

Temporal Stability and Authenticity of Self-Representations in Adulthood

Manfred Diehl,^{1,3} Laurie M. Jacobs,² and Catherine T. Hastings²

The temporal stability of role-specific self-representations was examined in a sample of 188 young, middle-aged, and older adults. Considerable stability was observed for all self-representations. Central self-descriptors showed significantly greater temporal stability than peripheral self-descriptors. Temporal stability of self-representations was positively associated with self-concept clarity, self-esteem, and positive affect (PA). Age differences were obtained for three of the five self-representations, with older adults showing significantly lower stabilities for self with family, self with friend, and self with significant other compared to young and middle-aged adults. Assessment of the authenticity of adults' role-specific self-representations showed that greater authenticity tended to be associated with greater temporal stability. Authenticity and the number of positive daily events were significant positive predictors of the stability of self-representations.

KEY WORDS: self-concept; temporal stability; authenticity; age differences; daily events.

INTRODUCTION

This article reports findings from a study examining the temporal stability and authenticity of adults' role-specific self-representations. Self-representations refer to those "attributes or characteristics of the self that are consciously acknowledged by the individual through language" (Harter, 1999, p. 3) and collectively constitute a person's self-concept.⁴⁴ Current theory and research conceptualize the self-concept as a dynamic cognitive structure with important adaptive and self-regulatory functions

(Baumeister, 1998; Harter, 1999; Higgins, 1996; Markus & Wurf, 1987; Showers, Abramson, & Hogan, 1998). This conceptualization describes the self-concept as a knowledge structure that controls the processing of self-relevant information and responds to situational and time-varying experiences (Campbell et al., 1996). One of the fundamental questions resulting from this characterization of the self-concept as a multidimensional cognitive structure concerns the temporal stability of individuals' self-representations and the tension that may exist between stability and change.

Studying the temporal stability of role-specific self-representations is noteworthy because there is substantial evidence suggesting that individuals' self-concept is an important source of continuity and consistency over time (Baumeister, 1998; James, 1890/1963; Troll & Skaff, 1997). James (1890/1963) and Allport (1955), for example, argued that the self-concept gives the person a sense of inward unity and continuity over time. Similarly, Erikson (1959) asserted that the search for inner sameness and a sense of continuity that bridges the different periods

¹Department of Psychology, University of Florida, Gainesville, USA.

²Department of Psychology, University of Colorado at Colorado Springs, Colorado Springs, CO, USA.

³Correspondence should be directed to Manfred Diehl, Department of Psychology, University of Florida, 508 McCarty Hall C, P.O. Box 115911, Gainesville, FL 32611-5911, USA; e-mail: mdiehl@ufl.edu

⁴Throughout this article, we will use the terms "self-concept" and "self-representation" interchangeably.

of the life span is an essential concern for the individual, and a lifelong developmental task.

Empirical support for the stability and continuity of adults' *global* self-concept has been provided by several studies (Cheek & Hogan, 1983; Mortimer, Finch, & Kumka, 1982; Troll & Skaff, 1997). Mortimer et al. (1982) followed 368 college men over a 14-year period and found that the structure and content of their global self-concept remained quite stable in the 10 years following graduation. Although some variability was observed in terms of the self-descriptors that these men used, their general self-concept remained mostly the same. Similar findings have been reported by Troll and Skaff (1997) for a sample of 150 men and women age 85 or older (age range 85–103 years) who were followed over a 3-year period. Specifically, this study showed that the vast majority of older adults showed high continuity in their self-descriptions. Reported changes were mostly due to age-related impairments that resulted in restrictions in lifestyle. Overall, these findings suggest that adults tend to have a consistent sense of self and that, over the life course, stability seems to prevail.

Despite this evidence in favor of the stability hypothesis, there is also substantial evidence supporting the notion that individuals' self-concept is responsive to situational influences (Markus & Wurf, 1987). As a demonstration of the malleable nature of the self-concept, Savin-Williams and Demo (1983) randomly paged adolescents over a 1-week period, asking them to complete a short self-report inventory of their self-feelings at that moment. Results showed that the majority of participants were characterized by fluctuations in self-descriptions from situation to situation.

Evidence for the malleability of adults' self-representations has been provided by several studies (Freund & Smith, 1999a; Markus & Kunda, 1986; Nurius & Markus, 1990). Freund and Smith (1999a) measured older adults' self-representations on two occasions, 8 weeks apart, and found low stability on an intraindividual level but moderate to high stability at the group level. These authors suggested that individuals have a broad self-knowledge base that remains stable over time. Relevant events or stimuli in the social environment, however, may challenge certain definitions in this self-knowledge base and may result in the activation of situation-specific self-representations. This situation-specific activation of self-descriptors reflects the adaptive nature of individuals' self-representations.

Findings that are consistent with this explanation were reported by Markus and Kunda (1986) and by Nurius and Markus (1990). In both studies, the investigators manipulated the social context (e.g., success versus failure situation) that college students used as frame of reference for their self-definitions. Findings showed that individuals responded to the changes in the social environment by flexibly adjusting their self-defining attributes to the demands of the situation. Similarly, using a prospective study design, Showers et al. (1998) followed a sample of college students over a 2-year period and examined how the content and structure of the self-concept changed with mood. Results showed that the content of students' self-representations changed in a way that was consistent with their experience of positive or negative events. Moreover, changes in the structural organization of the self-concept helped to counteract the experience of stress and negative mood. Overall, this study showed that the flexible use of structural features of the self-concept permits individuals to minimize the impact of negative self-knowledge made salient by life stress and, hence, to avoid the experience of negative mood.

In summary, the described empirical findings underscore the need for a theory that can account for the stability and malleability of individuals' self-concept (Epstein, 1973). Such a theory has been offered in the distinction between working self-concept and general self-concept (Markus & Wurf, 1987).

The Working Self-Concept and the General Self-Concept

Markus and Wurf (1987) introduced the term *working self-concept* to account for the situational malleability of individuals' self-representations. This construct is based on the observation that not all self-representations or identities that are part of the complete self-concept are equally accessible at any given time (Markus & Wurf, 1987). Rather, the working self-concept is best described "as a continually active, shifting array of accessible self-knowledge" (Markus & Wurf, 1987, p. 306). Which aspects of the working self-concept are activated depends on the demands of a given situation, interaction, role, or relationship.

