# HOW OLD AM I? PERCEIVED AGE IN MIDDLE AND LATER LIFE\*

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#### **ABSTRACT**

Literatures on perceived age and developmental issues in middle and later life are joined in analyzing perceived age and its implications for well-being. Respondents aged 40-74 (N=2,696) are drawn from the national MIDUS survey, containing developmental variables such as personal growth and insight into past. People generally "feel" (felt age) and would "like" (ideal age) to be younger, but these exhibit different predictors and outcomes. Younger felt age is associated with positive developmental assessments and enhanced well-being, whereas younger ideal age is associated with less positive assessments and lower well-being. The association between felt age and well-being is moderated by developmental assessments. The contrasting patterns exhibited by felt age and ideal age reflect the complexities of age perceptions. It is suggested that felt age entails perceptions of current circumstances as they relate to expectations about aging, whereas ideal age reflects a comparative overview of the life cycle.

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"How old are you?" is a common, if impertinent, question. "How old am I?" is perhaps asked less often, but has more personal implications. Social meanings of age—cultural images and stereotypes—result in age self-perceptions that carry significant meaning. This article investigates the predictors and outcomes of perceived age in middle and later life. A particular focus links perceived age with developmental issues or challenges in middle and later life. Two questions are addressed. First, how do developmental assessments affect perceived age; does fulfillment of developmental challenges lead to more positive perceptions of age? Second, does fulfillment of developmental challenges combine with positive perceived age to enhance well-being in middle and later life? The discussion below reviews literature on perceived age, then turns to developmental themes and their implications for perceived age and well-being.

# PERCEIVED AGE: PATTERNS, PREDICTORS, AND OUTCOMES

Various measures have been used to assess perceived age (Mutran & George, 1982; Settersten & Mayer, 1997). One approach asks people to label themselves as "middle-aged" or "old" (e.g., Logan, Ward, & Spitze, 1992; Mutran & George, 1982; Ward, 1977; Ward, LaGory, & Sherman, 1988). Others assess whether people feel younger or older than others their age, or the age people "feel" or would "like" to be (e.g., Hubley & Hultsch, 1994; Kaufman & Elder, 2002; Staats et al., 1993; Uotinen, Rantanen, Suutama, & Ruoppila, 2006; Westerhof & Barrett, 2005; Westerhof, Barrett, & Steverink, 2003).

The "feel" and "like" indicators are used here; termed as in prior work (e.g., Hubley & Hultsch, 1994; Uotinen et al., 2006) *felt age* and *ideal age*, respectively. *Felt age* reflects a comparison of oneself to expectations about aging; you may be 70 but feel 50 because you do not fit your expectations about 70. *Ideal age* suggests a comparison of oneself now with a younger age; you may be 70 but wish to be 50 because your life was better then. Studies of perceived age have mostly focused on older samples (aged 60 or 65+), but perceived age has been shown to be pertinent to persons in their 40s and 50s (Karp, 1988; Logan, Ward, & Spitze, 1992; Sherman, 1994; Westerhof & Barrett, 2005; Westerhof, Barrett, & Steverink, 2003). Thus, the present study uses a sample of persons aged 40+ to assess perceived age in midlife and beyond.

Chronological age only modestly predicts perceived age (e.g., Logan et al., 1992; Ward, 1977; Ward, LaGory, & Sherman, 1988). Indeed, older age labels and identities are resisted, reflecting "youthful bias" (Staats et al., 1993) and "rejection" of old age (Barak & Rahtz, 1999). Most people in middle and later life feel and wish to be younger, a tendency that increases with age (e.g., Barak, 2009; Barak & Rahtz, 1999; Hubley & Hultsch, 1994; Hubley & Russell, 2009; Kaufman & Elder, 2002; Montepare & Lachman, 1989; Staats et al.,

1993; Ward, 1977; Ward et al., 1988; Westerhof & Barrett, 2005). Teuscher (2009) has suggested that these patterns reflect efforts at self-enhancement, as well as images of aging that are no longer accurate.

Other predictors of perceived age include health, socioeconomic status, activity, employment status, and marital and other family characteristics (Barak & Rahtz, 1999; Barrett, 2005; Hubley & Hultsch, 1994; Logan et al., 1992; Mutran & George, 1982; Settersten & Mayer, 1997; Staats et al., 1993; Ward, 1977; Ward et al., 1988; Westerhof et al., 2003). Some of these reflect roles and transitions associated symbolicly with later life, such as retirement and widowhood.

