

# Trait Self and True Self: Cross-Role Variation in the Big-Five Personality Traits and Its Relations With Psychological Authenticity and Subjective Well-Being

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In 2 studies, college students evidenced differing levels of the “Big-Five” traits in different roles, supporting social-contextualist assumptions regarding trait expression. Supporting organismic theories of personality, within-subject variations in the Big Five were predictable from variations in the degree of psychological authenticity felt in different roles. In addition, two concepts of self-integration or true selfhood were examined: 1 based on high consistency of trait profiles across roles (i.e., low-self-concept differentiation; E. M. Donahue, R. W. Robins, B. W. Roberts, & O. P. John, 1993) and 1 based on high mean levels of authenticity felt across roles. The 2 self-integration measures were found to be independent predictors of psychological and physical well-being indicating that both self-consistency and psychological authenticity are vital for organized functioning and health.

Admonitions to be true to oneself are as old as ancient philosophy and as perennial as moral lessons themselves. But what does it mean to be true to, or to act in accord with, oneself? At least two different answers can be gleaned from modern theories of personality, one that views people in terms of stable and enduring behavioral dispositions and one that views people in terms of a struggle for authenticity and self-expression.

The first of these two perspectives has been offered by trait theorists, many of whom have recently galvanized around the “Big-Five” model of personality (McRae & John, 1992). In the trait view, people are assumed to have transcontextual (McCrae & Costa, 1984) personality dispositions that are highly stable over time, situations, and social roles. Not only do our traits characterize us, indeed, they may be “our very selves” (McCrae & Costa, 1994, p. 175); one implication of this view is that to be true to oneself is to behave in consistent accordance with one’s own latent traits. Yet Big-Five theorists have been criticized precisely because of their focus on stability or consistency, to the seeming neglect of important social-contextual influences on personality (McAdams, 1992; Pervin, 1994; Veroff, 1983). As Funder (1994) observed, it appears that trait theory “ignores individual differences in stability, ignores the way small changes in the environment can (sometimes) lead to large changes in personality, and fails to describe the mechanisms that promote stability and change” (p. 125). In short, the Big-Five model may not, as yet, provide a complete description of personality.

An alternative perspective, which stresses a more contextual

and dynamic view of the person, is provided by organismic and existentially informed theories of personality (e.g., Deci & Ryan 1985; Rogers, 1963; Waterman, 1993). In these approaches, a central thesis is that people do not always act in accord with their self; instead, they vary from situation to situation in the degree to which they contact and enact their true feelings and values. Roles and situations are assumed to differentially afford support for authentic self-expression and self-organized behaviors, and some roles may foster false self-presentations, or departures from how one might ideally choose to be. According to this view, to be true to oneself within a role is to be able to behave in ways that feel personally expressive (Waterman, 1990), authentic (Ryan, 1993), or self-determined (Deci & Ryan, 1991).

In this article, we investigate the relations between these seemingly disparate views of personality, by simultaneously examining both the cross-role consistency of the Big-Five personality traits, and the construct of psychological authenticity, within five specific life roles. In so doing, we show a number of important differences, but also some important cross modulations and convergences between the two conceptions of personality.

## Cross-Role Variation in the Big-Five Traits

The Big-Five model offers an integrative framework for personality psychology (Costa & McCrae, 1995; Goldberg, 1993; McCrae & John, 1992). It focuses on a core set of behavioral traits—Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness to Experience—and its proponents argue that people can be understood by knowing how much they display each of these five traits in their lives. Workers in this tradition have amassed impressive evidence in support of the cross-cultural, cross-method, and temporal consistency of the Big-Five factors (McCrae & John, 1992). As noted above, however, the Big-Five model has been criticized for missing much of the action in personality, partly because it does not consider

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that people might behave differently in different domains of life (Block, 1995; McAdams, 1992; Pervin, 1994). Because the aim of Big-Five assessment approaches is to locate people on underlying trait continua as reliably as possible, proponents of the model are prone to overlook cross-situational variation or to treat it as measurement error (Shadel & Cervone, 1993; Smith & Williams, 1992). The issue of situational differences in trait expression is thus peripheralized.

Yet, it is apparent that people do behave differently in different roles and situations (Funder & Colvin, 1991) and that this variation is systematic (Roberts & Donahue, 1994) and meaningful (Ryan, 1995). Using one Big-Five trait as an example, it is reasonable to suppose that employee or student roles call for more conscientiousness than do other roles, such as those of friend or romantic partner. Such cross-situational variability seems natural and even expectable, given the diversity of the demands made by different roles and the diversity of the resources afforded within different roles. But this raises the question of the meaning and functional impact of role-to-role variability in the expression of personality traits. Is such variability a sign of flexibility or of instability? And, do people vary in the extent to which they vary across roles?

#### Cross-Role Variation as a Sign of Disorganization

Recent research has shown that there are indeed individual differences in the degree of consistency people show across roles and, more, that this variation in variation covaries with health and adjustment outcomes. In one approach, Donahue, Robins, Roberts, and John (1993) created a self-concept differentiation (SCD) measure that indexes how distinctively people assess their different role-selves across representative sets of trait adjectives. Although these researchers were not specifically focused on the Big-Five traits, they found that people who manifest much inconsistency in trait profiles across different roles were lower on a variety of well-being indicators. Donahue et al. conceptualized high SCD as a state of nonintegration or self-fragmentation, in which the individual's functioning and well-being is impaired. Relatedly, in a series of within-subjects analyses, Roberts and Donahue (1994) showed that the relative sense of satisfaction a person feels within a particular role is positively associated with the degree of similarity evidenced between trait ratings made concerning that role and trait ratings made concerning "myself in general." The latter results suggest that when people vary away from their general or characteristic style within a given role, they tend to feel less content within that role.

In short, there is good reason to suspect that highly discrepant modes of functioning create difficulties that negatively impact adjustment and well-being. William James aptly described such difficulties with a German term, *Zerrissenheit*, which literally means "torn-to-pieces hood" (cf. Lindbergh, 1955). A person who constantly remolds him or herself in line with role-related pressures or demands would seem to lack integrity and self-direction (Block, 1961) and might suffer accordingly.

Note, however, that the logical converse of the self-fragmentation idea proposed by Donahue et al. (1993) and Roberts and Donahue (1994) is an ideal of perfect self-consistency or invariance across roles. That is, a potential implication of the SCD

research is that people are most integrated, and happiest, when they are exactly the same in every role. Taken as a prescription for how to attain well-being, Donahue et al.'s (1993) results suggest that people should strive to reduce their cross-role variability and to behave in more uniform accordance with their latent general traits. However, the idea that perfect consistency represents perfect integration is theoretically problematic, because one can also view such extreme invariance as a perfect lack of differentiation, potentially indicative of maladaptive rigidity and inflexibility (Funder & Colvin, 1991; Mischel, 1968). In this vein, Sheldon and Emmons (1995) have argued that differentiation and integration are distinct dimensions of personality organization and, thus, that the absence of one should not be mistaken for the presence of the other.

