# Socioeconomic status and age identity: The role of dimensions of health in th...

Anne E Barrett *The Journals of Gerontology;* Mar 2003; 58B, 2; Research Library Core pg. S101

Journal of Gerontology: SOCIAL SCIENCES 2003, Vol. 58B, No. 2, \$101–\$109

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# Socioeconomic Status and Age Identity: The Role of Dimensions of Health in the Subjective Construction of Age

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Objectives. This study examines health inequality as a potential explanation for socioeconomic differences in age identity. The following dimensions of health are examined: comparative self-rated health, self-assessed changes in physiological well-being, prospective self-rated health, perceived control over health, chronic conditions, and parents' health. Components of health also are explored as possible mediators of age differences in the effect of socioeconomic status on age identity.

**Methods.** Using the National Survey of Midlife Development in the United States, ordinary least squares regression models of age identity are estimated for a representative sample of the noninstitutionalized U.S. population between the ages of 25 and 74 (n = 2,864).

**Results.** The older identities held by the less socioeconomically advantaged are explained by their worse health, particularly their less favorable predictions of future health, compared with their wealthier peers. Differences in age identity by education and perceived financial well-being are greatest among older adults; however, health only partially accounts for these age patterns.

Discussion. This study reveals that health inequalities shape the subjective experience of aging. Further work using longitudinal data is needed to determine the precise causal pathways linking socioeconomic status, health, and age identity.

S OCIOECONOMIC status (SES) is a major factor shaping the multiple strands of the life course, including family, work, and health trajectories. An earlier onset of health limitations and faster rate of decline in functional ability are found among those of lower SES (House et al., 1994). In addition to facing earlier health decrements, they tend to experience many of the transitions marking one's passage through the adult life course, such as the completion of education, marriage, parenthood, and retirement, at younger ages than their more advantaged peers (Axinn & Thornton, 1992; Neugarten & Moore, 1968; O'Rand & Henretta, 1999).

Because it influences the timing of life transitions and rate of physiological decline, SES is a primary determinant of the subjective experience of aging; it shapes the way an individual thinks about age and the stages of life in general and his or her own age and life stage in particular. Compared with their wealthier counterparts, individuals of lower SES tend to perceive a more temporally compressed life course. They view the onset of old age as occurring at a younger age, perceive carlier cultural age deadlines for many adult transitions, and anticipate a shorter life span (Mirowsky & Ross, 2000; Rosow, 1967; Settersten & Hagestad, 1996). Consistent with these patterns, the less advantaged tend to adopt older age identities than the more privileged (George, Mutran, & Pennybaker, 1980; Markides & Boldt, 1983).

One may argue that these findings on the perceptions of one's life course and age are not surprising or of much concern, because lower SES is, in fact, associated with earlier life course transitions and shorter life expectancy. However, they can be viewed not only as mirrors of the objective reality of divergent life course patterns that are produced in a highly economically stratified society, but also as indications of some of the deleterious, psychological consequences of occupying a disadvantaged position in such a society. Maintaining a youthful identity as one ages has been viewed as a self-enhancing strategy in a culture, like the dominant culture in the United States, that highly values youth (Barak & Stern, 1986; Montepare & Lachman, 1989). Indeed, research indicates that beginning in middle-age, Americans adopt increasingly youthful identities (Goldsmith & Heiens, 1992; Montepare & Lachman, 1989). Moreover, there is evidence that it is an effective means of self-enhancement: Adults with youthful identities in middle and later life have better mental health, life satisfaction, morale, and self-esteem (Barak & Stern, 1986). Members of lower socioeconomic strata use this strategy to a lesser degree; as a result, they are disadvantaged not only by objective conditions of their lives (such as their health), but also by conceptions of their age.

Because the older identities of the less advantaged are indications of some of the harmful, but less visible, effects of occupying lower socioeconomic strata, this topic deserves more attention than it has received in the last decade or so. The link between SES and age identity has been well-documented; however, much less is known about the underlying social psychological mechanisms. Drawing on the strong relationships between social class and health (Adler et al., 1994; Williams & Collins, 1995) and between health and age identity (Logan, Ward, & Spitze, 1992; Markides & Boldt, 1983), this study

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focuses on dimensions of health as potential explanations for socioeconomic differences in age identity. Of particular interest is not only objective and subjective health, but also multiple points of reference for one's perceived health. Drawing on prior research reporting that socioeconomic differences in health expand with age (House et al., 1994; Ross & Wu, 1996), this study also examines potential age differences in the effect of SES on perceptions of one's age.

# SES and Age Identity

Research has found consistently that occupying lower socioeconomic strata is associated with having older identities. Compared with the more advantaged, individuals of lower SES are more likely to classify themselves as "old" or "elderly" (George et al., 1980; Mutran & George, 1982) and feel older than their chronological age (Baum & Boxley, 1983; Steitz & McClary, 1988). This pattern is found across indicators of SES, including education (Markides & Boldt, 1983; Steitz & McClary, 1988) and income (Baum & Boxley, 1983; Mutran & George, 1982). Subjective assessments of financial wellbeing have been rarely examined, and results have been inconsistent (Bultena & Powers, 1978; Steitz & McClary, 1988).

