

# Age Differences in Self-Liking in Japan: The Developmental Trajectory of Self-Esteem from Elementary School to Old Age

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The present research examined age differences in self-liking (an important component of self-esteem) across a broad range of the population in Japan, from elementary school students to the elderly. Previous research in the U.S. has shown that self-esteem levels in childhood are high, decline during adolescence, rise gradually in adulthood and drop in old age. However, it was unclear whether this pattern holds for other cultures. As self-esteem is significantly affected by culture, it is important to reveal its developmental trajectory not only in European American cultures, but also in other cultures. Therefore, the current research analyzed a large, highly representative cross-sectional dataset from Japan. Results showed that levels of self-liking were high for elementary school students, declined among middle school and high school students, and rose gradually among adults, replicating the developmental trajectory of self-esteem found in prior research.

## Keywords

self-liking, self-esteem, age difference, development, Japan

## Introduction

Self-esteem is one of the most frequently researched topics in psychology. Variations exist in how it is defined, but a common aspect is that it refers to the positivity of a person's global evaluation of the self (e.g., Baumeister, Campbell, Krueger, & Vohs, 2003). Self-esteem is closely associated with mental/physical health (e.g., Baumeister et al., 2003) and higher socioeconomic status (e.g., Twenge & Campbell, 2002). In addition, it encourages adaptive social behavior because one's self-evaluation reflects one's social situation (e.g., acceptance or rejection by others; e.g., Leary, Tambor, Terdal, & Downs, 1995). Therefore,

self-esteem is an important concept from an evolutionary perspective.

The present research examined age differences in self-esteem. It is important to reveal how self-esteem levels vary across ages as it provides an important foundation for understanding how positive global evaluations of the self increase or decrease in response to socio-cultural environments (Robins, Trzendsniewski, Tracy, Gosling, & Potter, 2002; Twenge & Campbell, 2001).

## Age Differences in Self-Esteem in the U.S.

Robins et al. (2002) showed a comprehensive developmental trajectory for self-esteem in the U.S. They conducted a cross-sectional survey on a large sample of participants ranging in age from 9 to 90 years. They showed that self-esteem levels were high in childhood, declined in adolescence, rose gradually throughout adulthood, and then dropped in old age. Additionally, Twenge & Campbell (2001) conducted a cross-temporal meta-analysis and showed that self-esteem decreases when transitioning from elementary school to middle school, but rises through high school and college. These transitions are explained as below in previous research. Children do not have the cognitive capacity to evaluate their abilities via social comparison, and accept unconditional love and care from parents, resulting in subjective and high self-esteem. But as they grow older, self-evaluations become more objective because they gain the capacity for social comparison, and receive negative feedback from peers and/or teachers, and relationships with parents become looser, decreasing self-esteem. In the transition to young adulthood, self-esteem works as a signal of social status and with improved social skills, people gradually build and maintain good relationships with others and themselves, increasing self-esteem.

However, such findings may be limited to certain types of samples. Robins et al. (2002) investigated ethnic and nationality differences in the development of self-esteem. Specifically, they categorized their samples according to either one of five ethnicities (Asian, Black, White, Latino or Middle Eastern) or two nationalities (US or non-US). These analyses did not sufficiently examine the developmental trajectory of self-esteem outside the American cultural context, as variations within the non-US participant group were obscured by aggregation. Self-esteem is significantly affected by culture (e.g., Heine, Lehman, Markus, & Kitayama, 1999), so it is necessary to reveal the developmental trajectories of self-esteem, not only for North American culture, but also for other cultures.

## Age Differences in Self-Esteem in Japan

In Japan, Oshio, Okada, Mogaki, Namikawa, and Wakita (2014) provided a rough map of age differences in self-esteem<sup>1</sup>. They conducted a cross-temporal meta-analysis of studies that used the Rosenberg Self Esteem Scale

**Table 1.** Sample sizes by gender and generation

	Elementary School	Middle School	High School	20s	30s	40s	50s	60s	Total
Male	2,849	1,263	1,408	500	500	500	500	500	8,020
Female	2,834	1,201	1,410	500	500	500	500	500	7,945
Unknown	7	16	26	—	—	—	—	—	49
Total	5,690	2,480	2,844	1,000	1,000	1,000	1,000	1,000	16,014

(RSES; Rosenberg, 1965) between 1984 and 2010. They found that middle and high school students have lower self-esteem than university students, while adults (aged 18 to 60 excluding university students) and the elderly (aged over 60) have higher self-esteem than university students. These results were consistent with previous findings in the U.S. (Robins et al., 2002; Twenge & Campbell, 2001).

