

Subjective Age and Aging: An Aspect of Psychological Gerontology

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Background

- Age identification and life-span change (Montepare & Lachman, 1989)
- Age Identification: People's behavior and subjective age (Hendrics, 1987)
- Middle aged and older consumers' needs

Today's Talk

- Definitions of self-perceived age
- Yokohama Study (1997)
 - Changes of subjective age in life-span
- Sapporo Study (2011)
 - QOL and subjective age
- Conclusion



Sapporo

Yokohama

Definitions of Self-Perceived Age

Five kinds of self-perceived age or subjective age
(Barak & Stern, 1986)

- **Subjective Age:** A general term of self-perceived age
 1. **Cognitive Age:** Operationally defined and 4-item scale
 2. **Identity Age:** Self-perceived generation
 3. **Comparative Age:** Feel younger, same, or older
 4. **Feel Age:** Self-perceived age
 5. **Stereotype Age:** Measured by Semantic Differential
- **Age Identity:**

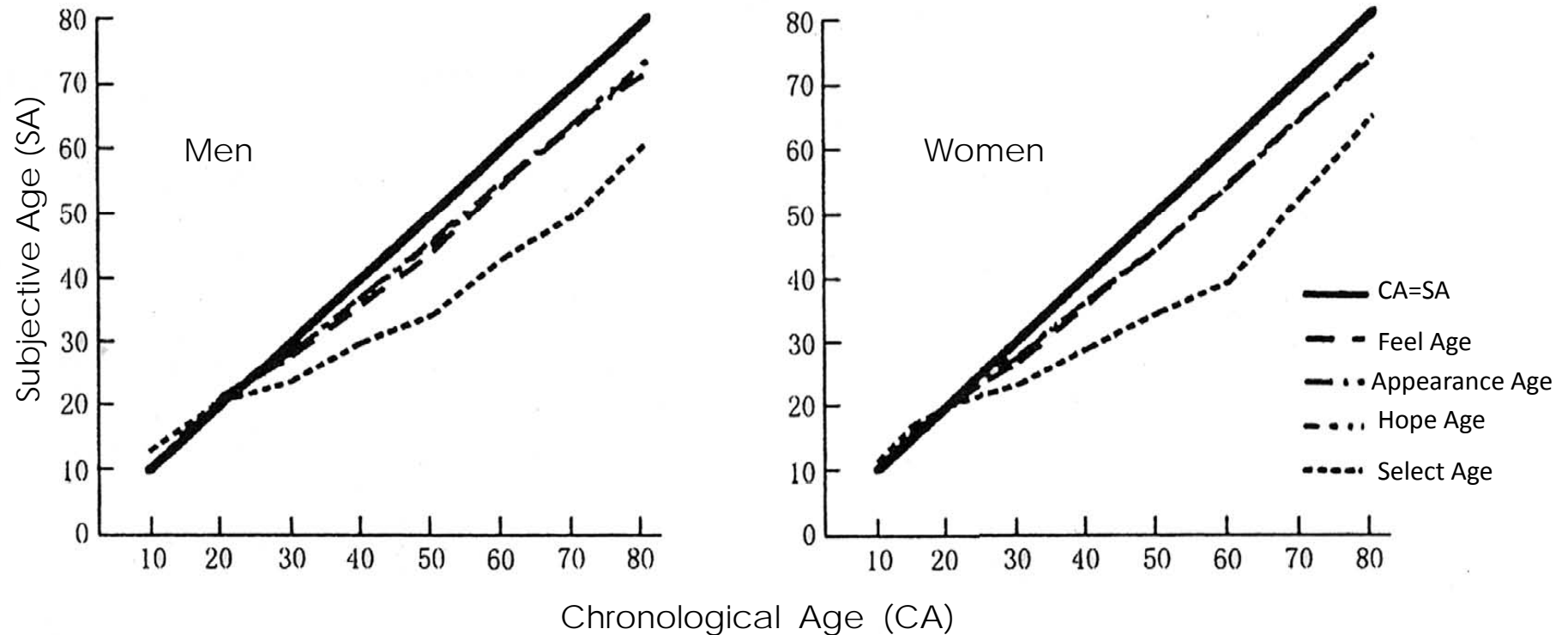
Life-span development of age identity - Yokohama Study

