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Self-Discrepancy Across the Life Span

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This study examined the developmental trajectory of self-discrepancies in adulthood and the role of self-discrepancies in the maintenance of psychological well-being. One hundred fourteen adults completed mailed surveys that assessed physical health, actual self and ideal self, depression, anxiety, self-esteem, and self-discrepancy. Examination of age differences in actual self and ideal self assessments showed that ideal self ratings converged with actual self ratings for older adults but were significantly different for young and middle-aged adults, which indicated a decline in self-discrepancy with age. Mean scores on the self-discrepancy scale indicated less self-discrepancy in old age, but the differences were not significant. Self-discrepancy mediated the effects of health problems on depression, anxiety, self-esteem, environmental mastery, and self-acceptance. Results support life-span theory suggesting that self-discrepancy declines in old age and that this decline is positively related to psychological well-being.

KEY WORDS: Self-discrepancy; psychological well-being; age differences; health; life-span development.

INTRODUCTION

This study examined the developmental trajectory of self-discrepancies in adulthood and the role of self-discrepancies in the maintenance of psychological well-being. The assumption underlying this research was that the individual is a "psychological activist," as well as an adaptive organism (Thoits, 1994). According to this view, how individuals interpret, give meaning to, or make sense of their life experiences is a powerful determinant of their psychological well-being and, in fact, is more important than the experience itself in determining well-being. The self is central in this model because events are interpreted through and in relation to the self (Heidrich & Ryff, 1996).

Two strands of research and theory contribute to the conceptualization of self-discrepancy as a central dimension of the self: self-concept theory and self-discrepancy theory. Rosenberg's (1977/1986) conceptualization of the self-concept as dynamic and multidimensional provides a basis for self-discrepancy theory. According to Rosenberg, multiple aspects of the self develop through both internal self-evaluations and interpersonal experiences. The self is dynamic because, in response to external events, different aspects of the self may be changed or modified. The self is also multidimensional; two of these dimensions are the ideal self and the actual self. *Ideal self* refers to the person one aspires to be and includes possible and potential selves, whereas *actual self* refers to conceptions of who one really is. Individuals are motivated to achieve a match between the ideal self and the actual self because a mismatch, or a discrepancy, results in psychological discomfort, such as depression or anxiety (Higgins, 1987; Higgins, Bond, Klein, & Strauman, 1986).

When external events, such as health declines in old age or major age-related losses, threaten an individual's sense of self, different aspects of the self-

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concept are altered in an attempt to maintain an actual self–ideal self match and reduce psychological distress. Taylor argues, on the basis of studies of women with cancer, that one way individuals adjust to threatening events is by altering their views of the self in such a way that self-esteem is enhanced (Taylor, 1983; Taylor & Brown, 1988). In this sense, achieving a match among different aspects of the self is a process of psychological adjustment that results in psychological well-being.

Self-discrepancy theory (Higgins, 1987) provides a more specific model of the relationship between different and potentially conflicting aspects of the self and the affective outcomes of this conflict. For example, when a discrepancy exists between actual self and ideal self domains, there is an absence of positive psychological outcomes for the individual, which results in dejection-related emotions, or depression (Higgins et al., 1986; Higgins, Klein, & Strauman, 1985; Strauman & Higgins, 1987).

Although self-discrepancy theory was formulated to explain negative outcomes, specifically anxiety and depression, a *lack of self-discrepancy* should be related to positive outcomes (Heidrich & Ryff, 1993b). It has, in fact, been argued that successful adaptation in old age is related to increasing congruence between the actual self and the ideal self (Birren & Renner, 1980). This view is also suggested by life-span developmental theories that maintain that older adults compensate for losses in some areas (e.g., physical health) by optimizing selective abilities or aspects of themselves (Baltes & Baltes, 1990; Dixon & Baltes, 1986). Thus, the more positive views of the self held by older persons, despite physical health problems, may be explained in part as a decrease in actual self–ideal self discrepancy in old age.

These hypotheses were examined by Ryff (1991), who asked young, middle-aged, and older adults to evaluate themselves on the six dimensions of psychological well-being according to present, past, future, and ideal self assessments. The comparison of present self and ideal self ratings indicated that, with age, there was greater congruence between aspects of the ideal self and those of the actual self. The decrease in actual–ideal discrepancy in old age was due to lowered ratings for ideal self assessments by the older adults. That is, older adults had lower ideal ratings, but generally similar ratings of actual self, compared with those of young and middle-aged adults. Heidrich and Ryff (1993b) found low levels of discrepancy between actual self and ideal self descriptions and ratings in older women. These women also had high levels of psychological well-being, which seemed consistent with life-span development theory regarding the match between actual self and ideal self that should occur in old age. In a 2-year longitudinal follow-up, significant declines were found in ideal self ratings of personal growth and purpose in life (Heidrich, 1994). These declines were not related to declines in physical health. These longitudinal findings converge with prior cross-sectional evidence of declines in self-discrepancy in some aspects of the self in old age.