Most of the explanations for the older identities of the more disadvantaged center on class differences in the timing of social and biological aging. For example, Neugarten and Moore (1968) argue that the earlier timing of life events—such as marriage, childbearing, and retirement—may account for the more rapid pace of the subjective life course of those of lower SES. Although the temporal pattern of life transitions has not been examined empirically as an explanation for socioeconomic differences in age identity, some research exploring role losses in later life supports this hypothesis. Some have found, for example, that widowhood (George et al., 1980; Mutran & Reitzes, 1981) and retirement (Bultena & Powers, 1978; Mutran & George, 1982) are associated with older identities; however, the findings have not been consistent (cf. Logan et al., 1992; Ward, La Gory, & Sherman, 1988).

Another explanation for social class differences in age identity also rests on role transitions; however, it focuses on perceived losses associated with the transitions, rather than their timing in the life course. Rosow (1967) posits that individuals of higher SES have "more to lose" by relinquishing younger identities and their accompanying social resources. In other words, role losses typically associated with later life, such as retirement, are more threatening to the status of middle class individuals; therefore, they have a greater incentive to deny their age.

Health trajectories explanation.—In addition to the temporal pattern and perception of family and work transitions, a third hypothesis has been offered regarding socioeconomic differences in age identity. Rosow (1967) has argued that occupying lower socioeconomic strata produces a more rapid rate of physiological aging as a consequence of cumulative hardships over the life course; hence, older identities are found among the most disadvantaged. The mediating role of health has received limited attention in research; however, it is plausible given the associations among social class, health, and age identity.

Research has found consistently that lower SES is related to worse physical health (Adler et al., 1994; Williams & Collins, 1995) and self-ratings of health (Borg & Kristensen, 2000; Manor, Matthews, & Power, 1997). Work on age identity has revealed that worse health is associated with feeling older than one's actual age (Baum & Boxley, 1983; Linn & Hunter, 1979) and describing oneself as "old" (Logan et al., 1992; Markides & Boldt, 1983). This pattern has been found across a range of health indicators, including objective measures such as number and severity of chronic conditions and use of health services (Markides & Boldt, 1983; Mutran & George, 1982), and subjective ratings of health (Baum & Boxley, 1983; Logan et al., 1992). Corroborating the evidence from quantitative research, the qualitative work of Sherman (1994) reports that changes in health are the most frequently cited reasons for beginning to feel older.

Health has been treated largely as a control variable in studies of age identity. The only work I have found that includes analyses useful in examining the potential mediating role of health is by Mutran and Burke (1979). Although not a focus of their study, they find that education exerts an effect on age identity through self-rated health. However, they use an indicator of age identity that differs from those most often used in subjective age research. In contrast with items that ask respondents direct questions about their self-perceived ages, the authors examine measures indicating the degree to which respondents identify with characteristics stereotypically associated with older ages. It is not known whether similar results would be found using indicators that more directly reflect perceptions of one's age.

Limited attention has been given to the potential mediating effects of health; further, the relative importance of various dimensions of health in an individual's construction of subjective age is not known. Objective and subjective dimensions of health have been found to be predictors of age identity; Ward and colleagues (1988) examine both and report that they exert similarly strong effects. Other dimensions of health that may shape age identity have not been examined, in particular those reflecting the multiple frames of reference that individuals may use in evaluating their health.

Theories of social evaluation and reference groups would suggest that individuals construct their own age identities through a process of comparing the conditions of their lives, including their health, against same-age peers as well as more generalized images of persons in their stage of life (Festinger, 1954; Singer, 1981). Comparative self-rated health has been examined in some research on age identity: More favorable evaluations of one's health relative to peers are associated with younger identities (Bultena & Powers, 1978; Logan et al., 1992). Further, the work of Sherman (1994) reports that respondents frequently made comparisons with same-age peers or family members in constructing their own age identities, a recurring theme in her interviews that she refers to as the "comparative self."

Findings reported by Sherman (1994) point to other frames of reference that are relevant to examining the role of health in the construction of subjective age. The "retrospective self," or the way one remembers oneself in younger years, suggests that perceptions of past health, perhaps as a point of comparison for current health, may shape age identity. Perceptions of age may

be influenced not only by one's remembered past health, but also images of what one's health will be in the future. Considering both the comparative and temporal elements of age identity, one's images of future health may be shaped by perceptions of the health trajectories of one's parents or other relatives. As Neugarten (1968) notes, people may begin in middle-age to identify with the older generation and wonder if they will age in similar ways.

In addition to dimensions of comparative health, other perceptions that may influence age identity have not been explored, including perceived control over health that is positively related to SES (Mirowsky, Ross, & Van Willigen, 1996). Adopting a more youthful, and more age-discrepant, identity can be seen as an active reinterpretation of one's chronological age; maintaining a youthful identity is likely to require a high degree of perceived control over one's health. As Linn and Hunter (1979, p. 50) note: "If one is in poor health, uneducated, and poor, then feeling younger than one's age probably takes a strong inner belief in one's ability to control life events."

