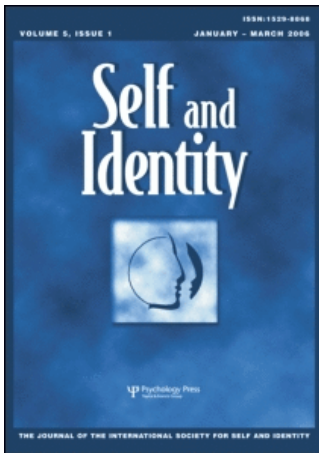


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Broadening the research on self-esteem: A new scale for longitudinal studies

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Broadening the Research on Self-Esteem: A New Scale for Longitudinal Studies

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When interest in self-esteem exploded in the 1980s, many longitudinal studies were already under way and thus did not administer self-esteem measures. Consequently, not much is known about the developmental course of self-esteem during adulthood. In order to facilitate life-span research using existing longitudinal studies, a new self-esteem scale (CPI-SE) was derived from the California Psychological Inventory. Study 1 documented the internal consistency and test–retest reliability of the CPI-SE, as well as its convergent validity by comparing it to three commonly used measures of self-esteem. Study 2 examined the nomological network of the CPI-SE by relating it to interviewer ratings of self-esteem, affect, coping style, social skills, intelligence, and physical attractiveness, obtained with the California Adult Q-Set. Together, these two studies provide evidence for the construct validity of the CPI-SE.

Despite the overwhelming number of studies that have been done on self-esteem, there is a surprising lack of longitudinal data, especially as it pertains to the nature and developmental course of self-esteem during adulthood. Most research on self-esteem has focused almost exclusively upon the years before and during adolescence (Block & Robins, 1993; Coopersmith, 1967; Rosenberg, 1965; Zimmerman, Copeland, Shope, & Dielman, 1996). As Demo (1992) concluded, “the research to date is extremely lopsided, with 12- and 13-year-olds forming the floor and 18- to 22-year-olds representing the ceiling of our convenience samples” (p. 323). With few exceptions, the studies that do exist on adult self-esteem are cross-sectional in design (e.g., Jaquish & Ripple, 1981; Lall, Jain, & Johnson, 1996; Robins, Trzesniewski, Tracy, Gosling, & Potter, 2002; Ryff, 1989). While these studies show us a general picture of mean-level differences in self-esteem among different age groups, little is known about the stability and change of self-esteem *within* individuals across their

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lifespan. This lack of longitudinal data severely hampers the ability of researchers to apply a life-span perspective to self-esteem, and likewise hampers their ability to determine whether or not all adults follow the same developmental path with regard to self-esteem, or whether different types of self-esteem trajectories exist.

The lack of longitudinal data on adult self-esteem also hinders the ability of researchers to examine cohort differences in self-esteem development. Examining differences in the self-esteem trajectories of various cohorts is important because the public's conception of self-esteem has changed dramatically over the last several decades. While self-esteem was a concept of little importance in the 1950s and 1960s, it has since become an object of intense focus on the part of both parents and educators. During the 1980s and 1990s, high self-esteem was promoted by the dominant culture as not only a desirable goal, but a prerequisite to normal psychological functioning (Mecca, Smelser, & Vasconcellos, 1989). It would be a valuable and interesting line of research to compare the developmental course of self-esteem in individuals who have been studied from the 1950s to the present. The use of CPI-SE in longitudinal research on self-esteem may help illustrate the similarities and differences in levels of self-esteem over time.

A meta-analysis performed by Twenge and Campbell (2001) suggests cohort differences, with a steady increase in the self-esteem scores of college students from the 1960s to the 1990s. Longitudinal data (i.e., for the same individuals) during this historical period would add to such findings by giving us a more holistic picture of differences in self-esteem development among various cohorts and thus help gain insight into the extent to which socio-cultural expectations about self-perception influence self-esteem.

An examination of longitudinal data is essential to gaining a life-span perspective on self-esteem. Unfortunately, most long-term longitudinal studies were begun before self-esteem was recognized as an important concept. Thus, many of these studies did not administer self-esteem scales to their participants (Rosenberg, 1965). The California Psychological Inventory (CPI; Gough, 1957, 1987; Gough & Bradley, 1996), on the other hand, has been used in many longitudinal studies but does not yet include a scale to measure self-esteem. In this paper, we propose the construction of a self-esteem scale derived from the CPI in order to facilitate life-span research on self-esteem.

Originally published by Gough in 1957, the CPI was constructed to assess various aspects of personality functioning in such a way that a "true-to-life and useful picture" of the person taking the test may emerge (Gough & Bradley, 1996, p. 1). The 20 standard CPI scales measure an everyday, "folk" concept of personality by asking test-takers to agree or disagree with various statements concerning "behavior patterns, customary feelings, opinions, and attitudes about social, ethical, and family matters" (Megargee, 1972, p. 5), and a number of additional special-purpose scales have been developed for research purposes (e.g., Jay & John, 2004; Wink & Gough, 1990).

One of the great advantages of the CPI is its widespread usage. Since the development of the very first scales in 1948, it has been translated into over twenty different languages and has been one of the most widely used measures in psychological research. In particular, the CPI has been used in several longitudinal studies of adult development (Block, 1971; Cartwright & Wink, 1994; Diehl, Elnick, Bourbeau, & Labouvie-Vief, 1998; Helson, Stewart, & Ostrove, 1995; Stewart & Vandewater, 1999; Twisk, Snel, Kempor, & Van Mechelen, 1998; Wink & Dillon, 2003). These studies of adult development—some of which span 50 years or more—have greatly enhanced our understanding of the developmental course of many life

and personality variables, but the developmental course of self-esteem has yet to be addressed.

The goal of the present research is to introduce a new self-esteem scale that can be scored from the California Psychological Inventory. In Study 1, we examined the reliability and convergent validity of the new CPI Self-Esteem Scale (CPI-SE) compared to three commonly used self-esteem scales. In Study 2, we used interviewer ratings of participants in order to test hypotheses about the nomological network of the CPI-SE in seven theoretically relevant domains.

Defining Global Self-esteem

How should self-esteem be defined and measured? A remarkable diversity of definitions of self-esteem has emerged over time. An understanding of the evolving definitions of self-esteem is essential because its measurement is inextricably linked to its conceptualization. Thus, we began our scale construction process with a review of the definitions of self-esteem.

Sources of self-esteem. Definitions of self-esteem differ in the sources from which individuals may derive their self-esteem. Our review of the literature suggested four kinds of sources that have been postulated by theorists. Specifically, individuals may evaluate their self-worth against: (1) personal standards of competence; (2) how others judge them; (3) how they judge others; and (4) other possible selves. The preceding four sources of deriving self-worth are illustrated in the following four definitions of self-esteem.

First, James (1890/1950) conceptualized self-esteem as being equivalent to the ratio of success over pretensions. That is, when achievements and goals are in harmony, self-esteem is high. In a sense, individuals compare their personal competence to a *personal standard* or a preset criterion.

Second, symbolic interactionists such as Cooley (1902/1964) and Mead (1934) put forward one of the first models of self-esteem that emphasized social acceptance. The notion of a “looking-glass self” suggested that the self-concept is a reflection of others’ appraisals. Self-esteem is thus derived from the perceptions and reactions of those around us. This basic idea is central to Leary and Downs’ (1995) more recent sociometer model, which proposes that self-esteem functions as an internal measure of social value and inclusion. In all these models, then, self-esteem is derived from the way *others judge the self*.

