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Cohort Differences in Aging Self-Perceptions Among Japanese Older Adults

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Conflict of Interests

The authors declare that we have no conflict of interests.

Abstract

Various individual resources for successful aging have improved during the last decades. However, a limited number of studies have examined historical changes in how older individuals view their own aging. This study examined cohort differences in aging self-perceptions among Japanese older adults. Using nationally representative data obtained nine years apart in 1987 and 1996, we compared two cohorts born in the 1920s versus the 1930s. To control for relevant correlates, we identified case-matched controls based on age, gender, and education (age range = 60–65 years; $n = 499$ per cohort). Results indicated that the later-born cohort held more positive self-perceptions of aging than the earlier-born cohort, even after adjusting for relevant correlates. The correlates with self-perceptions of aging did not differ across cohorts. Our findings suggest that self-perceptions of aging have improved over the past decade. We discuss the potential role of societal forces on personal views on aging.

Keywords: age stereotype, aging attitude, historical change, secular trend, subjective aging

Introduction

Lifespan psychology and life course sociology theorize that human development and aging are embedded in sociocultural and historical contexts (Riley, 1973; Ryder, 1965; Schaie, 1965). Empirical research has documented that various individual resources, such as socioeconomic status and physical health, improved over the past decades (Drewelies et al., 2019; Gerstorf et al., 2020). More recent studies have examined whether older individuals view their own aging as more positive or negative nowadays than in the past (Henchoz et al., 2019; Hülür et al., 2016; Wahl et al., 2021). However, these studies have utilized data from North America and Western Europe. Thus, it remains unknown whether existing findings on personal views on aging in western countries are generalized to other sociocultural contexts. To expand previous research, this study aimed to examine cohort differences in the subjective experience of aging, operationalized as aging self-perceptions, in East Asia, namely Japan.

Aging self-perceptions

As individuals age, they interpret the meaning of getting older. Researchers have long been interested in how older adults perceive and evaluate their personal experience of aging, by using different operationalizations, including subjective age, age identity, and attitudes toward aging (Diehl et al., 2014). For instance, prior research on subjective age posed the question, “How old do you feel?” and reported that younger adults felt older, whereas older adults felt younger relative to their actual chronological age (Pinquart & Wahl, 2021). Recent studies have endeavored to better understand personal views on aging through the use of constructs, such as “self-perceptions of aging” and “awareness of age-related change” (Diehl et al., 2021). Stereotype embodiment theory has greatly informed this line of research (Levy, 2009).

Stereotype embodiment theory distinguishes societal and personal views on aging and

assumes that socially shared age stereotypes influence how individuals view and treat older adults in daily life. More specifically, individuals in their youth internalize how older adults are generally viewed and treated in a given society. As young individuals become old and recognize themselves as an older adult, the internalized perceptions of aging become self-relevant and affect their functioning and health. Empirical research has supported stereotype embodiment theory. A large number of studies provided evidence that negative self-perceptions of aging are associated with an increased risk of poor health and mortality among older individuals (Westerhof et al., 2014). Given such adverse long-term consequences, the reduction of negative age stereotypes is vital at the societal and individual levels.

Cohort differences in aging self-perceptions

Stimulated by the frameworks proposed by lifespan psychology and life course sociology, researchers have begun to inquire whether and how historical contexts shape individuals' views on aging (Henchoz et al., 2019; Hülür et al., 2016; Wahl et al., 2021). To date, however, contradictory predictions have existed regarding whether self-perceptions of aging become more positive or negative across cohorts.

Some studies have demonstrated that various individual resources, such as socioeconomic status and physical health, for successful aging have improved over the previous decades (Drewelies et al., 2019; Gerstorf et al., 2020). For instance, recent birth cohorts perform at higher levels on cognitive tests and live longer across countries (Flynn, 1987; Salomon et al., 2012). Thus, historical improvements in individual resources may enable later-born older individuals to age more successfully and to perceive their aging as more positive than their earlier-born counterparts.

In contrast, other studies have indicated that societal stereotypes about older adults have become more negative over the last two centuries (Ng et al., 2015; Ng & Chow, 2020).

Several studies suggest that the negative secular trends in societal stereotypes on aging are caused by demographic trends, such as the increased size of the aging population and the accelerated speed of aging (Löckenhoff et al., 2009; Ng et al., 2015; North & Fiske, 2015). Such a growing number of older adults may cause intergenerational conflicts over limited resources (Silverstein et al., 2000), which can lead to worsening societal stereotypes on aging. Given that individuals are presumed to internalize socially shared age stereotypes (Levy, 2009), older individuals' perceptions of aging may become more negative as societies age progressively.