The role of self-discrepancies in maintaining or contributing to psychological well-being has received less attention. Heidrich and Ward (1992) found that older women with cancer had lower actual self and ideal self ratings than those of women without cancer, but were no different in self-discrepancies or adjustment. These investigators suggested that women with cancer might be lowering their expectations concerning their ideal self in order to align more closely their ideal self assessment with their now lower actual self assessments. This increased congruence between their ideal self and actual self conceptions may serve to reduce psychological distress. Heidrich and Ryff (1993a) found no relationship between the physical health status of older women and their level of self-discrepancy, although self-discrepancy was related to psychological well-being. However, the measure of self-discrepancy was problematic (based on difference scores), and perhaps self-discrepancies were measured in the wrong realm (that of psychological well-being) and would be more salient if measured in particular life domains (e.g., "my role as a spouse", "what kind of friend I am", "my hobbies"). Heidrich, Forsthoff, and Ward (1994) measured self-discrepancies in domains other than psychological well-being and examined whether self-discrepancy was related to psychological well-being for individuals faced with a major threat to the self, a diagnosis of cancer. Regardless of the level of symptoms, functional status, or perceptions of cancer as a chronic illness, individuals with less self-discrepancy had higher levels of purpose in life and positive relations with others and lower levels of depression. Conversely, individuals with more self-discrepancy had higher levels of depression and lower levels of psychological well-being.

In summary, evidence from both cross-sectional and longitudinal data points to declines in ideal self assessments in old age, at least for some aspects of the self. Thus, partial support exists for the notion that self-discrepancies are reduced with age, but further research is needed to test the hypothesis directly.

There is also preliminary evidence that self-discrepancy is related to physical health status in cancer patients and, more important, that self-discrepancy is related to psychological functioning.

This study was carried out to examine age differences in self-discrepancies by using two assessments that were used in previous studies: the difference between actual self and ideal self assessments and a domain-specific measure of self-discrepancy. These two measures had never been used together in a single study. In addition, the notion of the self as an interpretive mechanism that functions to maintain psychological well-being was examined by testing the mediating effects of self-discrepancy on the relationship between physical health and psychological well-being.

METHOD

Participants

Participants in this study were 114 adults (30 men and 84 women) aged 20 to 88 years, living in a Midwestern metropolitan area. All were White. Participants were divided into three age groups: young, aged 20 to 44 years (n = 36); middle, aged 45 to 64 years (n = 37); and old, aged 65-plus years (n = 41). Table I shows demographic characteristics by age group.

There were some differences in demographic characteristics by age group. As expected, older adults were more likely to be widowed, live alone, be retired, and have fewer years of education and lower incomes than were young or middle-aged adults. However, older adults rated their financial situation the same (very good) as that of the other groups. Overall, the participants were highly educated with adequate incomes. The majority were married.

Procedure

Participants were recruited through elementary school, community, and service organizations. Survey materials were distributed to members, completed at home, and returned at members' meetings to be picked up by the research staff. Survey materials were divided into two sections. The first section included a cover letter, an informed consent statement, and health, actual self, and self-discrepancy measures. A second section contained ideal self measures and measures of self-esteem, depression, and anxiety. Participants were instructed to complete the two sections on separate days. Organizations were paid $3.00 for each survey returned.

Measures

Measures included a demographic questionnaire, six physical health measures, six actual self measures, six ideal self measures, and measures of depression, anxiety, self-esteem, and-self discrepancy. The demographic questionnaire included infor-

Table I. Demographic Characteristics by Age Group

Demographic characteristic	Age group								
	Young			Middle			Old		
	M	*SD*	%	*M*	*SD*	%	*M*	*SD*	%
Age in years	35.9	6.04		52.2	5.73		74.2	5.76	
Education[a]	5.19	1.51		6.22	1.25		3.70	1.65	
Income[b]	8.00	1.67		8.38	1.16		5.26	1.67	
Marital status									
Married			81			89			55
Widowed			0			3			38
Separated/divorced			6			3			5
Never married			14			5			2
Living arrangements									
With spouse			89			92			56
Alone			3			8			41
With other(s)			8			0			3

[a]3 = *High school,* 5 *some college,* 6 = *college graduate.*
[b]8 = $40–$49,999; 5 = $16–$19,999.

mation about age, gender, education, occupation, marital status, race/ethnicity, income, and living arrangements.

Physical Health Measures

There were three single-item *subjective health ratings.* Participants were asked to rate their general health from *excellent* (5) to *poor* (1); their health today compared with that 5 years ago from *much better* (5) to *much worse* (1); and their anticipated health in the next few years from *much better* (5) to *much worse* (1). Subjective health ratings have been shown to have more predictive power for morbidity and mortality than that of more objective health ratings (Idler, 1993; Idler & Kasl, 1991).

The number of *health problems* was measured by using the Older Americans Resources Survey (OARS) schedule of illnesses, an instrument widely used to assess health status in community-dwelling samples of middle-aged and older adults (Duke University, 1978). Respondents identified whether or not they experienced each illness in the recent past, and the total number of health problems was computed. Respondents also rated the extent to which each health problem interfered with activities of daily living on a scale from 0 (*do not have*) to 5 (*completely*), and a mean *health interference* score was computed.