#### Authenticity as a Sign of Organization

Humanistic and organismic approaches to personality have taken a somewhat different approach in conceptualizing organized functioning (e.g., Deci & Ryan, 1985; Rogers, 1963; Sheldon & Kasser, 1995). In these perspectives, integration is not defined as being consistent in one's life but, rather, as feeling authentic in one's life. Authenticity refers to behavior that is phenomenally experienced as being authored by the self (Wild, 1965) or internally caused (deCharms, 1968; Ryan, Deci, & Grolnick, 1995). People feel most authentic when they act with a full sense of choice and self-expression. We assume that such positive feelings give access to important internal resources, such as the ability to effectively regulate and maintain one's intentional states (Kuhl, 1986), the ability to process new information more deeply (Deci & Ryan, 1991), and the ability to think more creatively (Amabile, 1996). In short, felt authenticity is likely to be a good indicator of integration and organization, the fully functioning person (Rogers, 1963).

According to the social-contextual assumptions of self-determination theory (Deci & Ryan, 1985, 1991), not all situations or roles are conducive to choiceful and authentic behavior; hence, there are expectable within-subject differences in the degree of authenticity felt within different behavioral domains (Ryan, 1995). Because felt authenticity is viewed as having dynamic impact on personality and behavior, people are expected to manifest different behavioral styles in different roles, that is, to be inconsistent in their traits. Moreover, situations, roles, and domains that afford authenticity are viewed as facilitative of health and well-being, whereas situations, roles, and domains that stifle authenticity or autonomy are those that foster maladjustment and distress (Ryan, Sheldon, Kasser, & Deci, 1996; Sheldon, Ryan, & Reis, 1996). From this phenomenological perspective, it is not differentiation or variation per se that is indicative of fragmentation in personality but, rather, variation away from authenticity.

#### The Present Research

To coordinate these diverse viewpoints on the nature of personality and of personality integration, we developed four working hypotheses.

First, we hypothesized that Big-Five trait scores, indeed, vary systematically across roles (Smith & Williams, 1992), in addi-

tion to showing substantial consistency across roles. To test this, we asked participants to rate themselves on adjective markers representing all five of the Big-Five traits in each of five psychosocial roles identified by Donahue et al. (1993) as being important to college students: student, employee, child, friend, and romantic partner. Using within-subject multivariate analyses of variance (MANOVAs), we expected to find significant main effects of role type, and significant interaction effects of role type with trait type, in the prediction of trait scores (Roberts & Donahue, 1994). That is, people should describe themselves differently depending on the role, and particular traits should be uniquely associated with particular roles. We did not venture specific predictions regarding which traits would be strong within which role.

As a second hypothesis, we expected that cross-role variations in felt authenticity (assessed through items to be described below) would be predictive of cross-role variations in at least some of the Big-Five traits. We suggest that when people feel constrained and controlled by the circumstances of a given situation, they are likely to behave quite differently than in situations in which they feel comfortable and genuine. For example, a teenager might be much less extraverted with a potential boyfriend than she is with her friends, in part because she does not yet feel authentic and self-expressive within the romance role. Although we collected data on all five traits, we reasoned that Extraversion and Neuroticism, which have strong associations with positive and negative well-being (Watson & Clark, 1992), respectively, would be most likely to covary with felt authenticity; this is because authenticity-related constructs have themselves been shown to be strong predictors of both positive and negative well-being (Deci & Ryan, 1991; Sheldon & Kasser, 1995; Sheldon et al., 1996). To test this second hypothesis, we used a hierarchical regression strategy to examine whether the amount of authenticity felt within particular roles, relative to participants' mean level of authenticity, is associated with within-subject variations in amounts of Big-Five traits evidenced in particular roles.

Another area of inquiry involved an examination of two conceptions of self-integration (Sheldon & Kasser, 1995)—one based on the idea of consistency and the other based on the idea of authenticity. Our third hypothesis was that both conceptions would be associated with measures of positive well-being and role satisfaction, because we regarded self-consistency and authenticity as parallel indicators of an underlying state of integration or organization. We assumed that measures of adjustment and well-being offer reasonable criterion variables for evaluating and comparing proposed conceptions of personality integration (Sheldon & Kasser, 1995).

We tested our third hypothesis at a between-subjects level of analysis by examining the degree of consistency of trait profiles (as indexed by low SCD scores; Donahue et al., 1993) shown by participants across the five roles and the degree of psychological authenticity felt across those five roles, as predictors of several global adjustment and well-being outcomes. On the basis of previous findings regarding the construct of authenticity (Deci & Ryan, 1991; Rogers, 1963; Waterman, 1993), it seemed likely that people would experience greater well-being to the extent that they feel generally authentic across roles. On the basis of previous findings regarding SCD (Donahue et al., 1993;

Sheldon & Emmons, 1995), it seemed likely that people would experience greater well-being to the extent that they manifest consistent trait profiles across roles. To test our third hypothesis at a within-subjects level of analysis, we examined both authenticity and consistency as predictors of greater satisfaction within particular roles. On the basis of the social-contextual assumption that some roles afford more autonomous self-expression and, thus, more satisfaction than others (Deci & Ryan, 1985), we expected that participants would feel relatively more content within particular roles in which they feel relatively more authentic. On the basis of the results of Roberts and Donahue (1994), we expected that people would feel relatively more content within roles in which their traits are more consistent with their assessments of their general traits.

Finally, we directly compared authenticity- and consistency-based measures of self-integration as predictors of satisfaction and well-being, using simultaneous regression procedures. Our fourth hypothesis was that authenticity would account for a greater percentage of the variance in positive outcomes than would consistency. This was based on the assumption that cross-role variations in traits are caused, in part, by cross-role variations in authenticity; as outlined above, we view the lack of felt authenticity as one underlying source of inconsistency or cross-role variation. Thus, in between-subject analyses, we expected that the mean level of authenticity experienced across roles would better predict participants' well-being than would the overall consistency of the trait profiles displayed across roles, as measured by the SCD statistic. In within-subject examinations of each of the five roles separately, we hypothesized that the relative level of authenticity felt within a particular role would better predict relative satisfaction within that role than would the extent to which the person's rated characteristics in that role concur with the person's ratings of themselves in general (Roberts & Donahue, 1994).

To summarize, in Study 1 we hypothesized (a) that there is systematic variation in the Big-Five traits across roles, (b) that cross-role variations in felt authenticity are predictive of cross-role variations in at least some of the Big-Five traits, (c) that measures of both consistency- and authenticity-based conceptions of self-integration are associated with measures of positive well-being and role satisfaction, and (d) that authenticity accounts for a greater percentage of the variation in well-being than does consistency. Hypotheses 3 and 4 were examined using both between-subjects (in which people were the unit of analysis) and within-subjects (in which roles were the unit of analysis) methodologies; we reasoned that to find parallel results at these distinct levels of analysis would strengthen the case for the phenomena being documented (Epstein, 1983; Sheldon et al., 1996).