This conceptualization raises the question whether all self-descriptors are equally affected by situational challenges, or whether some self-descriptors

might be more stable across situations? Several authors have pointed out that one of the most apparent differences among self-representations is their *centrality* or *importance* (Markus & Wurf, 1987). It has been suggested that the self-concept contains certain “core elements” (Schlenker & Weigold, 1989) or “salient identities” (Stryker, 1987), whereas other self-representations are more peripheral. To underscore this notion, Markus and Wurf (1987) stated that the “core” or “central” elements of the self-concept “are generally the most well elaborated and are presumed to affect information processing and behavior most powerfully” (p. 302). Implicit in this description is the assumption that the more important, central parts of the self-concept should display greater temporal and cross-situational stability. In contrast, the more peripheral parts should be more susceptible to situational influences and should, therefore, show less temporal and cross-situational stability (Markus & Wurf, 1987).

Although these arguments have great face validity, little research exists that has tested whether these hypotheses are supported by data. Thus, one objective of the current study was to examine the stability of central versus peripheral elements of adults’ role-specific self-representations. Role-specific self-representations appear to be particularly well suited for examining this question because it is reasonable to assume that the importance of self-attributes varies across self-representations. Focusing on role-specific self-representations rather than on the general self-concept also takes into account two other important issues. First, theorizing and research on the dynamic nature of the self-concept has brought about an awareness that self-representations cannot be fully understood without reference to the interpersonal context in which they are experienced (Noam, Powers, Kilkenny, & Beedy, 1990; Ogilvie & Ashmore, 1991). Second, a large body of developmental research has shown that across childhood, adolescence, and into young adulthood, self-representations develop in a predictable order, resulting in *role-specific multiple selves* (see Damon & Hart, 1988; Harter, 1998, 1999; Rosenberg, 1986). The emergence of role-specific selves raises the question whether the temporal stability of self-representations differs by interpersonal context. Moreover, with regard to adult development and aging it is also important to examine whether the temporal stability of adults’ self-representations differs across age groups and for men and women.

Age and Gender Differences in the Stability of Self-Representations

Although the overwhelming majority of studies on self-concept development have been conducted with children, adolescents, and young adults (i.e., college students), the last decade has seen important extensions into the adult life span (Diehl, Hastings, & Stanton, 2001; Freund & Smith, 1999b; Hooker & Kaus, 1994; Kling, Ryff, & Essex, 1997; Ryff, 1991). For example, research has shown that adults’ possible selves reflect their concerns with different developmental tasks and life domains (e.g., family, work, and health) and provide a context for the motivation, interpretation, and evaluation of the current self (Cross & Markus, 1991; Hooker & Kaus, 1994; Ryff, 1991; Smith & Freund, 2002). Other studies have examined the role of the self-concept as a coping resource in the aging process or in important life transitions (Freund & Smith, 1999b; Heidrich & Ryff, 1993; Kling et al., 1997; Troll & Skaff, 1997). Taken together, these studies have shown that the content and organization of adults’ self-representations are differentially related to psychological outcomes (e.g., Freund & Smith, 1999b; Kling et al., 1997).

Despite the increase in studies examining the role of the adult self-concept as it relates to life transitions and psychological well-being (Freund & Smith, 1999b; Kling et al., 1997; Smith & Freund, 2002), information on age differences in self-representations or age trajectories of self-concept related characteristics are fairly limited (Diehl et al., 2001; Labouvie-Vief, Chiodo, Goguen, Diehl, & Orwoll, 1995). Combined with a number of popular stereotypes about the self-concept in later adulthood (e.g., the assumption that self-representations become more stable with age), this has resulted in a situation where common-sense assumptions are accepted as the empirical reality. Since this study used a sample of young, middle-aged, and older adults, we were able to examine age differences in adults’ role-specific self-representations. In accordance with several theorists’ reasoning (Baumeister, 1998; Brandtstädter & Greve, 1994; Erikson, 1959) and consistent with some empirical findings (e.g., Troll & Skaff, 1997), we hypothesized that middle-aged and older adults’ self-representations would show greater temporal stability than young adults’ self-representations.

Although the developmental literature has shown important gender differences in self-concept in childhood and adolescence (for a summary, see Harter, 1999), findings in the adult literature have been more mixed. Some studies have shown gender

differences in the content of adults' self-representations (Diehl, Owen, & Youngblade, 2004), whereas other studies have failed to report such differences (Labouvie-Vief et al., 1995). Advocates of gender differences in adults' self-concept have argued that men's and women's self-representations can be expected to diverge because of different socialization experiences (Josephs, Markus, & Tafarodi, 1992). These different socialization experiences tend to result in more interdependent and connected self-conceptions for women and more independent and individualistic self-conceptions for men (Cross & Madson, 1997). The present study was particularly suited for considering gender differences in the stability of adults' self-representations, because the role-specific assessment of self-representations lends itself to a rigorous test of the socialization hypothesis. Because the overall literature on gender differences in temporal stability of the self-concept is rather ambiguous at this stage, no specific hypotheses were made.

Correlates and Predictors of Temporal Stability

Examining the temporal stability of individuals' self-representations also raises the question about correlates and predictors of stability. We addressed this issue in the following way. First, a review of the self-concept literature led to the conclusion that the temporal stability of a person's self-representation should be associated with other characteristics of the self-concept. In particular, three self-concept characteristics were identified as potential correlates of stability: self-concept clarity, self-esteem, and authenticity. Second, given the literature on the dynamic nature of the self-concept (e.g., Showers et al., 1998), we also postulated that positive and negative daily events would have an effect on the temporal stability of adults' self-representations.

Self-concept clarity is a structural aspect of the self-concept and is defined "as the extent to which the contents of an individuals' self-concept are clearly and confidently defined, internally consistent and temporally stable" (Campbell et al., 1996, p. 141). A number of studies have shown that individuals with a more clearly defined self-concept tend to fluctuate less in their self-descriptions and self-evaluations over time compared to individuals whose self-concept is less clearly defined (Baumgardner, 1990; Campbell et al., 1996; Donahue, Robins, Roberts, & John, 1993). Similarly, a large literature on self-esteem has shown that a low sense of self-worth tends to be associated with more conflicted attitudes about the self, a more

fragmented self-concept, and greater uncertainty about the self over time (Baumeister, 1993; Campbell & Lavelle, 1993; Donahue et al., 1993). Taken together, this suggests that both self-concept clarity and self-esteem should show significant associations with the temporal stability of adults' self-representations.