Age differences in the relationship between SES and age identity.—Not only has limited attention been given to the process through which age identity is constructed, but also little is known about potential age differences in the effect of SES on age identity. It is well-documented that older persons adopt more age-discrepant, youthful identities than those in midlife (Barak & Stern, 1986; Goldsmith & Heiens, 1992; Montepare & Lachman, 1989), but is this pattern found across all socioeconomic strata? The only work I have found that explores the potential interactive effect of age and social class on age identity examines only two groups, those younger than 75 and those 75 or older; this study finds that the effect of SES is stronger in the younger group (Rosow, 1967). More finegrained analyses, however, would help to identify points in the life course at which members of lower socioeconomic strata are especially disadvantaged by their views of their aging selves in a culture valuing youth.

As individuals age, advantages held by members of higher socioeconomic strata, such as having more financial resources and better health, become magnified (House et al., 1994; O'Rand, 1996; Ross & Wu, 1996). Often referred to as the cumulative advantage and disadvantage hypothesis, this divergence in resources over the life course raises the possibility that a similar process occurs in perceptions of age: Socioeconomic differences in age identity that produce older identities among the less advantaged may be greatest in later stages of life. Considering this hypothesis in conjunction with the strong link between health and age identity further suggests that health may play a critical role in explaining age differences in the effect of SES on age identity. In other words, the cumulative effects of poor health and more limited access to health care among disadvantaged members of society may produce wider socioeconomic differences in age identity in later life.

Drawing from prior research and the theoretical frameworks underlying this study, the following hypotheses are made: (1) lower SES will be significantly associated with adopting an older identity; (2) dimensions of health, both objective and subjective, will partially mediate the effect of SES on age

identity; (3) the effect of SES on age identity will be strongest among older adults; and (4) dimensions of health, both objective and subjective, will partially account for the stronger effect of SES on age identity among older adults.

## **METHODS**

Sample

Data are drawn from the National Survey of Midlife Development in the United States (MIDUS; Brim et al., 2000) collected in 1995 and 1996 by the John D. and Catherine T. MacArthur Foundation Network on Successful Midlife Development. The MIDUS sample (n = 3,032) is representative of the noninstitutionalized U.S. population between the ages of 25 and 74 who have telephones. The sample was generated through random-digit dialing; older respondents and men were oversampled. MIDUS involved a telephone interview and two self-administered mail-back questionnaires. The overall response rate was 60.8%. Because MIDUS includes measures of age identity and self-assessed health, the data are appropriate for this study. However, a limitation is introduced by the use of cross-sectional data. The broad questions stimulating this research involve temporal processes. Social class is hypothesized to affect health which, in turn, influences age identity. It is also expected that the effect of SES on age identity becomes stronger as individuals age. Although findings may be consistent with these age effects and causal pathways, alternative interpretations cannot be eliminated.

Of the 3,032 respondents completing the telephone and mailback surveys, 111 were not included because they were missing on items used in the construction of the dependent variable (i.e., chronological age or subjective age). To avoid the influence of extreme scores in the analyses, respondents with age identities falling in the top or bottom 1% of the scores were excluded from the analyses yielding a study sample of 2,864. In analyses presented, data are weighted to adjust for selection probabilities and nonresponse.

As described in Table 1, age identity is indicated by the difference between one's subjective and chronological age; on average, respondents feel between 6 and 7 years younger than their actual age. Six measures of health are used: comparative self-rated health, self-assessed changes in physiological wellbeing, prospective self-rated health, perceived control over health, parents' health, and number of chronic conditions. The indicators of SES are education, household income, and perceived financial well-being. The following sociodemographic variables associated with age identity are included as controls: age, gender, and race (Barak & Stern, 1986). For each of the following variables, less than 5% of the sample contained missing values, and means are used to impute values: race, income, education, perceived financial well-being, comparative health, self-assessed physiological changes, prospective selfrated health, perceived control over health, and chronic conditions. Approximately 12% of the sample have missing data on the status of one or both parents (typically the father); however, a third of these respondents report having a parent in good health. These respondents are assigned to the "no parent(s) in poor health" category. Of the remaining respondents missing on these variables, those age 65 or older are assigned to the "both parents deceased" category; those

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Table 1. Description of Variables (n = 2,864)