Empirical research compared older adults in recent years with same-age peers born earlier in time and indicated that individual views on aging remained the same over the past decades (Henchoz et al., 2019; Hülür et al., 2016; Wahl et al., 2021). Moreover, earlier studies operationalized the subjective experience of aging as subjective age and attitudes toward aging. In terms of the latter, Henchoz and colleagues (2019) measured aging self-perceptions using the Attitude Toward Own Aging subscale of the Philadelphia Geriatric Center Morale Scale (PGCMS; Lawton, 1975) and compared the results of Swiss older adults aged 65–70 years in 2004, 2009, and 2014. The authors did not observe historical changes in aging self-perceptions over the 10-year period. Similarly, Wahl and colleagues (2021) assessed aging self-perceptions using the subscale of the PGCMS and compared the results for German older adults aged 70 years and above in 1990/1993 and 2017/2018. Similarly, the authors did not observe cohort differences in aging self-perceptions across the two decades. Thus, the existing results did not support the positive or negative secular trends in self-perceptions about aging.

The aforementioned studies have yielded valuable findings on historical changes in personal views on aging. However, several questions remain unanswered. First, the generalizability of the findings across sociocultural contexts is limited. Prior studies

incorporated samples from North America and Western Europe (i.e., the United States, Germany, and Switzerland); however, evidence outside western countries remains scarce. The cross-cultural literature suggests that cultural values (e.g., collectivism versus individualism) are associated with societal views on older adults. Collectivism refers to cultural values that view the self as interdependent from others, such as families and tribes (Triandis, 1995). Thus, even when older adults face losses (e.g., disability) and require support and care from others, they are more likely to maintain positive views on their aging in collectivistic societies, such as East Asia (Cheng & Chan, 2006; Takagi & Saito, 2013). So far, empirical studies provide mixed results. Although many studies demonstrate that societal beliefs on aging are more negative in collectivistic cultures (North & Fiske, 2015; Voss et al., 2018), others find opposite patterns (Löckenhoff et al., 2009; Ng & Lim-Soh, 2020). Given the existing findings, the manner in which the self-perceptions of aging change over historical time in collectivistic countries remains an open question.

Second, the majority of research has investigated cohort differences in the mean levels of aging self-perceptions. However, only a few studies have examined whether the correlates of aging self-perceptions differed across time. Recently, Wahl and colleagues (2021) hypothesized that older adults may perceive health as less important in terms of their personal views on aging compared with those in the past, because, currently, they can enjoy longer and healthier lives. As a result, associations of personal views on aging with the sociodemographic, health, cognitive, and psychosocial correlates remained the same over the past decades. Nevertheless, there is a lack of evidence regarding cohort differences in the correlates of aging self-perceptions.

The present study

To expand previous research, this study aimed to investigate whether the mean levels

and correlates of aging self-perceptions differ across cohorts in a collectivistic country, namely Japan. More specifically, we compared two cohorts of Japanese older adults who were born nine years apart and turned 60–65 years old. Respondents in the earlier-born cohort (year of birth: 1922–1927) participated in the survey in 1987, and those in the later-born cohort (year of birth: 1931–1936) participated in the survey in 1996. As will be described, later-born cohorts have experienced historical advantages and disadvantages in Japan, which unfortunately hinder the formulation of clear hypotheses. Therefore, we have adopted an exploratory approach without specific hypotheses.

When focusing on historical advantages, some individual resources (e.g., socioeconomic status and physical health) appear to improve over time in Japan, which may make individuals' views on aging more positive across cohorts. In terms of socioeconomic status, educational attainment improved as the Japanese government raised the compulsory education age from 6 years to 8 years in 1941 and 9 years in 1947. Also, the mandatory retirement age gradually increased from 55 years to 60 years between 1986 and 1998. Such prolonged labor force participation could improve the socioeconomic status in the later-born cohorts (Raymo et al., 2004). Furthermore, physical health, such as walking speed and functional capacity, has generally improved from the 1990s to the 2000s (Suzuki, 2018). Historical improvements in individual health are partly due to the implementation of universal health insurance coverage in 1961 (Ikeda et al., 2011).