## Study 1

### Method

#### Overview

Participants completed the materials in two large-group sessions run by trained research assistants, held 2 weeks apart. The first session's questionnaire packet contained all of the role-related measures (Big-Five adjective-markers, role-authenticity items, and role-satisfaction

items). The second session packet contained all of the general well-being measures. The second packet also contained the NEO Personality Inventory (Costa & McCrae, 1985), which was included for reasons to be discussed below.

### Participants

Participants were 193 undergraduates in an upper division psychology course taught at the University of Rochester (137 were women and 56 were men). They participated for extra course credit.

### Measures

**Measuring the Big-Five traits through adjective markers.** Donahue et al. (1993) used a broadly representative set of 60 trait adjectives to assess SCD, a set that included markers for all of the Big-Five traits, as well as markers not clearly identifiable in Big-Five terms. Donahue et al.'s participants rated these 60 adjectives in each of five roles: student, employee/worker, child (son/daughter), friend, and romantic partner. In order to enhance comparability of our results to Donahue et al.'s SCD results, we began with this set of five roles and 60 adjectives. However, we pared the set of adjectives down to 45, to reduce participant fatigue, while attempting to ensure adequate representation for each of the Big-Five traits. Because preliminary item analyses revealed that 5 of the 45 adjectives we selected (intelligent, unintelligent, tactful, tactless, and daring) did not clearly represent the expected Big-Five trait, we excluded these 5 adjectives from further analyses.

Thus, the trait-in-role results presented below used 40 adjectives, including Extraversion: extraverted, vigorous, active, talkative, energetic, not energetic (reversed [R]), shy (R), timid (R), introverted (R), and passive (R); Neuroticism: joyless, unhappy, insecure, self-confident (R), and cheerful (R); Agreeableness: cheerful, polite, considerate, kind, generous, dutiful, friendly, inconsiderate (R), impolite (R), selfish (R), and unkind (R); Conscientiousness: responsible, foresighted, orderly, not orderly (R), irresponsible (R), careless (R), disorganized (R), unpunctual (R), and scatterbrained (R); and Openness to Experience: perceptive, artistic, imperceptive (R), adventurous, and inartistic (R).

**Measuring the Big-Five traits through inventory.** To assess the adequacy of the adjective marker sets chosen to represent the Big-Five traits, we used the 180-item NEO Personality Inventory (Costa & McCrae, 1985). We examined the associations of NEO trait scores with Big-Five scores computed from participants' ratings of their general self on the 40 adjective markers,<sup>1</sup> expecting to find strong convergent correlations between these inventory- and adjective-based (Briggs, 1992) operational definitions of Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness to Experience.

**Measuring authenticity.** Five items were selected to represent the authenticity construct, through item and factor analysis of a set of 10 pilot items previously administered to a sample of 112 participants. The five items were as follows: "I experience this aspect of myself as an authentic part of who I am," "This aspect of myself is meaningful and valuable to me," "I have freely chosen this way of being," "I am only this way because I have to be (R)," and "I feel tense and pressured in this part of my life (R)."

**Measuring well-being within roles.** For each role, participants rated their degree of satisfaction (Donahue et al., 1993; Roberts & Donahue, 1994). Participants also rated the degree to which they would prefer to spend more or less time in each role.

**Measuring general well-being.** To assess participants' global levels of adjustment and well-being, we used five well-established scales. These included the Trait Anxiety Scale (Spielberger, Gorsuch, & Lushene, 1979), the Center for Epidemiological Studies (CES) Depression scale (Radloff, 1977), the Cohen-Hoberman Inventory of Physical Symptoms (Cohen & Hoberman, 1983), the Perceived Stress Inventory (Cohen,

Kamarack, & Mermelstein, 1983), and the Rosenberg Self-Esteem Inventory (Rosenberg, 1965). Thus, the adjustment outcomes we assessed included both positively and negatively valenced constructs and both physical and psychological well-being.

### Procedure and Variable Computation

**Session 1.** During the first session, participants first described "How I see myself in general" by rating each of the 40 adjective markers, using a scale ranging from (1) *very uncharacteristic of me* to (8) *very characteristic of me*. Participants next read definitions of the student, employee, child, friend, and romantic partner roles, then proceeded to rate how they saw themselves and their behavior in each role, in terms of the same 40 adjectives. Following Donahue et al.'s (1993) procedure, each role was presented on a separate page, the order of adjectives was varied within each role, and the order of presentation of roles was counterbalanced across participants using a Latin square design. A score for each of the Big-Five traits was computed for each of the five roles (e.g., Neuroticism in the student role) by summing the appropriate adjectives, yielding 25 trait-in-role scores in all. In addition, a global score was computed for each Big-Five trait, by taking the mean of the five role scores for that trait. Finally, another global score was computed for each of the Big-Five traits, using the 40 myself-in-general ratings. The latter two sets of variables were computed for use as person-level baselines against which role-specific variations in traits were predicted. As noted above, the myself-in-general set was also used in conjunction with the NEO Personality Inventory to examine the validity of the adjective markers used.

Next, participants responded to each of the five authenticity items, separately for each of the five roles, using a (1) *strongly disagree* to (9) *strongly agree* scale. Prior to answering, participants were instructed to envision each role and reflect on the thoughts, emotions, and behaviors they most commonly experience in that role. After recoding, a role-authenticity score was created for each role by averaging the five responses for that role. A mean role-authenticity variable was computed by averaging across the five role-authenticity scores, for use as a control variable and as a person-level measure of self-integration.

Participants then rated their level of satisfaction in each role, using a (1) *not at all satisfied* to (9) *very satisfied* scale. They then rated the degree to which they would like to spend more or less time in each role, using a (1) *less time* to (9) *more time* scale. These ratings constituted role-satisfaction and role-preference scores, one for each role, for each participant. Mean role-satisfaction and mean role-preference variables were also computed by averaging across roles, for use as control variables in role-level regressions.

**Session 2.** At the beginning of the second packet, participants completed the five global-adjustment measures, using the scales recommended by the measures' authors. Anxiety, depression, symptomatology, stress, and self-esteem variables were computed from these ratings. Participants then completed the NEO Personality Inventory, from which NEO Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness to Experience scores were computed.

**Computation of consistency-based integration measures.** To assess self-consistency at a person or between-subjects level of analysis, we first reformatted the adjective rating data so that individual roles were the case or unit of analysis, rather than participants. We then split the file by participant. Correlations between each participant's five roles (10 correlations in all) were computed on the basis of the 40 adjective

<sup>1</sup> We chose to use the Big-Five scores derived from the general-self adjective ratings for comparison with Big-Five scores derived from the NEO because the procedure of rating myself in general provides the closest methodological approximation to the NEO procedure, in which respondents also take a very general perspective on themselves.

