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The Divided Self: Concurrent and Longitudinal Effects of Psychological Adjustment and Social Roles on Self-Concept Differentiation

Eileen M. Donahue, Richard W. Robins, Brent W. Roberts, and Oliver P. John

The relation between *self-concept differentiation* (SCD), the tendency to see oneself as having different personality characteristics in different social roles, and psychological adjustment was examined in a sample of college students and a sample of middle-aged women. In both studies, Ss with high levels of SCD showed poor emotional adjustment (e.g., depression) and tended to reject social norms and conventions (e.g., low socialization). Longitudinal analyses demonstrated that these same characteristics measured at age 21 predicted SCD measured more than 30 years later in middle age. These findings provide strong evidence that SCD is a sign of fragmentation of the self rather than specialization of role identities. The social context was also an important determinant of SCD; both dissatisfaction with role performance and frequent role changes in relationships and jobs predicted SCD measured 9 years later.

Some individuals see themselves as essentially the same person across their various social roles, whereas others see themselves quite differently. For example, one woman might see herself as fun loving and easygoing with her friends but as serious and responsible with her parents. In contrast, another woman might see herself as fun loving and easygoing with both her friends and her parents. Which of these two individuals is likely to be better adjusted—the first who has a differentiated self-concept across roles or the second who does not?

The present research examined this question and, more generally, the psychological meaning of individual differences in the tendency to see oneself as having different personality characteristics across one's roles. We assume that the self-concept consists of multiple components or identities and propose that (a) individuals differ systematically in the degree to which their identities are differentiated from each other rather than integrated into a unitary self and (b) psychological well-being and role-related experiences influence the individual's characteristic level of self-concept differentiation (SCD).

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It has long been recognized that the self-concept is organized into multiple components and that this structure emerges and evolves through social interaction. Indeed, James (1890) suggested that

a man has as many social selves as there are distinct groups of persons about whose opinion he cares. He generally shows a different side of himself to each of these different groups. . . . From this there results what practically is a division of the man into several selves. (p. 294)

The views of James, as well as subsequent symbolic interactionists (e.g., Cooley, 1902; Mead, 1934), precipitated the recent view of the self as a multifaceted cognitive structure (e.g., Markus & Wurf, 1987). The self-concept is differentiated into multiple facets because it reflects the unique relationships and social interactions that characterize an individual's various social roles (Burke & Tully, 1977; Hoelter, 1985; McCall & Simmons, 1978; Stryker, 1987; Turner, 1978). Although individuals have numerous social roles (e.g., student, spouse, and worker), they develop *role identities* only for those roles that they internalize into their self-concept (Burke & Tully, 1977). These role identities represent the characteristics a person ascribes to him- or herself in a particular role. Some individuals develop role identities that vary considerably across roles, whereas others develop role identities that are essentially the same across roles. SCD refers to the degree to which an individual's self is variable or consistent across personally important roles.

What factors influence the degree to which an individual's self-concept is differentiated? Various theories of self-concept structure have advanced different mechanisms to explain the degree of differentiation in the self-concept and have suggested different processes that link SCD to psychological adjustment.

Views of SCD: Specialization and Fragmentation

According to some theories of the self, SCD reflects an adaptation to the varying requirements of different social roles (e.g., Gergen, 1971). To effectively enact their social roles, individ-

uals must be aware of the different rules and expectations prescribed by each role and must be able to alter their behavior accordingly (Goffman, 1959; Snyder, 1974). From this perspective, individuals with highly differentiated self-conceptions can be seen as possessing *specialized identities* that enable them to respond flexibly and adaptively to different role requirements, which should improve interpersonal relationships and functioning within roles. In contrast, the undifferentiated self is seen as rigid and inflexible, constraining the individual from effectively adapting to the multiple and often conflicting requirements of social life (e.g., Gergen, 1971). Thus, this perspective suggests psychological adjustment is related to a high level of SCD, or, as Gergen (1972) suggested, "The healthy, happy human wears many masks" (p. 31).

In contrast with this specialization view, a number of clinically oriented psychologists have interpreted SCD as *fragmentation* or lack of an integrated "core" self. "William James said that a person with a divided sense of self had a 'sick soul': he was to be pitied and redeemed" (Gergen, 1972, p. 32). Lecky (1945) viewed self-consistency as an important indicator of mental health. Rogers (1959) argued that the psychologically adjusted individual has a coherent and integrated self. Block (1961) characterized the individual without an integrated self as

an interpersonal chameleon, with no inner core of identity, fitfully reacting in all ways to all people. This kind of person is . . . plagued by self-doubts and despairs for he has no internal reference which can affirm his continuity and self-integrity. (p. 392)

According to these theorists, SCD reflects a lack of psychological integration stemming from unresolved intrapsychic conflicts; a unitary self, in contrast, is considered central to mental health.

In contrast with the intrapsychic view of SCD, sociological theorists emphasize that the differentiated self is shaped by the roles we occupy and by the way others perceive us within these roles (e.g., Goffman, 1959; Mead, 1934; Stryker, 1987). Individual differences in SCD, therefore, should reflect the extent to which the roles an individual occupies differ in their norms, expectations, and demands and the extent to which the individual has internalized the perceptions of significant others within those roles. Thus, the characteristics of one's roles, role performances, and perceptions of one's roles should influence SCD. For example, individuals who are involved in many different roles or who have experienced many changes in their roles over the life span may have a more differentiated self. With respect to the relation between self-concept structure and psychological adjustment, sociological perspectives consider a certain degree of SCD to be normal, but they do not postulate a direct link between adjustment and SCD.

There has been relatively little research on SCD and its relation to adjustment, personality, and social roles. In an early study, Block (1961) examined the relation between adjustment (measured with his Psychoneuroticism scale) and SCD (measured across interactions with eight partners). He postulated that individuals with either very high or very low levels of SCD would be poorly adjusted, whereas individuals with moderate levels of SCD would be better adjusted. Block found that subjects with very high SCD scores (i.e., those he deemed "interper-

sonally changeable") were relatively more neurotic. Subjects with very low SCD scores (i.e., "interpersonally consistent"), however, were not more neurotic. Block's (1961) finding suggests that SCD may be linearly, but not curvilinearly, related to neuroticism. More generally, the link between differentiation in the self-concept structure and mental health has broader implications for the interrelations among social context, personality, and adjustment and deserves closer examination.

In the present article we report two studies on the relation between SCD and measures of psychological adjustment, personality, and social role variables. In Study 1, we replicate Block's (1961) initial finding and extend it in five ways: (a) We used several different measures of adjustment; (b) we used a comprehensive measure of personality to explore the psychological meaning of individual differences in SCD; (c) we examined the relation between SCD and several role-specific variables, including role satisfaction, involvement, and performance; (d) we measured SCD across five social roles (e.g., student) rather than interactions with specific partners (e.g., with a teacher); and (e) we used two instructional formats designed to control for potential response biases. In Study 2, we replicated the findings from the first study in a sample of women whose level of SCD was assessed at age 52 and for whom antecedent adjustment, personality, and social role information were available. Specifically, we tested whether self-report and observer-based measures of personality and adjustment collected up to 30 years earlier predict SCD in middle age. Moreover, we examined how role-related experiences and outcomes accumulated over time, such as role conflict and role changes, influence subsequent levels of SCD.

