

RUNNNING HEAD: ATTITUDES TOWARDS AGE GROUPS AND GENERATIONS

Multiple Sources of Aging Attitudes: Perceptions of Age Groups and Generations from Adolescence to Old Age Across China, Germany, and the US

SUPPLEMENTARY MATERIAL

S1: Instructions Attitude Scale

Germany

Age Groups

„Was sind Dinge die Sie oft über verschiedene **Altersgruppen** denken, hören oder lesssen?“

Jugendliche (13-19 Jahre) sind typischerweise ...

Junge Menschen (20-39 Jahre) sind typischerweise...

Mittel-alte Erwachsene (40-52 Jahre) sind typischerweise...

Junge-alte Erwachsene (53-72 Jahre) sind typischerweise...

Alte Menschen (73-89 Jahre) sind typischweise ...

Sehr alte Menschen (90 Jahre und älter) sind typischweise

Generations

„Was sind Dinge die Sie oft über verschiedene **Generationen** denken, hören oder lesen?“

Menschen der Generation Z (1999-) sind typischerweise...

Menschen der Millennials (1980-1998) sind typischerweise...

Menschen der Generation X (1966-1979) sind typischerweise...

Menschen der 68'er Generation (1946-1965) sind typischerweise...

Menschen der Nachkriegsgeneration (1929-1945) sind typischerweise...

Menschen der Kriegsgeneration (1900-1928) sind typischerweise...

faul-fleissig

unfähig-kompetent

einfältig-weise

dumm-intelligent

deprimiert-glücklich

egoistisch-selbstlos

US

“What are things people typically think about, hear about, or read about different **age groups**?“

Adolescents (13-19 years) are typically...

Young people (20-39 years) are typically...

Middle-aged adults (40-52 years) are typically...

Young-Old people (53-72 years) are typically ...

Old people (73-89 years) are typically ...

Very old people (90 years and older) are typically...

“What are things people typically think about, hear about, or read about different **generations**? ”

People of Generation Z (1999-) are typically...

People of Millennials (1980-1998) are typically...

People of Generation X (1966-1979) are typically...

People of the Baby Boomer Generation (1946-1965) are typically...

People of the Silent Generation (1929-1945) are typically...

People of the Greatest Generation (1900-1928) are typically ...

lazy-hardworking

incompetent-competent

foolish-wise

stupid-intelligent

depressed-happy

selfish-altruistic

China

人们通常会如何看待、如何讨论、如何描述以下这些**年龄组**的人？

青少年 (13-19周岁) 通常是...

年轻人 (20-39周岁) 通常是...

中年人 (40-55周岁) 通常是...

早老年人 (55-69周岁) 通常是...

老年人 (70-89周岁) 通常是...

老老年人 (大于90周岁) 通常是...

人们通常会如何看待、如何讨论、如何描述以下这些**代际**的人？

00后 (2000-) 通常是...

80后90后 (1980-1999) 通常是...

文革一代 (1966-1979) 通常是...

新中国一代 (1949-1965) 通常是...

抗战一代 (1931-1948) 通常是...

民国一代 (1911-1930) 通常是...

懒惰的-勤奋的
无能的-能干的
愚昧的-智慧的
愚笨的-聪明的
消沉的-愉快的
自私的-无私的

Table S1

Sociodemographic information for the sample by country and age

Age Group	N			Age			Subjective Health		Level of Education	
	Total	Men	Women	M	SD	Range	M	SD	M	SD
Germany										
Younger	122	56	64	29.16	5.76	18-39	4.27	1.25	3.42	1.02
Middle-aged	120	64	53	49.42	5.73	40-59	3.82	1.48	3.26	1.02
Older	122	67	55	69.61	6.45	60-82	3.62	1.33	3.40	1.06
United States										
Younger	147	84	63	30.15	4.79	19-39	4.51	1.11	3.87	1.03
Middle-aged	115	44	71	50.78	5.45	40-59	3.88	1.49	3.62	1.19
Older	79	31	48	65.48	4.64	60-80	3.97	1.33	3.49	1.23
China										
Younger	134	60	74	25.57	7.34	18-39	4.05	1.10	3.37	1.24
Middle-aged	163	99	64	48.88	5.47	40-59	3.90	1.23	3.55	1.08
Older	110	60	50	67.00	4.95	60-83	3.25	1.31	1.72	1.08

Note. Self-reported subjective health: "In general, how would you rate your physical health? 0= "poor" to 6 = "excellent"; Level of education: 1= "no degree", 2="High School Diploma/GED", 3="Associate degree", 4="Bachelor's degree", 5 = "Master's degree", and 6= "Doctorate (PhD)"