As a third correlate, we examined the influence of *role authenticity* on the stability of adults' self-representations. Authenticity of a role-specific self-representation can be defined as the extent to which the role or relationship permits a person to feel and act genuinely in that role and to freely express his or her true self (Deci & Ryan, 1995; Waterman, 1990). Theoretical discussions (Allport, 1955; Epstein, 1973; James, 1890/1963; Rogers, 1959) have emphasized that individuals' self-concept includes knowledge about actual, ideal, and undesired features of the self, and knowledge about the "real me" or "true self." Developmental research has shown that in middle childhood children start to understand that they possess certain characteristics and behaviors that are essential to their personal identity and that transcend specific contexts or roles (Damon & Hart, 1988; Harter, 1998, 1999). Consistent with this notion, Harter and Monsour (1992) documented a natural progression in adolescents' self-representations into role-specific multiple selves that were often contrasted against their "real me" representation. This "real me" representation is viewed as the essence of a person's identity and is a major indicator of a healthy personality (Deci & Ryan, 1995; Erikson, 1959, 1982; Rogers, 1959). Because this study assessed individuals' "real me" representation, we were able to generate a measure of authenticity and to examine its relevance as a correlate of temporal stability.

Finally, as an external influence on adults' self-representations, we examined the role of positive and negative daily events. Previous research has shown that the experience of negative daily events challenges individuals' self-conceptions and results in strategic reorganizations of the content of self-representations (Showers et al., 1998). Although this work has provided valuable insights into the dynamic nature of self-representations, it has also been limited in several ways. One limitation is that earlier studies focused on very age-homogeneous samples, namely college students. Therefore, it is not known whether the findings from this work generalize to other age groups, in particular to middle-aged and older adults. A second limitation is that previous studies mostly focused on the effects of negative events and that little is known about the potentially counteracting effects of positive daily events (for an exception, see Campbell,

Chew, & Scratchley, 1991). In everyday life, however, it seems plausible to assume that positive events tend to reinforce a person's self-representations, whereas negative events tend to challenge them. To test this assumption, the current study assessed the frequency and stressfulness of positive and negative daily events and examined their effects on the temporal stability of adults' self-representations.

In summary, the review of the literature led to the hypothesis that self-concept clarity, self-esteem, authenticity, and the frequency of positive daily events should be positively associated with the stability of adults' self-representations. In contrast, we hypothesized that the frequency of negative daily events should have a negative effect on the stability of self-representations.

METHOD

Participants

The study sample consisted of 188 adults (94 men and 94 women) from three age groups. Young adults ($n = 63$) ranged in age from 20 to 39 years ($M = 25.03$ years, $SD = 5.1$ years), middle-aged adults ($n = 62$) ranged from 40 to 59 years ($M = 47.83$ years, $SD = 5.44$ years), and older adults ($n = 63$) ranged from 60 to 88 years ($M = 71.92$ years, $SD = 7.22$). Men and women were about equally represented in each age group. The educational level was comparable across age groups with 14.6 years ($SD = 1.67$ years), 15.9 years ($SD = 2.36$ years), and 15.8 years ($SD = 3.38$ years) of schooling for young, middle-aged, and older adults, respectively. The majority of young adults (66.7%) were single, 19.0% were married, and 14.3% were divorced; the majority of middle-aged adults (72.6%) were married, 4.8% were single, and 22.5% were separated, divorced, or widowed. Most of the older adults (60.3%) were married, 28.6% widowed, and 9.5% separated or divorced. Middle-aged and older adults reported that they were satisfied with their lives (middle-aged adults: $M = 4.61$, $SD = .80$; older adults: $M = 4.89$, $SD = .77$; 1 = *Extremely unhappy*, 6 = *Extremely happy*) and in good health (middle-aged adults: $M = 5.19$, $SD = .76$; older adults: $M = 5.24$, $SD = .75$; 1 = *Very poor*, 6 = *Very good*). The majority of participants (87.2%) were Caucasian. The majority of retired older adults were actively involved in some kind of volunteer activity and some were part-time employed.⁵

⁵ For retired older adults we considered the role of volunteer to be equivalent to the role of a colleague/coworker or student.

Participants were recruited from three sources. The majority of young adults were students at the University of Colorado at Colorado Springs and volunteered in return for course credit. All middle-aged and older adults were community residing and were recruited through newspaper announcements and announcements at local civic organizations (e.g., senior center). None of the participants were financially compensated.

Measures

Role-Specific Self-Representations

An *identity* \times *feature matrix* (IFM) was used to assess participants' role-specific self-representations. This measure was administered in two steps. In Step 1, participants generated a list of 20 words that described them as a person in general. This list of self-descriptors was transcribed onto a matrix consisting of 20 rows and 5 columns. Each self-descriptor was filled in as a row header. The columns were already labeled with the names of five role-specific self-representations. These self-representations included "Me with my family," "Me with a good friend," "Me with fellow students/colleagues/co-volunteers," "Me with my significant other," and "My real me – regardless of who I'm with." Thus, the rows consisted of self-descriptors or *features*, whereas the columns consisted of self-representations or *identities*.

In Step 2, participants were asked separately for each self-representation to imagine themselves in that role or relationship, and determine how characteristic each of the self-descriptors was of them in that role. If the descriptor was very characteristic, they placed a 2 in the corresponding cell. If it was somewhat characteristic, they gave it a 1. If the descriptor was not characteristic at all, they rated it as 0. To control for order of administration effects, the order of the self-representations was counter-balanced across participants. At Time 2, participants rated the same set of self-descriptors that they had generated at Time 1 using the same rating scale.⁶

⁶ The detailed instructions for the administration of the IFM are available upon request.

Central Self-Descriptors

Central self-descriptors were operationally defined as those attributes that participants rated as being very characteristic of them (2); *peripheral self-descriptors* were defined as those rated with a 1 or a 0 (i.e., “somewhat characteristic of me” or “not characteristic of me”). At Time 1, coefficients of internal consistency (Cronbach’s α) ranged from .69 to .79 for the self with friends and the real-me representation, respectively. At Time 2, the coefficients of internal consistency ranged from .75 to .81 for the self with friends and the real-me representation, respectively. An index of *temporal stability* was calculated as the proportion of descriptors that received the same rating at Time 1 and Time 2. This index was calculated separately for each self-representation and across self-representations. In addition, the stability index was calculated for central and peripheral descriptors within and across self-representations.

Role Authenticity

Based on participants’ Time 1 self-representations, indices of role-specific authenticity were calculated. Specifically, authenticity was operationalized as the proportion of descriptors for which the rating for the role-specific self-representation was identical to the rating for the real me. That is, for each role-specific self-representation the authenticity score reflected the extent to which the role or relationship permitted a person to express his or her “real me” or “true self.” In addition to the role-specific authenticity scores, an overall authenticity score was calculated by summing the role-specific authenticity scores and dividing them by the number of roles.

Self-Concept Clarity

The Self-Concept Clarity Scale (SCCS; Campbell, 1990) was used to assess “the extent to which the contents of an individual’s self-concept are clearly and confidently defined, internally consistent, and temporally stable” (Campbell et al., 1996, p. 141). The SCCS consists of 12 items that are rated on a 5-point Likert-type scale (1 = *Strongly disagree*, 5 = *Strongly agree*), with a higher total score indicating a more clearly defined self-concept. Reliability of the SCCS has been reported in terms of internal consistency ($\alpha = .85$), and evidence for its convergent and construct validity have been reported (Campbell et al., 1996). The coefficient of internal consistency in the present study was .90.