Study 1

The goal of our first study was to contrast the specialization and fragmentation views of SCD. To determine whether Block's (1961) finding linking high levels of SCD with maladjustment is specific to his Psychoneuroticism scale, we used measures of neuroticism, depression, and self-esteem. In addition, we included the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1989) to explore the relations between SCD and the major dimensions of personality. Finally, we measured role satisfaction, performance, and involvement to examine the way these theoretically important variables are related to SCD.

The measurement of SCD required that subjects rate each attribute several times (i.e., once for each role identity). Because SCD reflects differences among the ratings, SCD scores might be biased by careless responding or by demand effects. Therefore, we assessed SCD in two experimental conditions. The *identity-focused* condition was modeled after Block's (1961) procedure; subjects described themselves on all 60 attributes for one role at a time. This condition was intended to minimize carry-over effects from one role identity to the next but could spuriously increase the SCD scores of subjects responding carelessly. In the *attribute-focused* condition, subjects described themselves in all of the roles for one attribute at a time. This condition ensured that SCD scores were not inflated by unreliability, but it could encourage subjects to differentiate across roles, thus creating an experimental demand effect. To test the

replicability of our findings, we report all findings separately for the two conditions.

Method

Subjects

Subjects were 96 undergraduates at a large public university on the West coast; half of the subjects were men, half women. Subjects received partial course credit in exchange for participation.

Social roles and personal attributes. Subjects described themselves first in general and then in each of five social roles: student, friend, romantic partner, son or daughter, and worker. These roles were chosen because most students consider them to be personally relevant and important parts of their identities (e.g., Goolsby, 1988) and because they have been commonly used in research on undergraduate populations (e.g., Hoelter, 1985).

Using an 8-point Likert scale, subjects rated themselves on 60 personality-descriptive attributes, first for the general self and then separately in each role. The attributes are broad personal characteristics applicable to most social roles, such as talkative, considerate, responsible, emotional, and perceptive, and included adjective markers for all of the Big Five factors of personality description (Norman, 1963; see also McCrae & John, 1992). The 60 attributes were selected from a set of 78 constructed by John, Hampson, and Goldberg (1991, Study 1), omitting their highly evaluative attributes (e.g., good, exceptional, and inferior).

SCD. In the identity-focused condition, subjects were given the definition of one role at a time and then rated themselves on the 60 attributes for that role. For example, for the student role, they were asked to imagine themselves in school-related contexts and to rate how characteristic each of the 60 attributes was of how they saw themselves as a student. This procedure was repeated until the subjects had rated each role identity on the 60 attributes. Each role was presented on a separate page, and subjects were not permitted to refer back to their ratings in the previous roles. To minimize carry-over effects, the 60 attributes were presented in a different order for each role. The order of roles was counterbalanced across subjects using a Latin square design.

In the attribute-focused condition, subjects were given the definition of all five roles at the beginning of the task. The attributes were presented, one at a time, with all five roles listed next to each attribute. For example, subjects were asked to rate how friendly they saw themselves as a son or daughter, as an employee, as a friend, as a romantic partner, and as a student. This procedure was repeated until each attribute had been rated for all five roles. The order in which the roles were presented next to the attributes was counterbalanced across subjects using a Latin square design.

Computation of SCD. Following the procedure developed by Block (1961), we used factor analysis to measure the proportion of variance in the role-identity ratings that was not shared across the roles.¹ For each subject, we intercorrelated the five role identities across the 60 attributes and then factor analyzed the resulting 5×5 role-identity correlation matrix. The first principal component, representing the variance shared by the five role identities, was extracted; the remaining variance was used as an index of SCD (i.e., 100% minus the percentage of variance accounted for by the first principal component). Higher values indicate more unshared variance across role identities and therefore greater SCD.

Note that this index was derived from correlations between role identities (rather than from difference scores) and therefore it indicates the extent to which an individual's ordering of the attributes from most to least descriptive varied from role to role. The SCD index can also be expressed as the mean intercorrelation among the role identities.² For

example, the lowest SCD score in the present sample (2.6% of non-shared variance) corresponded to a mean interrole correlation of .97; for this subject the ordering of attributes in any role identity was almost perfectly predictable from any other. On the other hand, the highest SCD score in the present sample (69.9%) corresponded to a mean interrole correlation of only .14; for this subject the role identities were so different that prediction of one role identity from another would achieve little more than chance success.

Emotional adjustment and personality. We used three self-report scales to measure aspects of emotional adjustment: the Neuroticism scale from the NEO-FFI (Costa & McCrae, 1989), the revised Minnesota Multiphasic Personality Inventory Depression scale (Dempsey, 1964), and the Rosenberg (1965) Self-Esteem Scale. In the present sample the coefficient alpha reliabilities of these three scales were .86, .86, and .85, respectively. The NEO-FFI also measures Extraversion, Agreeableness, Conscientiousness, and Openness; these scales (alpha coefficients ranged from .75 to .84) were used to examine relations between SCD and other broad personality characteristics.

Role satisfaction, involvement, and participation. For each role, role satisfaction was assessed as the composite of three ratings: the extent to which subjects felt they fulfilled the role, the competence they felt in the role, and how satisfying they found the role; alpha coefficients ranged from .49 to .81 ($M = .71$) across the five roles. For the student role, high school and college GPAs were used as measures of objective role performance. Role involvement was measured as the composite of four ratings for each role: how frequently the subject thinks about the role, how many daily activities involve the role, whether the subject would like to spend more time in the role, and whether the subject would be unhappy spending less time in the role; alpha coefficients ranged from .55 to .75 ($M = .67$) across the roles.³ Role participation was assessed from several demographic items. In particular, subjects reported how frequently they visited their parents (son or daughter role); whether they worked part time or full time (worker); the closeness of their friendships (friend); whether they were dating casually, living with a partner, or married (romantic partner); and whether they attended school part time or full time (student).

¹ We also examined a second index that was different from Block's (1961). This alternative index represents the absolute differences among the identities, computed separately for each attribute and then aggregated across attributes. In particular, for each subject we computed 60 standard deviations across the five identities, one standard deviation for each of the attributes, and then averaged them across the 60 attributes. The coefficient alpha reliability of this composite index (based on the intercorrelations among the 60 attribute-specific standard deviations) was .95, indicating that subjects that differentiated among their identities on one attribute also differentiated among them on the other attributes. This index of SCD was highly correlated with Block's (1961) index; the correlations were .80 in the attribute-focused condition and .78 in the identity-focused condition in Study 1 and .80 in Study 2. Moreover, the substantive findings were highly similar for the two indexes. Given their high degree of convergence in both conditions and in both samples, we report the findings only for the more commonly used index suggested by Block (1961).