How does perceived age affect well-being? Resistance to older perceived age suggests that later life is devalued in a culture that celebrates youth (Ward, 1977; Westerhof and Barrett, 2005; see also Nelson, 2002; Palmore, 2004). "Ageism" (Butler, 1969) and stereotypes can affect *self*-perceptions (Levy, 2003), so a youthful age identity may be self-enhancing (Barrett, 2005; Westerhof and Barrett, 2005). Older perceived age is associated with lower subjective well-being (Barak & Rahtz, 1999; Baum & Boxley, 1983; Logan et al., 1992; Montepare & Lachman, 1989; Mutran & George, 1982; Ward, 1977; Ward et al., 1988; Westerhof & Barrett, 2005).

# THE IMPLICATIONS OF DEVELOPMENTAL PROCESSES

This article joins the literature on perceived age with that on developmental processes and assessments in middle and later life. What developmental considerations or challenges are experienced in middle and later life? One common theme concerns assessment of one's life, priorities, and accomplishments (Staudinger & Bluck, 2001). Middle age has been described as a time of comparing goals to accomplishments (Levinson, 1978, 1996; Sheehy, 2006). Later life has been characterized by reminiscence and life review (Butler & Lewis, 1982), seeking "ego integrity" (Erikson, 1980), and "continuous growth" (Steverink, Westerhof, Bode, & Dittmann-Kohli, 2001). Similarly, Gove, Ortega, and Style (1989) refer to "maturational" views of later life as a time of introspection and self-acceptance, and Krause (2007) suggests that self-expression facilitates meaning in life, and entails "reflecting on the past and the way in which one's life has been lived" (p. 191). A perception of "generativity" in guiding the next generation has also been commonly discussed as a feature of middle and later life (Erikson, 1980; McAdams, 2001; Staudinger & Bluck, 2001).

Four dimensions can be derived from these discussions of development in middle and later life (and are used in the analyses): personal growth, insight into past, generativity, and social integration. The dimensions of personal growth and insight into past reflect the discussions of life review and reminiscence, which

focus on feelings of accomplishment, growth, and the meaning in one's life. Generativity directs attention to intergenerational linkages and mentoring. The fourth dimension, social integration, is less directly tied to developmental discussions, but it is included here in a more exploratory vein. Barak and Rahtz (1999) found that perceived age was related to "opinion leadership" and "social identity," suggesting that feelings of social engagement are related to assessments of accomplishment and meaning in middle and later life.

There are two related questions linking perceived age and developmental considerations. First, how do developmental assessments affect perceived age? Developmental assessments, and the associated life review and introspection, suggest heightened awareness of aging in middle and later life. Further, success in fulfilling developmental challenges may yield more positive perceived age. The tendency to feel and wish to be younger may be counteracted, resulting in older *felt* and *ideal* ages.

Second, how do perceived age and developmental assessments combine to affect well-being? Successful developmental assessments, reflected in feelings of personal growth or social integration, likely enhance well-being directly. Such assessments may also contribute indirectly to well-being through their association with more positive perceived age. Previous research suggests that older *felt age* lowers well-being, whereas older *ideal age* may be related to higher well-being, since it implies a more favorable view of later life and less distance from one's preferred age. But the implications of perceived age depend on what aging means to the individual. "Feeling older" would be more positive if you view your life more favorably, thereby perceiving your own aging more favorably. Thus, older *felt age* can be expected to be more positively (or less negatively) related to well-being if developmental assessments are more positive. The effects of *ideal age* may also be moderated by positive developmental assessments that yield a more favorable view of one's current age.

### **RESEARCH QUESTIONS**

This study uses a dataset that enables bringing developmental factors more explicitly into analyses of perceived age. Two questions are investigated. First: How do developmental assessments affect perceived age? It can be hypothesized that positive developmental assessments (successful fulfillment of developmental challenges) will reduce negative feelings about aging and resistance to perceptions of being older, resulting in older *felt* and *ideal* age. Second: How do developmental factors affect the outcomes of perceived age? Older *felt age* and younger *ideal age* tend to lower well-being. However, it can be hypothesized that these dimensions of perceived age will have less negative outcomes when there is fulfillment of developmental challenges.