Some researchers see competence and social-acceptance co-existing as dimensions of self-esteem. For example, White (1963) postulated that people derive self-esteem from two sources: an internal source of a sense of accomplishment and an external source of affirmation from others. Recently, Tafarodi and Swann (1995, 2001) argued for two dimensions of global self-esteem (they renamed them as self-competence and self-liking) and developed a measure to tap the two dimensions empirically (see also Tafarodi & Milne, 2002).

Third, Festinger (1954) postulated that people possess a “drive for self-evaluation . . . based on comparison with other persons” (p. 138). According to this social-comparison perspective, individuals compare their own attributes and accomplishments with the way they *perceive other people*.

In addition to comparing the self to others, other selves are possible. Albert (1977) postulated “a process of comparison that goes on only within a single individual [who] might compare a description of himself now with a description of himself in

the past or future” (p. 485). Recent evidence shows that people do compare themselves to their past selves (e.g., Wilson & Ross, 2001). Thus, individuals may also derive their self-esteem by comparing their current self to their past selves or future selves.

Fourth, Rogers (1961) defined self-esteem as the personal judgment of worthiness, or how much an individual accepts him- or herself. When there is good correspondence between the actual self and the ideal self, self-esteem is high. Thus, self-esteem is a function of the congruence between how we aspire to be and our actual experience. Building on this, Higgins’ (1987) self-discrepancy theory emphasized the importance of discrepancies between the actual self and the ideal self or the actual self and the ought self. Thus, from this perspective, individuals may derive their self-esteem from comparing themselves with various *other possible selves*.

Affective vs. cognitive evaluations. In our review of the literature, we also found that self-esteem is used to refer to both affective and cognitive evaluations of the self. Some theorists have viewed self-esteem as the “feeling thermometer” of the self. For example, James (1890/1950) described self-esteem as: “a certain average tone of self-feeling which each one of us carries about with him, and which is independent of the objective reasons we may have for satisfaction and discontent” (p. 306). Likewise, Brown (1998) has referred to self-esteem as: “the way people generally feel about themselves” (p. 191). In a sense, self-esteem is defined as the totality of positive and negative feelings for oneself that is separate from specific self-evaluations.

In contrast, other theorists have viewed self-esteem as the result of cognitive appraisals of oneself. For example, Coopersmith (1967) defined self-esteem as a set of “evaluative attitudes toward the self” (p. 2). In this sense, self-esteem is defined as the cognitive appraisal of one’s personal worth, potentially across a number of sources.

An Integrated View of Self-esteem

In our review of the literature, we found that most major theories of self-esteem do not have a corresponding measure. Measures of self-esteem have been derived from different theories and conceptualizations of self-esteem, thus making it equivocal as to which definition of self-esteem we should go by in deriving a new measure of self-esteem from CPI.

Nevertheless, most self-esteem researchers utilize an integrated view of self-esteem, including both affective and cognitive-evaluative aspects across various sources of self-esteem in their definition. For example, Rosenberg (1965) defined self-esteem as the sum total of one’s self-evaluations of worthiness and underlying positive and negative feelings for the self. Thus, scores on such a self-esteem measure represent self-worth that is derived from different sources and combined subjectively by the individual.

The Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965) has been by far the most widely used definition and measure of global self-esteem. For example, the number of citations for the Rosenberg Self-Esteem Scale exceeds 3000, that is, at least five times greater than for any other self-esteem scale over the 13 years from 1991 to 2004 (Kwan & Mandisodza, in press). The RSE has become the most accepted scale for tapping global self-esteem and as the convergent validity criterion in the construct validation of new self-esteem scales (e.g., Robins, Hendin, & Trzesniewski, 2001).

The major goal of the present research was to derive a global self-esteem scale for the CPI so that future research can capitalize on the benefits of existing longitudinal CPI data. After very careful consideration and review of the CPI items, we propose that a logical starting point is to derive a scale that is as similar as possible to the RSE.¹ Future research could then connect findings obtained with the new CPI-SE directly with those that exist for the RSE in the literature.

Item Selection

Because the CPI-SE scale is scored from the CPI, our original item pool consisted of the 462 items that are found in the 1987 version of the California Psychological Inventory. We used the item list from the 1987 version of the CPI because it is only slightly shorter than the 1957 edition and thus includes virtually all of the items potentially relevant to self-esteem and administered by longitudinal researchers since the 1950s.

Two of the authors independently selected self-esteem items from the CPI, taking great care to ensure that the selected items reflected global notions of self-worth, just as the Rosenberg Self-Esteem Scale does. Although most CPI items had little to do with global self-esteem, a small number of items were clearly relevant. The first author independently selected 15 items out of the original 462 and the second author independently selected 12 items out of the original 462. There was considerable overlap: all 12 of the items chosen by the second author overlapped with the items chosen by the first author, and the agreement between the two experts was substantial ($\phi = .89$). All 12 of these CPI-SE items can be scored from the 1957 and 1987 editions of the CPI, and 10 items can be scored from the 1996 revised edition of the CPI.

Note that 3 of these 12 selected items seem to refer broadly to positive affect (133, 245, 416; see Table 1). We included these 3 positive affect items in the initial pool because some commonly used global self-esteem measures include positive affect items along with items that refer more explicitly to the self. For example, Coopersmith's (1967) Self-Esteem Inventory includes positive affect items (e.g., "I'm pretty happy" and "I'm never unhappy (R)"). Some portion of the variance in these positive affect items is likely attributable to self-referent affect (e.g., "I am happy with myself or the way I am"). However, it is not clear how much. Furthermore, it is not clear whether items that tap positive affect and items that tap self-referent affect are independent from each other and whether these two types of items form a single unified factor empirically.

Study 1: Reliability and Convergent Validity

Using two large undergraduate samples, Study 1 addressed five aspects of scale construction. First, to verify whether all of the 12 CPI-SE items belong to the self-esteem domain, in particular the 3 positive affect items, we correlated each of the 12 CPI-SE items with the RSE. Second, to examine the factor structure of the CPI-SE, we conducted a series of confirmatory factor analyses (CFA) testing whether these 3 positive affect items and the other 9 core self-esteem items form a single CPI self-esteem factor or if they form two independent factors. Third, to examine convergent validity, the CPI-SE was administered along with three commonly used self-esteem scales: the Rosenberg Self-Esteem Scale (RSE; Rosenberg, 1965), the Self-Acceptance Scale (Ryff, 1989), and the Single-Item Self-Esteem Scale

TABLE 1 Factor Loadings of the CPI-SE Items and their Correlations with the Rosenberg Self-Esteem Scale in Study 1

No.	Initially selected CPI-SE items	Correlation with RSE			Factor loading		
		A	B	Combined	A	B	Combined
<i>Nine core self-esteem items (Factor 1)</i>							
177	Lacking in self-confidence (R)	.56	.58	.56	.85	.80	.83
339	Thinks is no good at all (R)	.54	.57	.56	.84	.90	.84
147	Feels useless at times (R)	.53	.51	.53	.89	.77	.83
279	Often gets disgusted with self (R)	.52	.51	.51	.70	.67	.68
50	As capable and smart as most others	.46	.39	.43	.58	.59	.58
311	Can't do anything well (R)	.42	.21	.30	.93	.68	.85
224	Expects to succeed	.37	.21	.28	.69	.29	.47
192	Thinks that others think they are better than self (R)	.32	.40	.35	.70	.62	.62
252	Feels like a burden to others (R)	.29	.39	.33	.43	.60	.50
	<i>Mean</i>	.45	.43	.43	.73	.66	.67
<i>Three positive affect items (Factor 2)</i>							
416	Not as happy as others (R)	.48	.51	.48	.87	.96	.93
245	Feels happy most of the time	.40	.41	.40	.78	.78	.79
133	Feels as good as ever	.29	.31	.27	.53	.63	.56
	<i>Mean</i>	.39	.41	.39	.73	.79	.76

Note: All *ps* for correlations $< .01$. $N = 179$ for Sample A, $N = 210$ for Sample B. Means were computed using Fisher's *r*-to-*z* transformation. Factor loadings of the CPI-SE items are based on the CFA of the 2-factor model described in the text. California Psychological Inventory (CPI) items are abbreviated and paraphrased and included to illustrate the item content of the CPI-SE. Only the first 9 core self-esteem items are scored on the final CPI-SE. The number to the left of each item is the item number on the Form 462 version of the CPI (Gough, 1987). Item numbers on the Form 434 version of the CPI are the same as on Form 462 (Gough & Bradley, 1996). (R) indicates that an item is reversed keyed.