Global Self-Esteem

Participants’ global self-esteem was assessed using the Rosenberg Self-Esteem Scale (SES; Rosenberg, 1965). The SES is a 10-item self-report questionnaire which measures the extent to which a person considers him- or herself worthy and holds a positive attitude toward his or her own person. Items are presented as a 4-point Likert-type scale (1 = *Strongly agree*, 4 = *Strongly disagree*) with a higher total score indicating higher self-esteem.

The SES is widely used in research with adults (Byrne, 1996) and its reliability has been examined in terms of internal consistency (Cronbach’s α ranging from .72 to .88) and in terms of test–retest reliability (1-week interval: $r = .82$; 7-month interval: $r = .63$). In addition, the SES has been evaluated with regard to its convergent and construct validity (for a summary, see Byrne, 1996). Cronbach’s α in the current study was .85.

Positive Affect and Negative Affect

The Positive Affect and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) was included to assess two primary dimensions of mood. Positive affect (PA) reflects the extent to which a person feels enthusiastic, active, and alert. High PA is indicative of a high energy level, full concentration, and pleasurable engagement, whereas low PA is indicative of sadness and lethargy. In contrast, negative affect (NA) is a general dimension of aversive mood states such as anger, contempt, disgust, guilt, fear, and nervousness, with low NA being a state of calmness and serenity.

The PANAS has a total of 20 items, 10 for PA and 10 for NA. Respondents rate each item on a 5-point Likert-type scale (1 = *Very slightly or not at all*, 5 = *Extremely*), indicating to what extent they felt this way in the past week. The psychometric properties of the PANAS have been examined with regard to internal consistency and test–retest reliability and in terms of construct validity (see Watson et al., 1988). The coefficients of internal consistency for PA and NA in the current study were .89 and .87, respectively.

Assessment of Daily Events

To assess the association between daily events and the temporal stability of adults’ self-representations, participants reported the frequency with which specific daily events had occurred during the week before each

of the two testing sessions. The events included in the checklist were the events most frequently endorsed by adults on the *daily hassles* (i.e., negative events) and *daily uplifts* (i.e., positive events) scales by Lazarus and Folkman (1989). The final checklist contained 26 negative events (e.g., “Misplaced or lost something,” “Had a health problem,” or “Disagreement with children”) and 26 positive events (e.g., “Completed an important task,” “Recovered from an illness,” “Received some good news”). In addition, several blank spaces were provided for participants to fill in any daily events that were not included in the checklist.

Separately for the list of positive and negative events, participants were instructed to think about the day-to-day events of the past week. For each day of the past week, the checklist provided a box for the participant to check if the event occurred. If an event had occurred, participants also rated on a 5-point Likert-type scale how stressful the event was (1 = *Not at all stressful*, 5 = *Very stressful*).

A total of four variables, aggregated across the 2 weeks preceding the two testing sessions, were derived from this measure: the total number of positive and negative events and the total stressfulness of positive and negative events. Since event frequency and stressfulness were highly correlated ($r = .89$ for positive events, $r = .96$ for negative events), an *event impact score* was calculated separately for positive and negative events by creating a unit-weighted composite of frequency and stressfulness. This event impact score was used to examine the associations between positive and negative events and temporal stability of self-representations.

Procedure

Participants attended two testing sessions that were scheduled about 4 weeks apart ($M = 28.4$ days,

$SD = 3.7$ days). Each session lasted 1 to 1½ hours and was conducted by a trained graduate research assistant in the Adult Development and Aging laboratory at the University of Colorado, Colorado Springs. Group size varied from 1 to 5 participants and a typical session included 3 participants. For both sessions, measures were administered in the following order: Personal data form, identity \times feature matrix, self-esteem scale (SES), daily events checklists, positive and negative affect scale, and self-concept clarity scale (SCCS).

RESULTS

Order of Administration Effects

A multivariate analysis of variance (MANOVA) was performed with order of administration as the independent variable and the temporal stability coefficients of the five self-representations as the dependent variables. Findings from this analysis indicated that there were no significant mean level differences between stability coefficients based on order of administration, $F(24, 622) = 0.97, p > .05$. This suggests that the stability of participants' IFM scores was not affected by the order in which the self-representations were presented.

Temporal Stability of Self-Representations

Table I displays the means and standard deviations of the stability coefficients for each role-specific self-representation across all self-attributes and separately for central and peripheral self-attributes. As can be seen in Table I, the mean stability coefficients across all self-attributes ranged from .75 to .80, indicating considerable stability of participants' role-specific self-representations over a 4-week period.

Table I. Temporal Stability of Self-Attributes

Self-representation	All self-attributes		Central self-attributes		Peripheral self-attributes		$t(187)$
	M	SD	M	SD	M	SD	
Self with family	.76 _a	.16	.79	.21	.63	.30	5.81***
Self with friend	.78	.14	.82	.20	.67	.26	5.79***
Self with colleagues	.79	.14	.80	.20	.70	.26	3.83***
Self with significant other	.75 _b	.21	.78	.26	.62	.31	5.98***
Real me	.80 _{a,b}	.17	.85	.19	.57	.31	9.51***
Across all representations	.78	.17	.81	.15	.64	.21	8.06***

Note. Means in the same column with the same subscript are significantly different at $p < .01$.

*** $p < .001$.

A repeated measures analysis of variance (ANOVA) showed a significant main effect of role, Wilks' $\lambda = .92$, $F(4, 184) = 4.13$, $p < .01$, $\eta^2 = .08$, suggesting that temporal stability varied by social role. *Post-hoc* tests showed that the self with family and the self with significant other representations were significantly less stable than the real-me representation, $t(187) = -2.74$ and $t(187) = -3.05$, respectively, both $ps < .01$.

To examine the hypothesis that the temporal stability of self-descriptors would vary depending on their centrality, paired-samples *t*-tests were performed comparing the stability of central descriptors to the stability of peripheral descriptors. To control for inflated Type I error, the Bonferroni corrected significance level was set at $p < .01$. Table I shows the findings resulting from these analyses.

As can be seen in Table I, for each self-representation and across all self-representations, central self-descriptors showed significantly greater temporal stability than peripheral self-descriptors (all $ps < .001$). Mean stability coefficients for central descriptors ranged from .78 for self with significant other to .85 for the real me. Mean stability coefficients for peripheral descriptors ranged from .57 for the real me to .70 for the self with colleagues.