#### **METHODS**

#### Sample

Data are from the 1995-96 Midlife in the United States (MIDUS) survey (see Brim, 2000, Brim, Ryff, & Kessler, 2004). The sample represents non-institutionalized, English-speaking adults aged 25-74. Reflecting our focus on developmental assessments and perceived age in middle and later life, respondents aged 40-74 were selected (N = 2,696;  $M_{\rm age} = 54.3$ ); 38% were in their 40s, 31% in their 50s, 22% in their 60s, and 9% aged 70+. The subsample is about evenly divided by gender (51% men); 90% are white, 6% black, and 4% other racial identification. The survey included some oversampling of males aged 65-74. Analyses include controls for the principal subgroup characteristics that may be over- or under-sampled, so unweighted data were used. As a check, the main analyses were repeated with weighted data; these yielded similar patterns to those reported here.

#### Measures

#### Age-Related Perceptions

We focus on two measures of perceived age: "what age do you feel most of the time" and "what age would you like to be." Consistent with previous research, these were subtracted from chronological age to assess the extent to which Rs *feel* younger/older (*felt age*) and would *like* to be older/younger (*ideal age*) than their current age (positive scores = feel/like to be younger). These indicators are only modestly correlated (.20) (similar to Hubley & Hultsch, 1994), and are expected to exhibit different predictors and outcomes. Some respondents reported feeling or liking to be many years younger. Since extreme scores in the tails of a distribution can distort empirical patterns, the approximately 5% of respondents with extreme scores were recoded (e.g., for *age feel*: -48 to -11 = -10, 26 to 60 = 25).

### Developmental Assessments

The survey included a rich array of psychological assessments, including six scales of psychological well-being (see Marks, Bumpass, & Jun, 2004; Ryff & Keyes, 1995); six dimensions of self-reported personality traits; five dimensions of social well-being (Keyes & Shapiro, 2004); and a scale of generativity (adapted from McAdams & de St. Aubin, 1992; also see Marks, Bumpass, & Jun, 2004). These multiple scales, and the multiple items within each of them, reflect in various ways the developmental dimensions described earlier, but they overlap among themselves both conceptually and empirically. For example, several are pertinent to life review assessments, including such scales as personal growth, purpose in life, self-acceptance, and insight into past. Preliminary analyses were conducted, using a variety of tools (including factor analyses and intercorrelations),

to winnow them down to a parsimonious subset based on both conceptual considerations (i.e., their correspondence to discussions in the developmental literature) and empirical patterns (e.g., to avoid distortions from collinearity).

As noted in the introduction, four dimensions of developmental assessments are used in the analyses: personal growth, insight into past, social integration, and generativity. Personal growth (one of the psychological well-being scales) has three items (e.g., "for me, life has been a continuous process of learning, changing, and growth") with seven categories from strongly agree to strongly disagree coded so higher scores are more positive assessments (scale M = 17.6). Reliability of this subscale is modest (alpha = .56); Keyes, Shmotkin, and Ryff (2002) have noted that reliability may be underestimated in reduced-item subscales of psychological well-being (see also Carmines & Zeller, 1979), but that their construction reflects content validity. Insight into past (one of the personality trait dimensions) has four items (e.g., "I try to make sense of things that have happened to me"), with four categories from a lot to not at all coded so higher scores are more positive assessments (scale M of item responses = 3.0; alpha = .70). Social integration (one of the social well-being scales) has three items (e.g., "I don't feel I belong to anything I'd call a community") ranging from strongly agree to strongly disagree, coded 1-7 so higher scores reflect more positive qualities (scale M = 14.3; alpha = .73). Generativity has six items (e.g., "you have important skills you can pass along to others"), from a lot to not at all coded 1-4 so higher scores reflect more positive assessments (scale M = 17.2; alpha = .85).

Together these measures reflect key dimensions in discussions of developmental issues or challenges in middle and later life. We can note some of their empirical patterns (see also Brim, Ryff, & Kessler, 2004). Responses were quite positive on *personal growth* and *insight into past*; for example, 78% strongly or somewhat agreed that "when I look at the story of my life, I am pleased with how things have turned out so far." Responses to *social integration* and *generativity* items were also generally positive; for example, 71% agreed a lot or some that "you have important skills you can pass along to others."