Table 1  
*Correlations of Big-Five Trait Scores as Measured by the NEO Personality Inventory and by Ratings of the General Self on Representative Adjective Markers in Study 1*

NEO scale	Adjective marker rating				
	1	2	3	4	5
1. Extraversion	<b>.69**</b>	-.56**	.29**	.20*	.23**
2. Neuroticism	-.36**	<b>.64**</b>	-.39**	-.25**	-.24**
3. Agreeableness	.00	-.17*	<b>.47**</b>	.21*	.05
4. Conscientiousness	.21*	-.27**	.27**	<b>.75**</b>	.11
5. Openness to Experience	.19*	-.03	.04	-.17*	<b>.43**</b>

Note. Boldface values are convergent correlations.

\*  $p < .05$ . \*\*  $p < .01$ .

ratings made in each role, using the SPSS-X Proximities procedure (SPSS, 1988). SCD (Donahue et al., 1993), which represents the degree to which a participant rates different roles in a distinctive manner, was defined as one minus the average of these 10 correlations.<sup>2</sup>

To assess self-consistency at a role or within-subjects level of analysis, we used the SPSS-X Proximities procedure to calculate, for each participant, the correlation between the set of adjective ratings made for the general self and the set of adjective ratings made for each of the five roles (following Roberts & Donahue, 1994). These five correlations constituted our five consistency-with-the-general-self measures. For example, the correlations between the first participant's general-self profile and his student, employee, child, friend, and romantic partner profiles ranged from .26 to .81.

## Results

### Preliminary Analyses

**Evaluating the Big-Five adjective markers.** To examine the internal consistency of the adjective marker sets chosen, we computed alpha coefficients for each of the Big-Five traits within each of the five roles and, also, within the general-self ratings (yielding 30 alpha coefficients in all). For Conscientiousness, these coefficients ranged from .83 to .90 across the six domains; for Neuroticism, coefficients ranged from .61 to .84; for Agreeableness, coefficients ranged from .75 to .87; for Extraversion, coefficients ranged from .83 to .88; and finally, for Openness to Experience, alphas ranged from .50 to .60. Thus, the sets of trait markers showed adequate internal consistency, with the exception of the Openness to Experience set, whose reliabilities were marginal at best.

We also examined internal consistencies for each set of trait scores (i.e., the reliability of Extraversion scores across the student, employee, child, friend, and romantic partner role domains). These five alpha coefficients ranged from .83 (Agreeableness) to .92 (Openness to Experience). These findings accord with the claim that the Big-Five traits are cross-situationally stable personality dispositions (McCrae & Costa, 1994).

To investigate the validity of the adjective marker sets chosen, we correlated the Big-Five trait scores derived from the adjective ratings of myself in general with the five criterion variables (i.e., the NEO-based scores measured 2 weeks later). As shown in Table 1, the adjective-based Extraversion, Neuroticism, and Conscientiousness scores converged well with their corresponding NEO scores (all  $r_s = .64$  or above). The adjective-based

Agreeableness and Openness to Experience scores did not correlate as well as would be desired with their corresponding NEO scores,  $r_s = .48$  and  $.43$ , respectively.<sup>3</sup> However, because the discriminant correlational pattern for all five traits was quite good, we believe that these adjective markers adequately represent the Big-Five traits.

**Assessing the authenticity items.** Next, we examined the internal consistency of the five authenticity items by computing alpha coefficients for each of the five roles. These five reliability coefficients ranged from .72 (in the employee role) to .82 (in the child role), indicating that the five items cohere reasonably well with each other. We also examined the reliability of the set of role-authenticity scores across the five roles (i.e., the internal consistency of the mean role-authenticity variable). This alpha coefficient was .71, indicating that it is reasonable to talk about a general level of authenticity that individuals manifest across their different roles. To examine the contextualist assumption that people vary in the level of authenticity they feel in different roles, we conducted a within-subject MANOVA on the five role-authenticity scores and discovered a significant role effect on authenticity,  $F(4, 768) = 50.93, p < .001$ . Relative to the child and romantic partner roles, participants felt significantly less authentic in the student and employee roles and more authentic in the friend role.

**Gender differences.** As a final preliminary analysis, we tested for gender differences in important variables. Women were found to be significantly higher than men in Extraversion, as measured both by the general-self ratings and by the NEO, and were higher than men in agreeableness, as measured by the NEO (all three  $p_s < .05$ ). Women were also higher than men in mean role authenticity ( $p < .01$ ), and were lower in SCD ( $p < .001$ ). There was no difference between men and women on any of the general well-being variables. Because gender did

<sup>2</sup> Donahue et al.'s (1993) measure was defined as one minus the percentage of variance accounted for by the first principal component within this matrix of 10 correlations; however, these researchers demonstrated that the first principal component is a linear function of the average correlation within this matrix. For convenience, we chose the latter computational method.

<sup>3</sup> Thus, our conclusions regarding cross-role variation in these two traits will be more tentative than for the other three traits.

not interact with any of the major findings below, we omit gender from further discussion.

### Primary Hypothesis Tests

**Role effects on Big-Five traits.** The analyses reported above, in which strong alpha coefficients were found for sets of trait scores (i.e., extraversion across the student, employee, child, friend, and romantic partner role domains), established that people show substantial cross-situational consistency in the Big-Five traits. To test our first hypothesis, that people also differ systematically in their traits in different roles, we conducted a within-subject MANOVA in which the 25 trait-in-role scores were the dependent variables. This analysis revealed a significant role effect,  $F(4, 768) = 31.20, p < .001$ , indicating that people describe themselves differently in different roles (Roberts & Donahue, 1994). Also as predicted, a Trait  $\times$  Role interaction emerged,  $F(16, 3072) = 46.60, p < .001$ . That is, different roles appear to pull for different traits. This is demonstrated in Table 2, which presents mean differences in traits across roles. For each trait, we used a series of paired-sample  $t$  tests to compare each pair of means. Because these were exploratory analyses, a .01 significance criterion was used. As can be seen, our participants report being least extraverted and most neurotic in the student role, and most extraverted and least neurotic in the friend role. They are most conscientious in the employee role, and least conscientious in the friend role. Furthermore, participants are less agreeable in the student and child roles than they are in the other three roles. Finally, participants are least open to experience in the student role, and most open to experience in the romantic partner role.