However, this research (Oshio et al., 2014) has three limitations. Firstly, the self-esteem levels of elementary school students were not examined. This is understandable, as their research was based on RSES scores from previous studies, but the RSES is generally administered to measure self-esteem for older people than late adolescents, not elementary schoolers. The second limitation is that the average self-esteem scores of middle school and high school students were analyzed together, thus leaving open the question of whether self-esteem might change during the transition from middle school to high school and/or high school to early adulthood. This aggregation was presumably due to the small sample sizes for middle and high schoolers (the total sample size was 39). A third limitation was that the self-esteem levels of adults aged 18 to 60 were combined into one group, so transitions during this period were not examined. This is also probably due to small sample sizes in the research. In order to capture a more comprehensive picture of the developmental trajectory of self-esteem in Japan, it is necessary to investigate whether such changes are also present in Japan.

#### Current Research

The present research overcomes the three limitations of Oshio et al. (2014) by analyzing a large, highly representative cross-sectional dataset that covers a broader spectrum of the population, ranging from elementary school students to the elderly in their 60s.

The current research focused on self-liking as one component of self-esteem. Self-esteem is composed of two distinct, but closely related, aspects: self-liking and self-competence (Tafarodi & Swann, 2001).

## Method

### Data

The data was collected by the National Institution for Youth Education (NIYE; 2010) in 2009. The raw data was

1. Matsuoka (2006) found that self-esteem for high schoolers was low, but increased in the transitions to college and young adults, and then remained stable. However, it did not look at self-esteem levels for elementary and middle schoolers. Additionally, the study sampled only one prefecture (similar to a state in the U.S.), so it is unclear whether the data can be seen as representative of Japan as a whole. Further, the sample size for each category was relatively small (e.g., for people aged 65-86, the sample size was 72). Hence, the reliability of their results is unclear.

made available through registration with the NIYE.

### Respondents

Data was collected from a large and representative sample in Japan. Sample sizes are indicated in Table 1. The total sample sizes were 8,020 for male and 7,945 for female.

The non-adult respondent group was comprised of 5th and 6th grade elementary school students (aged 10 to 12), 2nd-year middle school students (i.e., the 8th grade; aged 13 or 14) and 2nd-year high school students (i.e., the 11th grade; aged 16 or 17). A two-stage stratified sampling was used. In the first stage, all public schools in Japan were stratified according to school and city sizes. One hundred elementary schools, 80 middle schools and 80 high schools were assigned to reflect the real rates of these types of public schools. In the second stage, classes were randomly selected from each grade of each school. This sampling method provided representative data for the school-aged population in Japan. The students answered paper questionnaires.

The adult group was comprised of respondents aged from their 20s to their 60s. Five hundred respondents were assigned to each 10 cell (2, gender x 5, generation). Respondents were allocated to the cells in rates proportional to the actual population in terms of region, city size, marital status, and employment status. Respondents took the survey online.

### Question Items

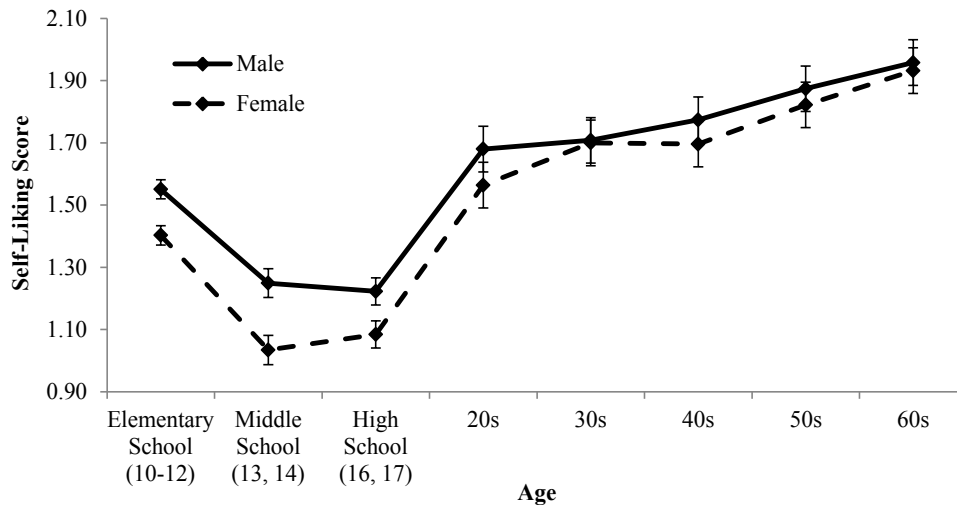
**Demographic questions.** Respondents provided information about their gender. Adult respondents also reported their generation as one of five categories (20s, 30s, 40s, 50s, or 60s).