#### Well-Being

Keyes et al. (2002) have noted two streams of research on well-being, psychological and subjective well-being, and argued that psychological well-being is antecedent to subjective well-being. The analyses here follow a similar logic: Developmental assessments are viewed as elements of psychological well-being. They are analyzed as predictors of perceived age; developmental assessments and perceived age are, in turn, analyzed as predictors of subjective well-being.

Three dimensions of subjective well-being are employed as outcomes: life satisfaction, positive affect, and negative affect (see Diener, 1984; Diener, Suh, Lucas, & Smith, 1999). Two measures of life satisfaction are used: "how would

you rate your life today" (rate life: 0 = worst to 10 = best; M = 7.8); and "at present, how satisfied are you with your life" (satisfaction: from 1 = not at all to 4 = a lot; M = 3.5). Positive affect and negative affect were measured with six items each: five categories from all the time to none of the time, coded such that higher scores reflect more positive or negative feelings, respectively; scores in the data set are means across the items (see Mroczek, 2004; Mroczek & Kolarz, 1998); positive affect M = 3.4, alpha = .87; negative affect M = 1.5, alpha = .91.

Table 1 presents correlations among the key predictors and outcomes: perceived age, well-being, and developmental assessments. *Felt* and *ideal* age are only modestly correlated with each other and with the well-being and developmental measures. As would be expected, the well-being measures are more highly correlated with each other, but only modestly with developmental measures. The developmental measures are only modestly correlated with each other.

#### Health and Demographic Characteristics

Analyses include health and demographic characteristics as controls. Health is assessed with subjective self-ratings ("in general, would you say your physical health is:" from 1 = poor to 5 = excellent; mean = 3.4), a commonly used indicator

Table 1. Correlations among Measures for Main Predictors and Outcomes in the Analyses

	Felt	Ideal	Rate	Satis	Pos aff	Neg aff	Pers gr	Insight	Gen	Soc
Felt age <sup>a</sup>	Х									
Ideal age <sup>a</sup>	.20*	Χ								
Rate life <sup>b</sup>	.24*	04*	Χ							
Satisfaction <sup>b</sup>	.19*	07*	.53*	Χ						
Pos affect <sup>C</sup>	.27*	02	.55*	.49*	Χ					
Neg affect <sup>c</sup>	−. <b>27</b> *	.04	49*	<b>46</b> *	63*	Χ				
Pers growth $^d$	.18*	−. <b>17</b> *	.28*	.21*	.29*	<b>30</b> *	Χ			
Insight <sup>d</sup>	.08*	04*	.11*	.07*	.09*	03	.31*	Χ		
${\it Generativity}^d$	.15*	08*	.18*	.13*	.20*	10 <b>*</b>	.36*	.34*	Χ	
Social integ <sup>d</sup>	.13*	00	.35*	.30*	.31*	28*	.26*	.16*	.28*	Χ

<sup>&</sup>lt;sup>a</sup>Chronological age minus age R feels/like to be, so positive scores indicate feel or like to be younger than chronological age.

<sup>&</sup>lt;sup>b</sup>Coded so higher score is more positive well-beling.

<sup>&</sup>lt;sup>c</sup>Coded so higher scores are more positive/negative experiences, respectively.

<sup>&</sup>lt;sup>d</sup>Coded so higher scores are more positive assessments.

<sup>\*</sup>p < .05

of overall health. Demographic measures include age and gender. Education, in four categories (graduated college or professional degree, some college, graduated high school, less than high school), is used as an indicator of socioeconomic status. Dummy variables were included for widowed (9%) and retired (23%), as age-symbolic transitions.

## **Analytic Plan**

Descriptive patterns of *felt age* and *ideal age* are presented first. Next are predictors of perceived age, focusing on developmental assessments. It was hypothesized that positive assessments would be associated with greater acceptance of aging; that is, older *felt* and *ideal* age. Implications of perceived age and developmental assessments for subjective well-being are then analyzed. Older *felt age* and younger *ideal age* were expected to be associated with lower well-being. However, it was hypothesized that positive developmental assessments would reduce these negative associations with well-being. These moderating influences are assessed as interaction effects.