² The relation between the mean of the interrole correlations (R) and the eigenvalue of the first principal component (E) is given by the formula $R = (E - 1)/(N - 1)$, where N is the number of variables in the correlation matrix (i.e., five in the present case).

³ Neither performance satisfaction nor role involvement formed a homogeneous scale across roles (alpha coefficients = .22 and .25, respectively) because some single-role scales were negatively intercorrelated; for example, role satisfaction in the romantic partner role and in the student role correlated at $-.34$ ($N = 95$, $p < .001$).

Procedure

SCD, role satisfaction, role involvement, and role participation were assessed in the first session. Emotional adjustment and personality were assessed approximately 1 week later. Thus, correlations between SCD and adjustment or personality cannot be attributed to shared mood effects resulting from administration of the measures on the same occasion. Subjects were randomly assigned to complete the SCD measure in either the identity-focused ($n = 48$) or attribute-focused ($n = 48$) condition. Two subjects in the identity-focused and 1 in the attribute-focused condition had no work experience and therefore could not rate the worker role; their data were excluded from the present analyses.

Results

A comparison of the scores in the identity-focused and attribute-focused conditions revealed that our measure was not affected by variations in the subjects' focus; neither the means nor the distributions of the scores differed across conditions. The means were 24.6% ($SD = 12.4$) and 24.2% ($SD = 16.3$) in the role- and attribute-focused conditions, respectively, $t(92) < 1$. In both conditions the distributions were somewhat skewed, with relatively more subjects scoring in the lower range (i.e., less differentiated); only about 10% of the subjects had SCD scores above 40%. Apparently, very high levels of SCD are the exception rather than the norm among college students today, just as 30 years ago (Block, 1961). The SCD scores of men ($M = 23.7\%$) and women ($M = 25.6\%$) did not differ significantly.

We first examined the relation of SCD to emotional adjustment and to the other broad personality dimensions, separately for the two conditions and for the combined sample. These correlations are reported in Table 1. As predicted by the fragmentation model, SCD was related to distress, rather than to adjustment, regardless of the measure we used. For example, in the combined sample, SCD correlated $-.39$ with Self-Esteem,

.44 with Depression, and .30 with Neuroticism (all $ps < .01$). Among the other broad personality traits measured by the NEO-FFI, Conscientiousness was strongly negatively related to SCD; this correlation ($r = -.45$, $p < .01$) was comparable in size with the correlations of SCD with Depression and Self-Esteem. As shown in Table 1, subjects higher in SCD also tended to be somewhat lower in Agreeableness than subjects low in SCD.

To test whether the relations of SCD to emotional distress and personality were curvilinear, we first examined the scatterplots of SCD with each measure of distress and personality and then used multiple regression to test the significance of a quadratic (i.e., curvilinear) effect for each predictor (controlling for linear effects). Neither the scatterplots nor the multiple regression analyses indicated a curvilinear effect between SCD and any of the emotional adjustment or personality measures. In other words, individuals at the high end of the SCD distribution tended to experience emotional distress and tended to be low in Conscientiousness and Agreeableness, but those at the opposite end of the SCD distribution did not.

We next examined the relation between SCD and the social role variables. The specialization view (e.g., Gergen, 1972) implies that SCD facilitates effective role performance; thus, SCD should be positively related to measures of role performance and satisfaction. In contrast, the fragmentation view suggests a negative relation between SCD and satisfaction; high SCD individuals are assumed to have difficulty integrating their various roles into a coherent self-concept, which may lead them to feel less successful and less satisfied with their roles.

SCD was negatively related to role satisfaction for four of the five roles we examined, with correlation coefficients ranging from $-.29$ to $-.39$ ($p < .01$) for the total sample (see Table 2). Subjects with more differentiated self-concepts were less satisfied with their role performances, and this effect replicated across the role- and attribute-focused conditions. Moreover, we found that greater SCD was related to two objective measures of role performance. As shown in Table 2, SCD was negatively correlated with both high school and college GPAs, suggesting that high-SCD subjects performed less well in the student role.

In contrast, role involvement was not related to SCD in either condition. As shown in Table 2, there were no reliable correlations between SCD and the role-involvement scale for any of the roles in the combined sample. Moreover, SCD was not related to any of the measures of role participation, such as frequency of visiting parents and number of hours worked. Thus, subjects with high versus low levels of differentiation across their role identities did not differ in the degree to which they thought about their roles or engaged in role-related behaviors.

Discussion

In Study 1, we measured SCD across social roles with two instructional formats to control for potential response bias, and we examined the relation between SCD and adjustment using several different measures of adjustment. We found that individuals who saw themselves very differently across their roles tended to be more depressed, more neurotic, and lower in self-esteem than individuals who saw themselves as similar across

Table 1
Correlations of Self-Concept Differentiation With Emotional Adjustment and Other Broad Personality Dimensions in the Two Conditions of Study 1

Measure	Condition		Combined across conditions
	Identity focused	Attribute focused	
Emotional adjustment			
Self-Esteem (Rosenberg)	-.41**	-.37**	-.39**
Depression (MMPI)	.46**	.44**	.44**
Neuroticism (NEO)	.32*	.30*	.30**
Broad personality dimensions			
Conscientiousness (NEO)	-.44**	-.45**	-.45**
Agreeableness (NEO)	-.38**	-.21	-.27**
Extraversion (NEO)	-.21	-.08	-.13
Openness (NEO)	-.15	-.02	-.07

Note. $N = 93$ (46 in the identity-focused and 47 in the attribute-focused condition). MMPI = Minnesota Multiphasic Personality Inventory; NEO = NEO Five-Factor Inventory (Costa & McCrae, 1989).

* $p < .05$. ** $p < .01$, two-tailed.

Table 2
Correlations of Self-Concept Differentiation With Role Satisfaction, Role Performance, and Role Involvement in the Identity- and Attribute-Focused Conditions of Study 1

Measure	Condition		Combined across conditions
	Identity focused	Attribute focused	
Role satisfaction			
Student	-.31*	-.45**	-.39**
Friend	-.38**	-.30*	-.33**
Son or daughter	-.44**	-.26	-.30**
Worker	-.38**	-.24	-.29**
Romantic partner	-.14	.07	-.02
Performance in student role (GPA)			
High school	-.22	-.28*	-.22*
College	-.32*	-.12	-.21*
Role involvement			
Student	-.28	.08	-.07
Friend	-.37*	.04	-.14
Son or daughter	-.17	.17	.02
Worker	.06	.13	.10
Romantic partner	-.10	.23	.08

Note. $N = 93$ (46 in the identity-focused and 47 in the attribute-focused condition). GPA = grade point average.