Participants

age	age cohort	n: men	n: women	n: total	mean age (SD)
8-12 yrs	childhood	101	100	201	10.0 (1.4)
13-17	early adolescence	46	42	88	15.4 (1.5)
18-24	adolescence	79	77	156	20.6 (2.0)
25-34	early adulthood	94	116	210	29.7 (3.0)
35-44	middle adulthood	111	268	379	39.7 (2.8)
45-54	late adulthood	82	115	197	49.2 (2.8)
55-64	presenile	102	107	209	59.1 (3.2)
65-74	young old	119	114	233	69.0 (3.0)
75+	old old	82	87	169	78.7 (3.7)
Total		816	1026	1842	43.0 (21.5)

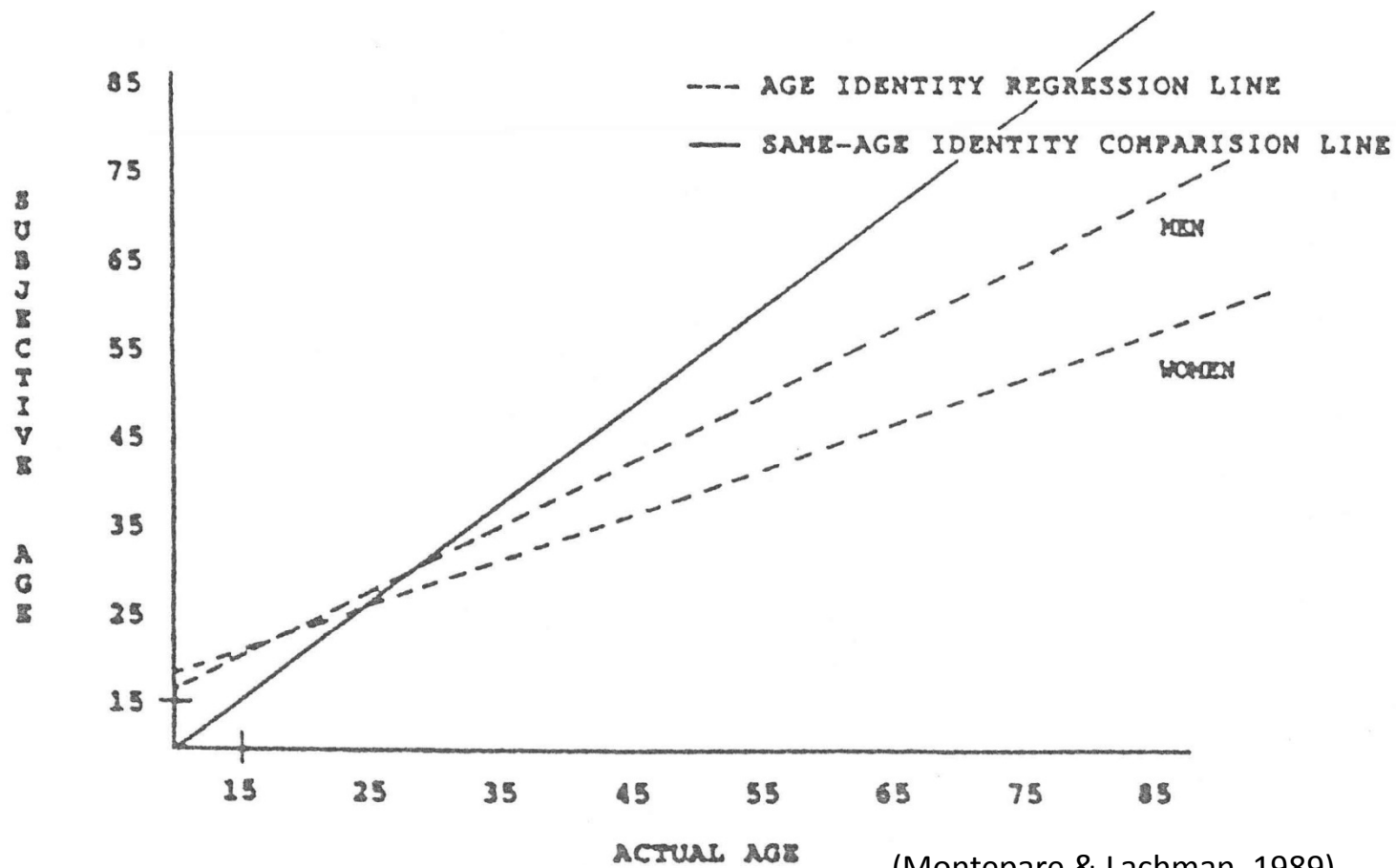
(Sato, et al., 1997)