#### **RESULTS**

# Patterns of Perceived Age

As in prior studies, respondents generally "feel" and would "like" to be younger than their current age. The mean age people felt was 44.6, a mean *felt age* of 9.7 years younger (SD = 8.0); only 9% felt older, 7% felt the same age, and 84% felt younger (54% by 10 years or more). As Barak (2009) has reported from cross-national research, ideal age tends to be younger than *felt* age: the mean age respondents would like to be was 34.8 (67% said younger than 40, 22% in the 40s, and 11% 50 and over), a mean *ideal age* of 19.7 years younger (SD = 10.9) (only 9% wished to be older or the same age they are; 83% wished to be 10+ years younger). Analyses with weighted data yielded patterns within a few percentage points of these.

Age and gender differences in perceived age are summarized in Table 2. Older respondents felt and wished to be younger to a greater extent than their younger counterparts. However, *felt* and *ideal* age exhibit somewhat different patterns with age. The age people would like to be does not vary as much across age groups as the age people feel: mean ages for the former (not shown in Table 1) range from 30.8 for people in the 40s to 39.1 for those 70+; mean ages for the latter range from 37.3 in the 40s to 58.4 at 70+. Thus, preferred age is more anchored in the 30s, so that people are increasingly more distant from their "ideal" age as they get older: *ideal age* in Table 2 increases from 13.9 to 32.0 years. *Felt age* (compared with current age) varies less with age, increasing only from 7.2 to 13.1. *Felt age* does not differ for men and women, but men reported younger *ideal age*.

Table 2. Age and Gender Differences in Age Perceptions (Means)

	Felt age <sup>a</sup>	ldeal age <sup>a</sup>
Respondent age		
40s	7.2*	13.9*
50s	9.9	18.9
60s	12.5	25.2
70+	13.1	32.0
Respondent gender		
Male	9.5	20.4*
Female	10.0	19.0

<sup>&</sup>lt;sup>a</sup>Chronological age minus age R feels/like to be, so positive scores indicate feel or like to be younger than chronological age.

# **Predictors of Perceived Age**

It was hypothesized that positive developmental assessments would facilitate older perceived age. To the contrary, bivariate correlations (see Table 1) indicate that positive assessments of personal growth, insight into past, social integration, and generativity are associated with *feeling younger*. However, personal growth is related to *older ideal age*, and *ideal age* is only weakly related to other developmental dimensions.

Predictors of perceived age were investigated further with multivariate regression analyses of *felt* and *ideal age* (see Table 3). Independent variables include age, gender, education, subjective health, and age-symbolic role losses of being widowed or retired. Of particular interest are developmental assessments: *personal growth*, *insight into past*, *generativity*, and *social integration*. Subgroup analyses were also conducted to compare patterns by age (< 60 versus 60+) and gender, but these subgroups did not vary significantly.

Personal growth is associated with younger *felt age*, but also with older *ideal age*. Insight into past is not related to either felt or ideal age. Generativity is related to *feeling* younger, but is not related to ideal age. Social integration is unrelated to perceived age. In combination, although coefficients are not sizable, these patterns suggest that persons who are more successful in fulfilling developmental challenges, especially for personal growth, *feel* younger but have older *ideal* age. This is contrary to the hypothesis that positive developmental assessments facilitate older *felt* age; but they are associated with a greater acceptance of age implied by older *ideal age*.

<sup>\*</sup>Differences across age groups and by gender significant at p < .05.

Table 3. Multiple Regression Analyses of Felt Age and Ideal Age (Standradized Regression Coefficients)

	Felt age <sup>a</sup>	Ideal age <sup>a</sup>
	ren aye	iueai aye
Gender <sup>b</sup>	.02	09*
Age	.32*	.49*
Education	01	<b>11</b> *
Widowed <sup>c</sup>	.01	02
Retired <sup>c</sup>	05*	01
Health <sup>d</sup>	.24*	05*
Insight into past <sup>d</sup>	.00	.02
Personal growth <sup>d</sup>	.13*	09*
Generativity <sup>d</sup>	.08*	.00
Social integration <sup>d</sup>	.01	02
N	2220	2231
Adj. R <sup>2</sup>	.171*	.284*

<sup>&</sup>lt;sup>a</sup>Chronological age minus age R feels/like to be, so positive scores indicate feel or like to be younger than chronological age.