* $p < .05$. ** $p < .01$, two-tailed.

roles. These relations were robust across the identity-focused and attribute-focused conditions, which required subjects to rate their role identities in rather different ways. Thus, regardless of the condition under which it was assessed, the psychological meaning of the SCD index remained the same. In conclusion, the correlations of SCD with these three aspects of adjustment linked SCD to emotional distress and maladjustment in general. Thus, the findings of Study 1 support the interpretation of SCD as indicating fragmentation rather than specialization of the individual's role identities.

In addition, we used a comprehensive measure of the Big Five personality dimensions to explore the more general personal implications of SCD. We found that whereas SCD was not correlated with the Extraversion and Openness scales of the NEO-FFI, it had a substantial negative correlation with Conscientiousness and a moderate negative correlation with Agreeableness. The combination of low Conscientiousness and low Agreeableness indicates problems with respecting and following generally accepted social norms, as displayed in the extreme by antisocial behavior and delinquency (Eysenck & Eysenck, 1976; Gough, 1987; John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1992). Thus, Study 1 suggests a link between SCD and problems with norm acceptance that now needs to be replicated. Moreover, the idea that individuals low in SCD find it difficult to accept and conform to the demands of social roles suggests the intriguing hypothesis that they may eventually experience failed role relationships and other role-related problems.

This hypothesis received some preliminary support in Study 1. We examined the relation between SCD and three role-specific variables—role involvement, satisfaction, and performance.

None of the measures of role involvement were related to SCD. On the other hand, we found that individuals high in SCD were generally less satisfied with their role performances and tended to have lower high school and college GPAs, indicating poorer performance in the student role. These findings implicate the importance of role-related experiences and outcomes as predictors of SCD.⁴

In all, the findings from Study 1 suggest that SCD is related not only to adjustment but also to norm acceptance and to role-related experiences and outcomes. SCD may thus imply not just fragmentation in the sense of emotional adjustment but also a more general pattern of maladaptation: SCD may be associated with intrapersonal and interpersonal difficulties marked by emotional distress, rejection of social norms, and failed role relationships. Over time, these difficulties may reinforce one another and form a stable, self-maintaining pattern. To examine this pattern of relations in more detail and over time, we conducted a second study. It was designed to investigate the links between individual differences in SCD in middle age and three types of predictors: (a) emotional adjustment, (b) norm acceptance, and (c) role experiences. All of these predictors were measured both concurrently and longitudinally as antecedents of SCD.

Study 2

Study 2 had four major purposes. First, we attempted to replicate the two new findings emerging from the exploratory analyses in Study 1, linking norm acceptance and role experiences to SCD. Second, we used observer data to replicate the adjustment-SCD link, which so far had been established only with self-reported adjustment. Third, we used a longitudinal design to examine the psychological precursors of SCD in middle adulthood, using multiple measures of adjustment and norm acceptance predating the measurement of SCD by up to 30 years. Fourth, we explored whether role-related experiences, accumulated over time, predict SCD in midlife.

In our first study, we examined SCD in a sample of undergraduates. However, relatively little is known about SCD in older individuals whose role identities are based on much more life experience. As Harter (1983) noted, "At best, we have clinical accounts of adults who seem unable to integrate their various self-definitions into a unified sense of self" (p. 313). In Study 2, therefore, we replicated the findings from Study 1 in a sample of middle-aged adults. These subjects were women in their early 50s who had experienced diverse role-related conflicts, achievements, and changes, such as marriage, divorce, child rearing, career advancement, chronic illness, and the deaths of parents, friends, and spouses.

There has been relatively little research on the antecedents and determinants of self-concept structure. Harter and Monsour (1992) recently emphasized the need for research on the "psychosocial precursors responsible for the degree of contra-

⁴ Additional exploratory analyses showed that none of the role variables measured in Study 1 moderated or mediated the link between SCD and adjustment.

diction and conflict experienced within the self" (p. 259). The possibility that personality characteristics serve as precursors of SCD has been raised by Elliott (1986), who studied self-esteem as a developmental precursor of people's beliefs about the stability of their self-concept (Elliott, 1988). The data used in Study 2 made possible a unique 30-year longitudinal study of the personality characteristics and role experiences that predict which women will have highly differentiated selves in middle adulthood. The subjects in Study 2 were participants in an ongoing longitudinal study of women (Helson, 1967; Helson & Wink, 1992) whose emotional adjustment, norm acceptance, and role-related behaviors and outcomes had already been assessed at ages 21, 27, and 43. Our measure of SCD was administered to this sample in the most recent follow-up at age 52, along with the same personality and role measures obtained previously.

To test the longitudinal effects of adjustment and norm acceptance, we used multiple convergent measures. To measure emotional adjustment, we used the Well-Being, Self-Realization, Anxiety, and Psychoneuroticism scales from the California Psychological Inventory (CPI; Gough, 1987). Our multiple convergent measures of norm acceptance were the CPI Socialization, Self-Control, Good Impression, Achievement via Conformance, and Norm Favoring scales. One limitation of Study 1 was that the findings were based on self-report data. Thus, to eliminate the possibility of self-report biases in the measurement of adjustment, we extended our findings using multiple observer ratings of emotional adjustment (i.e., depression, neuroticism, psychological soundness, and ego-resiliency) and of norm acceptance (i.e., conventionality, conscientiousness, and ego-overcontrol).

Finally, the design of Study 2 allowed us to examine the relation between social role variables and SCD in more detail than possible in an undergraduate sample. Role theory (Stryker & Statham, 1985) addresses the relations among psychological well-being, SCD, and role variables. Past research suggests that well-being is associated with the number of roles a person occupies, role satisfaction, role conflict, and role involvement (e.g., Barnett & Baruch, 1985; Baruch & Barnett, 1986; Thoits, 1983). These role variables may also influence SCD. For example, occupying a larger number of roles may expose an individual to more diverse role relations and environments, resulting in increased SCD. Similarly, people experiencing more conflict between the demands placed on them in their roles may be forced to behave quite differently across roles and thus may develop more differentiated self-concepts. Finally, individuals who have experienced many role transitions, such as marriage, divorce, and job changes, may have acquired a more diverse range of information about themselves, and consequently have higher levels of SCD, than those who have lived less eventful lives.

Given the linkages among role variables, adjustment, and SCD suggested by role theory, we also investigated the independent contributions of role factors and adjustment in predicting SCD. We tested whether the association between adjustment and SCD can be accounted for by an individual's role experiences and outcomes and, conversely, whether the associations between role variables and SCD can be accounted for by pre-existing individual differences in adjustment.

Method

Subjects and Longitudinal Assessments

The subjects were first assessed in 1958 or in 1960 when they participated in a study of personality and plans for the future during their senior year at a private women's college (Helson, 1967). Three subsequent assessments of the sample have traced the personality and life events of approximately 100 women for 30 years with little attrition (see Helson & Wink, 1992). The women were approximately 21, 27, 43, and 52 years old at the four times of testing. SCD was assessed at age 52 for 83 of the women. Measures of emotional adjustment and norm acceptance were available from all four assessments.

