea

Factor Matrix of 8 sub-scale principal factor solution/varimax rotation

	China	Japan		South Korea	
		Physical	Mental	Physical	Mental
Physical Functioning	0.556	0.616	0.090	0.764	0.178
Role Physical	0.746	0.794	0.256	0.830	0.250
Bodily Pain	0.645	0.627	0.212	0.783	0.276
General Health	0.543	0.480	0.306	0.674	0.267
Vitality	0.410	0.282	0.516	0.304	0.582
Social Functioning	0.507	0.443	0.381	0.622	0.374
Role Emotional	0.502	0.555	0.478	0.372	0.533
Mental Health	0.488	0.118	0.928	0.137	0.962
	60%	49%		61%	

Japan and South Korea: two-component model; Chine: only one

Factor Matrix of 8 sub-scale for JGSS-2010 and those for iHope 1997 survey principal factor solution/varimax rotation

	JGSS-2010		iHope 1997	
	n=2,496 age:20-89		n=1,089 age:20-79	
	Physical	Mental	PCS	MCS
Physical Functioning	0.62	0.09	0.63	0.24
Role Physical	0.79	0.26	0.90	0.25
Bodily Pain	0.63	0.21	0.54	0.40
General Health	0.48	0.31	0.39	0.55
Vitality	0.28	0.52	0.30	0.84
Social Functioning	0.44	0.38	0.55	0.46
Role Emotional	0.56	0.48	0.77	0.37
Mental Health	0.12	0.93	0.26	0.81
	49%		62%	

Most of the loadings are the same for both surveys, but there are also some differences.

A decorative horizontal bar at the top of the slide, consisting of a red rectangular section on the left and a blue rectangular section on the right.

3. What kind of people use alternative oriental herbal medicine

Men	China	Japan	S. Korea	Taiwan
Education level				
Junior high school	64.6	17.8	18.5	27.2
High school or college	28.0	50.3	43.8	43.9
University or moer	7.4	31.9	37.7	28.9
Household income compared				
Below average	40.6	45.4	43.7	26.5
Average	49.0	40.4	36.6	64.9
Above average	10.4	14.2	19.7	8.6
Marriage status				
Currently married	82.3	74.5	65.6	63.2
Widowed / divorced	7.5	6.9	7.6	7.7
Unmarried	10.1	18.5	26.7	29.1
Occupation				
Legislators / Managers	3.8	5.9	2.5	6.5
Professionals	4.3	5.1	6.6	6.3
Technicians	3.6	8.8	21.5	14.2
Clerks	4.4	10.3	7.5	4.3
Service / sales	8.2	6.3	9.3	9.1
Skilled	26.5	3.3	5.1	4.4
Craft	8.7	12.4	7.6	10.7
Operators	6.1	10.1	7.6	10.7
Elementary	5.8	5.9	5.1	3.2
Having no current work income	28.6	31.8	27.1	30.7
Age				
Aged 20-29	12.7	9.2	18.2	18.4
Aged 30-39	18.4	14.8	23.0	19.7
Aged 40-49	24.3	14.6	22.7	17.4
Aged 50-59	20.6	17.1	15.8	18.9
Aged 60-69	14.3	22.7	10.7	13.4
Aged 70-	9.6	21.6	9.6	12.2

Men	China	Japan	S. Korea	Taiwan
Subjective health condition				
Very good	61.3	19.4	56.6	22.3
Good	22.7	51.5	23.9	27.1
Poor	16.0	29.1	19.6	50.6
Frequency of seeing a doctor				
none	30.5	15.1	20.5	11.2
About once/year	17.7	16.6	16.2	9.5
Several times/year	41.5	32.7	41.1	60.4
About once/month	7.1	29.0	16.1	16.0
About once/week	2.5	4.8	2.8	2.3
Several times/week	0.7	1.8	3.3	0.6
Chronic diseases				
No	68.5	51.9	72.6	72.6
One	26.8	31.1	20.1	20.1
Two or more	4.7	17.0	7.2	7.2
Smoking				
	58.6	34.9	51.6	32.6
Alcohol habits				
Everyday	17.5	34.0	10.4	4.7
Several days per month	34.7	38.0	61.0	21.4
Less than several times a year	47.9	28.1	28.6	73.8
Physical activity				
Everyday	19.1	6.3	20.3	25.2
Several days per month	21.2	42.2	51.1	44.3
Less than several times a year	59.7	51.5	28.6	30.5