Among other predictors in Table 3: Men exhibit younger *ideal age*. Age is related to younger *felt age* and especially to younger *ideal age* (as was noted for Table 2). Better health is related to *feeling* younger, but health has only a weak negative association with *ideal age*. Widowhood and retirement have little association with perceived age. Education is associated with less youthful *ideal age*.

# Perceived Age, Developmental Assessments, and Subjective Well-Being

It was expected that older *felt* age and younger *ideal* age would be associated with lower well-being, but that favorable developmental assessments would moderate these outcomes. Measures of subjective well-being were employed as

bMale = 1, female = 2.

 $<sup>^{</sup>C}$ Widowed/retired = 1, not = 0.

 $<sup>^</sup>d\mathrm{Coded}$  so higher scores are more positive health and assessments.

<sup>\*</sup>p < .05.

outcomes in multivariate analyses paralleling those for predictors of perceived age: two measures of life satisfaction (rate life and satisfaction) and positive and negative affect (see Table 4). Control variables include gender, age, education, widowhood and retirement, and health. Of primary interest are the four developmental assessments—personal growth, insight into past, generativity, and social integration—and the measures of perceived age—felt age and ideal age. The first column under each well-being outcome in Table 4 presents "main effects;" as discussed below, the second column for each outcome presents tests of interaction effects. (Subgroup analyses were again conducted by age and gender; patterns did not vary significantly.)

Two developmental assessments—personal growth and social integration—are related to higher subjective well-being across all four outcomes. Insight into past exhibits a modest association with increased negative affect with other developmental assessments controlled, but has only weak associations with the other outcomes. Rather than overall life assessment, the insight items suggest responses that may be triggered by negative affect (e.g., "after something bad happens, I think about how I could have prevented it"). Generativity is only weakly related to well-being. Thus, a life review assessment of personal growth and feelings of social connectedness appear to enhance well-being in middle and later life. *Felt* and *ideal age* exhibit opposite patterns on all well-being dimensions, as expected: *feeling* younger is associated with higher well-being, whereas younger *ideal* age is associated with lower well-being.

It was also hypothesized that older *felt age* and younger *ideal age* would have less negative implications for well-being if there are more positive developmental assessments. *Personal growth* was used to explore this question, since it has the most consistent associations with both perceived age and well-being. Multiplicative interaction terms were created for *felt age* and *ideal age* with personal growth; statistical significance of change in  $R^2$  when the interaction terms were added to the models was tested (Jaccard, Turrisi, & Wan, 1990). None of the interactions for *ideal age* was significant; those models are not included in Table 4. Outcomes for *felt age* are presented in the second column for each well-being outcome. All interactions for *felt age* are significant.

The interactions were explored further by looking at patterns for subgroups above and below the mean for personal growth (see Table 5). Pertinent results are highlighted in bold. For persons above the mean for personal growth, *felt age* is not significantly related to the two measures of life satisfaction, and its associations with positive and negative affect are cut in half. This is consistent with the hypothesis that older felt age has less negative effects on well-being when there is a more success in fulfilling developmental challenges. In contrast, associations of *ideal age* with well-being are essentially the same for the two personal growth subgroups.

For other variables in the models in Table 4: Age and better subjective health are associated with higher well-being. Women exhibit lower well-being, and

Table 4. Multiple Regression Analyses of Life Satisfaction ("Rate Life" and "Satisfaction") and Positive and Negative Affect (Standardized Regression Coefficients)

	Rate life <sup>a</sup>		Satisfaction <sup>a</sup>		Positive affect <sup>b</sup>		Negative affect <sup>b</sup>		
Gender <sup>c</sup>	05*	05*					.13*	.12*	
Age	.17*	.17*	.12*	.13*	.14*	.15*	<b>14</b> *	<b>15</b> *	
Education	09*	09*	07*	06*	- <b>.13</b> *	12*	.01	.01	
Widowed <sup>d</sup>	04*	04*	06*	06*	02	03	.02	.02	
Retired <sup>d</sup>	.06*	.06*	.04	.03	.01	.00	.03	.04	
Health <sup>e</sup>	.21*	.21*	.19*	.18*	.18*	.18*	22*	21 <b>*</b>	
Personal growthe	.18*	.27*	.11*	.21*	.20*	.25*	23*	36*	
Generativity <sup>e</sup>	.05*	.06*	03	04	.06*	.06*	06*	05*	
Social integration <sup>e</sup>	.24*	.24*	.22*	21*	.22*	.22*	20*	19*	
Insight into paste	03	04	04*	04*	05*	05*	.11*	.11*	
Felt age <sup>f</sup>	.10*	.55*	.09*	.58*	.14*	.38*	17*	81*	
ldeal age <sup>f</sup>	12 <b>*</b>	11 <b>*</b>	12 <b>*</b>	12 <b>*</b>	09*	08*	.08*	.08*	
Felt age × growth <sup>g</sup>		- <b>.49*</b>		53*		26 <b>*</b>		.69*	
N	2168		21	2167		2178		2177	
Adj. R <sup>2</sup>	.268*		.18	0*	.251*		.280*		
$\Delta R^2$	.007*		.00	9*	.002*		.01	.015*	