SCD

At age 52, subjects rated up to five role identities using 16 personal attributes; 10 of these attributes were selected to represent the Big Five dimensions of personality description, and 6 were added to represent important feelings about relationships with others (e.g., feeling appreciated and feeling bored). Using the attribute-focused format of Study 1, the subjects rated the degree to which each attribute described them in the following roles: as a daughter, in work or career, as a friend, as a spouse or partner, and as a mother. The subjects were instructed to rate only those roles they felt were relevant to their lives; all subjects included in the present study had rated at least three roles. To ensure that the number of roles rated did not affect our findings, we compared the groups of subjects who had rated either three, four, or all five roles in a one-factor analysis of variance; the mean SCD scores did not differ across the three groups. SCD was calculated on the basis of within-subject factor analyses of the interrole correlations, as described in Study 1.

Emotional Adjustment and Norm Acceptance

Self-report measures. These measures were scored from the CPI (Gough, 1987), which had been administered in all four assessments, enabling us to examine the relations between SCD at age 52 and emotional adjustment and norm conformance measured either concurrently (i.e., at age 52) or as antecedents (i.e., at ages 21, 27, and 43). To replicate the findings from our first study and from Block's (1961) study, we scored four convergent measures of emotional adjustment from the CPI: Block's (1961) Psychoneuroticism scale (a measure of general susceptibility to anxiety), Leventhal's Anxiety Index (see Gough, 1987), and the CPI standard scales for Well-Being and Self-Realization. To measure norm acceptance, we used five convergent scales that Gough (1987) developed to assess various aspects of individual differences in the degree to which people value and follow social conventions and interpersonal norms. These scales were Socialization, Self-Control, Achievement via Conformance, Good Impression, and Norm Favoring.

Archive-based observer measures. Observer-based personality descriptions of the subjects were available from three to five judges (either doctorates or advanced graduate students in clinical and personality psychology). They had read all of the age-43 archival materials about a subject except the standardized tests and inventories (see Wink, 1991, for details) and then described the subject using the standardized language of the California Adult Q-Set (CAQ; Block, 1978). The CAQ consists of 100 statements about personality, interpersonal, and cognitive characteristics (e.g., "Is critical, skeptical, not easily impressed"). Each judge independently sorted the 100 CAQ items into a forced, 9-point distribution scale ranging from *extremely uncharacteristic* (1) to *extremely characteristic* (9) of the individual being described.

The resulting CAQ descriptions were then averaged to form a composite personality description of each subject.

We scored four convergent measures of emotional adjustment from these composite CAQ descriptions. The Depression scale consisted of those 13 CAQ items rated by a panel of experts as quite or extremely characteristic of depressives and the 14 items rated as quite or extremely uncharacteristic of depressives (Block, 1991). The Psychological Soundness scale consisted of the 26 items that Marrott (1981) had assigned either to her Soundness scale or to her Unsoundness scale on the basis of clinical judgments and internal consistency analyses. The Neuroticism factor scale consisted of the 18 items that loaded at least .40 on the Neuroticism factor in McCrae, Costa, and Busch's (1986) factor analysis of self CAQ sorts. Finally, we measured Block and Block's (1980) construct of ego-resiliency using a prototype score (Block, 1978). The Ego-Resiliency Prototype score was computed by correlating the observer judges' composite CAQ description of each subject with the composite of nine experts' CAQ descriptions of the prototypical ego-resilient individual (Block, 1991). Note that these four measures of emotional adjustment represent a broad range of theoretical viewpoints and scale construction methodologies, thus providing a strong test of the generalizability of our findings.

Similarly, we scored three measures of norm acceptance. The Conventionality measure was a 7-item rationally constructed scale; it included items such as "Favors conservative values in a variety of areas" and "Is moralistic." CAQ Items 7, 41, 63, 70, and 75 were scored true, and Items 62 and 96 were scored false. The Conscientiousness factor scale consisted of the 6 items that loaded at least .40 on McCrae et al.'s (1986) Conscientiousness factor. The Ego-Overcontrol Prototype score was the correlation between the observer CAQ sort of the subject and the ego overcontrol criterion sort generated by nine experts (Block, 1991). The coefficient alpha reliabilities for the CAQ-based scales are given in Table 5.

Social role variables. To examine the antecedent and concurrent effects of social roles on SCD we measured five types of role variables: number of roles, role conflict, role involvement, role satisfaction, and number of role changes.

To measure number of roles, subjects were classified as having one, two, or three of the roles of partner, parent, and paid worker at age 43; at age 52, a fourth possible role was added, that of caregiver for their aging parents. Subjects were considered to be partners if they were in a marriage or marriage-like relationship, parents if they reported having a child or stepchild in the household, paid workers if they had worked for pay more than 20% of the time during the previous year, and caregivers if they rated themselves as involved or heavily involved in the care of their parents.

Role conflict was assessed at age 43. Subjects rated the amount of conflict between their work role and each of three other roles—partner, parent, and homemaker—on a 5-point scale. The resulting three measures were standardized and then composited into a total index of role conflict. Role involvement was measured on a 5-point scale at age 43 and age 52. At each age, an overall measure was computed by averaging the amount of involvement across all roles rated. To assess role satisfaction, subjects rated how satisfied they were with each of their roles on a 5-point scale. These role-specific ratings were standardized and then averaged across roles.

Finally, we used two measures of role changes from 21 to 43. The number of relationship changes was computed by summing the number of marriages and marriage-like relationships each subject had from age 21 to age 43. The number of job changes was computed by summing the number of different jobs occupied from age 21 to age 43. A total index of role changes was the unit weighted average of the number of relationships and number of jobs.

Results and Discussion

SCD scores were calculated using the procedure described in Study 1. Values ranged from 0.5% to 48.8% ($M = 20.1\%$, $SD = 12.7$) of variance remaining after extraction of the first principal component. As in Study 1, the distribution of the measure was somewhat skewed, with more subjects scoring in the lower, less differentiated range.

Self-Reported Adjustment and Norm Acceptance

Concurrent correlations at age 52. As predicted, SCD correlated positively with both Psychoneuroticism ($r = .48$) and Anxiety ($r = .26$) and negatively with both Well-Being ($r = -.31$) and Self-Realization ($r = -.31$, all $ps < .01$). Interestingly, the scale with the highest correlation was Block's (1961) Psychoneuroticism scale, and the present correlation of .48 was very close to the correlation of .52 reported by Block (1961).

The correlations between SCD and the five CPI scales related to norm acceptance were all significant and in the predicted direction: $-.47$ for Socialization, $-.38$ for Self-Control, $-.30$ for Achievement via Conformance, $-.50$ for Good Impression, and $-.25$ for Norm Favoring (all $ps < .01$). These findings replicate those from Study 1 in a different age group and across different measures of emotional adjustment and norm acceptance. Together, these findings make a strong case for our hypothesis that high-SCD scorers are less well adjusted and reject social norms, whereas low-SCD scorers are better adjusted and norm following.