In contrast, later-born cohorts have faced historical disadvantages, which can lead to negative secular trends in self-perceptions of aging. Specifically, other individual resources (e.g., family networks) diminish across cohorts. Traditional multigeneration households (i.e., grandparents, older parents, and adult children living together under the same roof) have become less common, from 45.9% in 1985 to 33.3% in 1995 (Cabinet Office, 2020). Given that

increased direct contact with older adults reduce negative views on aging among younger adults (Burnes et al., 2019; Ramiah & Hewstone, 2013), societal beliefs on older adults may become more negative due to the historical shrinkage in household size. Moreover, the population aging has progressed from 11% in 1987 to 15% in 1996 (The World Bank, 2018), which may worsen societal beliefs toward older adults over historical time.

Method

Participants and procedure

We derived data from subsamples of the National Survey of Japanese Elderly (NSJE). The NSJE is a nationally representative longitudinal study of Japanese adults aged 60 years and above. In this study, we selected participants having no missing values on our study variables.

In 1987, the survey initially recruited 2,200 participants aged 60–93 years. In 1996, the NSJE recruited a supplemental sample of adults aged 60–65 years, and 969 individuals participated. Face-to-face interviews were administered. In this study, the inclusion criteria were that the participants were aged 60–65 years at the time of the survey and provided data on relevant study variables. As a result, a total of 1,206 participants (referred to as the earlier-born cohort: $n = 578$, age = 62.33 ± 1.69 years, female = 54.0%, and the later-born cohort: $n = 628$, age = 62.67 ± 1.60 years, female = 53.3%) were eligible. To minimize possible confounds and equate the cohorts, we further identified case-matched controls in the two cohorts ($n = 499$ per cohort) by age, gender, and education. The matching procedure will be explained in the Data Preparation section.

Measures

Aging self-perceptions. Self-perceptions of aging were measured by using the Attitude Toward Own Aging subscale of the PGCMS (Lawton, 1975; Liang et al., 1987).

Previous studies used the subscale as a global indicator of aging self-perceptions (for a review, see Tully-Wilson et al., 2021). The original subscales comprised five items; however, a cross-cultural study (Liang et al., 1987) demonstrated that the following four items were equivalent across societies (i.e., the United States and Japan): “I have as much pep as I had last year,” “As I get older, I am less useful,” “I am as happy now as I was when I was younger,” and “Things keep getting worse as I get older.” The response categories were either yes or no. Negative items were reverse coded, and summary scores were computed. Scores ranged 0–4, with higher values indicating positive aging self-perceptions. Cronbach’s alpha for the aging self-perceptions scale was low ($\alpha = .47$ for the earlier-born cohort and $\alpha = .49$ for the later-born cohort).

Correlates. Demographic, socioeconomic, social, and health factors were included as relevant correlates of self-perceptions of aging.

Age (years) and gender (0 = *male*; 1 = *female*) were included as demographic factors.

Socioeconomic factors were assessed by education, financial status, and working status (0 = *not working*; 1 = *working*). Education was measured as the total number of years spent in schooling. Respondents reported financial difficulties ranging from 0 = *extremely difficult* to 4 = *not at all difficult*, and higher scores indicated good financial status.

Social factors were indexed as marital status (0 = *not married*; 1 = *married*), co-residence with a child (0 = *no*; 1 = *yes*), and contact with non-coresident children. Contact with non-coresident children was assessed with one item ranging from 0 = *never* to 5 = *twice or more per week*.

Health-related factors were indexed as physical function, the number of diseases present, and depressive symptoms.

Regarding physical function, participants rated the extent to which they perceived

difficulties in performing the following four activities of daily living: taking a bath, shopping for groceries, making telephone calls, and using public transportation. Response categories ranged from 0 = *cannot* to 4 = *not difficult*. Summary scores were computed, with higher scores (range: 0–16) indicating high functioning. Cronbach's alpha for the physical function scale was high ($\alpha = .85$ for the earlier-born cohort and $\alpha = .76$ for the later-born cohort).

As for diseases, respondents reported whether they had been diagnosed with a list of diseases. The number of serious conditions, which included diabetes, heart disease, hypertension, and stroke, was counted according to an earlier study (Liang et al., 2007). We excluded cancer as a serious condition because the disease was not included in the first-wave survey in 1987.