<sup>&</sup>lt;sup>a</sup>Coded so higher score is more positive well-being.

<sup>&</sup>lt;sup>b</sup>Coded so higher scores are more positive/negative experiences, respectively.

 $<sup>^{</sup>C}$ Male = 1, female = 2.

 $<sup>^</sup>d$ Widowed/retired = 1, not = 0.

eCoded so higher scores are more positive health and assessments.

fChronological age minus age R feels/like to be, so positive scores indicate feel or like to be younger than chronological age.

<sup>&</sup>lt;sup>g</sup>Multiplicative interaction term added to models.

<sup>\*</sup>p < .05.

Table 5. Multiple Regression Analyses of Life Satisfaction ("Rate Life" and "Satisfaction") and Positive and Negative Affect (Standardized Regression Coefficients) for Subgroups Below (-pg) and Above (+pg) the Mean for Personal Growth

	Rate	· life <sup>a</sup>	Satisfaction <sup>a</sup>		Positive affect <sup>b</sup>		Negative affect <sup>b</sup>	
	– pg	+ pg	– pg	+ pg	– pg	+ pg	– pg	+ pg
Gender <sup>c</sup>	.00	09*	05	06	09*	11*	.14*	.12*
Age	.21*	.14*	.21*	.06	.23*	.09*	21 <b>*</b>	<b>11</b> *
Education	07*	10*	12*	02	12*	<b>14</b> *	.03	.00
Widowed <sup>d</sup>	07*	02	06	07*	02	03	02	.08*
Retired <sup>d</sup>	.04	.09*	06	.12*	04	.04	.04	03
Health <sup>e</sup>	.23*	.19*	.21*	.16*	.19*	.18*	23*	22*
Personal growthe	.11*	.08*	.05	.03	.13*	.13*	16*	11*
Generativity <sup>e</sup>	.07*	.03*	03	04	.05	.06*	08*	03
Social integration <sup>e</sup>	.25*	.23*	.21*	.21*	.19*	.23*	<b>19</b> *	21*
Insight into paste	04	05*	06	03	01	09*	.11*	.13*
Felt age <sup>f</sup>	.15*	.04	.16*	.03	.18*	.10*	−. <b>21</b> *	11*
ldeal age <sup>f</sup>	11*	<b>12</b> *	<b>12</b> *	<b>14</b> *	<b>10</b> *	<b>08</b> *	.08*	.10*
N	882	1286	876	1291	884	1294	886	1291
Adj. R <sup>2</sup>	.27*	.16*	.19*	.11*	.24*	.17*	.27*	.16*

<sup>&</sup>lt;sup>a</sup>Coded so higher score is more positive well-being.

<sup>&</sup>lt;sup>b</sup>Coded so higher scores are more positive/negative experiences, respectively.

 $<sup>{}^{</sup>C}$ Male = 1, female = 2.  ${}^{d}$ Widowed/retired = 1, not = 0.

<sup>&</sup>lt;sup>e</sup>Coded so higher scores are more positive health and assessments.

 $<sup>{}^</sup>f\mathrm{Chronological}$  age minus age R feels/like to be, so positive scores indicate feel or like to be younger than chronological age.

<sup>\*</sup>p < .05.

education tends to be associated with lower well-being. Being widowed or retired have only very weak associations with well-being when other variables in the model are controlled.