Antecedent correlations. To investigate whether SCD is related only to concurrent emotional problems or to a long-term history of maladjustment, we used emotional adjustment and norm acceptance at ages 21, 27, and 43 to predict SCD at age 52. In Table 3, we report the correlations of SCD with emotional adjustment and norm acceptance at each assessment period. To summarize the effects at each age and increase the reliability of the predictors, we standard scored and aggregated the four emotional adjustment scales into an overall emotional adjustment score and the five norm acceptance scales into an overall norm acceptance score. Both of these scores were quite reliable, with alpha coefficients exceeding .80 at every age. The correlations between SCD and these two overall measures (see Table 3), show that SCD in middle adulthood can be predicted from individual differences in personality dating at least as far back as the college years. The small but significant correlations (in the low .20s) at age 21 increased to .35 by age 27, and approached .50 by age 43. Note that the antecedent correlations from age 43 were as high as the concurrent correlations from age 52; the effect sizes for both ages were also very close to the effect sizes found for the college student sample in Study 1.

The correlations in Table 3 show that women with high SCD scores at 52 had already shown signs of emotional distress when they were in college; in other words, women who 30 years later had high SCD scores were already higher in Psychoneuroticism and Anxiety, and lower in Well-Being. By age 27, they were lower in Self-Realization as well, and this pattern remained stable through ages 43 and 52. The correlations for the norm acceptance scales in Table 3 are similar; women with high SCD

Table 3

Longitudinal Analysis in Study 2: Self-Concept Differentiation at Age 52 Predicted From CPI Scales for Emotional Adjustment and Norm Acceptance Measured at Ages 21, 27, 43, and 52

Measure and CPI predictor scales	CPI predictor scales measured at			
	Age 21	Age 27	Age 43	Age 52
Emotional adjustment				
Psychoneuroticism	.20*	.29**	.47**	.48**
Anxiety	.20*	.24*	.23*	.26**
Well-Being	-.25*	-.35**	-.38**	-.31**
Self-Realization (v.3)	-.08	-.26*	-.35**	-.31**
Overall emotional adjustment	-.23*	-.35**	-.47**	-.45**
Norm acceptance				
Socialization	-.16	-.25*	-.25*	-.47**
Self-Control	-.16	-.35**	-.36**	-.38**
Good Impression	-.25*	-.40**	-.49**	-.50**
Achievement via Conformance	-.16	-.26*	-.41**	-.30**
Norm Favoring (v.2)	-.15	-.20	-.26**	-.25**
Overall norm acceptance	-.22*	-.38**	-.47**	-.48**

Note. CPI (California Psychological Inventory) scales were available for 83, 66, 82, and 83 subjects at ages 21, 27, 43, and 52, respectively. v. = vector scale.

* $p < .05$. ** $p < .01$, one-tailed.

scores had been lower on these scales than women with low SCD for many years. Together, our findings suggest that the relatively high levels of distress and low levels of norm acceptance that characterize the high-SCD women in their 50s had characterized them for most of their adult lives.

Observer Measures of Adjustment and Norm Acceptance: Antecedent Correlations

The correlations of SCD with the antecedent observer measures are particularly important because they test whether the earlier findings linking SCD to emotional distress and a rejection of social norms generalize beyond the self-report domain. These correlations are presented in Table 4. As predicted, SCD was negatively related to emotional adjustment assessed 9 years

earlier, and this finding held for each of our four measures of adjustment.

As we found for self-reported depression in Study 1, observer-rated depression showed the highest correlation with SCD ($r = .35$). Neuroticism, Psychological Soundness, and Ego-Resiliency were also significantly related to SCD. These correlations are substantial in size, given that the observer ratings were based on archival material gathered 9 years before the assessment of SCD. Apparently, the distress and the neurotic problems of high-SCD scorers were apparent to independent raters. In summary, SCD was predicted by poor emotional adjustment regardless of the way it was conceptualized, and this effect held for both self-report scales and observer ratings.

The findings for the three observer measures of norm acceptance were less consistent. As expected, Conventionality was

Table 4

Self-Concept Differentiation (SCD) at Age 52 and Antecedent Archival Ratings at Age 43: Alpha Reliabilities and 9-Year Predictive Correlations of CAQ Measures

Measures scored from archival CAQ sorts at age 43	Alpha reliability	No. of items	Correlation with SCD at age 52
Emotional adjustment			
Depression scale	.90	27	.35**
Neuroticism factor scale	.92	18	.25**
Psychological Soundness scale	.94	26	-.30**
Ego-Resiliency prototype	—	100	-.21*
Norm acceptance			
Conventionality scale	.84	7	-.24*
Conscientiousness factor scale	.81	6	-.02
Ego-Overcontrol prototype	—	100	.05

Note. $N = 81$. Dashes indicate that alpha coefficients are not available for the prototype scores, which are computed across all 100 California Adult Q-Set (CAQ) items.

* $p < .05$. ** $p < .01$, one-tailed.

negatively related to SCD. Conscientiousness and Ego-Overcontrol, however, did not show the expected negative correlations. The Conventionality scale was narrowly conceptualized to measure acceptance versus rejection of traditional norms. By contrast, the Conscientiousness scale and the Ego-Overcontrol score measure broad personality dimensions that include, but are not limited to, conventionality and norm acceptance. Hence, SCD may be related only to the conventionality component of this broad domain. Alternatively, the raters in the present study may have had difficulty judging some aspects of norm acceptance from the archival materials.

Effects of Social Roles: Concurrent and Antecedent Correlations

The relations between the social role variables and SCD are summarized in Table 5. As in Study 1, role involvement did not significantly predict SCD. Moreover, neither concurrent nor antecedent measures of number of roles and role conflict predicted SCD. On the other hand, role satisfaction had a strong concurrent relation with SCD ($r = -.46$) and a weaker but still significant antecedent relation ($r = -.21$). These findings replicate and extend those from Study 1; the negative relation between SCD and role satisfaction we found among college students generalized to middle adulthood and across the 9-year period from age 43 to 52. Finally, our antecedent measures of role changes in relationships and jobs (during the period from age 21 to 43) strongly predicted SCD; individuals who had experienced more role transitions in their 20s and 30s had higher SCD scores in their 50s ($r = .38$). This relation was significant for both the relationship index ($r = .33$) and the job index ($r = .31$).