Depressive symptoms were measured using some of the items from the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). Nine of the twenty items were available in both cohorts. The respondents answered each item on a 3-point scale ranging from 0 = *hardly ever* to 2 = *most of the time*. Summary scores were computed, with higher scores (range: 0–18) representing frequent symptoms. Cronbach's alpha for the depressive symptoms scale was adequate ($\alpha = .74$ for the earlier-born cohort and $\alpha = .69$ for the later-born cohort).

Data preparation

To minimize possible confounds and equate the cohorts, we used propensity score matching procedures (Coffman, 2011; Stuart, 2010) based on age, gender, and education. Calculating a logistic regression with cohort membership as the outcome, we used 1:1 nearest neighbor matching methods to match participants from the earlier-born cohort ($n = 578$) to those from the later-born cohort ($n = 628$) who shared the most similar estimated propensity scores. To select well-matched cases, we pruned matched cases with a caliper distance of $c < 0.06 SD$

of the logit of the propensity score. We determined the caliper by increasing 0.01 *SD* by steps until differences between the two cohorts were no longer different from 0 at $p < .05$. As a result, the study identified a total of 998 matched participants ($n = 499$ per cohort).

We recognized the option to include additional variables in the propensity score matching procedure. However, follow-up analyses revealed a considerable trade-off between the number of matching variables and the selected sample size. Therefore, we selected the minimal number of matching variables to prevent a large reduction in statistical power.

Table 1 provides the descriptive statistics for the study variables in the entire samples, including the unmatched participants, and matched samples. The propensity score procedure was successful in matching the variables. The distributions of age and years of education and the ratios of gender were similar across the selected samples. To examine possible selection bias, we compared the matched and unmatched samples. The unmatched participants were younger compared with the matched participants ($M = 63.48$, $SD = 1.14$ for the unmatched sample and $M = 62.52$, $SD = 1.63$ for the matched sample), indicating that the study samples were positively selected in terms of age.

Data analysis

First, we provided the descriptive characteristics by cohort; we employed Pearson's chi-squared tests or Student's t tests to compare the two cohorts. Furthermore, we presented intercorrelations among the study variables separated by the cohort and the partial correlations controlling for the cohort.

Second, we applied regression models to examine cohort differences in the mean levels and correlates of aging self-perceptions. In model 1, the cohorts were dichotomized (0 = *earlier-born cohort*; 1 = *later-born cohort*), and the predictor was entered in the crude model with aging self-perceptions as the outcome. Other correlates were then added into model 2 to validate

whether the individual resources attenuated cohort differences in aging self-perceptions. We additionally performed analyses to examine whether the correlates of aging self-perceptions differed between the two cohorts, by adding the interaction term of each correlate with the cohort variable.

Analyses were performed using the statistical package IBM SPSS Statistics software (version 26.00). The significance tests were evaluated at a p value of less than .05.

Results

Descriptive statistics and intercorrelations

Table 1 provides the descriptive statistics of the study variables by cohort. Cohort comparison results indicate differences and similarities between the earlier- and later-born cohorts. For the differences, compared with the earlier-born cohort, the later-born cohort exhibited more positive aging self-perceptions [$t(996) = 3.87, p < .001$], perceived better financial status [$t(996) = 0.28, p = .022$], engage in paid work [$\chi^2(1) = 25.65, p < .001$], had a spouse [$\chi^2(1) = 12.93, p < .001$], and had higher physical function [$t(665.4) = 2.01, p = .045$]. Regarding similarities, no cohort differences were observed in the proportion of coresidence with their children [$\chi^2(1) = 0.20, p = .656$], contact with non-coresident children [$t(996) = 0.28, p = .777$], number of diseases [$t(996) = 0.60, p = .549$], and depressive symptoms [$t(984.8) = 0.60, p = .548$] in addition to matching variables: age [$t(996) = 1.05, p = .294$], gender [$\chi^2(1) = 0.49, p = .484$], and education [$t(985.0) = 1.40, p = .161$]. These findings suggested that, although some individual resources remained unchanged, others improved across cohorts.

Table 2 depicts the intercorrelations of the study variables separated by the cohort. In terms of the correlates with aging self-perceptions, the correlation coefficients did not statistically differ across cohorts except for the coefficient for co-residence with a child ($r = .10$

for the earlier-born cohort; $r = -.03$ for the later-born cohort). Furthermore, Supplementary Table 1 shows the partial intercorrelations after controlling for the cohort. The statistically significant correlates of aging self-perceptions were overall weak ($r_s = .08$ – $-.24$). Higher levels of education, better financial status, engaging in paid work, more frequent contact with non-coresident children, higher physical function, fewer diseases, and fewer depressive symptoms were associated with positive self-perceptions of aging. Intercorrelations among the correlates were weak to moderate ($r_s = .07$ – $-.30$) and indicated the absence of multicollinearity in the subsequent multivariate analyses.