Age Identities for men and women in life-span (Japan)



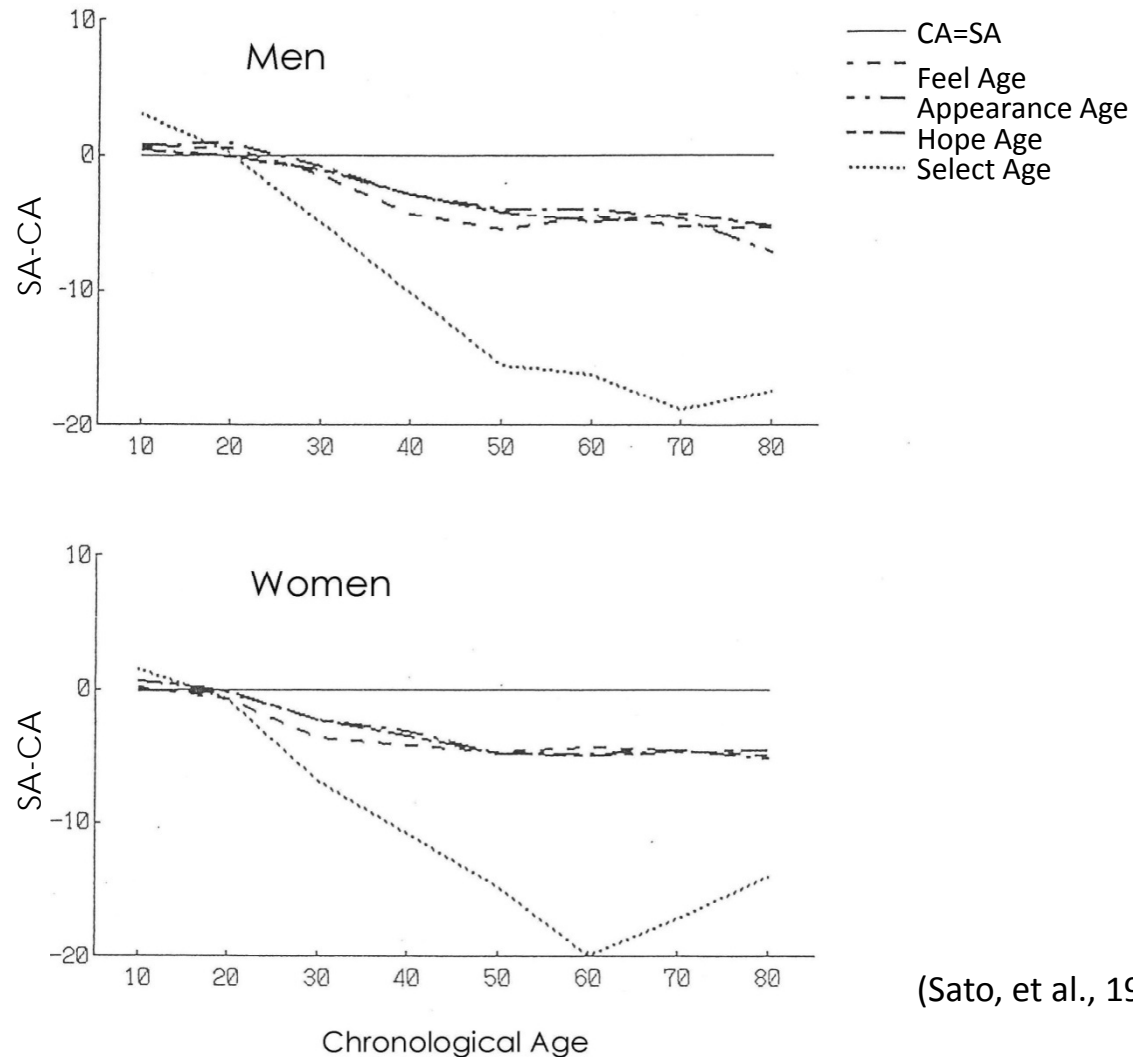
(Sato, et al., 1997)

Age Identities for men and women in life-span (U.S.)