(Robins et al., 2001). Fourth, to examine test-retest reliability, the CPI-SE was readministered to the same sample after a five-week interval. Fifth, to examine the internal consistency of the CPI-SE, we computed the reliability of the CPI-SE based on the Kuder-Richardson Formula 20 (KR-20), which is analogous to Cronbach's α . Additional evidence for the convergent validity and reliability of the CPI-SE was gathered in a second sample, where we replicated the findings from the first sample.

Method

Participants

The participants in the two samples, A and B, were students at the University of California, Berkeley, who participated in the study for course credit. Of the 389 participants, 72% were women. The participants were diverse in terms of ethnicity

(53% Asian American, 31% Caucasian, 3% African American, 8% Latino, and 5% Other), and had a mean age of 21 years ($SD = 2.4$). To assess retest reliability, the CPI-SE was obtained a second time from 188 participants in Sample B and 65 participants from Sample A.

Measures of Self-esteem

Rosenberg self-esteem scale (RSE; Rosenberg, 1965). The RSE is a 10-item scale that requires participants to directly report feelings about the self. Participants responded to items such as: "I feel that I am a person of worth, at least on an equal basis with others" on a 4-point scale, ranging from "strongly agree" to "strongly disagree." The RSE has become by far the most widely used measurement of global self-esteem (Blascovich & Tomaka, 1991). Internal consistency is substantial, with alpha reliabilities ranging from .77 (Dobson, Goudy, Keith, & Powers, 1979) to .88 (Fleming & Courtney, 1984). Test–retest reliability was .82 (Fleming & Courtney, 1984).

The self-acceptance scale (SA; Ryff, 1989). This scale consists of 15-item measure of positive self-regard, such as: "When I compare myself to friends and acquaintances, it makes me feel good about who I am" on a 6-point scale ranging from "strongly agree" to "strongly disagree." Internal consistency is high, with alpha reliability of .93 and a test–retest reliability of .85 (Ryff, 1989). In terms of convergent validity, the Self-Acceptance Scale correlated .62 with the RSE (Ryff, 1989).

Single-Item self-esteem scale (SISE; Robins et al., 2001). The SISE asks participants to indicate their evaluation of a single item: "I have high self-esteem." Responses were made on a 5-point scale, with 1 indicating "not very true of me" and 5 indicating "very true of me." The SISE had a test–retest reliability of .75 and has also demonstrated good convergent validity with the RSE, with correlations ranging from .72 to .76 in college-age samples and correlations ranging from .79 to .81 in community samples (Robins et al., 2001).

Procedure

In order to determine the internal consistency and convergent validity of the CPI-SE, we administered the CPI-SE to Sample A along with the RSE, the Self-Acceptance Scale, and the SISE. Five weeks later, we readministered the CPI-SE to determine retest reliability. In Sample B, we administered the CPI-SE at a different time than the other self-esteem scales; the CPI-SE was given first and the other three scales three weeks later. To determine the retest reliability of the CPI-SE, as well as its internal consistency when scored from the full CPI, a subset of the participants completed the abbreviated 1996 version of the CPI five weeks after the original assessment, which permits scoring of 10 of the 12 initially selected CPI-SE Scale items. Note that CPI-SE item responses were always made on a dichotomous scale (i.e., true or false).

Results and Discussion

To verify whether the 12 initially selected CPI-SE items were related to the Rosenberg Self-Esteem Scale (RSE), we examined the correlations for all 12 items with the RSE. As shown in Table 1, all of these correlations were positive and significant, providing initial support for the validity of the CPI-SE items.

Confirmatory Factor Analyses

To determine whether the 9 core self-esteem items and the 3 positive affect items form a single factor or two independent factors, we conducted a series of confirmatory factor analyses using AMOS 5.0. The 1-factor model assumes that all the items measure a core self-esteem dimension and do not make a reliable discrimination between self-referent items and positive affect. Alternatively, the 2-factor model assumes that the 9 core self-esteem items and the 3 positive affect items form two independent factors. In the combined sample, the model fit of the 1-factor model was $\chi^2(54) = 225, p < .01$ and the model fit for the 2-factor model was $\chi^2(53) = 179, p < .01$. A significant $\Delta\chi^2(1) = 46$ was obtained, $p < .01$. Since the 2-factor model fitted better than the 1-factor model, it is in the interest of conceptual clarity that the 3 positive affect items be dropped from the CPI-SE Scale. We conducted the same CFAs separately in Sample A and Sample B; in both samples, the 2-factor model showed better fit than the 1-factor model.

These findings were obtained using maximum likelihood estimation, which assumes that the indicators were assessed on continuous scales. In order to verify our findings, we re-estimated the models using weighted least squares estimation with mean and variance adjustment (MLSMV), which does not assume continuous measurement (Muthén & Muthén, 2001). We also had concerns about the distributions of scores on the indicators, so we consulted Satorra–Bentler (S–B) corrected indices of fit, which are robust to violations of multivariate normality. Again using the combined sample, the fit indices for the 1-factor model were as follows: S–B $\chi^2(34) = 146$, Tucker–Lewis Index (TLI) = .92, and root-mean square error of approximation (RMSEA) = .09.

We then examined the fit of the 2-factor model, with one factor representing core self-esteem (i.e., 9 items) and the other factor representing positive affect (i.e., 3 items); the two factors were allowed to correlate as in the AMOS analyses described above. Similar to what we found from the CFAs conducted in AMOS, the 2-factor model fitted somewhat better than the 1-factor model. The fit indices of the 2-factor model were as follow: S–B $\chi^2(34) = 113$, TLI = .94, RMSEA = .08, with values closely approaching suggested cut-off scores for good models (Hu & Bentler, 1999; see also Hill, Neumann, & Rogers, 2004). The estimated correlation between the latent self-esteem factor and the latent positive affect factor in the 2-factor model was .27, $p < .01$, suggesting that these two types of items were related but modestly so.

The factor loadings obtained for the 3 positive affect items in the 1-factor and 2-factor models (see also Table 1) are consistent with these conclusions. In the 1-factor model, the average factor loading of the 3 positive affect items was .65, suggesting that these items do measure general self-esteem almost as well as the 9 core self-esteem items (mean loading = .68). However, in the 2-factor model where the 3 positive affect items were allowed to form a factor of their own, their average loading was .76, higher than in the 1-factor model (.65); the average factor loading of the 9 core self-esteem items in the 2-factor model (.67) was similar to their loading in the 1-factor model (.68).

Together, these findings show that the 2-factor model fitted better than the 1-factor model. The 9 self-esteem items and the 3 positive affect items did not form a single unified factor. Thus, we retained only the 9 core self-esteem items for the new CPI-SE and then conducted all the remaining analyses based on these 9 items.