Cohort differences in aging self-perceptions

Table 3 provides the results of the regression model used to investigate cohort differences in the mean levels of aging self-perceptions. Model 1 controlled for none of the correlates. The results demonstrated that the later-born cohort reported more positive aging self-perceptions than the earlier-born cohort, albeit by a small amount (unstandardized $B = 0.26$, standardized $\beta = .12$, $p < .001$). Model 2, which adjusted for all correlates, still observed cohort variations in aging self-perceptions ($B = 0.16$, standardized $\beta = .08$, $p = .013$). Resources favoring the later-born cohort (i.e., perceived financial status, working status, and physical function) and those showing no cohort differences (i.e., gender, education, diseases, and depressive symptoms) were associated with aging self-perceptions. The results thus suggested that cohort effects in favor of the later-born cohort for individual resources did not fully explain the observed differences in the mean levels of aging self-perceptions between the cohorts.

We performed additional analyses that included the interaction term of each correlate with cohort. However, none of the interaction terms statistically differed from 0 ($p_s > .070$), which indicated that the degree of association between the correlates and self-perceptions of aging remained the same across the cohorts.¹

Discussion

Recent studies have investigated whether older adults currently view aging as more positive or negative than in the past (Henchoz et al., 2019; Hülür et al., 2016; Wahl et al., 2021); however, evidence outside western countries remains limited. Thus, the current study employed data majorly derived from an eastern country, namely, Japan, and investigated cohort differences in the mean levels and correlates of the subjective experience of aging, which were operationalized as aging self-perceptions. Specifically, we compared two cohorts of Japanese older adults who were born nine years apart and turned 60–65 years old. Because later-born cohorts have experienced historical advantages and disadvantages, this study was exploratory in nature, such that we did not present any hypotheses on cohort differences in self-perceptions of aging.

With regard to the mean levels, previous studies reported the absence of cohort differences in personal views on aging, such as subjective age and aging self-perceptions (Henchoz et al., 2019; Hülür et al., 2016; Wahl et al., 2021). Contrary to the previous findings, our study demonstrated that the later-born cohort was more positive regarding their own aging than the earlier-born cohort. We presumed that societal forces, such as the development of educational and welfare systems, promote individual resources for successful aging, which subsequently result in more positive self-perceptions of aging. Still, the cohort differences were observed even after adjusting for historical improvements in individual resources (i.e., marital status, working status, perceived financial status, and physical function). Future research should identify potential societal forces which influence individuals' self-perceptions of aging.

Furthermore, the existing literature (Wahl et al., 2021) did not find cohort differences in the correlates of aging self-perceptions. As such, these correlates may barely change over

historical time. Moreover, these findings provide support for recent evidence that suggests biological pathways from the personal views on aging to health (Stephan et al., 2021; Thyagarajan et al., 2019; Wurm et al., 2017). Another possibility is that the correlates of aging self-perceptions change over a longer historical span. Prior research suggested that the adverse effects of negative self-perceptions of aging on health were weaker in countries that provide ample public support (Westerhof et al., 2014). If welfare systems continue to develop over historical time within a given society, then future older adults may perceive health as less important for their personal views on aging compared with those in the present.

Among the correlates of aging self-perceptions, we further note that social factors (i.e., marital status and relationships with children) were not statistically related to aging self-perceptions. The absence of the associations between social factors and aging self-perceptions is inconsistent with prior research (Burnes et al., 2019; Ramiah & Hewstone, 2013), suggesting that increased direct contact with older adults reduces negative views on aging among younger adults. In addition, interactions with family members, including the spouse and children, can be positive and negative; thus, older adults may not always feel respected by close family members. However, the role of social factors requires further investigation. A recent study indicated that social involvement (e.g., providing advice and emotional support to others and participating in social groups) predicted better aging self-perceptions (Schwartz et al., 2021). In the same manner, the current study found that respondents engaging in a paid job reported better aging self-perceptions. Taken together, positive interactions with nonfamily networks may also exert beneficial effects on aging self-perceptions.