Women	China	Japan	S. Korea	Taiwan
Education level				
Junior high school	70.1	14.3	28.3	40.9
High school or college	22.5	70.1	45.8	33.6
University or moer	7.4	15.5	25.9	25.5
Household income compared				
Below average	40.9	41.1	45.1	26.7
Average	50.6	45.6	39.9	67.2
Above average	8.6	13.3	15.0	6.1
Marriage status				
Currently married	80.7	70.5	66.3	60.1
Widowed / divorced	12.8	16.6	17.5	17.1
Unmarried	6.5	13.0	16.2	22.7
Occupation				
Legislators / Managers	1.7	0.3	0.4	2.2
Professionals	4.6	6.1	5.3	5.3
Technicians	2.3	5.5	8.4	10.7
Clerks	5.3	15.2	9.1	11.4
Service / sales	9.4	12.6	13.2	13.0
Skilled	26.6	2.0	3.8	2.4
Craft	2.5	2.7	1.4	2.5
Operators	0.9	2.5	1.9	4.3
Elementary	3.5	5.6	5.8	4.4
Having no current work income	43.1	47.5	50.8	43.8
Age				
Aged 20-29	13.3	9.7	15.1	18.2
Aged 30-39	20.4	15.6	25.4	16.5
Aged 40-49	25.3	17.4	24.4	20.8
Aged 50-59	19.1	17.2	13.1	16.5
Aged 60-69	12.2	20.7	9.9	16.8
Aged 70-	9.6	19.3	12.1	11.2

Women	China	Japan	S. Korea	Taiwan
Subjective health condition				
Very good	53.9	17.8	45.8	15.6
Good	25.1	53.1	25.8	28.2
Poor	21.0	29.1	28.3	56.2

Frequency of seeing a doctor				
none	19.7	11.6	11.7	6.8
About once/year	16.1	15.6	8.4	5.7
Several times/year	48.3	37.6	47.0	61.6
About once/month	11.0	28.4	18.1	20.8
About once/week	3.6	4.7	7.4	2.7
Several times/week	1.3	2.1	7.5	2.3

Chronic diseases				
No	62.8	56.3	65.8	67.7
One	28.6	32.7	24.2	24.6
Two or more	8.6	11.0	10.0	7.8

Smoking				
	4.1	10.8	5.1	5.9

Alcohol habits				
Everyday	0.8	8.5	0.9	1.1
Several days per month	4.8	27.3	36.5	6.0
Less than several times a year	94.3	64.2	62.7	92.9

Physical activity				
Everyday	14.6	3.8	12.5	24.4
57 Several days per month	19.8	32.7	43.2	37.8
Less than several times a year	65.6	63.5	44.3	37.9

Oriental herbal treatment: Men	China	Japan	S. Korea	Taiwan
Education level				
Junior high school (ref.)				
High school or college				
University or moer		--		

Household income compared				
Below average (ref.)		**		
Average				
Above average		*		

Marriage status				
Currently married (ref.)	**			
Widowed / divorced				
Unmarried	---			

Occupation				
Legislators / Managers	**			
Professionals				
Technicians				
Clerks				
Service / sales	++			
Skilled				
Craft	--			
Operators				
Elementary				
Having no current work income (ref.)				

58**** /++++/----: p<0.001; *** /+++ /---: p<0.01; ** /++ /--: p<0.05; * /+ /-: p<0.10.

p<0.10.

Oriental herbal treatment: Men	China	Japan	S. Korea	Taiwan
Subjective health condition	****	*		**
Very good (ref.)				
Good	++++			++
Poor	++++	++		+++
Frequency of seeing a doctor (day /w)	++	+	++++	+
Chronic diseases	****	**		
No (ref.)				
One	++++	+++		
Two or more	+++	+++		
Smoking		---		
Alcohol habits				
Everyday				
Several days per month				
Less than several times a year (ref.)				
Physical activity	**			
Everyday	++			
Several days per month	++			
Less than several times a year (ref.)				
Age				
Aged 20-29 (ref.)				
Aged 30-39				
Aged 40-49				
Aged 50-59				
Aged 60-69			+	
Aged 70-			++	
Constant	****	****	****	***

Oriental herbal treatment: Women	China	Japan	S. Korea	Taiwan
Education level			***	
Junior high school (ref.)				
High school or college				
University or moer			++	
Household income compared			**	
Below average (ref.)				
Average			++	
Above average			++	
Marriage status		**		
Currently married (ref.)				
Widowed / divorced				
Unmarried		--		
Occupation	**		*	
Legislators / Managers				
Professionals		++		
Technicians				
Clerks		+	+++	
Service / sales			+++	
Skilled	++			
Craft				
Operators				
Elementary	---			
Having no current work income (ref.)				

Oriental herbal treatment: Women	China	Japan	S. Korea	Taiwan
Subjective health condition	****		****	
Very good (ref.)				
Good	+++		++++	
Poor	++++		+++	
Frequency of seeing a doctor (day /w)	+++	++	+++	+
Chronic diseases	****	***		
No (ref.)				
One	++++	++++		
Two or more	++++	++		
Smoking				
Alcohol habits				
Everyday				
Several days per month				
Less than several times a year (ref.)				
Physical activity				
Everyday	+			
Several days per month				
Less than several times a year (ref.)				
Age		***		
Aged 20-29 (ref.)				
Aged 30-39				
Aged 40-49				
Aged 50-59				
Aged 60-69				
Aged 70-				
Constant	****	****	****	***

Acupuncture / Moxibation: Men	China	Japan	S. Korea	Taiwan
Education level				
Junior high school (ref.)				
High school or college				
University or moer				

Household income compared				
Below average (ref.)				
Average				
Above average				

Marriage status				
Currently married (ref.)	*			
Widowed / divorced				
Unmarried	++			

Occupation				
Legislators / Managers				
Professionals				
Technicians		++		
Clerks		++		
Service / sales		+		
Skilled		++		
Craft		+		
Operators				
Elementary				
Having no current work income (ref.)				