A 13-item scale consisting of symptoms common to aging and/or illness (e.g., fatigue, pain, difficulty concentrating, and incontinence) was used to assess *symptom bother.* Participants indicated how bothered they were by each symptom on a scale from 0 (*do not have*) to 3 (*a great deal*), and a total score was computed. Higher scores indicated more bother from symptoms. Previous studies indicated good reliability (α = .85–.82) and evidence of convergent and discriminant validity (Heidrich, 1993; Heidrich & D'Amico, 1993).

Actual Self and Ideal Self Measures

Actual self and ideal self were each assessed with six scales of psychological well-being developed by Ryff (1989a, 1989b) that were derived from aspects of positive functioning found in theories of life-span development, personal growth, and mental health. Six criteria of well-being were operationalized as 20-item structured self-report scales: (1) autonomy, (2) purpose in life, (3) personal growth, (4) positive relations, (5) environmental mastery, and (6) self-acceptance (Ryff, 1989b). These scales are reliable (α = .86–.91) and correlate positively with commonly used measures of well-being (i.e., affect balance, life satisfaction, self-esteem, morale, and internal locus of control), with r ranging from .25 to .73, and negatively with depression and external control (r = −.30 to −.60). Shortened (14-item) versions were used in this study. Alpha coefficients for these shortened scales ranged from .83 to .91, and correlation with the parent scales ranged from .97 to .98 (Ryff, 1989b).

Items from the six scales were mixed to produce a single self-report inventory that participants answered according to a 1 (*strongly disagree*) to 6 (*strongly agree*) response format. This inventory was administered under two conditions: actual self and ideal self. First, participants were asked to indicate their present agreement or disagreement with the statements. Second, they were asked to respond in terms of the person that they would most like to be, their ideal self. Before responding, participants read a statement describing an ideal self and were asked to take a few minutes to think about their goals and wishes for themselves and the person they would ideally like to be. Participants were given the actual self assessment in the first packet of instruments and were instructed to wait 1 day before completing the second packet, which contained the ideal self assessment.

Self-Discrepancy Measure

Self-discrepancy was measured by using a 20-item self-report inventory (Heidrich, et al., 1994). Before completing the scale, participants read a description and an example of actual self, ideal self, and a match between actual self and ideal self; then, they were asked to take a few minutes to think about their personal qualities, goals, and dreams about themselves. They were asked to indicate the extent of their agreement (*strongly agree* to *strongly disagree* on a 6-point scale) with the statement, "My actual self and ideal self are a very close match," in each of 20 life domains. Examples of domains include, "my physical health," "coping with change," and "pursuing my leisure interests and hobbies." Mean ratings across the 20 domains were computed; higher scores indicated lower levels of self-discrepancy (i.e., a match between actual self and ideal self).

In a previous study, the average interitem correlation was .37 and Cronbach's alpha was .92 (Heidrich

et al., 1994). Construct validity was tested by examining the correlations among the self-discrepancy measure, self-esteem, and physical health variables. Content and convergent validity were demonstrated; high levels of self-discrepancy were significantly related to lower levels of self-esteem and psychological well-being and higher depression scores. In the present study, internal consistency (Cronbach's alpha) was .92.

Psychological Distress and Self-Esteem Measures

Depressive symptoms were assessed with the Center for Epidemiological Studies-Depression scale (CES-D) (Radloff, 1977), which was developed for use with community samples, has been extensively used with older persons because of its focus on affective rather than somatic symptoms, and has demonstrated good psychometric properties (Davidson, Feldman, & Crawford, 1994; Radloff, 1977). It is a 20-item scale based on reports of mood and symptoms during the past week. The CES-D is also useful because it has demonstrated diagnostic validity; scores greater than 15 indicate probable clinical depression (George, 1989).

The *anxiety* subscale of the Jackson Personality Research Inventory (Jackson, 1977, 1979) was used to measure anxiety. This anxiety measure was developed for and tested on community samples rather than psychiatrically disturbed groups. In the original psychometric studies, the anxiety subscale demonstrated both convergent and discriminant validity, as well as adequate reliability ($\alpha = .83–.85$). The anxiety subscale consists of 20 items rated from 1 (*strongly disagree*) to 6 (*strongly agree*). The ratings are summed for a total score. Higher scores indicate low anxiety.

Self-esteem was assessed with Rosenberg's (1977/1986) 10-item self-esteem scale that has been used in many studies of adults and the elderly (Breytspraak & George, 1982). Rosenberg reported a reproducibility coefficient of .92 and a scalability coefficient of .72. Reliability and validity are excellent and are reviewed in Breytspraak and George. Respondents rated the extent of their agreement with each item on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*), and a mean score was computed. Higher scores indicated higher levels of self-esteem.

DATA ANALYSIS AND RESULTS

Analysis and results are presented in three parts: (1) descriptive information about health status by age group, (2) age differences in actual self and ideal self assessments and self-discrepancy, and (3) the relationships among self-discrepancy, health, and psychological well-being.