Limitations and future outlook

Whereas this study has strengths, including a nationally representative sample and comparative methods across surveys, we also note a number of limitations. First, the study

design (e.g., age range and historical span) only partially fitted our research question as we utilized secondary data. Specifically, our target age range was the so-called third age (e.g., 60s and 70s; Baltes & Smith, 2003). Cohort differences in the fourth age (e.g., 80s and 90s) may differ from those in the third age. In fact, a previous longitudinal study demonstrated that self-perceptions of aging become more negative as individuals age (Sargent-Cox et al., 2014). If we had tracked changes in aging self-perceptions, both cohorts might have demonstrated more negative self-perceptions of aging in their fourth age. Furthermore, our two cohorts were born nine years apart (i.e., 1922–1927 versus 1931–1936), and the historical span was relatively narrow. Another study also examined cohort differences in aging self-perceptions over the past decade (Henchoz et al., 2019), but others compared cohorts born two decades apart (Hülür et al., 2016; Wahl et al., 2021). We compared older adults in 1987 and 1996, but more recent data should be utilized to investigate cohort differences in aging self-perceptions in a longer historical span.

Second, the measurement of aging self-perceptions should be reconsidered. Although the vast majority of studies have used the five-item subscale of the PGCMS, our study used the four-item subscale equivalent across societies (Liang et al., 1987). However, its reliability coefficient was low in this study ($\alpha = .47-.49$). Similarly, another study (Nakagawa & Yasumoto, 2019) also reported that the internal consistency was low ($\alpha = .56$). The low reliability could be partly due to the small number of items. The internal consistency of the five-item subscale was moderate to high ($\alpha = .61-.76$) in previous studies (Tully-Wilson et al., 2021).

Third, we acknowledge that the cross-sectional data did not enable the identification of causal relationships between correlates and aging self-perceptions. As previous research indicates the long-term effects of aging self-perceptions on health (Westerhof et al., 2014), the directionality of the correlates should be interpreted with caution. Additionally, investigating

historical differences in the health consequences of the personal views on aging would be important.

Lastly, this study found the historical improvement in aging self-perceptions in an eastern country, i.e., Japan, but the generalizability of our results to other neighboring countries (e.g., China, Taiwan, and South Korea) should be further investigated. Cross-cultural research has compared beliefs about older individuals between eastern and western countries but yielded mixed results (Löckenhoff et al., 2009; Ng & Lim-Soh, 2020; North & Fiske, 2015; Voss et al., 2018). Future studies should systematically examine historical changes in self-perceptions of aging across sociocultural contexts.

Conclusion

Empirical research has documented that various individual resources for successful aging improved over the past decades. Still, a limited number of studies have investigated whether older adults view their own aging as more positive or negative nowadays than in the past. Furthermore, only a few studies examined whether the correlates of aging self-perceptions differed across historical time. Whereas previous studies of Western samples found no cohort differences in the mean levels, this study of an eastern sample revealed that self-perceptions of aging have become more positive across cohorts even after controlling for historical improvements in individual resources (e.g., socioeconomic status and physical health). Consistent with prior research, however, the correlates of aging self-perceptions remained the same across cohorts. Further research should directly measure societal forces, such as educational and welfare systems, within and across societies and offer concrete policy implications to mitigate older individuals' negative views on their aging.

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Table 1. *Descriptive statistics for sample characteristics, separated by cohort.*

	Earlier-born cohort		Later-born cohort	
	Entire sample	Matched sample	Entire sample	Matched sample
<i>n</i>	578	499	628	499
Year of birth	1922—1927	1922—1927	1931—1936	1931—1936
Propensity scores ^a	0.48 (0.14)	0.51 (0.12)	0.56 (0.12)	0.52 (0.11)
Aging self-perceptions ^b	2.92 (1.10)	2.96 (1.07)	3.23 (0.98)	3.22 (1.00)
Age (years)	62.33 (1.69)	62.49 (1.67)	62.67 (1.60)	62.60 (1.65)
Gender (% female)	54.0	54.3	53.3	56.5
Education (years)	9.30 (2.61)	9.72 (2.49)	10.61 (2.54)	9.93 (2.24)
Financial status	2.51 (1.03)	2.57 (1.01)	2.76 (0.99)	2.72 (0.98)
Working status (% working)	41.5	41.9	58.9	57.5
Marital Status (% married)	78.4	78.4	86.3	87.4
Co-residence with a child (% yes)	54.3	54.1	54.3	56.1

Contact with non-coresident children	2.98 (1.78)	2.97 (1.81)	2.88 (1.79)	2.95 (1.76)
Physical function	15.85 (1.08)	15.85 (1.13)	15.96 (0.45)	15.96 (0.47)
Diseases	0.34 (0.57)	0.35 (0.58)	0.36 (0.57)	0.38 (0.58)
Depressive symptoms	1.40 (2.02)	1.37 (1.98)	1.26 (1.79)	1.26 (1.72)

Note. * $p < .05$.