Table S2

Interrater agreement (ICC[1,k]) for the six different age groups and generations

	Germany	US	China
Adolescents	.79	.81	.82
Young Adults	.78	.83	.84
Middle-Aged Adults	.84	.84	.86
Young-Old Adults	.88	.85	.87
Older Adults	.86	.81	.88
Old-Old Adults	.85	.83	.90
Generation Z, Post-00 Generation	.86	.86	.82
Millennials, Post-80/90 Generation	.90	.86	.86
Generation X, Cultural Revolution Generation	.90	.89	.89
68er Generation, Baby Boomer, New China Generation	.92	.89	.91
Post-War Generation, Silent Generation, War Generation	.90	.88	.90
War Generation, Greatest Generation, Republic of China Generation	.89	.88	.92

Table S3

Means and standard deviations of attitudes towards the six different age groups and generations in Germany, the US, and China. Higher scores indicate more positive and lower scores more negative attitudes.

Age Group	Country	N	M	SD	Generation	M	SD
Adolescents	US	341	.04	1.22	Generation Z	.33	1.24
	Germany	364	-.15	.97	Generation Z	-.05	1.02
	China	407	1.22	1.05	Post-00 Generation	1.10	1.06
	Total	1112	.41	1.24	Generation 1	0.49	1.21
Young Adults	US	341	.91	1.01	Millennials	.46	1.26
	Germany	364	.58	.79	Millennials	.61	0.99
	China	407	1.52	.93	Post-80/90 Generation	1.46	0.97
	Total	1112	1.03	.99	Generation 2	.88	1.16
Middle-Aged Adults	US	341	1.33	.95	Generation X	1.07	1.06
	Germany	364	1.06	.88	Generation X	.94	1.00
	China	407	1.59	.96	Cultural Revolution Generation	1.39	1.08
	Total	1112	1.34	.96	Generation 3	1.15	1.07
Young-Old Adults	US	341	1.39	1.03	Baby Boomer	1.41	1.08
	Germany	364	1.18	1.05	68er Generation	1.06	1.11
	China	407	1.30	1.03	New China Generation	1.65	.99
	Total	1112	1.28	1.04	Generation 4	1.39	1.09
Older Adults	US	341	.87	1.14	Silent Generation	1.22	1.07
	Germany	364	.79	1.16	Post-War Generation	1.05	1.18
	China	407	.85	1.18	War Generation	1.66	1.06
	Total	1112	.84	1.16	Generation 5	1.32	1.14
Old-Old Adults	US	341	.28	1.34	Greatest Generation	1.33	1.16
	Germany	364	.44	1.15	War Generation	.76	1.19
	China	407	.48	1.37	Republic of China Generation	1.22	1.20
	Total	1112	.40	1.29	Generation 6	1.10	1.21

Note. Attitudes towards age groups and generations were assessed using a semantic differential on a 7-point rating scale ranging from “-3” to “3”

Table S4a

Means and standard deviations of six attitudes items towards the six different age groups in Germany, the US, and China. Higher scores indicate more positive and lower scores more negative attitudes.

	USA		Germany		China	
	M	SD	M	SD	M	SD
Adolescents						
lazy-hardworking	-.41	1.68	-.24	1.42	.83	1.61
incompetent-competent	.26	1.55	-.09	1.31	1.19	1.29
foolish-wise	-.71	1.69	-.51	1.23	1.35	1.32
stupid - intelligent	1.04	1.27	.27	1.36	1.73	1.21
depressed-happy	.67	1.60	.39	1.37	1.71	1.24
selfish-altruistic	-.58	1.71	-.73	1.36	.52	1.69
Young Adults						
lazy-hardworking	1.18	1.37	.91	1.12	1.56	1.32
incompetent-competent	1.22	1.24	.87	1.07	1.81	1.08
foolish-wise	.47	1.36	.30	.95	1.81	1.05
stupid - intelligent	1.49	1.05	.89	1.09	1.83	1.01
depressed-happy	.82	1.35	.58	1.15	1.30	1.34
selfish-altruistic	.29	1.51	-.06	1.21	0.84	1.40
Middle-Aged Adults						
lazy-hardworking	1.50	1.32	1.37	1.13	1.79	1.25
incompetent-competent	1.62	1.13	1.45	1.09	1.85	1.11
foolish-wise	1.46	1.11	1.14	1.08	1.81	1.13
stupid - intelligent	1.51	1.13	1.24	1.07	1.61	1.15
depressed-happy	.90	1.39	.61	1.24	1.17	1.35
selfish-altruistic	1.01	1.38	.56	1.28	1.33	1.40
Young-Old Adults						
lazy-hardworking	1.14	1.40	1.21	1.27	1.37	1.42
incompetent-competent	1.45	1.32	1.37	1.27	1.17	1.25
foolish-wise	1.82	1.22	1.50	1.29	1.40	1.31
stupid - intelligent	1.32	1.39	1.28	1.21	1.19	1.22
depressed-happy	1.17	1.37	.75	1.39	1.25	1.33
selfish-altruistic	1.42	1.35	0.96	1.34	1.40	1.34
Older Adults						
lazy-hardworking	.38	1.50	.66	1.31	.79	1.55
incompetent-competent	.70	1.54	.77	1.45	.54	1.42
foolish-wise	1.70	1.40	1.31	1.59	.84	1.53
stupid - intelligent	.62	1.78	.97	1.35	.68	1.45