Reliability

Given the dichotomous format of the CPI items, we computed the reliability of the CPI-SE Scale based on the Kuder–Richardson Formula 20 (KR-20), which is

analogous to Cronbach's α . The KR-20 and test–retest reliability coefficients are shown in Table 2. The KR-20 coefficients for the 9-item CPI-SE were satisfactory in the two samples (.76 for Sample A and .74 for Sample B). Test–retest reliability coefficients for the CPI-SE were also high in both samples, .73 in Sample A and .75 in Sample B.

Convergent Validity

The convergent validity correlations of the CPI-SE with the RSE, the SISE, and the Self-Acceptance Scale are also shown in Table 2; all these correlations were substantial in both samples. In Sample A, the CPI-SE correlated .77 with the RSE, .70 with the Self-Acceptance Scale, and .62 with the SISE. The somewhat smaller correlation with the SISE reflects the brevity of that scale, as shown by its correlations with the RSE (.69) and SA (.66). In contrast, the RSE correlated .88 with SA, similar to its .77 correlation with CPI-SE. In Sample B, even though the CPI-SE had been administered 3 weeks apart, it correlated .75 with the RSE, .71 with the Self-Acceptance Scale, and .67 with the SISE. Overall, we found substantial convergence of the CPI-SE with existing measures of self-esteem, and the pattern of correlations for the CPI-SE was similar to the convergence of these measures with one another.

Differential Validity

Among all the existing CPI scales, the CPI-SE is conceptually most similar to the CPI Self-Acceptance Scale (CPI-Sa). The CPI-Sa was developed to measure confidence in interpersonal interactions, willingness to admit to self-serving behaviors, positive self-evaluation, and interest in adventurous and unconventional experiences (Gough & Bradley, 1996). We suggest that there is a need for the development of a new self-esteem scale for the CPI to capture the unique aspects of self-esteem not captured by the existing CPI-Sa. The CPI-Sa contains 28 items the content of which is not specific to self-esteem (e.g., "Once a while I laugh at a dirty joke"), and it tends to correlate strongly with perceived likeability (Gough & Bradley, 1996). Interestingly, the CPI-Sa and the CPI-SE share only one-item in common (i.e., lacking in confidence). Overall, we expected that the CPI-Sa would correlate only moderately with both the RSE and the new CPI-SE. Furthermore, we expected that the CPI-SE would account for more variance in predicting the RSE than would the existing CPI-Sa. We tested these predictions in Sample B.

As expected, the CPI-Sa correlated moderately with both the RSE ($r = .50$, $p < .01$) and the CPI-SE ($r = .55$, $p < .01$). In contrast, the CPI-SE correlated

TABLE 2 Alpha Reliabilities and Convergent Validity of the New CPI-SE Scale in Study 1

	Sample A	Sample B
<i>Reliability</i>		
Alpha (KR-20)	.76	.74
Five week test–retest	.73	.75 ^a
<i>Validity correlation with</i>		
Rosenberg self-esteem	.77	.75 ^b
Ryff's self-acceptance	.70	.71 ^b
Single item self-esteem	.62	.67 ^b

Note: ^aOnly the 7 of the 9 CPI-SE items that were administered in the retest; ^bAdministered three weeks apart from the CPI-SE scale.

.75 with the RSE, compared with the .50 for the CPI-Sa, and the difference between these correlations was significant, $t(193) = 49.9$, $p < .001$. These findings are consistent with the view that the CPI-SE serves a unique function in the CPI as a specific measure of global self-esteem.

More important, the CPI-SE captured unique variance in predicting the RSE, above and beyond that accounted for by the CPI-Sa, as shown by a multiple regression analysis predicting the RSE. In particular, we entered the CPI-Sa in the first step and the CPI-SE in the second step. When the CPI-SE was entered in the second step, the CPI-Sa no longer predicted the RSE scores, $t = 1.81$, $p > .05$, $\beta = .10$ for the CPI-Sa, and $t = 12.09$, $p < .001$, $\beta = .69$ for the CPI-SE.

Study 2: Testing Hypotheses about Links of CPI-SE to Theoretically Relevant Domains

Convergence with Previous Findings using the CAQ-Sort

One important step in the validation process of a new scale is to obtain evidence for convergent validity with regard to existing scales that claim to measure the same construct, as we have done in Study 1. Going beyond Study 1, a major goal of Study 2 was to compare the external correlates of the CPI-SE with those obtained previously for a rather different measure of self-esteem. Block and Robins (1993) used an interview-based design to determine the real-life implications of self-esteem. Similar to the present study, participants were interviewed and then rated on the California Q-set (CAQ; Block, 1961/1978). Despite the similarity in basic research design, there were also some noteworthy differences. Whereas the participants in our study were women in their early sixties ($N = 105$), Block and Robins' (1993) participants were in their early twenties ($N = 47$ women). Most importantly, they used a very different operationalization of self-esteem. Following Rogers (1961), they measured self-esteem as: "the extent to which one perceives oneself as relatively close to being the person one wants to be" (p. 911) and used 43 trait adjectives to obtain actual and ideal self-ratings, thus obtaining an index of actual-ideal self congruence.

If we obtain a similar pattern of correlates of self-esteem as Block and Robins (1993), then we can have considerably more confidence in the validity of the CPI-SE. Given that their measure of self-esteem and ours are very different, comparing our findings to Block and Robins' also allowed us to test the convergence of the CPI-SE with Rogers-type self-esteem measures of actual-ideal self congruence.

Another step in the validation process is to examine whether the new scale relates to external variables in theoretically meaningful ways. A secondary goal of Study 2 was to examine the nomological network of the newly developed CPI-SE. We examined the relations between the CPI-SE scores and interviewers' judgments of the participants across 7 theoretically relevant domains. Specifically, we examined both convergent and discriminant validity aspects including both domains that self-esteem should correlate with and domains where it should not.

Nomological Network of Self-esteem: Convergent and Discriminant Relations

Clarity of the self. High self-esteem individuals tend to have a clearly defined sense of self, with clear-cut notions of who they are and who they are not

(Baumgardner, 1990; Campbell, 1990). High self-esteem is associated with certainty and consistency of self as well as extensive self-knowledge (Baumeister et al., 1989). Thus, we expected that individuals with high scores on the CPI-SE would have a more clear-cut personality than individuals with low scores.

Negative and positive affect. Previous research indicates that higher self-esteem is associated with lower levels of negative affect, including a lower tendency to experience anxiety and stress (Brockner, 1984; Campbell, Chew, & Scratchley, 1991; Fleming & Courtney, 1984; Judge, Erez, Bono, & Thoresen, 2002). Additionally, individuals with high self-esteem tend to be less vulnerable to depression and stress (DeLongis, Folkman, & Lazarus, 1988; Kling, Ryff, Love, & Essex, 2003; Nolen-Hoeksema, 2000; Robinson, Garber, & Hilsman, 1995).

High self-esteem, on the other hand, has been linked to positive affect (Diener & Emmons, 1984; Veroff, Feld, & Gurin, 1962). Self-esteem is seen by many as being an important affective resource—an “emotional anchor” that helps individuals maintain balance and positive affect even in the face of stressful and unpleasant life events (Baumeister, 1998; Spencer, Josephs, & Steele, 1993). Individuals with low self-esteem tend to dampen their positive affect, whereas those with high self-esteem tend to savor it (Wood, Heimpel, & Michela, 2003).

Social skills and presence. In addition to having more positive affect, high self-esteem individuals tend to be more socially skillful and extraverted (Amirkhan, Risinger, & Swickert, 1995; Kling et al., 2003). Thus, in an interview situation, they should exhibit more social poise and presence.