Associations Between Stability of Self-Representations, Self-Concept Clarity, Self-Esteem, and Affect

Table II shows the zero-order correlations between the stability coefficient across all role-specific self-representations and self-concept clarity, self-esteem, PA, and NA. As can be seen in Table II, the stability coefficient showed significant positive correlations with self-concept clarity, self-esteem, and PA. This indicates that greater temporal stability of self-representations tended to be associated with greater clarity about the self-concept, higher self-esteem, and

greater PA. The correlation between the stability coefficient and NA was not significantly different from zero.

Age and Gender Differences in Stability of Self-Representations

A 3 (age group) \times 2 (gender) MANOVA was performed to examine age and gender differences in the temporal stability of adults' role-specific self-representations. This analysis yielded a significant multivariate main effect of age group, Wilks' $\lambda = .83$, $F(10, 356) = 3.54$, $p < .001$, $\eta^2 = .09$, and a significant multivariate Age Group \times Gender interaction, Wilks' $\lambda = .87$, $F(10, 356) = 2.50$, $p < .01$, $\eta^2 = .07$. The multivariate main effect of age group was due to significant univariate effects for self with family, self with friend, and self with significant other. The multivariate Age Group \times Gender interaction was due to a significant univariate interaction for self with significant other, $F(2, 182) = 5.13$, $p < .01$. Table III shows the means and standard deviations by age group.

Follow-up tests using Tukey's HSD method showed for self with family that middle-aged adults' self-representations were significantly more stable than young and older adults' self-representations. For self with friend, follow-up tests showed that young adults' self-representations were significantly more stable than middle-aged and older adults' self-representations. For self with significant other, *post-hoc* tests showed that, young and middle-aged adults' self-representations were significantly more stable than older adults' self-representations. This main effect, however, was qualified by a significant Age Group \times Gender interaction. Young adult women were significantly more stable ($M = .85$, $SD = .11$) in their self with significant other representation than young adult men ($M = .76$, $SD = .11$; $t(61) = -3.13$, $p < .01$), whereas middle-aged and older adult men and women did not differ significantly from each other.

Table II. Correlations of Temporal Stability with Self-Concept Clarity, Self-Esteem, and Affect ($N = 188$)

Variables	1	2	3	4	5
1. Temporal stability	–	.20**	.24**	.22**	–.06
2. Self-concept clarity		–	.69***	.45***	–.46***
3. Self-esteem			–	.58***	–.42***
4. Positive affect				–	–.35***
5. Negative affect					–

** $p < .01$; *** $p < .001$.

Table III. Temporal Stabilities of Role-Specific Self-Representations by Age Group

Self-representation	Young adults		Middle-aged adults		Older adults		<i>F</i> (2,182)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Self with family	.77	.12	.79 _a	.12	.72 _a	.20	5.79**
Self with friend	.84 _{a,b}	.12	.76 _a	.13	.75 _b	.16	7.07***
Self with colleagues	.81	.10	.79	.12	.76	.18	2.01
Self with significant other	.80 _a	.12	.77 _b	.20	.66 _{a,b}	.27	8.66***
Real me	.80	.13	.81	.16	.78	.20	0.62

Note. Means in the same row with the same subscript are significantly different from each other at $p < .05$ based on Tukey's HSD method. ** $p < .01$; *** $p < .001$.

Associations Between Stability and Authenticity of Self-Representations

Pearson product-moment correlations between stability coefficients and authenticity scores were calculated separately for each self-representation and across all self-representations to test the hypothesis that the temporal stability of adults' role-specific self-representations was positively associated with role authenticity. As can be seen in Table IV, stability and authenticity were positively correlated for all role-specific self-representations. Specifically, correlations between stability and role authenticity ranged from $r(188) = .33$ for self with colleagues to $r(188) = .53$ for self with significant other, all $ps < .001$. The correlation between temporal stability and authenticity across all role-specific self-representations was $r(188) = .50$, $p < .001$.

Predictors of Temporal Stability

To examine whether the stability of adults' role-specific self-representations could be predicted by a set of general self-concept characteristics and by the experience of daily events, we performed a hierarchical regression analysis. The criterion variable in this analysis was the overall stability index. In Step 1, we examined the effects of self-concept clarity, self-esteem, and the overall authenticity on the temporal stability of self-representations. In Step 2, we added the positive and negative event scores to the regression equation, to

Table IV. Associations Between Temporal Stability and Role Authenticity ($N = 188$)

Self-representation	Authenticity
Self with family	.41
Self with friends	.42
Self with colleagues	.33
Self with significant other	.53
Across all self-representations	.50

examine the effects of daily events on the stability of participants' self-representations. The findings from the regression analysis are shown in Table V.⁷

As can be seen in Table V, this analysis yielded significant effects for authenticity and positive daily events. Individuals who were more authentic in their role-specific self-representations and who experienced more positive daily events tended to have more stable self-representations over the 4-week period. Together the variables included in the regression equation accounted for 30.5% of the variance in temporal stability.

DISCUSSION

A great deal of theorizing has focused on the multidimensional and dynamic nature of the self-

Table V. Hierarchical Regression Analysis for Variables Predicting Temporal Stability of Self-Representations ($N = 188$)

Variable	<i>r</i>	β	<i>sr</i> _{<i>i</i>}	<i>R</i> ²
Step 1				
Self-concept clarity	.20	-.039	-.028	.253
Self-esteem	.24	.116	.083	
Authenticity	.50	.471***	.440	
Step 2				
Self-concept clarity	.20	-.043		.305
Self-esteem	.24	.115	.076	
Authenticity	.50	.463***	.429	
Positive events	.30	.168*	.143	
Negative events	.05	.110	.091	

Note. $\Delta R^2 = .052$ for Step 2, $p < .01$.

* $p < .05$; *** $p < .001$.

⁷ We also performed a control analysis in which we examined interactions between self-concept clarity, self-esteem, authenticity, and positive and negative events. None of the interaction terms reached the .05 level of statistical significance, suggesting that the self-concept variables did not moderate the effects of daily events.

concept (Baumeister, 1998; Harter, 1999; Higgins, 1996; Markus & Wurf, 1987). The present study adopted this theoretical framework and examined the temporal stability and authenticity of role-specific self-representations in a sample of young, middle-aged, and older adults. The study yielded several interesting findings.