Variable	Description	Range	Mean (Standard Deviation	
Age identity	Subjective age-chronological age, in which subjective age is the response to the following: "Many people feel older or younger than they actually are. What age do you feel most of the time?"  Higher value = older identity	-32-16	-6.797 (8.01)	
Age	Years	25–74	44.969 (13.37)	
Female	1 = female; 0 = male	0, 1	.559	
Non-White	1 = non-White; 0 = White	0, 1	.159	
Education	Highest level completed (no school/some grade school to PhD/other professional degree)	1–12	6.248 (2.40)	
Household income	Sum of income from self, spouse, or other family members in household, Social Security, government assistance, and all other sources	0-374,998.50	61,376.32 (51,735.25)	
Perceived financial well-being	Scale of 3 items ( $\alpha = 0.66$ ) indicating respondent's assessment of the extent to which resources meet needs Higher value = greater well-being	2–17	10.412 (3.27)	
Comparative self-rated health	Response to the following: "Compared with most (men/women) your age, would you say your health is much better, somewhat better, about the same, somewhat worse, or much worse?"	1–5	3.680 (.92)	
Self-assessed physiological changes	Higher value = better health Scale of 4 items ( $\alpha = 0.84$ ) reflecting respondent's evaluation of changes in energy level, physique/figure, physical fitness, and weight over the past 5 years (better now, no change, or worse now)	4–12	6.967 (2.38)	
	Higher value = more positive assessment			
Prospective self-rated health	Response to the following: "Looking ahead 10 years into the future, what do you expect your health will be like at that time?"; 0 (worst possible health) to 10 (best possible health)	0–10	6.999 (2.01)	
Perceived control over health	Response to the following: "Using a 0 to 10 scale, where 0 means 'no control at all' and 10 means 'very much control,' how would you rate the amount of control you have over your health these days?"	0–10	7.657 (1.90)	
Number of chronic conditions	Number experienced in the past year	0–27	2.509 (2.66)	
Has parent(s) in poor health	1 = at least one parent is living and s/he is in fair or poor health 0 = both parents deceased or no parent(s) in fair or poor health	0, 1	.344	
Both parents deceased	1 = both parents are deceased 0 = one or both parents still alive	0, 1	.235	
Does not have parent(s) in poor health	1 = at least one parent is living and no parent is in fair or poor health	0, 1	.421	
	0 = both parents deceased or parent(s) in fair or poor health			

younger than 65 are assigned to the "no parent(s) in poor health" group.

# Analyses

Ordinary least squares regression is used to examine the effect of SES on age identity. To explore the mediating effect of health, several models are run. First, age identity is regressed on education, income, perceived financial well-being, age, gender, and race. Each health indicator is then entered in a separate step. A final model includes all health measures. To examine potential age differences in the effect of SES on age identity, interactive models are run. Three interaction terms are added, one at a time, to the model containing age, gender, race, and the indicators of SES: age\*education, age\*income, and age\*perceived financial well-being. To reduce multicollinearity, variables are centered at the mean before constructing the interaction terms. In the last stage of analyses, the potential mediating effect of health on the interaction between age and SES is examined by entering each of the health measures in a separate step. In tables reporting the results of regression

analyses, mediating effects are indicated by the difference between coefficients from the baseline model (Model 1 in each table) and coefficients generated in each subsequent model.

## RESULTS

Table 2 reports the results of the regression of age identity on SES and the health measures. Model 1 reveals that older chronological age is associated with reporting a younger identity; however, the effect of age is weaker at older ages. Being non-White and having more education and better financial well-being are predictive of more youthful identities.

In Models 2–7, all the health measures reach significance; however, the magnitude of the role they play in the process linking SES and age identity varies. Model 2 indicates that more favorable assessments of one's health compared with peers are related to more youthful identities. For example, having "much better" health than one's peers is associated with an age identity that is approximately 2 years younger than that reported by individuals with only "somewhat better" health. Moreover, the coefficient for education falls by 50% and is no

Variable Model 1 Model 2 Model 3 Model 4 Model 5 Model 6 Model 7 Model 8 -.282\*\*\* -.290\*\*\* -.301\*\*\* -.271\*\*\* -.305\*\*\* -.276\*\*\* -.266\*\*\* - 310\*\*\* Age (.01)(.01)(.01)(.01)(.01)(.01)(.01)(.01).004\*\*\* .004\*\*\* .005\*\*\* Age<sup>2</sup> .004\*\*\* .004\*\*\* .004\*\*\* .004\*\*\* .004\*\*\* (.00)(.00)(.00)(.00)(.00)(.00)(.00)(.00)-.687\*-.412-.613\*Female -.377-.617\* -.464-.182-.368(.27)(.27)(.27)(.26)(.27)(.26)(.27)(.26)-1.337\*\* -1.251\*\* -1.281\*\* Non-White -1.325\*\* -.825\* -1.012\*\* -1.062\*\*-.748\*(.37)(.36)(.37)(.36)(.37)(.37)(.37)(.35)-.161\*\* -.182\*\*-.049-.140\*-.160\*\*-.034b<sub>a</sub>: Education -.080-.114(.06)(.06)(.06)(.06)(.06)(.06)(.06)(.06)Household income .000 .000 .000 .000 .000.000.000.000(.00)(.00)(.00)(.00)(.00)(.00)(.00)(.00)-.206\*\*\* -.118\*\* -.154\*\* -.123\*\* -.195\*\*\* -.107\*.009  $b_p$ : Perceived -.066(.04)(.04)(.04)(.04)(.04)(.04)(.04)(.04)financial well-being -2.051\*\*\* -1.240\*\*\*Comparative self-rated (.16)(.15)health -.227\*\*\* Self-assessed physiological -.513\*\*\* (.06)(.06)changes -.563\*\*\* -1.007\*\*\* Prospective (.08)self-rated health (.07)-.761\*\*\* -.138Perceived control (.08)(.07)over health .521\*\*\* .233\*\*\* Number of (.05)chronic conditions (.05)1.054\*\* .584\* Has parent(s) in poor healtha (.31)(.29)Both parents deceased<sup>a</sup> .110 -.104(.44)(.42)Adjusted  $R^2$ 20 25 .22 .26 .23 .23 .20 .29 50% decr. 13% incr. 70% decr. 13% decr. 29% decr. No change 79% decr. % Change in be with adjustment 43% decr. 25% decr. 68% decr. 48% decr. 40% decr. 5% decr. 96% decr. % Change in  $b_n$  with adjustment