Sample means are presented with standard deviations in parentheses.

^a Propensity scores represent the probability of membership in the later-born cohort based on age, gender, and education.

^b Higher scores indicate that respondents have positive aging self-perceptions.

Table 2. *Correlations among study variables, separated by cohort.*

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Aging self-perceptions ^a		-.04	-.01	.12	.26	.18	.05	.10	.06	.11	-.12	-.22
2. Age	-.06		.04	-.10	.02	-.07	-.08	.01	.03	.02	.01	-.05
3. Gender	.02	.00		-.33	-.03	-.29	-.30	-.01	.09	.08	.07	.09
4. Education	.13	-.23	-.09		.11	.15	.05	-.06	-.00	.05	-.09	.01
5. Financial status	.19	-.00	-.01	.06		.12	.08	.06	.07	.05	-.04	-.11
6. Working status	.06	-.09	-.31	.07	-.05		.12	.03	.00	.11	-.12	-.11
7. Marital Status	.05	.01	-.21	-.01	.09	-.00		-.02	.10	-.05	-.02	-.06
8. Co-residence with a child	-.03	-.15	-.02	-.09	-.06	-.04	-.06		-.12	.02	-.09	.04
9. Contact with non-coresident children	.10	.05	.07	.01	.08	-.01	-.00	-.24		-.01	.04	-.07

10. Physical function	.13	.03	.02	.05	−.01	.06	.05	.04	−.01	.00	−.06
11. Diseases	−.10	.09	−.06	−.00	−.10	−.07	.01	.09	−.01	.02	.06
12. Depressive symptoms	−.29	.05	.07	−.00	−.07	−.00	−.12	.03	−.10	−.07	−.02

Note. $N = 499$ per cohort. Correlations in the earlier- and later-born cohort are presented above and below the diagonal, respectively. Bolded values indicate correlations significant at the $\alpha = .05$ level.

Table 3. *Regression models of aging self-perceptions.*

Predictors	Model 1			Model 2		
	<i>B</i>	β	<i>p</i>	<i>B</i>	β	<i>p</i>
Cohort ^a	0.26	.12	< .001	0.16	.08	.013
Age				−0.02	−.02	.429
Gender				0.15	.07	.036
Education				0.05	.10	< .001
Financial status				0.19	.18	< .001
Working status				0.20	.10	.002
Marital status				0.07	.03	.409
Co-residence with a child				0.12	.06	.060
Contact with non-coresident children				0.03	.05	.094
Physical function				0.09	.07	.014
Diseases				−0.13	−.07	.016
Depressive symptoms				−0.12	−.22	< .001
<i>R</i> ²	.02		< .001	.15		< .001

Note. *N* = 998. *B* = unstandardized coefficients; β = standardized coefficients. Higher scores of aging self-perceptions indicate that respondents have positive aging self-perceptions. Higher values indicate coefficients favoring those with higher age, women, those with higher levels of education, those perceiving better financial status, those engaging in paid work, married participants, those residing with children, those contacting more frequently with non-coresident children, those having higher physical function, those having more diseases, and those having more depressive symptoms.

^a The earlier-born cohort as reference.

Footnotes

¹ To evaluate the extent to which the exclusion of unmatched participants concealed cohort differences in aging self-perceptions in the raw data, we conducted a follow-up analysis using the entire sample ($n = 578$ for the earlier-born cohort and $n = 628$ for the later-born cohort). The regression models yielded robust results. The later-born cohort had more positive aging self-perceptions compared with the earlier-born cohort ($B = 0.14$, $\beta = .07$, $p = .019$), even after controlling for the correlates. Moreover, the correlates of aging self-perceptions were also consistent across analyses (results not shown).

Supplementary Table 1. *Partial correlations among study variables, controlling for cohort.*

[illegible]

12. Depressive symptoms

Note. $N = 998$. Partial correlations between variables by cohort are presented. Bolded values indicate correlations significant at the $\alpha = .05$ level.