**Predicting relative levels of Big-Five traits from relative levels of authenticity.** To test our second hypothesis, that cross-role variation in Big-Five traits is associated with cross-role variations in authenticity, we conducted 25 hierarchical regressions. In these regressions, particular trait-in-role scores (e.g., Neuroticism in the student role) were the dependent measures. At Step 1 of these analyses, we entered the mean role-authenticity score and the mean trait score (e.g., the average of the five Neuroticism-in-role scores). At Step 2, we entered the authenticity score for that particular role domain. This analytical procedure allowed us to control for individual differences in Big-Five traits and individual differences in overall authenticity, and thereby to examine the association of the relative (Kasser &

Ryan, 1993, 1996) authenticity felt within a particular role with the relative level of traits within that role, compared with the other roles. Although our specific predictions involved only Neuroticism and Extraversion, we found that role-specific variation in authenticity was associated with variation in the other three Big-Five traits as well; in fact, in 23 of the 25 regressions, authenticity made a significant contribution to predicting trait scores within the role at Step 2 (the exceptions were for Conscientiousness in the employee and romantic partner roles). The signs of the beta coefficients were such that the more relatively authentic participants feel within a particular role, the more relatively extraverted, conscientious, agreeable, open to experience, and nonneurotic they are within that role.

To examine the robustness of effects, we conducted these 25 regressions twice more, once using trait scores derived from the myself-in-general ratings to control for global levels of Big-Five traits and once using NEO Personality Inventory scores. In the general-self analyses, 19 out of 25 beta coefficients were significant and 4 more were marginally significant. In the NEO analyses, 19 out of 25 beta coefficients were significant and 2 more were marginally significant. In sum, our second hypothesis, that cross-role variation in the Big-Five traits can be predicted from variations in cross-role authenticity, received strong support.

**Examining the two models of self-integration.** Next, we tested our third hypothesis, that both consistency-based and authenticity-based measures of self-integration would predict positive well-being outcomes. First, we focused on the within-subjects or role-level of analysis. Table 3 presents the correlations of the five role-authenticity variables and the five consistency-with-the-general-self variables, with role satisfaction and role preference. Replicating Roberts and Donahue's (1994) results and supporting the consistency-based concept of self-integration, participants were more satisfied in roles in which their trait characteristics are consistent with their general-self trait characteristics (with one exception). Supporting the authenticity-based concept of self-integration, participants were also more satisfied in roles in which they feel more authentic. Furthermore role authenticity was positively correlated with all five role-preference variables, and consistency was positively correlated with role preference in the child role. In sum, our third hypothesis was supported at the role-level of analysis, although the consistency effects were somewhat weaker than the authenticity effects.

Table 2  
Means for the Big-Five Traits in Five Different Roles as Assessed Through Adjective Markers in Study 1

Trait	Student	Employee	Child	Friend	Romantic partner
Extraversion	54.11 <sub>a</sub>	61.79 <sub>b</sub>	62.60 <sub>b,c</sub>	64.36 <sub>c</sub>	62.92 <sub>b,c</sub>
Neuroticism	14.46 <sub>a</sub>	12.74 <sub>b</sub>	12.23 <sub>b</sub>	11.21 <sub>c</sub>	12.97 <sub>b</sub>
Agreeableness	60.59 <sub>a</sub>	63.94 <sub>b</sub>	59.31 <sub>a</sub>	63.46 <sub>b</sub>	63.39 <sub>b</sub>
Conscientiousness	71.87 <sub>b</sub>	77.02 <sub>a</sub>	70.63 <sub>b</sub>	66.59 <sub>c</sub>	70.29 <sub>b</sub>
Openness to Experience	27.30 <sub>a</sub>	28.52 <sub>b</sub>	28.66 <sub>b</sub>	29.21 <sub>b,c</sub>	29.63 <sub>c</sub>

*Note.* Because traits were measured with differing numbers of adjectives, row entries are directly comparable but column entries are not. Within rows, means not sharing subscripts are significantly different from each other at the .01 level.

Table 3  
*Correlations of Role-Authenticity and Consistency-With-the-General-Self Measures With Role Satisfaction and Role Preference in Study 1*

Role	Role's authenticity	Role's consistency with the general self
Student		
Satisfaction	.53**	.21**
Preference	.21**	.10
Employee		
Satisfaction	.56**	.32**
Preference	.34**	.07
Child		
Satisfaction	.83**	.34**
Preference	.43**	.19*
Friend		
Satisfaction	.60**	.21*
Preference	.14	.00
Romantic partner		
Satisfaction	.61**	.37**
Preference	.18**	.04

\*  $p < .05$ . \*\*  $p < .01$ .

To test our third hypothesis at a person or between-subjects level of analysis, we correlated the SCD and mean role-authenticity variables with the five measures of adjustment and well-being. These correlations can be found in Table 4 (the beta coefficients will be discussed below). As can be seen, participants who feel more authentic across these five roles also experience more self-esteem, less anxiety, less depression, less stress, and less symptomatology. Replicating Donahue et al.'s (1993) general findings, participants higher in SCD experience less self-esteem and more anxiety, depression, stress, and symptomatology. In sum, our third hypothesis was well supported in these analyses.

Next we tested our fourth hypothesis, that authenticity-based measures of self-integration would better predict positive outcomes than would consistency-based measures, using simultaneous regression procedures. First, we examined the hypothesis at a within-subject or role level of analysis, using the role-satisfaction measure. Specifically, we regressed each role's satisfaction score on both the authenticity score for that role and the consistency-with-the-general-self score for that role (five regressions in all). Mean role authenticity and mean role satisfaction were also in the equation, again to control for between-subject differences and to focus the analysis on the status of a role relative to other roles. Authenticity emerged as a significant predictor of satisfaction in all five roles; consistency did not make a significant positive contribution in any role, and actually made a significant negative contribution to the prediction of satisfaction in the student role. We then repeated the same set of regressions using each role's preference score rather than satisfaction score as the dependent measure. In these analyses, authenticity was a significant predictor of preference for all five roles and consistency was unrelated, with one exception: In the student role, authenticity and consistency both made significant positive contributions in predicting preference. In sum, our third hypothesis, that authenticity would subsume the variance in pos-

itive outcomes accounted for by consistency, received strong support at this role level of analysis.

To test our fourth hypothesis at a between-subjects or person level of analysis, we examined the SCD and mean role-authenticity measures as simultaneous predictors of well-being. Table 4 presents the resulting beta coefficients. As can be seen, both measures accounted for significant unique variance in well-being. This occurred despite the fact that SCD and mean role authenticity were strongly correlated themselves,  $r = -.61$ ,  $p < .01$ . Thus, contrary to our predictions, mean role authenticity did not subsume the effects of SCD; it appears that both self-integration constructs may be useful in understanding psychological health and adjustment, at least at the person level of analysis.