Health Status by Age Group

Descriptive statistics showing health status by age group are presented in Table II. Age differences were examined by using one-way analyses of variance (ANOVAs). Significant main effects were examined by using post hoc Scheffe tests. Older adults reported significantly more health problems than young or middle-aged adults and, compared with young adults, significantly more interference with daily activities from health problems, a significantly higher degree of bother from symptoms, and significantly poorer present health. There were no significant differences in ratings of past or future health.

Age Differences in Self-Assessments and Self-Discrepancy

Mean scores for actual self, ideal self, depression, anxiety, self-esteem, and self-discrepancy are shown in Table III. Age differences in actual self and ideal self ratings were examined with a series of 3 (Age group) × 2 (Condition) ANOVAs. Condition was a within-subjects factor (actual self vs. ideal self). Because of the number of tests performed, p was set at .01.

There were significant ($p < .01$) Age group × Condition interactions for five of six well-being measures. These interactions were examined by using paired t-tests for actual self–ideal self scores within each age group. These results are shown in Table III and illustrated in Fig. 1. For personal growth, positive relations, environmental mastery, self-acceptance, and autonomy, the differences between actual self and ideal self were significant for young and middle-aged adults, but not for old adults. For purpose in life, there were significant main effects for Age group and Condition. Ideal self scores were significantly higher than actual self scores, and older adults had significantly lower scores than those of young adults. Thus, in general, ideal self ratings were higher than actual self ratings for young and middle-aged adults, but ideal self ratings converged with actual self ratings for older adults. For autonomy, environmental mastery, and self-acceptance, this convergence oc-

Table II. Means and Standard Deviations of Health Variables by Age Group

Health variable[a]	Age group: Young (n = 36) M[b]	Young SD	Middle (n = 37) M[b]	Middle SD	Old (n = 41) M[b]	Old SD
Number of HPs	0.78*	1.02	2.16*†	2.65	3.49*†	2.24
Interference from HPs	0.16*	0.50	0.22	0.38	0.47*	0.64
Symptom bother	0.57*	0.51	0.85	0.55	0.98*	0.57
Health now	3.67*	0.79	3.40	0.98	3.15*	0.84
Health past	2.83	0.61	2.78	0.71	2.92	0.90
Health future	3.14	0.64	2.86	0.82	3.03	0.49

[a]HPs = health problems.
[b]Within rows, means with the same superscript (asterisk or dagger) are significantly different.

Table III. Actual Self and Ideal Self Ratings[a] by Age Group

Measure	Young[b] Actual	Young[b] Ideal	Middle[b] Actual	Middle[b] Ideal	Old[b] Actual	Old[b] Ideal
Personal growth						
M	4.78*	5.36*§	5.01†‖	5.50†#	4.69‖	4.64§#
SD	0.69	0.66	0.61	0.62	0.76	0.98
Positive relations						
M	4.69*	5.38*§	5.12†‖	5.53†#	4.56‖	4.89§#
SD	0.79	0.69	0.65	0.59	0.84	0.83
Purpose in life						
M	4.69*	5.28*§	4.86†‖	5.36†#	4.37‡‖	4.61†§#
SD	0.60	0.68	0.60	0.55	0.66	0.69
Autonomy						
M	4.21*	5.06*§	4.45†	5.13†#	4.21	4.33§#
SD	0.72	0.83	0.79	0.76	0.64	0.82
Environmental mastery						
M	4.24*	5.32*§	4.54‡	5.40†#	4.63	4.81§#
SD	0.73	0.73	0.89	0.61	0.80	0.75
Self-acceptance						
M	4.44*	5.32*§	4.81†	5.45†#	4.42	4.56§#
SD	0.82	0.69	0.91	0.62	0.79	0.75
Depression						
M	13.44		8.78		11.76	
SD	8.82		8.44		9.68	
Anxiety						
M	3.61		3.96		3.76	
SD	0.82		0.82		0.87	
Self-esteem						
M	3.31		3.49		3.32	
SD	0.46		0.47		0.44	
Self-discrepancy						
M	4.22		4.46		4.51	
SD	0.85		0.91		1.02	

[a]Depression, anxiety, self-esteem, and self-discrepancy were rated for the actual self only.
[b]Within rows, means with the same superscript are significantly different ($p < .01$).