Table 2. Ordinary Least Squares Regression of Age Identity on Socioeconomic Status and Health

Notes: Unstandardized coefficients (standard errors). decr. = decrease; incr. = increase.

longer significant; the coefficient for financial well-being declines by 43%. The results indicate that the more advantaged have younger identities, in part, because they make more favorable comparisons of their health with that of their peers.

Model 3 reveals that more positive assessments of one's recent physiological changes are associated with younger identities, and they partially mediate the effect of financial well-being on age identity (i.e., the coefficient declines by 25%). However, this variable slightly suppresses the effect of education on age identity. Contrary to expectations, higher levels of education are associated with less favorable assessments of recent physiological changes.

Model 4 indicates that each 1 point increase in anticipated future health on the 10-point scale is associated with an age identity that is 1 year younger. Of all the dimensions of health examined, the largest mediating effects are found for prospective self-rated health. The coefficients for education and perceived financial well-being do not reach significance. In other words, the less favorable predictions of one's health in the future made by individuals of lower SES play a large role in explaining their older identities.

Mediating effects also are observed with the addition of perceived control over health (Model 5); however, the magnitude of the effects varies across indicators of SES. The

coefficient for perceived financial well-being falls by 48%, but the effect of education declines by only 13%. Not only are subjective indicators of health part of the process linking SES and age identity, but also the number of chronic conditions plays a mediating role (Model 6); with the inclusion of chronic conditions, the effect of education declines by 29% and perceived financial well-being by 40%.

Model 7 indicates that, controlling for respondent's age, those reporting a parent in poor health have age identities that are approximately 1 year older on average than those of respondents without a parent in poor health. Although the effect of self-reported parents' health is significant, it is not part of the process linking SES and age identity; the coefficients for the socioeconomic variables change little with the addition of parents' health into the model.

The last model in Table 2 includes all the health measures. The effects of neither education nor financial well-being are significant, indicating that the generally worse health of those occupying lower socioeconomic positions accounts for their older identities. Further, it is noted that the explained variance increases by approximately 50%, reflecting the importance of health in the construction of age identities.

Although not the central foci of this paper, several other findings are noted. Comparative self-rated health and chronic

<sup>&</sup>lt;sup>a</sup>Reference group = has no parent in poor health; age is centered at the mean; age identity = subjective age - chronological age; n = 2.864.

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .0001.

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Table 3. Ordinary Least Squares Regression of Age Identity on Age and Education Interaction

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Age	278***	268***	284***	321***	291***	303***	273***	306***
	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)
$Age^2$	.003***	.004***	.003***	.004***	.004***	.004***	.004***	.004***
	(.00.)	(.00.)	(.00)	(.00.)	(00.)	(.00)	(.00.)	(.00)
Female	387	629*	475	191	379	696**	424	626*
	(.27)	(.26)	(.27)	(.26)	(.27)	(.27)	(.27)	(.26)
Non-White	-1.352**	852*	-1.365**	-1.037**	-1.089**	-1.278**	-1.308**	774*
	(.37)	(.36)	(.37)	(.36)	(.37)	(.37)	(.37)	(.35)
Education	151*	069	172**	040	130*	104	150*	025
	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)
Household income	.000	.000	.000	.000	.000	.000	.000	.000
	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)	(.00)
Perceived financial	203***	115**	152**	064	105*	121**	192***	.012
well-being	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)
$b_{ae}$ : Age $\times$ Education	011*	012**	012**	010*	011**	011*	012**	011**
ac - S	(.00)	(.00.)	(.00)	(.00.)	(.00)	(.00)	(.00.)	(.00)
Comparative self-rated		-2.056***	_	_	_	_	_	-1.248***
health		(.15)						(.16)
Self-assessed			515***	_	<u> </u>	_	_	229***
physiological			(.06)					(.06)
changes								
Prospective				-1.004***	_	<u> </u>	_	556***
self-rated health				(.07)				(.08)
Perceived control					761***	_	_	140
over health					(.07)			(.08)
Number of						.520***	_	.232***
chronic conditions						(.05)		(.05)
Has parent(s) in							1.077**	.609*
poor health <sup>a</sup>							(.31)	(.29)
Both parents deceased <sup>a</sup>							.111	101
							(.44)	(.42)
Adjusted $R^2$	.20	.25	.23	.26	.23	.23	.21	.29
% Change in $b_{ae}$ with adjustment		9% incr.	9% incr.	9% decr.	No change	No change	9% incr.	No change

*Notes*: Unstandardized coefficients (standard errors), incr. = increase; decr. = decrease.

conditions mask the effect of gender on age identity. Controlling for the worse self-rated health and more chronic conditions experienced by women, it is found that they have younger identities than men. Health is involved also in the process linking race and age identity. In brief, race differences in comparative self-rated health appear to play an important role in explaining the younger identities reported by non-White respondents. Contrary to the findings of other work (e.g., Mutchler & Burr, 1991), non-White respondents in the MIDUS sample report significantly better comparative self-rated health than White respondents.