### Discussion

Study 1 provided support for our first hypothesis—namely, that there is systematic variation in the Big-Five personality traits as a function of social roles. This finding is consistent with social-contextual perspectives on personality (e.g., Magnusson & Endler, 1977; Ryan, 1995; Smith & Williams, 1992; Veroff, 1983), in which people are expected to evidence different characteristics in different situations. However, having said this, it is critical to point out that our results also point to a great deal of cross-role consistency, a finding that supports the view of trait theorists that people are stable and consistent in their dispositions (Costa & McCrae, 1995). Indeed, a fair synthetic statement is that in the context of a large degree of stability of traits across roles, there is also enough meaningful variance to warrant our empirical attention.

In support of our second hypothesis, Study 1 demonstrated that cross-role variation in Big-Five traits can be predicted by considering the relative authenticity participants feel in different roles. That is, fluctuations in felt authenticity were significantly associated with variations of trait scores in different roles, relative to baseline trait scores. Although our specific predictions concerned only higher Extraversion and lower Neuroticism, all five of the Big-Five traits were found to be associated with relative authenticity; that is, roles in which participants felt more

Table 4  
*Associations of SCD and Mean Role Authenticity With General Well-Being Measures in Study 1: Zero-Order Correlations and Beta Coefficients Resulting From Simultaneous Entry*

Measure	SCD		Mean role authenticity		R
	<i>r</i>	$\beta$	<i>r</i>	$\beta$	
Anxiety	.34**	.22**	-.39**	-.25**	.42**
Depression	.37**	.17*	-.38**	-.29**	.41**
Perceived stress	.38**	.21*	-.41**	-.28**	.44**
Self-esteem	-.42*	-.21**	.48**	.35**	.50**
Symptomatology	.34**	.22**	-.32**	-.19*	.37**

Note. SCD = self-concept differentiation.

\*  $p < .05$ . \*\*  $p < .01$ .

authentic were also roles in which they are relatively more agreeable, conscientious, and open to experience. We believe that these within-subject findings supply a new and potentially valuable dynamic perspective on the meaning of Big-Five trait scores. They also suggest that we would all be more extraverted, agreeable, conscientious, open to experience, and nonneurotic in our lives than we actually are, were we able to feel more authentic than we actually do.

The third major hypothesis of Study 1 was that authenticity-based and consistency-based measures of self-integration would be associated with personal well-being and with role-specific satisfaction. This expectation was confirmed, indicating that both conceptions of self-integration have merit. However our fourth hypothesis, that authenticity effects would largely account for the effects of inconsistency on well-being, received only partial support. At the role-level of analysis, simultaneous regressions showed that participants were more satisfied in roles in which they feel more authentic, and once the authenticity effect was taken into account, the consistency of the role with the general self had no significant impact on satisfaction. However, at the person level of analysis, there remained a significant SCD association with (negative) well-being even when mean role authenticity was also in the equation. Given our assumption that differentiation or variation per se is not problematic but, rather, that variations away from authenticity are problematic, we are left with a puzzle; what other constructs, besides inauthenticity, might account for the SCD effects?

## Study 2

A first objective of Study 2 was to again test the four hypotheses of Study 1. That is, we wished to replicate our findings concerning (a) significant cross-role variation in the Big-Five traits; (b) the relation of such variation to cross-role variations in authenticity; (c) the associations of both authenticity and consistency-based measures of self-integration with satisfaction and well-being; and (d) the finding that at the role level of analysis, inauthenticity accounts for the negative effects of a role's being dissimilar to the general self.

A second objective of Study 2 was to assess another potential source of the lingering SCD effects identified in Study 1. Specifically, we reasoned that an underlying cause of the SCD to well-being effects might be variations in the sense of conflict felt between different role identities. Role identities are an important aspect of the self-concept (Burke & Tully, 1977), and the sense of harmony or conflict existing between such self-identities gives important information regarding the general coherence or organization of personality (Harter & Monsour, 1992; Sheldon & Kasser, 1995). We assessed interrole conflict by asking participants to rate the amount of conflict felt within every possible pairing of roles, an extension of the methodology used by Emmons and King (1988) and Sheldon (1995) in their studies of conflict between personal strivings (Emmons, 1986). Because existing methods of assessing role conflict may be conceptually and psychometrically deficient (see King & King, 1990, for a review), the application of this pairwise-rating methodology to the domain of roles represents a potentially useful innovation.

We proposed four hypotheses involving this role-conflict

measure. First, we expected that role conflict would correlate positively with SCD, on the basis of the assumption that people who maintain very distinct role identities (i.e., those high in SCD) are more likely to find that different roles make incompatible demands.<sup>4</sup> Second, we hypothesized that role conflict would correlate negatively with mean role authenticity, on the basis of the assumption that those who feel more autonomous and self-expressive across roles will not perceive their roles to be incompatible or contradictory; indeed, more authentic individuals may be more prone to integrate or reciprocally assimilate various roles and functions (Ryan, 1993). Third, we expected that role conflict would correlate negatively with measures of general well-being, echoing past findings in the domains of roles (Barnett & Baruch, 1985; Baruch & Barnett, 1986; Harter & Monsour, 1992) and personal goals (Emmons & King, 1988). Fourth, we posited that role conflict would account for the residual associations of SCD with general well-being, after controlling for authenticity; this was based on the proposition that role conflict is a source of both high SCD and negative well-being. That is, it may be that conflict underlies the development of both SCD (Sheldon & Emmons, 1995; Turiel, 1974) and negative well-being.

A secondary objective of Study 2 was to improve and streamline our assessment of the Big-Five traits within roles. In Study 1, we began with the adjective set used by Donahue et al. (1993), to enhance comparability of our results with theirs. However, some of the Big-Five traits were not as well represented by those markers as might be desired, as evidenced by the lower than desirable correlations found (.47 and .43, respectively) between the marker-derived Agreeableness and Openness to Experience variables and the corresponding NEO variables. Thus, in Study 2, we chose adjective marker sets (presented below) that we believed would better represent the Big-Five traits, based on item analysis of the Study 1 results and scrutiny of the literature regarding Big-Five markers (Briggs, 1992). To further reduce the likelihood of participant fatigue, we used only 30 adjective markers altogether (6 for each of the Big-Five traits).

Study 2 also examined two new measures of adjustment within roles, in addition to again assessing role satisfaction. Specifically, we assessed the amount of stress and the amount of strain felt within each of the five roles, because these constructs have been shown to be important indicators of the effectiveness of role functioning (Barnett & Baruch, 1985). In Study 2, we again assessed global adjustment using the CES Depression scale (Radloff, 1977), the Rosenberg (1965) Self-Esteem Inventory, and the Perceived Stress Inventory (Cohen et al., 1983). We also included a new measure of personal adjustment, the 10-item Multidimensional Self-Esteem Inventory (MSEI)

<sup>4</sup> Donahue et al. (1993) found that role conflict measured at the age of 43 in a sample of adult women was not significantly related to SCD measured at age 52. However, their observed correlation was in the direction predicted by the current conceptualization, and the measure of conflict used was somewhat different than ours. It is also likely that role configurations change substantially during a 9-year period and, thus, that role conflict as measured at age 43 in the Donahue et al. sample was not representative of the amount of role conflict experienced by participants at the age of 52.