Coping. Previous research shows that high and low self-esteem individuals have different ways of appraising their environment and regulating their behavior. High self-esteem individuals are more likely to persist even when faced with the prospect of failure (McFarlin, Baumeister, & Blascovich, 1984) and to engage in positive, active attempts to cope with stressors (Pearlin & Schooler, 1978). In contrast, low self-esteem individuals are more likely to engage in self-handicapping behavior in order to provide an excuse for possible failure (Tice & Baumeister, 1990) and engage in avoidance strategies (Ben-Zur, 2002; Carver, Scheier, & Weintraub, 1989).

Interviewer-rated self-esteem. Coopersmith (1967) argued that self-esteem includes subjective expression and behavioral manifestation; individuals with genuine self-esteem felt worthy and valuable, as evidenced in both subjective expression (e.g., self-report) and behavioral manifestation (e.g., ratings of the individual by knowledgeable others). In a similar vein, Shedler, Mayman, and Manis (1993) used a clinical judge to provide an external criterion (i.e., nonself-report) measure for genuine self-esteem. Thus, we expected the scores on the CPI-SE to reflect genuine self-esteem, and thus to correlate with interviewer-rated self-esteem. That is, individuals with genuine self-esteem (whose self-worth is anchored in social reality) should manifest self-esteem in the interview in observable ways.

Note that some researchers have argued that self-reported and observer-reported self-esteem reflect different types of self-esteem. For example, Demo (1985) demonstrated that the Rosenberg Self-Esteem Scale is valid in measuring experienced self-esteem, which reflects how an individual feels about the self, whereas the observer Q-sort is valid in measuring presented self-esteem, which reflects how others rate an individual's self-esteem.

Demo (1985) showed that the correlation between scores on Coopersmith's Self-Esteem Inventory and self-esteem Q-sort ratings by observers ranged from .33 to .63. These correlations seem larger than those for the Rosenberg Self-Esteem Scale (from .19 to .45). We proposed that one reason for this difference in findings may be due to the fact that Coopersmith's Self-Esteem Inventory includes positive affect items, whereas the RSE does not. Observers may infer an individual's self-esteem in part based on their positive affect. In other words, positive affect may mediate the relation between experienced self-esteem and presented self-esteem.

Intelligence and attractiveness. Our final set of predictions involves qualities that should not be related to self-esteem. As beneficial as high self-esteem is, research has shown that it is not a cure-all remedy—self-esteem is not linked to everything that is desirable or good. First, self-esteem has either no significant or very weak correlations with measures of intelligence and academic performance (Baumeister, Campbell, Krueger, & Vohs, 2003; Hansford & Hattie, 1982; Robins et al., 2001). Second, *self-reported* physical attractiveness predicted self-esteem (see Feingold, 1992; Harter, 1993), but across multiple studies self-esteem was not related to *observer-rated* attractiveness (Feingold, 1992).

Overall, then, the literature suggests that self-esteem is an important psychological resource that helps people function and cope better, but the high self-esteem individual is not necessarily more intelligent or more attractive.

Method

Participants

The participants were 105 women from the Mills Study (Helson, Jones, & Kwan, 2002) and who graduated from college in either 1958 or 1960. According to their college grade point averages and Scholastic Aptitude Test scores, these women were representative of the Mills College at the time. The present data were collected from the women during a one-day assessment, when the women were, on average, 61 years of age.

Instruments

All participants participated in a two-and-a-half-hour structured interview. In the interview, participants were asked about their current involvement in and feelings about work, community activities, their relationships and friendships, childrearing, caretaking of aging parents, health, retirement, spirituality, and death. Immediately following each interview, the interviewers evaluated each participant on the California Adult Q-set (CAQ; Block, 1961/1978), which describes a wide range of cognitive, affective, and social characteristics. The CAQ is a general-purpose instrument that originated from clinical and psychodynamic theory; it thus avoids the limitations of other instruments that are specifically focused on one or a few predetermined variables. The CAQ is a set of 100 cards with descriptive statements (e.g., "feels satisfied with self"; "is consciously happy with person s/he believes self to be"; "is unaware of self-concern"). To describe each participant, interviewers sorted these 100 CAQ cards into a quasi-normal distribution using 9 piles of cards, with piles scored from 1 to 9 (least characteristic to most characteristic). Interviewers were three practicing clinicians with doctoral degrees and three advanced graduate students working towards their doctorate in clinical psychology. Interviewers were trained in the CAQ and completed several practice CAQ sorts, in which the inter-rater reliability was at least .80, before they interviewed the participants.

To test hypotheses about the external correlates of the CPI-SE, we included the relevant CAQ items for each of the 7 content domains, which are listed in Table 3. Research that has used observer Q-sort data showed that correlations between scores on the Rosenberg Self-Esteem Scale and observer-rated self-esteem ranged from .19 to .45 (e.g., Demo, 1985). Similar to the present study, participants in Demo's (1985) study were rated on the California Q-set (CAQ; Block, 1961/1978). Demo's (1985) participants were observed by peer observers for a few hours per week over a period of 12 weeks, and the participants in our study were interviewed by well-trained clinical psychologists for two and half hours. Therefore, the observers in both studies were knowledgeable about the participants and in a good position to evaluate them on the CAQ. A similar magnitude of correlations to those found using the Rosenberg Self-Esteem Scale should be replicated using the CPI-SE when predicting scores on single CAQ items. That is, we expected a correlation between the scores on the CPI-SE Scale and interviewers' ratings of single item self-esteem ranging from .20s to .40s.

CPI-SE. The participants completed the full 1987 version of the CPI from which we scored the 9-item CPI-SE; the internal consistency was satisfactory (.73) in this sample.

Results and Discussion

Comparison with Block and Robins' (1993) Study

Did our findings show a similar pattern of external correlates to Block and Robins' (1993) self-ideal self congruence measure of self-esteem? Block and Robins (1993) reported the correlation coefficients of their self-esteem measure with 31 CAQ items. In order to determine how similar our and their findings were, we correlated the two sets of correlation coefficients across these 31 shared CAQ items. The correlation between Block and Robins' findings and our own was .76, $p < .001$, indicating substantial and impressive similarity in external correlates of self-esteem. Indeed, the two studies differed only in the correlation for one single CAQ item, namely interviewer-rated Q-sort item #19 "Seeks reassurance from others": $r = -.25$ in the present study and $r = .01$ in Block and Robins' (1993) study. Notably, 30 of the 31 correlations had the same sign (i.e., either positive or negative, in *both* studies), showing that the external correlates of the CPI-SE were very similar to those found for the self-ideal congruence measure.

The substantial convergence of our findings with those of Block and Robins (1993) suggests that the personality profiles of high self-esteem women in their early twenties and in their early sixties are quite similar. Indeed, the findings of the two studies were remarkably similar in light of the substantial differences in samples and self-esteem measurement, thus further increasing our confidence in the construct validity of the new CPI-SE.

Testing Hypotheses about the Correlates of CPI-SE in 7 Content Domains

Table 3 shows the correlations between CPI-SE and the CAQ items representing the 7 content domains.