Significant interactions of age with education (Table 3; Model 1) and perceived financial well-being (Table 4; Model 1), but not household income (not shown), are found. As Figures 1 and 2 illustrate, among younger respondents, differences in age identity by level of education or financial well-being are minimal. Wider differences are found among older respondents.

In contrast to the main effects models (Table 2), health plays a more limited role in explaining the wider socioeconomic differences in age identity among older respondents. As reported in the last column of Table 3, no change is observed in the coefficient for the interactive effect of age and education  $(b_{ae})$  when all health measures are added. Only one measure, prospective self-rated health, exerts a mediating effect, and the effect is fairly small. Health plays a larger role in explaining the interactive effect of age and perceived financial well-being on age identity. With all of the health measures included (Table 4; Model 8), the coefficient for the interactive effect of age and financial well-being  $(b_{ap})$  is reduced by 25%. Models entering one health measure at a time reveal that chronic conditions and prospective self-rated health are the components of health acting as mediators. Prospective health, as found in the main effects model (Table 2; Model 4), exerts a strong mediating effect; with the inclusion of this health measure, the coefficient for the interactive effect of age and perceived financial wellbeing does not reach significance. Consistent with age patterns in age identity observed across levels of education and financial well-being, socioeconomic differences in prospective self-rated health are greatest in later life.

### DISCUSSION

Interpreting youthful constructions of one's age as a means of enhancing self-esteem in a society valuing youth, the findings of this study suggest that individuals of lower socioeconomic strata, especially those in later life, are

<sup>&</sup>lt;sup>a</sup>Reference group = has no parent in poor health; age, education, income, and perceived financial well-being are centered at the mean; age identity = subjective age - chronological age; n = 2.864.

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .0001.

Table 4. Ordinary Least Squares Regression of Age Identity on Age and Perceived Financial Well-being Interaction

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Age	276***	266***	282***	319***	290***	301***	271***	304***
rigo	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)
Age <sup>2</sup>	.004***	.005***	.004***	.004***	.004***	.005***	.004***	.005***
	(.00)	(.00.)	(.00.)	(.00.)	(.00)	(.00)	(.00)	(.00.)
Female	401	641*	490	197	391	702	437	633*
Tentae	(.27)	(.26)	(.27)	(.26)	(.27)	(.27)	(.27)	(.26)
Non-White	-1.355**	855*	-1.369**	-1.032**	-1.091**	-1.276**	-1.311**	770*
Troil Wille	(.37)	(.36)	(.37)	(.36)	(.37)	(.37)	(.37)	(.35)
Education	154**	073	175**	046	133*	109	153*	031
Eddetaion	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)	(.06)
Household income	.000	.000	.000	.000	.000	.000	.000	.000
Household meome	(.00)	(.00.)	(.00.)	(.00.)	(.00.)	(.00.)	(.00.)	(00.)
Perceived financial	206***	118**	155**	067	108*	125**	195***	.008
well-being	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)
$b_{ap}$ : Age $\times$	008**	008**	009**	005	008**	007*	009**	006*
Perceived Financial	(.00)	(.00.)	(.00.)	(.00)	(.00.)	(.00)	(.00.)	(.00.)
Well-being	(100)	()						
Comparative		-2.051***			****			-1.249***
self-rated health		(.15)						(.16)
Self-assessed		(1-1-)	516***					231***
physiological changes			(.06)					(.06)
Prospective				998***		-		548***
self-rated health				(.07)				(.08)
Perceived control					759***			143
over health					(.07)			(80.)
Number of						.515***		.228***
chronic conditions						(.05)		(.05)
Has parent(s)						,	1.078**	.608*
in poor health <sup>a</sup>							(.31)	(.29)
Both parents deceased <sup>a</sup>							.138	079
Both parents deceased							(.44)	(.42)
Adjusted $R^2$	.20	.25	.23	.26	.23	.23	.21	.29
% Change in $b_{ap}$ with adjustment	.20	No change	13% incr.	38% decr.	No change	13% decr.	13% incr.	25% decr.

Notes: Unstandardized coefficients (standard errors). incr. = increase; decr. = decrease.

disadvantaged not only by the objective conditions of their lives but also by conceptions of their aging selves. The findings are consistent with prior research revealing that the less advantaged tend to have older identities than their more privileged peers (e.g., Baum & Boxley, 1983; Markides & Boldt, 1983). Moreover, the observation that health accounts for the main effect of SES, as indicated by education and perceptions of economic well-being, on age identity parallels the patterns found in the only published work in which this relationship could be examined, that of Mutran and Burke (1979), which reports that self-rated health mediates the effect of education on age identity. Because this prior work uses a more indirect measure of age identity (i.e., an individual's identification with characteristics stereotypically associated with old age), the results of the present study indicate that this pattern is also found for more direct measures of age identity.