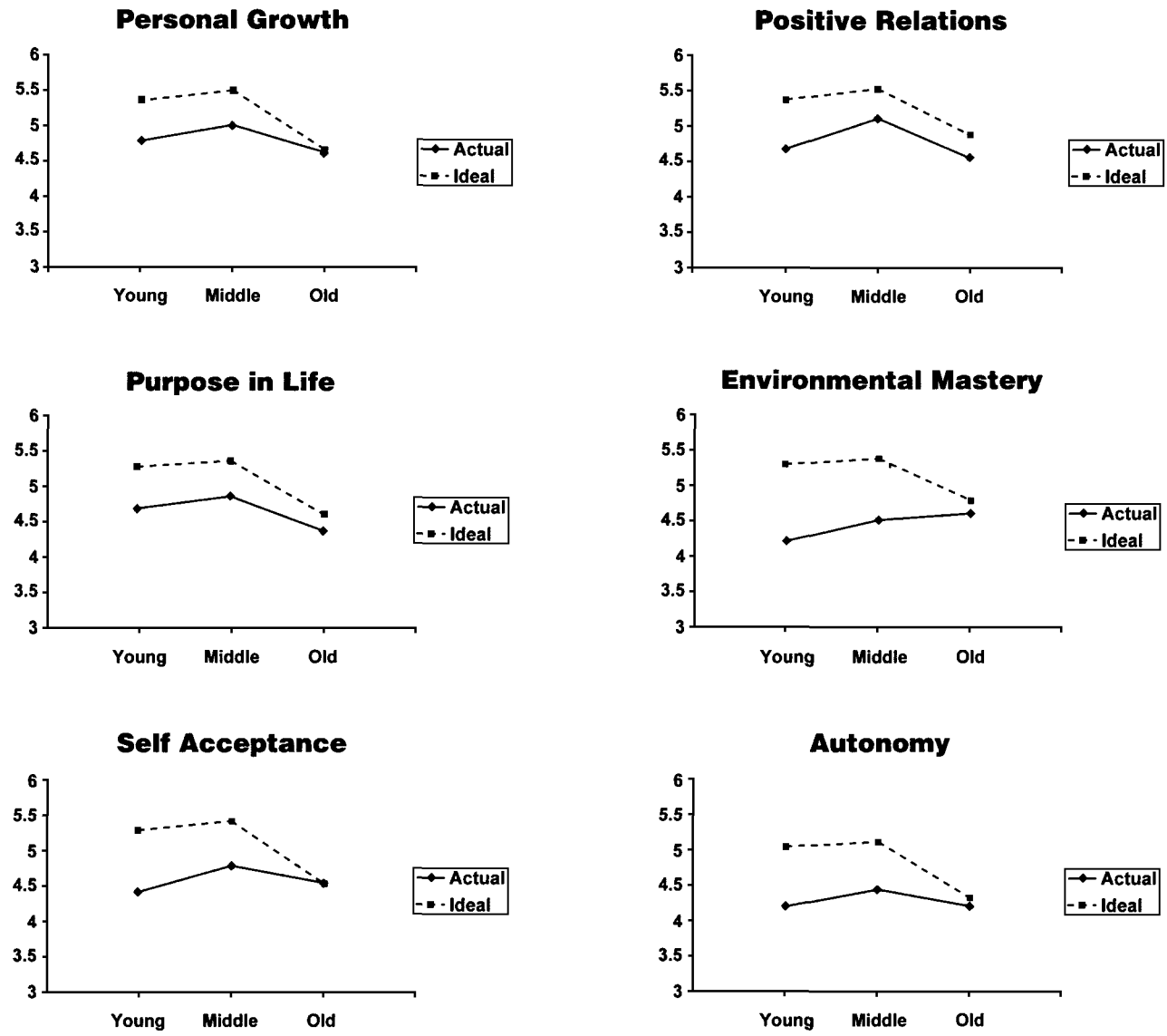

Fig. 1. Actual self and ideal self assessments by age group.

curred because ideal self ratings declined in old age while actual self ratings remained stable. For personal growth, positive relations, and purpose in life, both actual self and ideal self ratings declined in old age.

Age differences in depression, anxiety, self-esteem, and self-discrepancy were examined by using one-way ANOVAs. There were no significant differences. The finding of no significant age differences in mean self-discrepancy scores when the self-discrepancy scale was used differs from the finding of a decline in self-discrepancy with age when the actual self and ideal self ratings were used. However, the trend in the means was in the expected direction; that is, the highest mean self-discrepancy scores (i.e., a lack of self-discrepancy) were found in the old age group, while the lowest scores (most self-discrepancy) were found in the young age group.

Relationships Among Self-Discrepancy, Health, and Psychological Well-Being

Correlations among actual self, self-discrepancy, and demographic and health variables are presented in Table IV. In general, actual self ratings (except autonomy and positive relations), depression, anxi-

Table IV. Correlations Among Actual Self Ratings, Self-Discrepancy, and Demographic and Health Variables

Variable[b]	Measure[a]									
	PG	PR	PIL	AUT	EM	SA	CES-D	ANX	SE	SD
Age	−.15	−.03	−.22	.03	.22	−.01	−.06	.10	−.08	.13
Education	.45*	.23	.39*	.09	.12	.22	−.09	.10	.20	.05
Income	.19	.08	.23	.07	.01	.16	−.14	.06	.16	.03
Number of HP_s	−.13	.01	−.20*	.03	−.12	−.15	.26*	−.15	−.21	−.03
Interference from HP_s	−.29*	−.05	−.28*	−.17	−.10	−.22	.33	−.24*	−.32*	−.18
Symptom bother	−.25*	−.15	−.28*	−.11	−.28*	−.31*	.43*	−.26*	−.39*	−.31*
Health now	.27*	.18	.34*	.14	.35*	.35*	−.40*	.36*	.34*	.32*
Health past	.05	.02	.03	.04	.20	.10	−.27*	.28	.15	.24
Health future	.10	.08	.09	.04	.14	.10	−.14	.13	.12	−.01
SD	.34*	.37*	.41*	.37*	.59*	.54*	−.50*	.39*	.59*	1.00