Acupuncture / Moxibation: Men	China	Japan	S. Korea	Taiwan
Subjective health condition	****			
Very good (ref.)				
Good	+++			
Poor	++++			
Frequency of seeing a doctor (day /w)		+	++++	
Chronic diseases	***			
No (ref.)				
One	++++			
Two or more				
Smoking	+			
Alcohol habits	*			
Everyday				
Several days per month	++			
Less than several times a year (ref.)				
Physical activity				
Everyday		+		
Several days per month				
Less than several times a year (ref.)				
Age				
Aged 20-29 (ref.)				
Aged 30-39	--			
Aged 40-49			+	
Aged 50-59	--			
Aged 60-69	--			
Aged 70-	-			
Constant	****	****	***	

Acupuncture / Moxibation: Women	China	Japan	S. Korea	Taiwan
Education level	**			**
Junior high school (ref.)				
High school or college				
University or moer	+++			++
Household income compared		***		
Below average (ref.)				
Average				
Above average		+++		
Marriage status				
Currently married (ref.)				
Widowed / divorced				
Unmarried				
Occupation		**	*	
Legislators / Managers				
Professionals				
Technicians				
Clerks		+++		
Service / sales			+++	
Skilled	--	+++	+	
Craft				
Operators				
Elementary		++		
Having no current work income (ref.)				

Acupuncture / Moxibation: Women	China	Japan	S. Korea	Taiwan
Subjective health condition			****	
Very good (ref.)				
Good			+++	
Poor			++++	
Frequency of seeing a doctor (day /w)		+	+++	++
Chronic diseases	****	**	*	
No (ref.)				
One	++++	++		--
Two or more	++++	++	+	
Smoking			-	
Alcohol habits		*		
Everyday				
Several days per month		-		
Less than several times a year (ref.)				
Physical activity	**			
Everyday	+			
Several days per month	++			
Less than several times a year (ref.)				
Age				***
Aged 20-29 (ref.)				
Aged 30-39				
Aged 40-49	++			
Aged 50-59				++
Aged 60-69				
Aged 70-				
Constant	****	****	***	***

Acupressure / clinical massage: Men	China	Japan	S. Korea	Taiwan
Education level	***			
Junior high school (ref.)				
High school or college	+++			
University or moer	+++			
Household income compared		***		
Below average (ref.)				
Average				
Above average		++++	+	
Marriage status			*	
Currently married (ref.)				
Widowed / divorced			--	-
Unmarried				
Occupation	**	**		
Legislators / Managers	+++			
Professionals		++		
Technicians		+++		
Clerks				
Service / sales	++	+		+
Skilled				
Craft		+		-
Operators				
Elementary				
Having no current work income (ref.)				

Acupressure / clinical massage: Men	China	Japan	S. Korea	Taiwan
Subjective health condition	*			
Very good (ref.)				
Good				
Poor	++			
Frequency of seeing a doctor (day /w)		++++	+	
Chronic diseases	**	***	*	
No (ref.)				
One	++	++++		
Two or more			+	
Smoking		++		++
Alcohol habits	**			
Everyday				
Several days per month	+++			
Less than several times a year (ref.)				
Physical activity	****	**		
Everyday	+++	+++		
Several days per month	++++	+++		
Less than several times a year (ref.)				
Age				**
Aged 20-29 (ref.)				
Aged 30-39		++		
Aged 40-49				--
Aged 50-59				
Aged 60-69				--
Aged 70-				--
Constant	****	****	***	

Acupressure / clinical massage: Women	China	Japan	S. Korea	Taiwan
Education level	****		*	
Junior high school (ref.)				
High school or college	++++	+		
University or moer	++++			
Household income compared		****	*	
Below average (ref.)				
Average		+	++	
Above average		++++		
Marriage status				
Currently married (ref.)				
Widowed / divorced		+		
Unmarried				
Occupation	*	****		
Legislators / Managers				
Professionals		+++		
Technicians		+++		++
Clerks	++	++++		
Service / sales	+++	+		
Skilled		++++		
Craft				
Operators				
Elementary		+	+	
Having no current work income (ref.)				

Acupressure / clinical massage: Women	China	Japan	S. Korea	Taiwan
Subjective health condition		**	*	
Very good (ref.)				
Good				
Poor		++	++	
Frequency of seeing a doctor (day /w)	++++		+	+
Chronic diseases	*		**	*
No (ref.)				
One	++		++	--
Two or more	+		+	
Smoking			-	++
Alcohol habits	****			
Everyday				
Several days per month	++++			
Less than several times a year (ref.)				
Physical activity	****			
Everyday	++++			
Several days per month	+++			
Less than several times a year (ref.)				
Age				
Aged 20-29 (ref.)				
Aged 30-39				
Aged 40-49				
Aged 50-59				
Aged 60-69				
Aged 70-				
Constant	****	****	****	**

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