Identity-Integration scale (O'Brien & Epstein, 1988). This scale assesses "an individual's view of the efficiency of his or her self-concept in assimilating new information and in organizing and directing life-experience" (O'Brien & Epstein, 1988, p. 7). Identity integration was considered both as another well-being outcome and as a source of validation for our assumption that mean role authenticity and low SCD are properly construed as measures of self-integration.

In sum, in Study 2 we attempted to improve our assessment of the Big-Five traits within the five different roles, expand the range of well-being and adjustment outcomes considered, and assess conflict between the five roles. We sought to replicate our findings concerning the four primary hypotheses of Study 1. In addition, four new hypotheses were proposed in Study 2: (a) the expectation that role conflict would be positively associated with SCD; (b) the expectation that role conflict would be negatively associated with authenticity; (c) the expectation that role conflict would be associated with lesser well-being; and (d) the expectation that role conflict would account for the residual association of SCD with negative well-being, after authenticity effects are partialled out.

## Method

### Overview

Participants completed the questionnaire packets in two large-group sessions, held 1 week apart. The first session packet contained all of the role-related measures and, also, the Rosenberg Self-Esteem Inventory (Rosenberg, 1965). The second session packet began with the 60-item short form of the NEO Personality Inventory (Costa & McCrae, 1989). The NEO was again used to validate the set of adjective markers chosen; we used the short rather than the long form for reasons of economy. Packet 2 also contained the rest of the general well-being measures: the Perceived Stress scale (Cohen et al., 1983), the Cohen-Hoberman Inventory of Physical Symptoms (Cohen & Hoberman, 1983), the MSEI Identity-Integration scale (O'Brien & Epstein, 1988), and the CES Depression scale (Radloff, 1977).

### Participants

Participants were 116 undergraduates in an upper division psychology course taught at the University of Rochester, of whom 42 were men and 74 were women. They participated for extra course credit. None of the Study 2 participants were among those who took part in Study 1.

### New Measures

**Revised adjective-marker sets.** As noted above, in Study 2, we selected six adjective markers for each of the Big-Five traits, 30 in all. Many of these markers were used in Study 1 and were retained on the basis of their high individual correlations with the appropriate NEO scale. Poorly convergent markers from Study 1 were replaced with new markers. The adjective marker sets used in Study 2 were: Extraversion: extraverted, shy (R), talkative, introverted (R), timid (R), and active; Neuroticism: unhappy, insecure, self-confident (R), cheerful (R), joyless, and moody; Agreeableness: considerate, kind, friendly, cooperative, patient, and self-centered (R); Conscientiousness: organized, orderly, responsible, disorganized (R), irresponsible (R), and careless (R); and Openness to Experience: artistic, imaginative, curious, open-minded, unartistic (R), and adventurous.

**New role-related measures.** In Study 2, participants rated the amount of strain they feel in each role ("How hard is it to behave in each role

so that things go smoothly and satisfactorily?") and the amount of stress they feel in each role ("How much does each role contribute to your overall irritation and stress level"?), using a (1) *not at all* to (9) *extremely* scale. Participants also evaluated the amount of conflict existing between roles. Specifically, they were asked, "To what extent does each role conflict with, or feel discordant with, each other role? For example, you may feel that the son-daughter role makes demands on you which clash with the demands made upon you by the friend role." Each pair of roles (10 pairs in all) was rated, using a (1) *no conflict* to (9) *much conflict* scale.

### Procedure and Variable Computation

**Session 1.** As in Study 1, participants first used the 30 adjective markers to rate myself in general, using a (1) *not at all characteristic* to (8) *very characteristic* scale. Participants then read the definitions of the five roles of student, employee, child, friend, and romantic partner, and then proceeded to rate how they see themselves and their behavior in each role, in terms of the same 30 adjectives. The order of adjectives was again varied within different roles, and the order of presentation of roles was again counterbalanced across participants using a Latin square design. Big-Five scores were computed for each of the five roles by summing the appropriate adjective ratings (again yielding 25 trait-in-role scores). As in Study 1, global scores for each of the Big-Five traits were computed both by using the general-self ratings and, also, by averaging across the five role scores for each trait.

After completing the adjective ratings, participants responded to the same five authenticity items that were used in Study 1, separately for each role, using a (1) *strongly disagree* to (9) *strongly agree* scale. Five role-authenticity scores were computed and a mean role-authenticity score was created by averaging the five role scores. As in Study 1, these variables were used as role-level and person-level measures of self-integration, respectively. Participants then rated their level of satisfaction with each role, the amount of strain they feel in each role, and the amount of stress they feel in each role. Mean role-satisfaction, mean role-strain, and mean role-stress variables were computed for use as control variables in role-level analyses. Next, participants evaluated the amount of conflict existing between each pair of roles. A summary role-conflict variable was created by averaging across these 10 ratings. Finally, participants completed the Rosenberg Self-Esteem Inventory (Rosenberg, 1965), from which a self-esteem variable was computed (one of the five measures of personal adjustment).

**Session 2.** As noted above, participants first completed the 60-item NEO Personality Inventory, from which NEO Extraversion, Neuroticism, Agreeableness, Conscientiousness, and Openness to Experience variables were computed. Next, they completed the other four adjustment measures, from which perceived stress, symptomatology, identity integration, and depression variables were computed.

**Computation of consistency-based integration measures.** SCD was computed in the same way as in Study 1, using the SPSS-X Proximities procedure, for use in person-level analyses. Correlations between each role's ratings and the myself-in-general ratings were also computed in the same way as in Study 1 (five correlations in all), for use as role-level indicators of consistency with the general self.

## Results

### Preliminary Analyses

**Evaluating the revised Big-Five adjective markers.** To assess the internal consistency of the revised Big-Five adjective marker sets, we computed alpha coefficients for each trait for each of the five roles, and also for the general self-ratings. For Extraversion, Neuroticism, Agreeableness, and Conscientious-

ness, these six coefficients all exceeded .70. For Openness to Experience, alpha coefficients ranged between .68 and .76, a substantial improvement over the reliability coefficients found for Openness to Experience in Study 1. We then assessed the internal consistency of each set of trait scores (i.e., the reliability of Extraversion scores across the student, employee, child, friend, and romantic partner role domains). These alpha coefficients ranged from .82 (Extraversion) to .90 (Openness to Experience and Conscientiousness), again confirming that the Big-Five are cross-situationally stable personality dispositions (McCrae & Costa, 1994).

To investigate the validity of the revised marker sets, we correlated the Big-Five scores derived from the general-self ratings with the five criterion variables (i.e., the NEO-based trait scores). As can be seen in Table 5, all five convergent correlations exceeded .50, and the discriminant pattern is also acceptable. Thus, it appears our assessment of the Big-Five traits through adjective markers was somewhat improved in Study 2.