As we noted earlier, role theory posits complex interrelations among role variables, adjustment, and SCD. Therefore, we tested whether the role variables and adjustment independently predicted SCD. In the first analysis, we tested whether the associations between the role variables and SCD (presented in Table 5) could be due to preexisting individual differences in emotional adjustment. In Table 5, we report the partial correlations of the social role variables with SCD, controlling for self-reported adjustment at age 43 (see second column of Table 5) and observer-based adjustment at age 43 (see third column of Table 5). The antecedent effect of role satisfaction was no longer significant, suggesting that satisfaction with one's roles does not independently predict SCD over time. However, the concurrent relation between role satisfaction and SCD remained significant whether we controlled adjustment at age 43 or at age 52.⁵ With respect to role changes from age 21 to 43, the partial correlations in Table 5 indicate that these antecedent effects were independent of individual differences in adjustment.

Conversely, in the second analysis, we tested whether the antecedent effects of adjustment and norm acceptance on SCD could be due to individual differences in role experiences and outcomes. In particular, we partialled the effects of role satisfaction and role changes from the correlations of SCD with the overall emotional adjustment and norm acceptance indices at ages 43 and 52. These partial correlations all remained significant ($p < .01$), ranging in magnitude from $-.28$ to $-.53$. The

overall pattern of findings suggests that partialing role satisfaction slightly lowered the correlations, whereas partialing role changes slightly increased the correlations.

In summary, emotional adjustment, norm acceptance, role satisfaction, and role changes had antecedent effects on SCD in midlife. However, the effect of role satisfaction at age 43 was not independent of stable individual differences in adjustment. When the three remaining predictors (adjustment, norm acceptance, and role changes) were entered jointly into a multiple regression analysis, all contributed significantly to the prediction of SCD. The multiple correlation was .60, a substantial level of predictability given the 9-year time lag between the measurement of the predictors and criterion and the less-than-perfect reliability of both predictors and criterion.

General Discussion

SCD as Fragmentation Rather Than Specialization

In the present research we have examined the personological antecedents and concomitants of SCD. Our findings failed to support the idea that greater differentiation of the self-concept into role-specific identities represents an adaptive specialization to meet the varying demands of different roles. Rather, the two studies reported here provide compelling evidence for the clinical interpretation of high SCD as indicating psychological fragmentation and lack of an integrated core self. We found that high levels of SCD were strongly related to poor adjustment. This finding was robust across two sets of social roles and two sets of personality attributes, across two methods of assessing SCD, and across self-report and observer-based measures of adjustment. Even more important, the effect held for different aspects of adjustment, replicated in a college student sample and in a sample of middle-aged women, and remained stable across the life span. We consider these latter three points in turn.

Adjustment has been conceptualized in many ways (Korichin, 1976). Most conceptions of psychological adjustment emphasize the presence or absence of emotional distress. Indeed, our findings indicate that individuals high in SCD are relatively more depressed, anxious, and neurotic. Moreover, they have lower levels of self-esteem and well-being. Whereas these findings emphasize emotional and intrapersonal aspects of adjustment, our findings suggest that individuals high in SCD are less interpersonally adjusted as well. In particular, we found that SCD was negatively related to agreeableness and conscientiousness in Study 1 and to socialization, self-control, and acceptance of conventional values in Study 2. Thus, SCD appears to signal a more general pattern of maladaptation characterized by both intrapersonal and interpersonal difficulties.

Our findings generalized not only across different aspects of adjustment but also across two rather different samples. The subjects in Study 1 were college students of approximately the

⁵ Additional analyses showed that the findings did not change when we partialled out adjustment measured at age 52.

Table 5
*Prediction of Self-Concept Differentiation (SCD) at Age 52 From
 Social Role Variables at Ages 43 and 52*

Role variables	Correlation with SCD at age 52	Partial correlations with SCD at age 52	
		Controlling for self-reported adjustment at age 43	Controlling for observer-based adjustment at age 43
Number of roles			
Age 43	.05	.14	.05
Age 52	.16	.22*	.16
Role conflict at age 43	.16	.12	.15
Role involvement			
Age 43	-.07	.06	.00
Age 52	-.06	.04	-.03
Role satisfaction			
Age 43	-.21*	-.08	-.13
Age 52	-.46**	-.32**	-.42**
Role changes from age 21 to 43			
No. of relationships	.33**	.42**	.37**
No. of jobs	.31**	.28**	.35**
Total no. of role changes	.38**	.43**	.42**

* $p < .05$. ** $p < .01$, two-tailed.

same age as Block's (1961) subjects yet drawn from an age cohort that attended college about 30 years later. In contrast, the subjects in Study 2 were women in their 50s, many of whom had experienced diverse role-related conflicts, achievements, and changes, including marriage, parenting, career shifts, and chronic illness. Nevertheless, there was no indication that SCD served a different psychological function, or was any more psychologically adaptive, for women at midlife than for male and female students in college.

The longitudinal analyses in Study 2 suggest that SCD is more than a transient phenomenon. We found that SCD is tied to a long-term pattern of both intrapersonal and interpersonal problems. For example, women who were high in SCD at age 52 showed signs of emotional distress and a tendency to reject interpersonal norms as early as age 21. Notably, the predictive correlations between adjustment at age 43 and SCD at age 52 were of approximately the same magnitude as the concurrent correlations in Study 1 and in Study 2. This pattern of correlations shows that the strength of the relation between distress and SCD in adults is fairly stable over time, a conclusion further corroborated by our finding that observer ratings of adjustment collected 9 years earlier also predicted SCD. The observer-based findings considerably strengthen our argument: They demonstrate that SCD, an aspect of self-concept structure inferred from self-reports, is related to antecedent adjustment measures obtained from a data source other than self-report inventories. In conclusion, the longitudinal nature of both the self-reported and the observer-based adjustment effects rules out the possibility that SCD is the short-term outcome of temporary difficulties in adjustment. Nonetheless, one limitation of the present research is that SCD was measured only once; future longitudinal research should chart the consistency of individual differences in SCD over time.

Influence of the Social Context on SCD

So far we have discussed the personological aspects of SCD. However, our findings also illustrate the importance of the social context in which the individual lives. In both studies, we found that individuals who were less satisfied with their social roles had more highly differentiated self-concepts. Apparently, role satisfaction influences the likelihood that a role identity will be integrated into a coherent, unified self-concept. This finding is consistent with Harter and Monsour's (1992) research showing that people insulate their core self from negative self-identities.

On the other hand, we found no evidence for the hypothesis that occupying a larger number of roles results in increased SCD, even though the middle-aged women in Study 2 differed widely in the number of roles they occupied at age 52. This negative finding is similar to earlier failures to confirm the role-theoretical prediction that number of roles is positively related to psychological well-being (Helson, Elliott, & Leigh, 1990). Apparently, the number of roles an individual has at any given time does not have a strong effect on self-concept structure.

Another role variable, however, seems to have a powerful influence on the structure of the self-concept, namely, the cumulative effect of transitions and changes within particular roles over time. We found that individuals who in their 20s and 30s had gone through many role changes, such as marriage, divorce, and job changes, had much higher levels of SCD in their 50s. In this instance, high levels of SCD seem to mirror the diversity of the life contexts the individual has experienced over time. As symbolic interactionists have long emphasized, the structure of the self-concept represents the multiple relationships and social interactions that comprise the individual's past and present role experiences.