By examining multiple dimensions of health, this study extends the literature by providing further clues about the process through which one's position in systems of stratification affects the subjective experience of aging. Although most of the dimensions of health examined in this study emerge as mediators of the main effect of SES on age identity, the findings indicate that the less advantaged have older identities primarily because they hold less optimistic views of their health. Future work should give closer attention to the processes of social comparison underlying this relationship. How do individuals form predictions about their future health, and how is this process shaped by socioeconomic position? Immediate interpersonal environments and generalized images of women and men in various life stages should be examined as possible mechanisms through which individuals' socioeconomic positions shape the assessments that they make of their experiences of aging, including expectations of health declines.

In addition to illuminating the process through which SES influences age identity, this study finds that socioeconomic differences in age identity, as indicated by education and perceived financial well-being, are greatest among older adults. This pattern is consistent with the cumulative advantage and disadvantage hypothesis that has been examined more extensively in work on the objective experience of aging, such as functional health (House et al., 1994) and income (O'Rand, 1996). The findings of this study suggest that the concept may also be applicable to subjective dimensions of aging: Higher

 $<sup>^{</sup>a}$ Reference group = has no parent in poor health; age, education, income, and perceived financial well-being are centered at the mean; age identity = subjective age – chronological age; n = 2,864.

<sup>\*</sup>p < .05; \*\*p < .01; \*\*\*p < .0001.

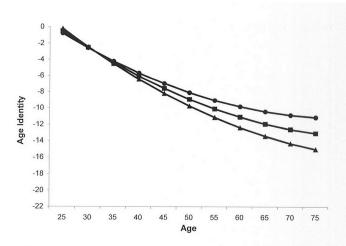


Figure 1. Age identity by level of education. Age identity = subjective age — chronological age; regression solution from Table 3, Model 1; means imputed for gender, race, income, and perceived financial well-being; n = 2,864.  $\leftarrow$  Some high school, no degree;  $\rightarrow$  or more years college, no degree;  $\rightarrow$  Master's degree.

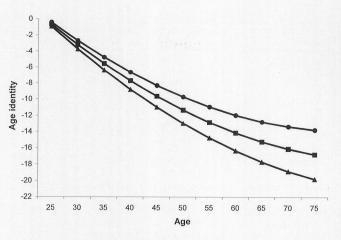


Figure 2. Age identity by level of perceived financial well-being. Age identity = subjective age - chronological age; regression solution from Table 4, Model 1; means imputed for gender, race, income, and education; n = 2,864. SD = standard deviation. - Mean - 2SD; - Mean; - Mean + 2SD.

SES may result in the accumulation not only of material advantages, but also social psychological resources that can diminish the negative effects of aging in a youth-oriented society. However, other interpretations of the findings are plausible because the data are cross-sectional. Rather than reflecting a process occurring as individual age, the youthful identities and wide socioeconomic differences in age identity observed among older respondents in this study may reflect period or cohort effects; these patterns may describe today's older adults but not future cohorts. Challenging this interpretation, however, is the persistence of two social phenomena, negative views of aging and economic inequality. Although these trends suggest that youthful identities and socioeconomic differences in health and age identity will be found in future cohorts of older adults, answering this question will require further investigation using longitudinal data.

The cross-sectional data used in this study introduce other limitations. Although the findings suggest that health is part of the process linking SES and age identity, causal order cannot be determined by this study. In particular, there is likely to be a reciprocal relationship between age identity and health; not only does health affect age perceptions, but having a more youthful identity may lead to behaviors, such as exercise, that are health-enhancing. Nearly all reported work on age identity uses cross-sectional data; longitudinal data will permit the causal relationships to be more clearly identified.

Subsequent research on age identity also should examine explanations for the stronger effect of SES on age identity in later life. This study finds that, although health accounts for the main effect of SES on age identity, it only partially explains the observed age differences. Socioeconomic differences in age identity are widest in later life, in part, because the disadvantaged elderly have more chronic conditions and hold more pessimistic views of their future health, compared with their wealthier peers. In exploring possible explanations for the observed age patterns, other hypotheses should be considered that have been offered in the literature, in particular, those hinging on social class differences in the timing of adult

transitions and the perceived losses associated with these transitions.

### ACKNOWLEDGMENTS

I thank Jill Quadagno and the anonymous reviewers for their helpful comments on earlier drafts.

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# REFERENCES

Adler, N. E., Boyce, T., Cheseney, M. A., Cohen, S., Folkman, S., Kahn, R. L., et al. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, 49, 15–24.

Axinn, W. G., & Thornton, A. (1992). The influence of parental resources on the timing of the transition to marriage. *Social Science Research*, 21, 261–285.

Barak, B., & Stern, B. (1986). Subjective age correlates: A research note. The Gerontologist, 26, 571–577.

Baum, S. K., & Boxley, R. L. (1983). Age identification in the elderly. *The Gerontologist*, 23, 532–537.

Borg, V., & Kristensen, T. S. (2000). Social class and self-rated health: Can the gradient be explained by differences in life style or work environment? Social Science and Medicine, 51, 1019–1030.