[a]PG = personal growth; PR = positive relations; PIL = purpose in life; AUT = autonomy; EM = environmental mastery; SA = self-acceptance; CES-D = depression; ANX = anxiety; SE = self-esteem; SD = self-discrepancy.
[b]HP_s = health problems; SD = self-discrepancy.
*$p < .01$.

ety, self-esteem, and self-discrepancy were significantly ($p < .01$) related to health measures but not generally to demographic variables. However, education was positively related to personal growth and purpose in life. Correlations between self-discrepancy and self-esteem, depression, anxiety, and actual self measures were significant ($p < .01$) and moderate, ranging from .34 to .59. Correlations between self-discrepancy and ideal self ratings were nonsignificant except for personal growth ($r = .25$) and autonomy ($r = .23$).

Hierarchical multiple regression was used to examine the relationships among self-discrepancy, physical health, and psychological well-being. Specifically, the direct effects of physical health on self-discrepancy, the direct effects of physical health on well-being, and whether self-discrepancy mediated the effects of health on well-being were examined. Well-being measures included each actual self rating (personal growth, purpose in life, positive relations, autonomy, environmental mastery, and self-acceptance), as well as depression, anxiety, and self-esteem.

First, self-discrepancy was regressed on age and education (entered first as control variables), followed by health interference and symptom bother (entered as a block). On the first step, age and education were not significant predictors of self-discrepancy ($\beta = .18$ and .12, respectively). However, in the final model, significant predictors of self-discrepancy were age ($\beta = .31$) and symptom bother ($\beta = -.35$), total $R^2 = .17$, $p < .01$. Older age and better health predicted less self-discrepancy. Second, each well-being measure was regressed on age and education (Model One), health interference and symptom bother (Model Two), and self-discrepancy (Model Three). Because of the number of regressions, p was set at .01. The results of these analyses are illustrated in Fig. 2.

Results for Model One indicated a significant direct effect of age on only one aspect of well-being, environmental mastery ($\beta = .43$, $R^2 = .10$), and significant direct effects of education on personal growth ($\beta = .46$, $R^2 = .20$) and purpose in life ($\beta = .35$, $R^2 = .16$). Results for Model Two, after age and education had been controlled for, indicated significant direct effects of physical health on personal growth ($\beta = -.20$, $\Delta R^2 = .07$), environmental mastery ($\beta = -.38$, $\Delta R^2 = .13$), self-acceptance ($\beta = -.29$, $\Delta R^2 = .11$), depression ($\beta = .41$, $\Delta R^2 = .25$), anxiety ($\beta = -.26$, $\Delta R^2 = .12$), and self-esteem ($\beta = -.32$, $\Delta R^2 = .17$). Physical health added 7% to 25% to the variance in well-being. Results for Model Three, which controlled for the effects of age, education, and health status, indicated significant effects of self-discrepancy on personal growth ($\beta = .27$, $\Delta R^2 = .06$), purpose in life ($\beta = .38$, $\Delta R^2 = .12$), positive relations ($\beta = .36$, $\Delta R^2 = .11$), autonomy ($\beta = .36$, $\Delta R^2 = .10$), environmental mastery ($\beta = .49$, $\Delta R^2 = .19$), self-acceptance ($\beta = .47$, $\Delta R^2 = .18$), depression ($\beta = -.35$, $\Delta R^2 = .10$), anxiety ($\beta = .28$, $\Delta R^2 = .07$), and self-esteem ($\beta = .52$, $\Delta R^2 = .22$). That is, self-discrepancy added a significant 6% to 22% to the explained variance in well-being.

Mediating effects of self-discrepancy were found for anxiety, environmental mastery, self-acceptance, depression, and self-esteem. The relationship between physical health and well-being became nonsignificant (anxiety, self-esteem, environmental mastery, self-acceptance) or was greatly reduced (depression) after self-discrepancy was added to the equation (Aiken & West, 1991).