Clarity of self. Also as expected, individuals with high scores on the CPI-SE were seen by interviewers as having greater clarity and consistency of self. Whereas high CPI-SE individuals exhibited more clear-cut personality in the interviews,

TABLE 3 Testing Hypotheses about the Correlates of CPI-SE in 7 Theoretically Relevant Domains

California Q-sort item (abbreviated)	Correlation with CPI-SE
<i>Clarity and consistency of self</i>	
Has a clear-cut personality; is relatively easy to understand and describe	.22**
Is unpredictable and changeable in attitudes and behavior (R)	-.34**
<i>Positive and negative affect</i>	
Is calm, relaxed in manner	.23*
Is cheerful, happy	.35**
Anxiety and tension find outlet in bodily symptoms	-.17*
Is basically anxious	-.31**
Feels a lack of meaning in life	-.24**
Is irritable; overreacts to minor frustrations	-.21**
Is generally fearful; is vulnerable to real or imagined threat	-.34**
Has a readiness to feel guilty	-.27**
Tends to ruminate and have persistent; preoccupying thoughts	-.21*
Has fluctuating moods; moods go up and down	-.39**
Feels cheated and victimized by life; self-pitying	-.25**
<i>Social skills and presence</i>	
Has social poise and presence; appears socially at ease	.30**
Is sociable, gregarious; emphasizes being with others	.28**
<i>Active coping</i>	
Is self-defeating; acts in ways that frustrate, hurt or undermine chances of getting what s/he wants (R)	-.31**
Gives up and withdraws where possible in the face of frustration and adversity (R)	-.06
Has brittle ego-defense system; has a small reserve of integration; would be disorganized and maladaptive when under stress or trauma (R)	-.22**
Seeks reassurance from others (R)	-.25**
<i>Interviewer-rated self-esteem</i>	
Feels satisfied with self; is consciously happy with person s/he believes self to be; is unaware of self-concern	.26**
Concerned with own adequacy as a person, either consciously or unconsciously (R)	-.33**
<i>Intelligence</i>	
Appears to have a high degree of intellectual capacity	.05
Is verbally fluent; can express ideas well in words	-.03
<i>Physical attractiveness</i>	
Is physically attractive; is good-looking	-.00

Note: $N = 105$. The CPI-SE scale used here is the full 9-item version scored from Form 462 of the CPI. CAQ items are abbreviated and paraphrased so as to illustrate the external correlates of the CPI-SE.

* $p < .05$; ** $p < .01$.

Individuals with low CPI-SE scores were unpredictable and changeable in behavior and attitudes. These findings are consistent with past studies that high self-esteem individuals have a more clearly defined sense of self, with clear-cut notions of who they are and who they are not.

Positive and negative affect. The CAQ items that measured cheerfulness and calmness of demeanor showed the expected positive correlations with the CPI-SE. These findings support the idea that self-esteem could serve as an important affective resource that helps individuals maintain balance and positive affect.

The CAQ items assessing level of anxiety, fearfulness, stress, and rumination showed the expected negative correlations with the CPI-SE. These findings are consistent with both the theoretical and empirical literature on self-esteem: Individuals with low self-esteem tend to be more fearful, anxious, and vulnerable to stress.

Social skills and presence. Individuals with high scores on the CPI-SE were also perceived by interviewers as being gregarious and as having more social poise and presence than individuals with low CPI-SE scores.

Interviewer-rated self-esteem. Perhaps the best indication that the CPI-SE taps into genuine self-esteem was the convergence between CPI-SE scores and interviewer rating of the participants' self-esteem. As expected, the CAQ includes 2 items that directly assess the interviewer's judgment of the participant's self-esteem, and both showed a significant and positive correlation with CPI-SE scores ($r_s = .26$ and $.33$, $p_s < .01$). Given that the interviewer's judgment of the participants' self-esteem was based on only one specific situation and one interview, these correlations are actually quite impressive. Individuals with high scores on the CPI-SE appeared as satisfied with themselves, whereas individuals with low scores appeared as concerned with their own adequacy. These findings are consistent with the hypothesis that the CPI-SE is related to genuine self-esteem that is anchored in the behavioral reality of the individuals and can be observed by others.

To test whether positive affect mediated the relation between experienced self-esteem and presented self-esteem, we conducted a series of mediation analyses. Baron and Kenny (1986) have identified three steps for establishing mediation: (1) the predictor predicts the outcome variable; (2) the predictor significantly predicts the mediator; and (3) the mediator significantly predicts the outcome variable. Scores on the CPI-SE significantly predicted interviewer-rated self-esteem (i.e., the outcome; $r = .34$, $p < .001$) and scores on the CPI positive-affect items (i.e., the mediator; $r = .45$, $p < .001$). In turn, the averaged CPI positive affect items predicted interviewer-rated self-esteem ($r = .47$, $p < .001$). Given that these steps were met, we conducted Baron and Kenny's (1986) modified Sobel test. This test revealed that the magnitude of the relation between the predictor and the outcome variable was significantly reduced when the mediator was included in the equation, $Z = 3.55$, $p < .01$. Thus, individuals with high self-esteem had more positive affect, which in turn predicted interviewers' ratings of self-esteem (presented self-esteem). Note that when we predicted interviewer-rated self-esteem from scores on the CPI-SE and the averaged scores on the 3 CPI positive-affect items selected from the CPI, CPI-SE ($\beta = .24$, $p < .01$) and positive affect ($\beta = .44$, $p < .001$) predicted interviewer-rated self-esteem independently. The fact that self-esteem continued to predict interviewer-rated self-esteem even when positive affect was partialled out means that positive

affect partially mediated the relation between self-esteem and interviewer-rated self-esteem. These findings thus suggest that interviewers rated individuals' self-esteem based on their positive affect as well as other manifestations of self-esteem.

Discriminant relations to intelligence and attractiveness. Finally, as expected, scores on the CPI-SE did not correlate with intellectual capacity and interviewer-rated physical attractiveness. Individuals with high self-esteem are not necessarily more intelligent and attractive.

In sum, our findings show that while self-esteem scores obtained from the CPI-SE correlated with constructs that have been theoretically and empirically linked to self-esteem, they did not correlate with two socially desirable constructs that are conceptually and theoretically distinct from self-esteem.

General Discussion

The main goal of this research was to introduce a new self-esteem scale derived from the California Psychological Inventory. Studies 1 and 2 provide substantial evidence for the construct validity of this new scale. In Study 1, we were able to demonstrate the high internal consistency and stability across time for the CPI-SE in two diverse samples. The CPI-SE had high internal consistency and test–retest reliabilities that were comparable to those for three commonly used measures of self-esteem. Most important, convergent validity was substantial with all three of these scales; across the two samples the correlation of the CPI-SE with the Rosenberg Self-Esteem Scale averaged .76.

Study 2 examined the external correlates of the CPI-SE using observer ratings. By comparing the external correlates of the CPI-SE with Block and Robins' (1993) measure of self-esteem, we found further evidence for the convergent validity of the CPI-SE. The similarity of the CAQ correlations implies convergence with self–ideal self measures of self-esteem. Furthermore, by comparing self-esteem scores to interviewer's ratings, we were able to demonstrate that self-esteem as measured by the CPI-SE had meaningful, predictable, and consistent relations with individual differences in 7 theoretically relevant domains. Correlations with the CAQ items formed a coherent constellation of attributes that were consistent with the existing empirical and theoretical literature on self-esteem, and a previous study.

The findings of Study 2 indicate clearly that self-esteem as measured by the CPI-SE related to constructs that have been theoretically and empirically linked to self-esteem. High scores on the CPI-SE were related to interviewer-rated self-esteem, clarity and consistency of self, low negative and high positive affect, and active coping strategy. In contrast, the CPI-SE did not relate to several constructs that are conceptually and theoretically separate from self-esteem. No significant relations were found with intelligence and physical attractiveness. Together, Studies 1 and 2 provide strong evidence for the validity of the CPI-SE.