depressed-happy	.67	1.61	.22	1.50	.94	1.47
selfish-altruistic	1.18	1.49	.82	1.63	1.30	1.51
Old-Old Adults						
lazy-hardworking	-.25	1.55	.11	1.19	.23	1.68
incompetent-competent	-.14	1.80	.18	1.47	.04	1.67
foolish-wise	1.18	1.73	.99	1.73	.55	1.72
stupid - intelligent	-.19	1.98	.58	1.34	.32	1.57
depressed-happy	.18	1.77	.04	1.51	.67	1.71
selfish-altruistic	.88	1.69	.71	1.59	1.05	1.58

Note. Attitudes towards age groups and generations were assessed using a semantic differential on a 7-point rating scale ranging from “-3” to “3”

Table S4b

Means and standard deviations of six attitudes items towards the six different generations in Germany, the US, and China. Higher scores indicate more positive and lower scores more negative attitudes.

	USA		Germany		China	
	M	SD	M	SD	M	SD
Generation Z, Post-00 Generation						
lazy-hardworking	.10	1.72	-.07	1.39	0.61	1.65
incompetent-competent	.51	1.54	.00	1.30	0.93	1.31
foolish-wise	-.05	1.67	-.32	1.15	1.29	1.27
stupid - intelligent	1.03	1.10	.23	1.27	1.64	1.21
depressed-happy	.56	1.46	.43	1.23	1.64	1.30
selfish-altruistic	-.18	1.77	-.57	1.38	.50	1.63
Millennials, Post-80/90 Generation						
lazy-hardworking	.35	1.78	.79	1.23	1.42	1.40
incompetent-competent	.69	1.57	.82	1.19	1.66	1.13
foolish-wise	.15	1.59	.37	1.08	1.72	1.07
stupid - intelligent	1.23	1.16	.86	1.18	1.75	1.13
depressed-happy	.52	1.51	.68	1.21	1.32	1.29
selfish-altruistic	-.20	1.80	.16	1.30	.91	1.34
Generation X, Cultural Revolution Generation						
lazy-hardworking	1.20	1.39	1.18	1.22	1.77	1.29
incompetent-competent	1.31	1.26	1.10	1.26	1.69	1.20
foolish-wise	.96	1.29	0.84	1.22	1.33	1.34
stupid - intelligent	1.40	1.12	1.12	1.15	1.26	1.27
depressed-happy	.82	1.33	.81	1.19	1.05	1.38
selfish-altruistic	.75	1.38	.62	1.26	1.27	1.44
Baby Boomer, 68er Generation, New China Generation						
lazy-hardworking	1.58	1.33	1.19	1.31	1.89	1.18
incompetent-competent	1.61	1.30	1.21	1.30	1.82	1.15
foolish-wise	1.42	1.33	1.13	1.25	1.59	1.21
stupid - intelligent	1.55	1.24	1.16	1.27	1.54	1.18
depressed-happy	1.18	1.35	.77	1.34	1.41	1.27
selfish-altruistic	1.12	1.46	.91	1.32	1.67	1.18
Silent Generation, Post-War Generation, War Generation						
lazy-hardworking	1.36	1.41	1.37	1.37	1.97	1.24

incompetent-competent	1.26	1.31	1.09	1.39	1.73	1.26
foolish-wise	1.38	1.32	1.31	1.45	1.57	1.25
stupid - intelligent	1.21	1.43	0.98	1.29	1.40	1.30
depressed-happy	.91	1.34	0.53	1.46	1.39	1.34
selfish-altruistic	1.16	1.33	1.04	1.50	1.89	1.28
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Greatest Generation, War Generation, Republic of China Generation						
lazy-hardworking	1.49	1.46	.94	1.42	1.45	1.41
incompetent-competent	1.40	1.44	.75	1.44	1.17	1.43
foolish-wise	1.64	1.34	1.03	1.54	1.23	1.38
stupid - intelligent	1.15	1.63	.80	1.28	1.10	1.37
depressed-happy	1.01	1.46	.23	1.52	1.02	1.49
selfish-altruistic	1.30	1.42	.82	1.57	1.35	1.46

Note. Attitudes
towards age

groups and generations were assessed using a semantic differential on a 7-point rating scale ranging from “-3” to “3”