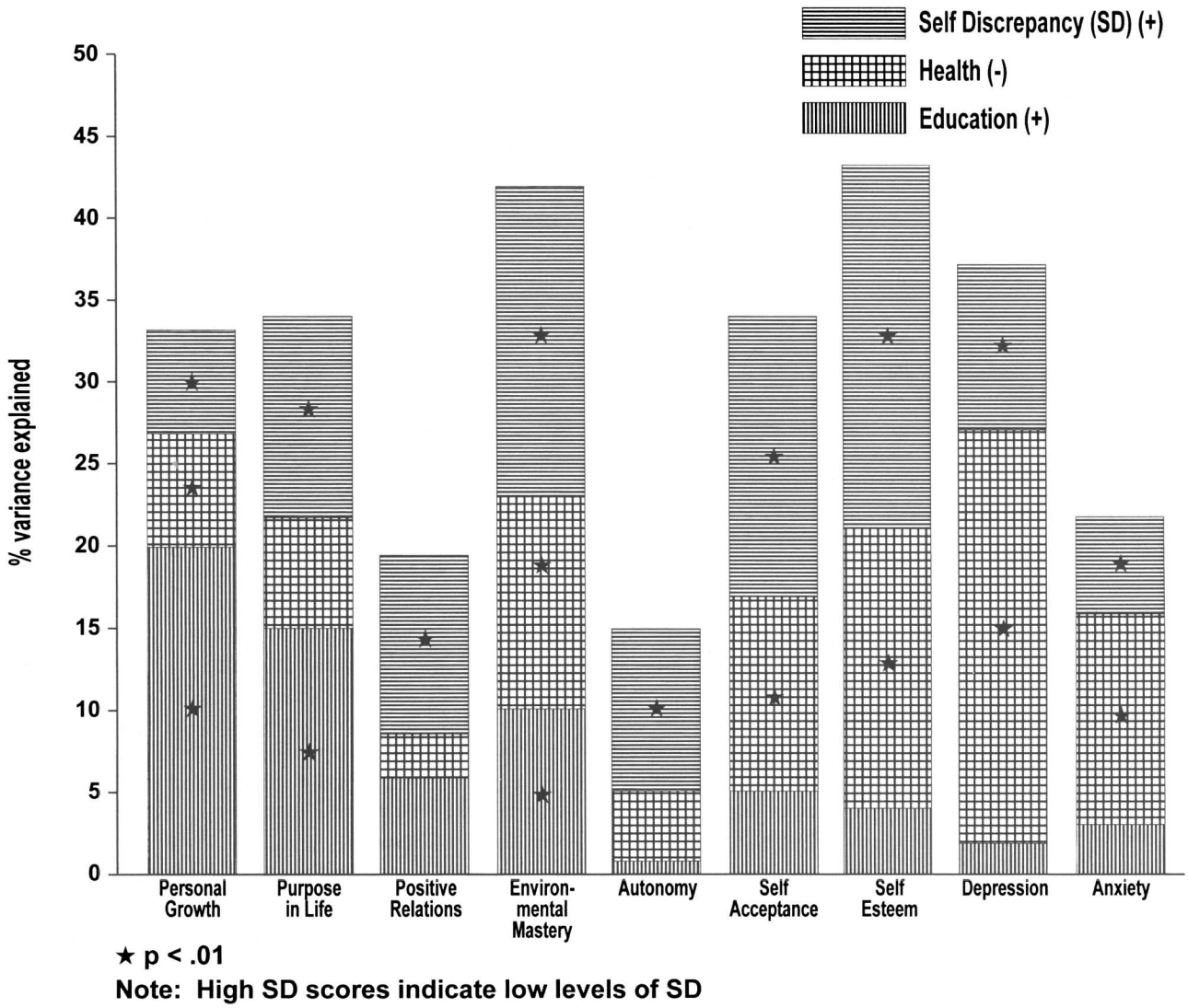

Fig. 2. Relationships among health status, self-discrepancy, and psychological well-being.

DISCUSSION

The present study examined the developmental trajectory of self-discrepancies in adulthood and the role of self-discrepancies in the maintenance of psychological well-being. The results indicate further support for the life-span developmental premise that congruence between ideal self and actual self occurs in old age (Birren & Renner, 1980). This congruence was shown for six aspects of psychological well-being and occurred both when actual self ratings were stable across age groups and when actual self ratings declined in old age. That is, the lower level of self-discrepancy found in older adults was due to lower ideal self ratings that more closely matched actual self ratings. These results replicate those reported by Ryff (1991). In addition to describing the decline in self-discrepancy that occurs in old age, this study examined the relationship between self-discrepancies and psychological well-being. The role of the self as a central mechanism in maintaining psychological well-being and mental health in old age has received both theoretical (Cross & Markus, 1991; Dixon & Baltes, 1986;) and empirical attention (Heidrich, 1994, 1998; Heidrich & Ryff, 1993b; Hooker, 1992; Ryff & Essex, 1992), all of which suggests that self-perceptions play a central role in psychological outcomes. The results of this study support this

premise and indicate that the way in which the self affects well-being is by mediating the influence of other factors (e.g., age, health problems) on psychological well-being. In this study, increasing age meant poorer physical health but also more congruence between ideal self and actual self (i.e., less self-discrepancy).

Self discrepancy was also related to physical health status. Worse health was related to a greater discrepancy between actual self and ideal self, regardless of age. The influence of physical health on the self again makes sense theoretically and has received empirical support. Poor health or distressing symptoms can make carrying out important social roles more difficult and thus affect self-perceptions. Poor health can alter a person's views of possible future selves or of possible feared selves, which again influences self perceptions. Poor health may also alter views of actual self-negatively and thus increase the discrepancy with ideal self. At the same time, poor health may alter a person's perception of what he or she may ideally strive for, yet, because the self is dynamic, poor health may be the impetus for new ideals to be formed.