Future Applications of the CPI-SE and Directions for Research

The CPI-SE was developed, in part, to facilitate life-span research on self-esteem. The CPI-SE allows researchers to tap into the rich vein of data available from long-term longitudinal studies that have utilized the CPI as well as many existing nonlongitudinal data sets that contain the CPI but not self-esteem. By making use of valuable longitudinal data, researchers will be able to apply a developmental

perspective to self-esteem and examine its stability and change, and its antecedents and convergence within the same individuals across the entire adult lifespan.

An interesting line of research that can emerge from the application of the CPI-SE will be to determine whether or not the development of self-esteem proceeds the same for everyone, or whether it is possible to identify different types of self-esteem trajectories from childhood to adulthood and from adulthood into old age. For example, while some individuals may exhibit consistently high levels of self-esteem, others may have moderate levels of self-esteem that gradually rise over time. Hirsch and Dubois (1991) have postulated that a cluster-analytic approach can be used to identify such intra-group differences in self-esteem trajectories. The availability of the new CPI-SE would make an extension of this approach to longitudinal samples possible.

Many of the long-term longitudinal studies have collected data in domains as diverse as personality, interpersonal relationships, childhood aspirations, career, family, and other life events. The new CPI-SE allows researchers to study the external correlates of self-esteem in a wide range of contexts and test their stability across different age periods. Future research could determine whether the life and personality profile of an individual with high self-esteem in early adulthood is the same in old age. Likewise, it would be possible to determine the long-term effects of life events on self-esteem. It is not clear, for example, whether early experience with the death of a parent correlates with low self-esteem only until early adulthood or whether such early trauma exerts an influence upon self-esteem across the entire adult lifespan. From both a developmental as well as a therapeutic standpoint, such questions are crucial to understanding the long-term impact of various life events, yet they have hitherto gone largely unexplored.

Another valuable line of research that can emerge from application of the CPI-SE is examining cohort differences in self-esteem and development (e.g., Twenge & Campbell, 2001). This line of research is important because the public's conception of the self and self-esteem has changed dramatically over past few decades. Current generations in the USA place higher priority upon the need to have a sense of self worth; some school programs were even designed specifically to increase children's self-esteem (Haney & Durlak, 1998). From a socio-cultural perspective, it would be valuable to explore differences in self-esteem development among individuals who came of age in this "culture of self-worth" with individuals who grew up in earlier time periods where self-esteem was a little-known concept.

Even though its vast, seemingly endless terrain can be at times daunting, half a century's worth of research and exploration has led to many valuable insights regarding the nature and origin of self-esteem. Expanding the breadth and scope of self-esteem research, however, requires the development of innovative assessment techniques. We hope that the new CPI-SE will foster future research to explore those life-span developmental aspects of self-esteem (and their accompanying terrain) that have largely remained inaccessible.

Note

1. Other research has formulated a hierarchical facet model of self-esteem, detailing more specific facets such as emotional, social, physical, and academic components that contribute to global self-esteem (Fleming & Courtney, 1984; Shavelson, Hubner, & Stanton, 1976). At present, self-esteem researchers seem to favor the unidimensional view, and most commonly used measures of self-esteem were designed to assess global

self-esteem across a broad range of domains and dimensions. Specifically, some research has found support for Rosenberg's contention that global self-esteem is unidimensional (e.g., Bagley, Bolitho, & Bertrand, 1997; Gray-Little, Williams, Hancock, 1997; Hensley, 1977; O'Brien, 1985). Nevertheless, the continuing interest in the domains and components of self-esteem has led to a close scrutiny of the conceptualizations of different models of self-esteem.

References

- Albert, S. (1977). Temporal comparison theory. *Psychological Review*, *84*, 485–503.
- Amirkhan, J. H., Risinger, R. T., & Swickert, R. J. (1995). Extraversion: A “hidden” personality factor in coping? *Journal of Personality*, *63*, 189–212.
- Bagley, C., Bolitho, F., & Bertrand, L. (1997). Norms and construct validity of the Rosenberg self-esteem scale in Canadian high school populations: Implication for counseling. *Canadian Journal of Counseling*, *31*, 82–92.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182.
- Baumeister, R. F. (1998). The self. In D. T. Gilbert & S. T. Fiske (Eds.), *The handbook of social psychology* (Vol. 1, pp. 680–740). New York: McGraw-Hill.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, *4*, 1–44.
- Baumeister, R. F., Tice, D. M., & Hutton, D. G. (1989). Self-presentational motivations and personality differences in self-esteem. *Journal of Personality*, *57*, 547–579.
- 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.
- Ben-Zur, H. (2002). Monitoring blunting and social support: Associations with coping and affect. *International Journal of Stress Management*, *9*, 357–373.
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson & P. R. Shaver (Eds.), *Measures of social psychological attitudes* (Vol. 1, pp. 115–160). San Diego, CA: Academic Press.
- Block, J. (1961). *The Q-sort method in personality assessment and psychiatric research*. Palo Alto, CA: Consulting Psychologists Press (Reprinted. 1978).
- Block, J. (1971). *Lives through time*. Berkeley, CA: Bancroft.
- Block, J., & Robins, R. (1993). A longitudinal study of consistency and change in self-esteem from early adolescence to early adulthood. *Child Development*, *64*, 909–923.
- Brockner, J. (1984). Low self-esteem and behavioral plasticity: Some implications of personality and social psychology. In L. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 4, pp. 237–271). Beverly Hills, CA: Sage.
- Brown, J. D. (1998). *The self*. Boston: McGraw-Hill.
- 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 reaction to daily events: The effects of self-esteem and self-complexity. *Journal of Personality*, *59*, 473–505.
- Cartwright, L. K., & Wink, P. (1994). Personality change in women physicians from medical student years to mid-40s. *Psychology of Women Quarterly*, *18*, 291–305.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, *56*, 267–283.
- Cooley, C. H. (1964). *Human nature and the social order*. New York: Schocken Books (Originally published 1902).
- Coopersmith, S. (1967). *The antecedents of self-esteem*. San Francisco: W. H. Freeman.

- DeLongis, A., Folkman, S., & Lazarus, R. S. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology, 54*, 486–495.
- Demo, D. H. (1985). The measurement of self-esteem: Refining our methods. *Journal of Personality and Social Psychology, 48*, 1490–1502.
- Demo, D. H. (1992). The self-concept over time: Research issues and directions. *Annual Review of Sociology, 18*, 303–326.
- Diehl, M., Elnick, A. B., Bourbeau, L. S., & Labouvie-Vief, G. (1998). Adult attachment styles: Their relation to family context and personality. *Journal of Personality and Social Psychology, 74*, 1656–1669.
- Diener, E., & Emmons, R. A. (1984). The independence of positive and negative affect. *Journal of Personality and Social Psychology, 47*, 1105–1117.
- Dobson, C., Goudy, W. J., Keith, P. M., & Powers, E. (1979). Further analysis of Rosenberg's Self-Esteem Scale. *Psychological Reports, 44*, 639–641.
- Feingold, A. (1992). Good looking people are not what we think. *Psychological Bulletin, 111*, 304–341.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*, 117–140.
- Fleming, J. S., & Courtney, B. E. (1984). The dimensionality of self-esteem. II. Hierarchical facet model for revised measurement scales. *Journal of Personality and Social Psychology, 46*, 404–421.
- Gough, H. G. (1957). *Manual for the California Psychological Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- Gough, H. G. (1987). *California Psychological Inventory: Administrator's guide*. Palo Alto, CA: Consulting Psychologists Press.
- Gough, H. G., & Bradley, P. (1996). *The California Psychological Inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Gray-Little, B., Williams, V. S. L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 23*, 443–451.
- Haney, P., & Durlak, J. A. (1998). Changing self-esteem in children and adolescents: A meta-analytic review. *Journal of Clinical Child Psychology, 27*, 423–433.
- Hansford, B. C., & Hattie, J. A. (1982). The relationship between self and achievement/performance measures. *Review of Educational Research, 52*, 123–142.
- Harter, S. (1993). Causes and consequences of low self-esteem in children and adolescents. In R. F. Baumeister (Ed.), *The puzzle of low self-regard*. (pp. 87–106). New York: Plenum.
- Helson, R., Jones, C., & Kwan, V. S. Y. (2002). Personality change over 40 years of adulthood: Hierarchical linear modeling analyses of two longitudinal samples. *Journal of Personality and Social Psychology, 83*, 752–766.
- Helson, R., Stewart, A. J., & Ostrove, J. (1995). Identity in three cohorts of midlife women. *Journal of Personality and Social Psychology, 69*, 544–557.
- Hensley, W. E. (1977). Differences between males and females on Rosenberg Scale of Self-Esteem. *Psychological Reports, 41*, 829–830.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.
- Hill, C. D., Neumann, C. S., & Rogers, R. (2004). Confirmatory factor analysis of the Psychopathy Checklist: Screening version in offenders with Axis I disorders. *Psychological Assessment, 16*, 90–95.
- Hirsch, B. J., & Dubois, D. L. (1991). Self-esteem in early adolescence: The identification and prediction of contrasting longitudinal trajectories. *Journal of Youth and Adolescence, 20*, 53–72.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indices in covariance structural analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1–55.
- James, W. (1950). *The principles of psychology* (Vol. 1). New York: Dover (Originally published 1890).