**Self-Liking.** Respondents answered to what extent the sentence “I like myself” applied to them on a 4-point scale (4: applies very much, 3: applies somewhat, 2: does not apply much, 1: does not apply at all). For ease of interpretation, we subtracted 1 (i.e., 3: applies very much, 2: applies somewhat, 1: does not apply much, 0: does not apply at all).

## Results

The average scores for self-liking by gender and age category are shown in Figure 1. Effect sizes for each change in the transitions are indicated in Table 2.

For males, self-liking scores were high for elementary schoolers but declined sharply from elementary school to middle school and declined mildly from middle school to high school. From there, male self-liking scores continued to increase.



**Figure 1.** Average self-liking scores across generations by gender in Japan

Note. Error bars represent 95% confidence intervals.

**Table 2.** Effect sizes (*ds*) between each generation by gender

	Elementary to Middle School	Middle to High School	High School to 20s	20s to 30s	30s to 40s	40s to 50s	50s to 60s
Male	-0.33	-0.03	0.54	0.04	0.09	0.14	0.12
Female	-0.43	0.06	0.62	0.17	-0.01	0.17	0.16

This pattern was also found for females: self-liking scores for elementary schoolers were high, but declined sharply from elementary school to middle school, after which they generally increased, except from 30s to 40s.

## Discussion

The present study examined age differences in self-liking – one component of self-esteem – among people, from elementary school students to the elderly in their 60s in Japan. Previous studies have shown that in the U.S., self-esteem is high in childhood, declines during adolescence, increases during adulthood, and drops in old age (Robins et al., 2002; Twenge & Campbell, 2001). Yet, it was unclear whether these age differences are also present in Japan. Prior research examining age differences in Japan indicated that self-esteem for college students was higher than that for middle and high school students, and lower than that for adults and the elderly. However, due to methodological limitations, three elements of the developmental trajectory of self-esteem were missing from the research in Japan. The present research has worked to fill in these gaps.

Firstly, present research showed that self-esteem levels for elementary schoolers are high but drop sharply in the transition to middle school. Secondly, we looked at self-esteem level for middle and high schoolers separately, and showed slightly different patterns for males and females. Specifically, males' self-esteem decreased in the transition from middle school to high school, while females' self-esteem increased. But, the difference between middle schoolers and high schoolers was very small ( $d_{\text{male}} = -0.03$ ,

$d_{\text{female}} = 0.06$ ), so this difference may be regarded as minor. Afterwards, self-esteem increases from high school to their 20s for both genders. A third finding was that self-esteem gradually increases during adulthood. These findings are consistent with those in the U.S. (Robins et al., 2002; Twenge & Campbell, 2001).

In conclusion, the current research suggested that the pattern of age differences in self-esteem found in the U.S. (Robins et al., 2002; Twenge & Campbell, 2001) is also present in Japan. Prior research in Japan did not examine these age differences sufficiently (Oshio et al., 2014), so the present research replicated and extended the existing literature. High childhood self-esteem decreases in adolescence due to social comparison and negative social feedback. However, people adapt to such crises by social skills with the help of self-esteem that facilitates the formation and maintenance of interpersonal relationships, leading to a gradual increase in self-esteem. Our study showed that these transitions were also present in Japan.

## Limitations and Future Directions

Although the current research indicated age differences among a broad range of the population from elementary school students to the elderly in their 60s, it is unclear how self-esteem levels for the elderly over 70 may or may not change. Prior research has indicated that self-esteem inclines until one's 60s, after which it declines (Robins et al., 2002). It is thus desirable to examine this point to gain a more comprehensive picture of age differences in self-esteem in Japan.

Another limitation of this study is that it was cross-

sectional, so may confound age differences caused by developmental stage and those caused by cohort effects. Thus, a longitudinal study tracking the developmental trajectory without cohort effects will be necessary in the future. However, as a first step to reveal the developmental trajectory of self-esteem in Japan, the current research presents comprehensive and valuable data.

(doi: 10.1207/S15327957PSPR0601\_3)

### Acknowledgements

I thank Atsushi Oshio and Pamela Taylor for their helpful comments on earlier versions of the manuscript. This research was partly supported by the Japanese Group Dynamics Association.

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