Our findings thus suggest that SCD is influenced both by personological factors (e.g., psychological adjustment) and by social-contextual factors (e.g., role experiences over time). To what extent do these two kinds of effects overlap? Using the longitudinal design of Study 2, we investigated the independent contributions of personological and role variables as antecedents of SCD. Role satisfaction had only a concurrent effect on SCD; its 9-year antecedent effect could be accounted for entirely by preexisting individual differences in adjustment. In contrast, the antecedent effect of role changes over time was independent of the personological effects of adjustment and thus added significantly to the substantial longitudinal predictability of individual differences in SCD at midlife.

In conclusion, our findings suggest that individual differences in SCD are shaped by a complex network of relations including adjustment, norm acceptance, and role-related experiences and outcomes. SCD appears to signal not just fragmentation in the sense of emotional adjustment but a more general pattern of maladaptation: We propose that SCD is associated with intrapersonal and interpersonal difficulties marked by emotional distress, rejection of social norms, and volatile role relationships in love and work. Across the life span, these difficulties may reinforce one another and form a stable pattern that maintains itself over time.

SCD and Other Aspects of Self-Concept Structure

How are our findings related to other research on individual differences in self-concept structure? Structural models of the self seek to explain how the components of the self are organized and how this self-structure is related to psychological functioning. The fundamental assumption underlying most of these models is that the nature of the interrelations among the self-components is related to psychological well-being (e.g., Hoelter, 1985; Linville, 1985). The present article is focused on one aspect of self-concept structure, namely, the degree to which the individual's role-specific self-conceptions are differentiated from each other or integrated into a unitary self. Our studies demonstrate a linear relation between adjustment and SCD such that subjects with lower levels of adjustment tend to have more differentiated selves.

Another important aspect of individual differences in self-concept structure is *self-complexity*, defined as "having more self-aspects and maintaining greater distinction among self-aspects" (Linville, 1987, p. 664). Linville (1985, 1987) postulated that a high level of self-complexity prevents domain-specific stressors from undermining the individual's global self-esteem and physical health and thus serves as a buffer against the adverse effects of stress. In one of several studies testing this buffer hypothesis, Linville (1987) showed that self-complexity moderated the effect of a stressful life event (e.g., an exam) on depression and physical health measured before and after the event. Note that Linville did not postulate, or test, a direct link between self-complexity and adjustment; in her model, self-complexity predicted changes in adjustment following a stressful experience. In contrast, the specialization and fragmentation models, which were tested in the present research, postulate direct links between adjustment and SCD.

Thus, self-complexity and SCD are quite different both in how they are conceptualized and in the nature of their relation with adjustment. Nonetheless, one may wonder how these two aspects of self-concept structure are related to each other. The present research was not designed to address this question; however, some indirect evidence comes from a study by Campbell, Chew, and Scratchley (1991) that included both a measure of self-complexity and a measure of self-differentiation (vs. integration).

Although Campbell et al. (1991, footnote 1) did not report the correlation between these two measures, they found that self-complexity was positively related to self-esteem, whereas self-differentiation was negatively related to self-esteem, suggesting that these two constructs represent different aspects of self-concept structure. Future research should investigate more directly the relation between Linville's measure of self-complexity and our measure of SCD. We expect that the two measures will share little, if any, variance. Linville's measure reflects the number of distinct self-aspects subjects generate when providing free descriptions of themselves and thus implies cognitive complexity and flexibility in the way people construe themselves. In contrast, our measure of SCD reflects the lack of interrelatedness of role identities and thus implies fragmentation and lack of coherence in the self-concept—in other words, a divided self.

Development of the Divided Self

What is the origin of the divided self? How do individuals develop identities that are so differentiated across roles that they do not form a coherent and unitary self? Many theories of the self postulate that the self-concept emerges and is shaped through social interaction with significant others. Thus, the origin of the divided self may well lie in conflicted or disrupted relationships within the family. In particular, children and adolescents who experience continual conflict and distress within the family system may fail to integrate their various relationship experiences into a coherent self. Some provocative evidence for this account comes from a cluster of CPI items indicative of early familial tension (Block, 1961). An example of the items in this cluster is "My parents have often disapproved of my friends," which implies an early fragmentation between the roles of child and friend. When scored in the Mills longitudinal sample of Study 2, this small and not very reliable cluster of familial tension items predicted SCD in adulthood not only concurrently ($r = .42, p < .01$) but also longitudinally over a period spanning more than 30 years ($r = .29, p < .01$). That is, subjects who at age 21 reported that their family relationships during childhood had been tense and conflicted had significantly more differentiated self-concepts at age 52. This evidence is based on retrospective reports of family stress and conflict and is therefore not conclusive. Nonetheless, the hypothesis that the divided self originates in conflicted or disrupted object relations in childhood is intriguing and consistent with current theory about the self and thus merits careful scrutiny in future research.

The developmental roots of individual differences in SCD may also be found in the role-taking processes through which

children acquire the reflected appraisals of others and internalize them to form a self-concept. Cooley (1902), Mead (1934), and other symbolic interactionists assumed that children eventually abstract a conception of the "generalized other" from the multiplicity of available reflected appraisals. However, some children may internalize multiple views of themselves that are quite unrelated, highly inconsistent, or both and subsequently may fail to integrate these views into a stable, coherent sense of self. This "conflict of the different Me's," as James (1892, p. 185) put it, might result from a child's oversensitivity to the expectations and demands of others, from skill in taking the perspective of others, or from greater exposure to reflected appraisals that are incompatible with each other, possibly due to conflicting object relations. The tendency to internalize the views of new significant others without comparing them with the existing self-structure may continue well into adulthood, with the result that with each new role partner the individual might experience him- or herself as a different individual. If this line of reasoning is correct, we can predict that individual differences in self-stability (e.g., Elliott, 1988; Rosenberg, 1965) should be related both to SCD and to poor adjustment. Future research on self-concept structure over time should examine this prediction as well as the role of early family dynamics.

Finally, we end this article with a caveat: Our findings should not be taken to mean that variability in behavior across social roles is a sign of poor adjustment. Rather, we have shown that variability in self-concept is related to poor adjustment. It is possible that high SCD scores accurately reflect variability in behavior and that this behavioral variability is also the source of the interpersonal conflicts and emotional distress that characterized the high-SCD scorers in the present research. Alternatively, the subjective experience of SCD may be directly related to intrapersonal and interpersonal problems, regardless of the actual consistency or variability in the individual's behavior across roles. Future research needs to address whether, and in what way, SCD is related to behavioral variability (cf. Schneiderman, 1980). In the interim, a plausible integration of the fragmentation and specialization views would predict that specialization of behavior across roles is adaptive and contributes to adjustment, whereas the subjective experience of a divided self, as we have shown, reflects poor adjustment or, as William James once put it, a sick soul.

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