Brim, O. G., Baltes, P. B., Bumpass, L. L., Cleary, P. D., Featherman, D. L., Hazzard, W. R., et al. (2000). National Survey of Midlife Development in the United States (MIDUS), 1995–1996 [Computer file]. ICPSR version. Ann Arbor, MI: DataStat, Inc./Boston, MA: Harvard Medical School, Department of Health Care Policy [producers], 1996. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor].

Bultena, G. L., & Powers, E. A. (1978). Denial of aging: Age identification and reference group orientations. *Journal of Gerontology*, 33, 748–754.
Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140.

George, L. K., Mutran, E. J., & Pennybacker, M. R. (1980). The meaning and measurement of age identity. *Experimental Aging Research*, 6, 283–298.

Goldsmith, R. E., & Heiens, R. A. (1992). Subjective age: A test of five hypotheses. *The Gerontologist*, 32, 312–317.

House, J. S., Lepkowski, J. M., Kinney, A. M., Mero, R. P., Kessler, R. C., & Herzog, A. R. (1994). The social stratification of aging and health. *Journal of Health and Social Behavior*, 35, 213–234.

- Linn, M. W., & Hunter, K. (1979). Perception of age in the elderly. *Journal of Gerontology*, 34, 46–52.
- Logan, J. R., Ward, R., & Spitze, G. (1992). As old as you feel: Age identity in middle and later life. Social Forces, 71, 451–467.
- Manor, O., Matthews, S., & Power, C. (1997). Comparing measures of health inequality. Social Science and Medicine, 45, 761–771.
- Markides, K. S., & Boldt, J. S. (1983). Change in subjective age among the elderly: A longitudinal analysis. *The Gerontologist*. 23, 422–427.
- Mirowsky, J., & Ross, C. E. (2000). Socioeconomic status and subjective life expectancy. Social Psychology Quarterly, 63, 133–151.
- Mirowsky, J., Ross, C. E., & Van Willigen, M. (1996). Instrumentalism in the land of opportunity: Socioeconomic causes and emotional consequences. Social Psychology Quarterly, 59, 322–337.
- Montepare, J. M., & Lachman, M. (1989). "You're only as old as you feel": Self-perceptions of age, fear of aging, and life satisfaction from adolescence to old age. *Psychology and Aging*, 4, 73–78.
- Mutchler, J. E., & Burr, J. A. (1991). Racial differences in health and health care service utilization in later life: The effect of socioeconomic status. *Journal of Health and Social Behavior*, 32, 342–356.
- Mutran, E., & Burke, P. J. (1979). Personalism as a component of old age identity. Research on Aging, 1, 38–63.
- Mutran, E., & George, L. K. (1982). Alternative methods of measuring role/ identity: A research note. Social Forces, 60, 866–875.
- Mutran, E., & Reitzes, D. (1981). Retirement, identity and well-being: Realignment of role relationships. *Journal of Gerontology*, 36, 733–740.
- Neugarten, B. L. (1968). The awareness of middle age. In B. L. Neugarten (Ed.), Middle age and aging (pp. 93-98). Chicago: University of Chicago Press.
- Neugarten, B. L., & Moore, J. W. (1968). The changing age status system. In B. L. Neugarten (Ed.), *Middle age and aging* (pp. 5–21). Chicago: University of Chicago Press.

- O'Rand, A. M. (1996). The precious and precocious: Understanding cumulative disadvantage and cumulative advantage over the life course. *The Gerontologist*, 36, 230–238.
- O'Rand, A. M., & Henretta, J. (1999). Pathways to retirement: The timing of retirement. In A. M. O'Rand & J. M. Henretta (Eds.), *Age and inequality: Diverse pathways through later life* (pp. 99–130). Boulder, CO: Westview.
- Rosow, I. (1967). Social integration of the aged. New York: The Free Press.
- Ross, C. E., & Wu, C. (1996). Education, age, and the accumulative advantage in health. *Journal of Health and Social Behavior*, 37, 104–120
- Settersten, R. A., & Hagestad, G. O. (1996). What's the latest? Cultural age deadlines for family transitions. *The Gerontologist*, *36*, 178–188.
- Sherman, S. R. (1994). Changes in age identity: Self perceptions in middle and late life. *Journal of Aging Studies*, 8, 397-412.
- Singer, E. (1981). Reference groups and social evaluations. In M. Rosenberg & R. Turner (Eds.), Social psychology: Sociological perspectives (pp. 66–93). New York: Basic Books.
- Steitz, J. A., & McClary, A. M. (1988). Subjective age, age identity, and middle-age adults. Experimental Aging Research, 14, 83–88.
- Ward, R. A., La Gory, M., & Sherman, S. R. (1988). The environment for aging: Interpersonal, social, and spatial contexts. Tuscaloosa: University of Alabama Press.
- Williams, D. R., & Collins, C. (1995). U.S. socioeconomic and racial differences in health: Patterns and explanations. *Annual Review of Sociology*, 21, 349–386.

Received March 7, 2002 Accepted August 6, 2002

Decision Editor: Charles F. Longino, Jr., PhD