First, adults' role-specific self-representations displayed a great deal of stability over the period of observation, suggesting that most of the study participants had fairly consistent self-representations within each social role. As expected, participants' real-me representation showed the highest overall stability, whereas the self with family and the self with significant other representation showed the lowest stabilities. Overall, the obtained stability coefficients were similar to stability estimates reported by other studies (Cairns, McWhirter, Duffy, & Barry, 1990; Engel, 1959; Freund & Smith, 1999a; Lintunen, Leskinen, Oinonen, Salinto, & Rahkila, 1995; Savin-Williams & Demo, 1984; Showers et al., 1998) and similar in size to stabilities that have been reported for trait measures of personality (see McCrae & Costa, 2003). This suggests that role-specific self-representations have an enduring character in adulthood and may only be revised if strong counterevidence emerges (Freund & Smith, 1999a; Mortimer et al., 1982). Compared to earlier studies, the present study is unique because we examined the temporal stability of self-representations across a wider age range, thus extending the generalizability of previous findings to middle-aged and older adults.

Second, consistent with theoretical elaborations on the structure of the "working self-concept" (Markus & Wurf, 1987; Schlenker & Weigold, 1989; Stryker, 1987), results from the current study showed that central self-descriptors exhibited significantly greater stability over the 4-week period than peripheral self-descriptors. Thus, consistent with identity theory (Erikson, 1959, 1982; Waterman & Archer, 1990) and consistent with other empirical work (Markus & Kunda, 1986), this finding supports the notion that more identity-relevant self-attributes are temporally more stable than less identity-relevant attributes. Because several theorists (e.g., Brandtstädter & Greve, 1994; Epstein, 1973; Troll & Skaff, 1997) have emphasized the continuity and permanence function of the self-concept across the adult life span, the findings of the current study suggest that this function may be mostly fulfilled by central characteristics of the self. Although several studies with college students have shown that central self-attributes are accessed faster in

memory than peripheral self-attributes (Markus, 1977), to our knowledge this is the first study with adults that has documented that central and peripheral attributes differ in stability over time.

Third, consistent with extensive theorizing (Epstein, 1973; Erikson, 1959, 1982; Rogers, 1959; Suh, 2002), the temporal stability of adults' self-representations was positively associated with self-concept clarity, self-esteem, and PA, and negatively associated with NA. This means, greater temporal stability tended to be accompanied by a more clearly defined self-concept, a greater sense of self-worth, and more PA. Although the correlational nature of the data does not permit any conclusions about cause and effect, this finding suggests that a certain degree of self-concept stability is desirable for adults' psychological well-being (Roberts & Donahue, 1994; Suh, 2002). These findings, however, were not consistent with views claiming that a flexible self-concept is inherently more adaptive in a world that is characterized by very diverse role demands (see Gergen, 1991). In contradiction to postmodern theorizing, the role-specific stability coefficients and their relations to self-concept clarity, self-esteem and affect supported the more traditional view that self-consistency over time is an indicator of a healthy personality (Donahue et al., 1993; Mortimer et al., 1982; Rogers, 1959; Swann, 1987).

Fourth, in contrast to the widely held assumption that advancing age is associated with a "crystallization" of a person's self-concept, findings from this study showed that the mean stabilities of older adults' role-specific self-representations tended to be lower than the mean stabilities of young and middle-aged adults (see Table III). Specifically, compared to young adults, older adults' mean stability was significantly lower for self with friend and self with significant other. Compared to middle-aged adults, older adults' mean stability was significantly lower for self with family and self with significant other. Although these findings appear to be counterintuitive, they are consistent with theorizing that, because of the lack of strong cultural norms, later adulthood provides the opportunity to redefine social roles (Rosow, 1985) and to be more selective with regard to social relationships (Carstensen, 1993).

As hypothesized, authenticity and temporal stability of participants' role-specific self-representations were positively related (see Table IV). This suggests that the temporal stability of self-representations is influenced by the extent to which the role or relationship permits a person to feel and act genuinely

and express his or her true self freely. This result is consistent with findings reported by Roberts and Donahue (1994) and Sheldon, Ryan, Rawsthorne, and Ilardi (1997). This convergence of findings is noteworthy, because unlike questionnaire measures of authenticity (e.g., Sheldon et al, 1997), our measure was not obtained by direct self-report but indirectly by assessing the overlap of each role-specific self-representation with a person's "real me" or "true self" representation. Thus, participants were not aware that the authenticity of their self-representations was assessed and, therefore, our measure may have been less susceptible to reactivity bias. Moreover, this result is consistent with propositions of self-determination theory, suggesting that authenticity is a major building block of a stable self-concept and one of the basic constituents of true self-esteem (Harter, 1997, 2002; Deci & Ryan, 1995; Ryan, 1993).

Additional analyses also showed that greater authenticity tended to be associated with a more clearly defined general self-concept, greater self-esteem, and more PA. These associations are consistent with findings reported by Harter, Waters, Whitesell, and Kastelic (1998) and Sheldon et al. (1997) and provide independent support for the notion that authentic and self-determined behavior constitutes an important part of a healthy personality (Allport, 1955; Rogers, 1959; Ryan & Deci, 2000). In accordance with Deci and Ryan's (1995) theorizing, the findings of the current study place the concept of authenticity in a nomological network of constructs that are direct or indirect indicators of an actualized and fully functioning person (Rogers, 1959).

Finally, multiple regression analyses were used to examine predictors of temporal stability. Specifically, we examined the importance of self-concept clarity, self-esteem, authenticity, and positive and negative daily events in predicting the temporal stability of adults' self-representations. Two significant predictors emerged from this analysis, namely authenticity and positive events. Greater authenticity and more positive daily events were associated with greater temporal stability.

Caveats

Several limitations of the study need to be acknowledged. First, this study examined the temporal stability of adults' self-representations over a relatively short period of time and, therefore, may be biased in favor of greater stability. Findings from several studies have shown that stability coefficients

for personality traits, such as extraversion or neuroticism, vary systematically with the length of the retest interval (Roberts & DelVecchio, 2000). Thus, it is reasonable to suspect that the same principle also affects the stability of self-representations, although subsequent studies in our laboratory have shown similar stabilities for 3-month and 6-month intervals.

Second, although the testing instructions emphasized that participants should include positive and negative attributes in their self-descriptions, it is well documented that individuals tend to describe themselves in mostly favorable terms (i.e., positivity bias). This positivity bias might have limited the range of self-descriptors that individuals spontaneously listed as part of the IFM task and may have biased participants' ratings further in the direction of stability. An examination of the frequency of ratings showed that participants, on average, rated between 10 and 15% of their self-descriptors as "not characteristic at all" (0), about 25% as "somewhat characteristic" (1), and between 60 and 65% as "very characteristic" (2).

Third, the design of this study confounds the effects of age and cohort. Thus, it cannot be ruled out that part of the observed age differences may be due to differences in cohort. This limitation can only be addressed with a cohort-sequential design (Schaie, 1983), which permits the estimation of cohort effects.