Self-discrepancy had a significant influence on all nine psychological well-being outcomes, after age and health status were controlled for. These well-being outcome measures encompassed both positive and negative dimensions of well-being, as well as affective and cognitive aspects of well-being. Although all these outcomes were affected by self-discrepancy, they were differentially related to both demographic characteristics (age and education) and physical health. The fact that self-discrepancy influenced such a wide range of well-being outcomes lends strong support to the central role of the self in well-being. Alternatively, the wide range of outcomes affected may suggest that self-discrepancy is really another measure of well-being. The results of the correlational analyses, however, do not support such an interpretation. The correlations between the self-discrepancy measure and the measures of well-being were moderate and ranged from .34 to .59. However, the correlations among the various measures of well-being were generally larger, ranging from .46 to .82.

Self-discrepancy also mediated the effects of physical health on anxiety, environmental mastery, self-acceptance, depression, and self-esteem. For these well-being outcomes, self-discrepancy was more important than physical health status in its effect on well-being. Interestingly, these are also the majority of the outcomes most affected by physical health, and mediating effects were found for both positive and negative aspects of well-being.

The findings regarding the main and mediating effects of self-discrepancy on multidimensional aspects of psychological well-being have both theoretical and clinical implications. The support for the premise that psychological well-being in old age may in part be explained as the congruence between actual self and ideal self that occurs with age was noted previously. Although this study was cross-sectional, at least one longitudinal investigation also supports this premise (Heidrich, 1994). The change in ideal self that seems to occur in old age helps explain why older adults report high levels of life satisfaction, happiness, and well-being despite objectively worse (at least to younger adults) life circumstances. The decline in ideal self assessments may also be explained as part of the "compensation" that theoretically occurs with selective optimization in old age (Baltes & Baltes, 1990). What is missing in these theoretical notions is a more satisfying explanation of the process by which the change in actual self and/or ideal self assessments occurs with age. There is some indication in this study that physical health and functioning affect self-conceptions, but the conditions under which and the time frame in which this change may occur are unknown. Whether self-discrepancies change in response to other life events, normative or nonnormative, has not been investigated but would certainly add to the understanding of how and when changes in the self occur. Finally, other aspects of the self have also been investigated in their relationship with psychological health. These include notions of possible selves (Hooker, 1992; Markus & Nurius, 1986), self-complexity (Linville, 1987), and self-construal models (Cross & Madsen, 1997). These approaches have not generally taken into account life-span developmental notions of the self or empirically examined age-related changes in these aspects of the self. Whether self-discrepancy is related to these other descriptions of the self-concept and whether self-discrepancy is a more powerful explanation of psychological health are questions that should be addressed in future research.

Self-discrepancy theory may also be valuable in formulating clinical interventions for persons at risk for clinical depression in relation to health problems. Perhaps presenting persons with accurate information about the likely consequences of an illness and its treatment could arm them to expect changes in their capabilities. These accurate expectations may,

in turn, prevent the development of discrepancies between what persons ideally think they should be or would like to be and how they currently see themselves. Research examining persons who begin with and maintain low levels of self-discrepancy when they are faced with the diagnosis of serious illness may also provide clues about the nature of resiliency. Research on the relationship among personality (e.g., dispositional optimism), health, and self-discrepancies would be useful in clarifying these processes (Costa & McCrae, 1984).

Other contributions of this study deserve mention. The measurement of self-discrepancies reported here differs from that of previous studies. Previous studies relied on difference scores based on ideal self and actual self measures (Heidrich & Ryff, 1993a) or utilized the Selves Questionnaire, which derives self-discrepancy scores from a content analysis of self descriptors (Heidrich & Ryff, 1993a; Higgins et al., 1985, 1986). The use of difference scores is problematic because of their unreliability. The Selves Questionnaire is an ideographic measure, which makes comparisons among subjects difficult; its reliability has not been established; and its usefulness for assessing older adults has been questioned (Heidrich & Ryff, 1993a). The self-discrepancy measure used in this study is face valid, is easy to administer and score, and, more important, taps a wide variety of domains deemed salient to adults of all ages. Initial evidence of discriminant and construct validity and of reliability is promising, although further psychometric testing in larger, more heterogeneous samples is necessary.

Caution is in order in interpreting these results, however. This was a cross-sectional study, so references to causal relationships are somewhat speculative, although they are supported with limited longitudinal studies. Other limitations in this study also need to be addressed. The sample for this study was homogeneous in terms of socioeconomic status and ethnicity and positively biased, which limits the generalizability of the findings. Further, the sample as a whole was physically healthy, so that the influence of more severe health problems and limitations on both well-being and self-discrepancy is unknown. In addition, only subjective measures of physical health were used. More objective measures, such as medical record data or physician ratings, may be considered more reliable. However, self-assessments of physical health and functional abilities have been shown to be reliable and valid and are more predictive of morbidity and mortality than are many objective indicators or physicians' ratings (Diener, 1984; Idler & Kasl, 1991).

Despite these limitations, demonstrating that the discrepancy between actual self and ideal self lessens with age, is strongly related to psychological health, and mediates the relationship between physical health and some aspects of psychological well-being provides support for life-span developmental notions concerning both the nature of the self-concept and of determinants of psychological health. These findings also contribute to the growing empirical literature supporting the central role of the self in maintaining psychological well-being.

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