(Montepare & Lachman, 1989)

Differences between subjective age and chronological age (SA-CA) in Japan



(Sato, et al., 1997)

Mean subjective age separated by chronological age (SA-CA) in Japan

- 30's: (Men) 2~3 years younger
(Women) 3~4 years
- 40's: 4~5 years
- 50's & 60's: 6 years
- 70's & 80's: 6~7 years

(Sato, et al., 1997)

Mean subjective age separated by chronological age (SA-CA) in U.S.

- 30's: (Men) 4 years younger
(Women) 6~7 years
- 40's: (M) 7~8 years
(W) 12 years
- 50's: (M) 11~12 years
(W) 17~18 years
- 60's: (M) 15~16 years
(W) 22~27 years
- 70's : (M) 19~20 years
(W) 28 years

(Montepare & Lachman, 1989)

Multiple regression analyses: SAs as dependent variables

Independent variables	Feel Age (n=920)	Appearance Age (n=819)	Hope Age (n=815)	Select Age (n=844)
<i><u>Demographic Variables</u></i>				
Chronological Age	-.363***	-.419***	-.379***	-.507
Sex ¹	-----	-.107***	-----	-----
Education ²	-----	-----	-----	-----
<i><u>Health & Economic Status</u></i>				
Health ³	-.079*	-.092**	-----	-----
Disease ⁴	-----	-----	-----	-----
Economic status ⁵	-.081*	-----	-----	-----
<i><u>Psychological Factors⁶</u></i>				
Self-esteem (Rosenberg)	-.094**	-.132***	-----	-----
Self-efficacy (Shere, et al)	-----	-----	-----	-----
Depression (Randloff; Kovacs)	-----	-----	-----	-----
Type A (Bortner; Matthews)	-.098**	-----	-----	-----
Masculinity (Bem)	-----	-----	-----	-----
Femininity (Bem)	-.074*	-----	-.118***	-----
R ²	-.374***	-.471***	-.407	-.507

(Numbers in the table are significant standardized betas by stepwise analyses.)

Note: ***p<.001, **p<.01, :p<.05, 1. male=1, female= 2, 2. number of years,

3 Better health status got higher score. 4. presence=1, absence=2,

5. Better economic status got higher score.

6. General scales were used for over 13 year old participants and scales for children were used for under 12 year old participants.

Sapporo Study

- Three kinds of subjective ages
Feel Age, Physical Age and Brain Age
- QOL scale
WHO-5
- Participants
 - Middle Aged (50-64) n=244
 - Young Old (65-74) n=263
 - Old Old (75+) n=104

Sapporo Data (February 2011)

Three kinds of Subjective Age

	Chronological Age (Mean & SD)	Feel Age	Physical Age	Brain Age
Middle Aged (50-64 year olds)	57.8 (4.2)	54.9 (5.5)	54.9 (6.6)	53.7 (8.1)
Young Old (65-74)	69.2 (2.7)	65.5 (4.7)	64.9 (5.4)	64.9 (6.1)
Old Old (75-90)	78.9 (3.1)	75.8 (5.2)	73.4 (6.2)	72.0 (8.2)

Number of Subjects: M-A 244, Y-O 263, O-O 104

(Sato, et al., 2011)

Photos of Freezing Sapporo (February 2011)



Correlations of WHO 5 and three Subjective Ages

	WHO-5	Feel Age-CA ¹	Physical Age-CA	Brain Age-CA	Age-Group ²
FA-CA	-.331**				
PA-CA	-.330**	.604**			
BA-CA	-.174**	.474**	.495**		
Age-Group	-.127**	.008	.171**	.143**	
Sex	-.067	-.036	-.027	-.046	-.175**

Note: 1 CA means Chronological Age, 2 Three age groups (Middle Aged, Young Old, Old Old)
N=595, **p<.01

Multiple Regression Analysis: WHO-5 as a dependent variable

Independent Variables	Standardized Beta
FA-CA	-.226**
PA-CA	-.201**
BA-CA	-.097*
Age Group	-.096*
Sex	.043
Adjusted R ²	.145**

Note: N=595, **p<.01, *p<.05

Conclusion

- Differences from actual age to subjective age expanded in life-span. But Japanese elderly were not so much younger than American elderly subjectively.
- Subjective physical strength has a higher relationship with subjective feeling of age than subjective brain function.
- Younger identity of the elderly may have important effects for their consumption behavior.

Thank you.