CONCLUSION

The present research contributes to the self-concept literature in adulthood in several ways. First, consistent with current theorizing and in contrast to most studies on adults' self-concept, the present research assessed young, middle-aged, and older adults' self-concept not in a global way, but in terms of role-specific self-representations. Findings showed that the selected role-specific self-representations exhibited substantial temporal stability and that temporal stability was associated with a number of positive outcomes. Second, this study also drew on the notion of the working self-concept and showed that central self-descriptors were significantly more stable over time than peripheral self-descriptors. These findings complement research that has investigated the saliency of self-attributes with regard to their accessibility and availability for information processing (for a review, see Markus & Wurf, 1987). Third, examination of age differences revealed that, contrary to general beliefs, older adults' self-representations were not more stable than young and middle-aged adults' self-representations. Instead, older adults' self-representations were

significantly less stable in three out of five social roles. Fourth, assessment of the authenticity of adults' role-specific self-representations showed consistent and positive associations between authenticity and temporal stability. This suggests that the extent to which a person can feel and act genuinely and in accordance with his or her true self in a given role or relationship is linked to the stability of the self-concept (Deci & Ryan, 1995; Harter, 1997). Finally, besides authenticity, the number of positive daily events was a significant predictor of temporal stability of self-representations. This finding suggests that the stability of role-specific representations is, at least in part, influenced by daily experiences and that the experience of positive events, in particular, helps to maintain a consistent self-concept.

ACKNOWLEDGMENT

Completion of this article was supported by a grant from the National Institute on Aging, R55 AG16107-01. Parts of the reported research were included in the master's theses of Laurie M. Jacobs and Catherine T. Hastings (supervisor: Manfred Diehl).

REFERENCES

- Allport, G. W. (1955). *Becoming: Basic considerations for a psychology of personality*. New Haven, CT: Yale University Press.
- Baumeister, R. (1993). Understanding the inner nature of low self-esteem: Uncertain, fragile, protective, and conflicted. In R. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard* (pp. 201–218). New York: Plenum.
- Baumeister, R. F. (1998). The self. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., pp. 680–740). Vol. 1 New York: McGraw-Hill.
- Baumgardner, A. H. (1990). To know oneself is to like oneself: Self-certainty and self-affect. *Journal of Personality and Social Psychology*, 58, 1062–1072.
- Brandstädter, J., & Greve, W. (1994). The aging self: Stabilizing and protective processes. *Developmental Review*, 14, 52–80.
- Byrne, B. M. (1996). *Measuring self-concept across the life span: Issues and instrumentation*. Washington, DC: American Psychological Association.
- Cairns, E., McWhirter, L., Duffy, U., & Barry, R. (1990). The stability of self-concept in late adolescence: Gender and situational effects. *Personality and Individual Differences*, 11, 937–944.
- Campbell, J. D. (1990). Self-esteem and clarity of the self-concept. *Journal of Personality and Social Psychology*, 59, 538–549.
- Campbell, J. D., Chew, B., & Scratchley, L. S. (1991). Cognitive and emotional reactions to daily events: The effects of self-esteem and self-complexity. *Journal of Personality*, 59, 473–505.
- Campbell, J. D., & Lavallee, L. F. (1993). Who am I?: The role of self-concept confusion in understanding the behavior of people with low self-esteem. In R. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard* (pp. 3–20). New York: Plenum.
- Campbell, J. D., Trapnell, P. D., Heine, S. J., Katz, I. M., Lavallee, L. F., & Lehman, D. R. (1996). Self-concept clarity: Measurement, personality correlates and cultural boundaries. *Journal of Personality and Social Psychology*, 70, 141–156.
- Carstensen, L. L. (1993). Motivation for social contact across the life span: A theory of socioemotional selectivity. In J. E. Jacobs (Ed.), *Nebraska symposium on motivation 1992: Vol. 40. Developmental perspectives on motivation* (pp. 209–254). Lincoln, NE: University of Nebraska Press.
- Cheek, J. M., & Hogan, R. (1983). Self-concepts, self-presentations, and moral judgments. In J. Suls, & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (pp. 249–273). Vol. 2 Hillsdale, NJ: Erlbaum.
- Cross, S., & Markus, H. (1991). Possible selves across the life span. *Human Development*, 34, 230–255.
- Cross, S. E., & Madson, L. (1997). Models of the self: Self-construals and gender. *Psychological Bulletin*, 122, 5–37.
- Damon, W., & Hart, D. (1988). *Self-understanding in childhood and adolescence*. New York: Cambridge University Press.
- Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York: Plenum.
- Diehl, M., Hastings, C. T., & Stanton, J. M. (2001). Self-concept differentiation across the adult life span. *Psychology and Aging*, 16, 643–654.
- Diehl, M., Owen, S. K., & Youngblade, L. M. (2004). Agency and communion attributes in adults' spontaneous self-representations. *International Journal of Behavioral Development*, 28, 1–15.
- Donahue, E. M., Robins, R. W., Roberts, B. W., & John, O. P. (1993). The divided self: Concurrent and longitudinal effects of psychological adjustment and social roles on self-concept differentiation. *Journal of Personality and Social Psychology*, 64, 834–846.
- Engel, M. (1959). The stability of the self-concept in adolescence. *Journal of Abnormal and Social Psychology*, 58, 211–215.
- Epstein, S. (1973). The self-concept revisited – or a theory of a theory. *American Psychologist*, 28, 404–416.
- Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues*, 1, 18–164.
- Erikson, E. H. (1982). *The life cycle completed*. Norton: New York.
- Freund, A. M., & Smith, J. (1999a). Temporal stability of older persons' spontaneous self-definition. *Experimental Aging Research*, 25, 95–107.
- Freund, A. M., & Smith, J. (1999b). Content and function of the self-definition in old and very old age. *Journal of Gerontology: Psychological Sciences*, 54B, P55–P67.
- Gergen, K. J. (1991). *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.
- Harter, S. (1997). The personal self in social context: Barriers to authenticity. In R. D. Ashmore, & L. Jussim (Eds.), *Self and identity: Fundamental issues. Rutgers series on self and identity* (pp. 81–105). Vol. 1 New York: Oxford University Press.
- Harter, S. (1998). The development of self-representations. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (5th edn., pp. 553–617). New York: Wiley.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford.
- Harter, S. (2002). Authenticity. In C. R. Snyder, & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 382–394). New York: Oxford University Press.
- Harter, S., & Monsour, A. (1992). Developmental analysis of conflict caused by opposing attributes in the adolescent self-portrait. *Developmental Psychology*, 28, 251–260.
- Harter, S., Waters, P. L., Whitesell, N. R., & Kestelic, D. (1998). Level of voice among female and male high school students: Relational context, support, and gender orientation. *Developmental Psychology*, 34, 892–901.
- Heidrich, S. M., & Ryff, C. D. (1993). Physical and mental health in later life: The self-system as mediator. *Psychology and Aging*, 8, 327–338.