#### DISCUSSION

The analyses presented here extend prior research on perceived age in two respects. First, they illuminate contrasting patterns for two dimensions of perceived age, *felt age* and *ideal age*, reflecting the complexities of personal age perceptions. Second, consideration of perceived age is extended into both middle and later life, linking perceived age and developmental processes; these have not been explicitly linked in prior research on the antecedents and outcomes of perceived age. Two questions have been addressed in relation to this linkage: how developmental assessments affect perceived age, and how developmental assessments combine with perceived age to affect well-being.

Whether people "feel" younger (*felt age*) and would "like" to be younger (*ideal age*) have different meanings. Felt age entails comparing personal circumstances with expectations about later life and "older people;" *ideal age* entails comparing one's current and younger life. Most people in middle and later life both feel and would like to be younger. Felt and *ideal age* are only very modestly related, however, and exhibit different antecedents and outcomes. In particular, as hypothesized, feeling younger was associated with higher subjective wellbeing, whereas younger *ideal age* (relative to current age) was related to lower well-being.

What are the implications of developmental assessments for perceived age and its outcomes? It was hypothesized that success in fulfilling developmental challenges would be associated with greater "acceptance" of older age. There was some support for this, as positive assessment of personal growth is related to less youthful *ideal* age (i.e., less distance from current age). But positive assessments of personal growth and of generativity are associated with *feeling* younger. This suggests that feelings of accomplishment and growth are associated with expectations about being "younger." However, *feeling* older has less negative implications for well-being when assessment of personal growth is more favorable, supporting a hypothesis that success in fulfilling developmental challenges moderates the negative implications of older perceived age. But developmental assessments do not moderate the association between younger *ideal age* and lower well-being.

Why do *felt* and *ideal age* have different associations with well-being, and what does this tell us about perceptions of aging? Because of negative images of aging, younger self-perceptions can be self-enhancing (Barrett, 2005; Teuscher, 2009). Patterns for *felt age* seem consistent with this. That people who "feel" younger have more positive developmental assessments and higher well-being suggests that "younger" is considered better ("I'm not like those old people").

In contrast, "liking" to be younger is related to less positive developmental assessments and lower well-being. Younger *ideal age* reflects dissatisfaction with one's own age; rather than self-enhancement, younger *ideal* age ("I wish I were younger") both reflects and contributes to dissatisfaction with one's life.

The picture is more nuanced, however. *Ideal age* may reflect cultural images and stereotypes, but it also reflects a weighing of positives and negatives of different parts of one's own life cycle; perhaps people would "rather" be 50 than 65 because on the whole they view earlier parts of their lives more positively. That one's own aging may not be perceived so negatively is also suggested by patterns in the MIDUS survey: people in their 40s and beyond generally reported positively on their lives, accomplishments, and circumstances (see also Brim et al., 2004). Consistent with a "maturational" view of later life (Gove, Ortega, & Style, 1989), there appears to be success in fulfilling developmental challenges like life review. Nonetheless, age perceptions favor younger ages; feeling younger reflects positive views of one's life. As suggested by Teuscher (2009), such positive feelings are in contrast to comparisons that people make to more negative (and largely inaccurate) images held about older people.

There are limitations to these analyses. It is difficult to disentangle developmental assessments, perceived age, and well-being, as they share some conceptual and empirical domains. Further, the measures of developmental assessments represent approximations of dimensions in the developmental literature; they were operationalized for other purposes and are used here in a selective and exploratory vein. For example, the generally weak associations of generativity with both perceived age and subjective well-being may reflect conceptual and measurement considerations. Generativity, conceptualized by Erikson as a midlife concern, may be less pertinent to the mostly older MIDUS sample members (see Keyes & Ryff, 1998).

The cross-sectional analyses here presumed that developmental assessments affect perceived age, and that both in turn subjective well-being. While these assumptions seem reasonable and are consistent with the literature, these processes may intersect in more complex ways. For example, older perceived age may lead to introspection and life review, as in Karp's (1988) discussion of "age reminders," with a reciprocal relationship between age perceptions and developmental assessments.

These considerations notwithstanding, the analyses presented here add to an understanding of dimensions of perceived age in middle and later life by relating such perceptions to developmental considerations. Further research needs to investigate linkages among dimensions of perceived age, development, and cultural and social factors that shape both perceived age and development over the life course. As Montepare (2009) has noted, a lifespan framework recognizes the dynamics of perceived age, and the need to investigate how perceived age is related to behavior and functioning across and within age groups.

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