- Jaquish, G. A., & Ripple, R. E. (1981). Cognitive creative abilities and self-esteem across the adult life-span. *Human Development, 24*, 110–119.
- Jay, M., & John, O. P. (2004). A depressive symptom scale for the California Psychological Inventory: Construct validation of the CPI-D. *Psychological Assessment, 16*, 299–309.
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized and self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology, 83*, 693–710.
- Kling, K. C., Ryff, C. D., Love, G., & Essex, M. (2003). Exploring the influence of personality on depressive symptoms and self-esteem across a significant life transition. *Journal of Personality and Social Psychology, 85*, 922–932.
- Kwan, V. S. Y., & Mandisodza, A. N. (in press). Self-esteem: On the relation between conceptualization and measurement. In C. Sedikides & S. Spencer (Eds.), *Frontiers in social psychology: The self*. Philadelphia: Psychology Press.
- Lall, R., Jain, V. K., & Johnson, W. B. (1996). Contemporary norms for the Coopersmith Self-Esteem Inventory—Adult Form. *Perceptual and Motor Skills, 82*, 1136–1138.
- Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive: The self-esteem system as a sociometer. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 123–144). New York: Plenum Press.
- McFarlin, D. B., Baumeister, R. F., & Blascovich, J. (1984). On knowing when to quit: Task failure, self-esteem, advice, and nonproductive persistence. *Journal of Personality, 52*, 138–155.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Mecca, A. M., Smelser, N. J., & Vasconcellos, J. (1989). *The social importance of self-esteem*. Berkeley, CA: University of California Press.
- Megargee, E. I. (1972). *California Psychological Inventory handbook*. San Francisco, CA: Jossey-Bass.
- Muthén, L. K., & Muthén, B. O. (2001). *Mplus user's guide* (2nd ed.). Los Angeles: Author.
- Nolen-Hoeksema, S. (2000). Growth and resilience among bereaved people. In J. E. Gilham (Ed.), *The science of optimism and hope: Research essays in honor of Martin E. P. Seligman* (pp. 107–127). Philadelphia: Templeton Foundation Press.
- O'Brien, E. J. (1985). Global self-esteem scales: Unidimensional or multidimensional? *Psychological Reports, 57*, 383–389.
- Pearlin, L. I., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2–21.
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin, 27*, 151–161.
- Robins, R. W., Trzesniewski, K. H., Tracy, J. L., Gosling, S. D., & Potter, J. (2002). Global self-esteem across the lifespan. *Psychology and Aging, 17*, 423–434.
- Robinson, N. S., Garber, J., & Hilsman, R. (1995). Cognitions and stress: Direct and moderating effects on depressive versus externalizing symptoms during the junior high school transition. *Journal of Abnormal Psychology, 104*, 453–463.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ryff, C. D. (1989). Happiness is everything, or is it? Exploration on the meaning of psychological well-being. *Journal of Personality and Social Psychology, 57*, 1069–1081.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept validation of construct interpretations. *Review of Educational Research, 46*, 407–441.
- Shedler, J., Mayman, M., & Manis, M. (1993). The illusion of mental health. *American Psychologist, 48*, 1117–1131.
- Spencer, S. J., Josephs, R. A., & Steele, C. M. (1993). Low self-esteem: The uphill struggle for self-integrity. In R. R. Baumeister (Ed.), *Self-esteem: The puzzle of low self-regard*. (pp. 21–36). New York: Plenum Press.

- Stewart, A. J., & Vandewater, E. A. (1999). If I had it to do all over again: Midlife review, midcourse corrections, and women's well-being in mid-life. *Journal of Personality and Social Psychology, 76*, 270–283.
- Tafarodi, R. W., & Milne, A. B. (2002). Decomposing global self-esteem. *Journal of Personality, 70*, 443–483.
- Tafarodi, R. W., & Swann, W. B., Jr. (1995). Self-liking and self-competence as dimensions of global self-esteem: Initial validation of a measure. *Journal of Personality Assessment, 65*, 322–342.
- Tafarodi, R. W., & Swann, W. B., Jr. (2001). Two-dimensional self-esteem: Theory and measurement. *Personality and Individual Differences, 31*, 653–673.
- Tice, D. M., & Baumeister, R. F. (1990). Self-esteem, self-handicapping, and self-presentation: The strategy of inadequate practice. *Journal of Personality, 58*, 443–464.
- Twenge, J. M., & Campbell, W. K. (2001). Age and birth cohort differences in self-esteem: A cross-temporal meta-analysis. *Personality and Social Psychology Review, 5*, 321–344.
- Twisk, J. W. R., Snel, J., Kempor, H. C. G., & Van Mechelen, W. (1998). Relation between the longitudinal development of personality characteristics and biological and lifestyle risk factors for coronary heart disease. *Psychosomatic Medicine, 60*, 372–377.
- Veroff, J., Feld, S., & Gurin, G. (1962). Dimensions of subjective adjustment. *Journal of Abnormal and Social Psychology, 64*, 192–205.
- White, R. W. (1963). Ego and reality in psychoanalytic theory: A proposal regarding independent ego energies. *Psychological Issues, 3* (3, Whole No. 11).
- Wilson, A. E., & Ross, M. (2001). From chump to champ: People's appraisals of their earlier and present selves. *Journal of Personality and Social Psychology, 80*, 572–584.
- Wink, P., & Dillon, M. (2003). Religiousness, spirituality, and psychosocial functioning in late adulthood: Findings from a longitudinal study. *Psychology and Aging, 18*, 916–924.
- Wink, P., & Gough, H. G. (1990). New narcissism scale for the California Psychological Inventory and MMPI. *Journal of Personality Assessment, 54*, 446–462.
- Wood, J. V., Heimpel, S. A., & Michela, J. L. (2003). Savoring versus dampening: Self-esteem differences in regulating positive affect. *Journal of Personality and Social Psychology, 85*, 566–580.
- Zimmerman, M. A., Copeland, L. A., Shope, J. T., & Dielman, T. E. (1996). A longitudinal study of self-esteem: Implications for adolescent development. *Journal of Youth and Adolescence, 26*, 117–141.