- Higgins, E. T. (1996). The "self digest": Self-knowledge serving self-regulatory functions. *Journal of Personality and Social Psychology, 71*, 1062–1083.
- Hooker, K., & Kaus, C. R. (1994). Health-related possible selves in young and middle adulthood. *Psychology and Aging, 9*, 126–133.
- James, W. (1963). *Psychology*. New York: Fawcett (original work published 1890).
- Josephs, R. A., Markus, H. R., & Tafarodi, R. W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology, 63*, 391–402.
- Kling, K. C., Ryff, C. D., & Essex, M. J. (1997). Adaptive changes in the self-concept during a life transition. *Personality and Social Psychology Bulletin, 23*, 981–990.
- Labouvie-Vief, G., Chiodo, L. M., Goguen, L. A., Diehl, M., & Orwoll, L. (1995). Representations of self across the life span. *Psychology and Aging, 10*, 404–415.
- Lazarus, R. S., & Folkman, S. (1989). *Hassles and uplift scales: Manual and test booklet*. Palo Alto, CA: Mind Garden.
- Lintunen, T., Leskinen, E., Oinonen, M., Salinto, M., & Rahkila, P. (1995). Change, reliability, and stability in self-perceptions in early adolescence: A four-year follow-up study. *International Journal of Behavioral Development, 18*, 351–364.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology, 35*, 63–78.
- Markus, H., & Kunda, Z. (1986). Stability and malleability of the self-concept. *Journal of Personality and Social Psychology, 51*, 858–866.
- Markus, H., & Wurf, E. (1987). The dynamic self-concept: A social psychological perspective. *Annual Review of Psychology, 38*, 299–337.
- McCrae, R. R., & Costa, P. T. Jr. (2003). *Personality in adulthood: A five-factor theory perspective*. New York: Guilford.
- Mortimer, J. T., Finch, M. D., & Kumka, D. (1982). Persistence and change in development: The multidimensional self-concept. In P. B. Baltes, & O. G. Brim Jr. (Eds.), *Life-span development and behavior* (pp. 263–313). Vol. 4 New York: Academic Press.
- Noam, G. G., Powers, S. I., Kilkenny, R., & Beedy, J. (1990). The interpersonal self in life-span developmental perspective: Theory, measurement, and longitudinal case analyses. In P. B. Baltes, D. L. Featherman, & R. M. Lerner (Eds.), *Life-span development and behavior* (pp. 59–104). Vol. 10 Hillsdale, NJ: Erlbaum.
- Nurius, P. S., & Markus, H. R. (1990). Situational variability in the self-concept: Appraisals, expectancies, and asymmetries. *Journal of Social and Clinical Psychology, 9*, 316–333.
- Ogilvie, D. M., & Ashmore, R. D. (1991). Self-with-other representation as a unit of analysis in self-concept research. In R. C. Curtis (Ed.), *The relational self: Theoretical convergences in psychoanalysis and social psychology* (pp. 282–314). New York: Guilford.
- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin, 126*, 3–25.
- Roberts, B. W., & Donahue, E. M. (1994). One personality, multiple selves: Integrating personality and social roles. *Journal of Personality, 62*, 199–218.
- Rogers, C. (1959). A theory of therapy, personality, and interpersonal relationships, as developed in the client-centered framework. In S. Koch (Ed.), *Psychology: A study of science: Vol. 3. Formulations of the person and the science* (pp. 184–256). New York: McGraw-Hill.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rosenberg, M. (1986). Self-concept from middle childhood through adolescence. In J. Suls, & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (pp. 182–205). Vol. 3 Hillsdale, NJ: Erlbaum.
- Rosow, I. (1985). Status and role change through the life cycle. In R. H. Binstock, & E. Shanas (Eds.), *Handbook of aging and the social sciences* (pp. 62–93). Vol. 2 New York: Van Nostrand Reinhold.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy, and the self in psychological development. In J. Jacobs (Ed.), *Nebraska symposium on motivation: Vol. 40. Developmental perspectives on motivation* (pp. 1–56). Lincoln, NE: University of Nebraska Press.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*, 68–78.
- Ryff, C. D. (1991). Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging, 6*, 286–295.
- Savin-Williams, R. C., & Demo, D. H. (1983). Situational and transsituational determinants of adolescent self-feelings. *Journal of Personality and Social Psychology, 44*, 824–833.
- Savin-Williams, R. C., & Demo, D. H. (1984). Developmental change and stability in adolescent self-concept. *Developmental Psychology, 20*, 1100–1110.
- Schaie, K. W. (1983). What can we learn from the longitudinal study of adult psychological development. In K. W. Schaie (Ed.), *Longitudinal studies of adult psychological development* (pp. 1–19). New York: Guilford.
- Schlenker, B. R., & Weigold, M. F. (1989). Goals and the self-identification process: Constructing desired identities. In L. A. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 243–290). Hillsdale, NJ: Erlbaum.
- Sheldon, K. M., Ryan, R. M., Rawsthorne, L. J., & Ilardi, B. (1997). Trait self and true self: Cross-role variation in the big-five personality traits and its relations with psychological authenticity and subjective well-being. *Journal of Personality and Social Psychology, 73*, 1380–1393.
- Showers, C. J., Abramson, L. Y., & Hogan, M. E. (1998). The dynamic self: How the content and structure of the self-concept change with mood. *Journal of Personality and Social Psychology, 75*, 478–493.
- Smith, J., & Freund, A. M. (2002). The dynamics of possible selves in old age. *Journal of Gerontology: Psychological Sciences, 57B*, P492–P500.
- Stryker, S. (1987). Stability and change in self: A structural symbolic interactionist perspective. *Social Psychology Quarterly, 50*, 44–55.
- Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology, 83*, 1378–1391.
- Swann, W. B. Jr. (1987). Identity negotiation: Where two roads meet. *Journal of Personality and Social Psychology, 53*, 1038–1051.
- Troll, L. E., & Skaff, M. M. (1997). Perceived continuity of self in very old age. *Psychology and Aging, 12*, 162–169.
- Waterman, A. S. (1990). Personal expressiveness: Philosophical and psychological foundations. *Journal of Mind and Behavior, 11*, 47–74.
- Waterman, A. S., & Archer, S. L. (1990). A life-span perspective on identity formation: Developments in form, function, and process. In P. B. Baltes, & D. L. Featherman (Eds.), *Life-span development and behavior* (pp. 29–57). Vol. 10 Hillsdale, NJ: Erlbaum.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.