*Gender differences.* There were no gender differences for any of the variables considered in Study 2, with three exceptions: For women, the mean correlation between the general-self and the romantic partner role was greater than the mean correlation for men, and women reported less stress and strain in the romantic partner role than did men. Because gender again did not interact with any of the major findings below, we omit gender from further discussion.

### Replications of Study 1 Hypotheses

*Role effects on Big-Five traits.* To again test the first hypothesis of Study 1, we conducted a within-subject MANOVA, in which the 25 trait-in-role scores were the dependent measures. Again, we found a significant main effect of role,  $F(4, 460) = 180.33, p < .001$ , and a significant Trait  $\times$  Role interaction,  $F(16, 1840) = 28.93, p < .001$ . In other words, people rate different roles differently, and different roles call for distinctive patterns of traits. The general pattern of means was almost identical to that found in Study 1 (see Table 2), and thus we chose not to present the means in a table.

*Predicting relative levels of Big-Five traits from relative levels of authenticity.* To replicate the second major finding of Study 1, we conducted 25 hierarchical regressions in the same manner as in Study 1. When the averages of the five trait-in-

role scores were used as global trait covariates, role authenticity made a significant contribution toward predicting role-specific trait scores in 16 out of 25 analyses and a marginally significant contribution in two analyses. When NEO scores were used as global trait covariates, significant authenticity effects resulted in 16 out of 25 analyses and a marginally significant effect in one analysis. When Big-Five scores based on the myself-in-general ratings were used as global trait covariates, role authenticity was significant in 13 out of 25 analyses. In sum, as in Study 1, we found that role-specific variations in authenticity were predictive of role-specific variations in the Big-Five traits. Specifically, participants tended to be less neurotic and more extraverted, and also more agreeable, conscientious, and open to experience in roles in which they feel relatively more authentic.

*Examining the two models of self-integration.* Next, we again tested our third and fourth hypotheses, that both consistency-based and authenticity-based measures of self-integration would be correlated with positive outcomes, but that authenticity-based measures would account for more unique variance. First, we looked at a role or within-subjects level of analysis. Table 6 presents the zero-order correlations of the role-authenticity and the consistency-with-the-general-self variables with the three role-level well-being outcomes, in all five roles. Both authenticity and consistency were positively correlated with satisfaction (an exception being that consistency was not significantly related to satisfaction in the romantic partner role). Authenticity was significantly negatively correlated with stress and strain in all five roles, whereas consistency was significantly negatively correlated with stress and strain only in the friend and child roles. To comparatively examine authenticity and consistency as predictors, we conducted three sets of simultaneous regressions using each role's satisfaction, stress, or strain score as the dependent measure (15 analyses in all). As in Study 1, both the authenticity score and consistency scores for each role were entered into these regressions, along with mean role authenticity and mean role satisfaction. In all 15 regressions, role-specific authenticity was a significant predictor of positive outcomes (i.e., low stress, low strain, and high satisfaction). Consistency made significant simultaneous contributions only in the prediction of lower stress in the child role and higher satisfaction within the student and child roles. To summarize, our third and fourth hypothesis results from Study 1 were replicated in Study 2 at this role level of analysis.

Table 5

*Correlations of Big-Five Trait Scores as Measured by the NEO Personality Inventory and by Ratings of the General Self on Representative Adjective Markers in Study 2*

NEO scale	Adjective marker rating				
	1	2	3	4	5
1. Extraversion	<b>.54**</b>	-.57**	.43**	.29**	.26**
2. Neuroticism	-.34**	<b>.55**</b>	-.11	-.24**	-.02
3. Agreeableness	.10	-.30*	<b>.59**</b>	.22*	.15
4. Conscientiousness	.14	-.36**	.14	<b>.75**</b>	-.07
5. Openness to Experience	.12	.02	.18	-.08	<b>.52**</b>

*Note.* Boldface scores are convergent correlations.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 6  
*Correlations of Role-Authenticity and Consistency-With-the-General-Self Measures With Role Satisfaction, Role Strain, and Role Stress in Study 2*

Role/measure	Role's authenticity	Role's consistency with the general self
Student		
Satisfaction	.45**	.30**
Strain	-.31**	-.02
Stress	-.26**	-.02
Employee		
Satisfaction	.72**	.53**
Strain	-.66**	-.41**
Stress	-.57**	-.47**
Child		
Satisfaction	.56**	.35**
Strain	-.60**	-.25**
Stress	-.50**	-.16
Friend		
Satisfaction	.51**	.13
Strain	-.53**	-.13
Stress	-.39**	-.09
Romantic partner		
Satisfaction	.60**	.36**
Strain	-.46**	-.14
Stress	-.41**	-.10

\*\*  $p < .01$ .

We then reexamined our third and fourth hypotheses at a person or between-subjects level of analysis. First, we examined the correlations of SCD and mean role authenticity with the general well-being outcomes. Conceptually replicating the Study 1 results, both were significantly correlated with all five outcomes. These correlations are given in Table 7 (we defer discussion of the role-conflict variable and the beta coefficients within Table 7). We then regressed the five well-being outcomes on SCD and mean role authenticity simultaneously. Both variables made significant independent contributions in predicting all five outcomes, again failing to support the Study 1 hypothesis that authenticity would subsume the variance shared by SCD and well-being. This occurred despite the fact that SCD and mean

role authenticity were again strongly intercorrelated,  $r = -.59$ ,  $p < .01$ .

### *New Hypotheses Regarding Role Conflict*

First, we examined the associations of role conflict with SCD and mean role authenticity. Supporting the first two new hypotheses of Study 2, role conflict was positively associated with SCD,  $r = .31$ ,  $p < .01$ , and negatively associated with mean role authenticity,  $r = -.31$ ,  $p < .01$ . We then examined the correlations between role conflict and the five well-being measures (see Table 7). Supporting our third new hypothesis, all of these correlations were significant; that is, the more conflict participants feel between these five roles, the less well-being they experience in their lives. Finally, we tested our fourth new hypothesis of Study 2, that role conflict would account for the residual associations of SCD with well-being, after the effects of authenticity are partialled out. To do this, we conducted five regressions, one for each well-being variable, in which SCD, mean role authenticity, and role conflict were all entered simultaneously as predictors. Table 7 gives the resulting beta coefficients. As can be seen, each of the three measures tended to account for significant independent variance in well-being outcomes. In other words, none of these constructs appear to be reducible to the others, in terms of effects on well-being; it appears that people are best off when they feel authentic across roles, experience low conflict between roles, and rate themselves very similarly in their different roles.

### *General Discussion*

Our two studies examined the associations of psychological consistency, authenticity, and well-being, using roles and traits as vehicles. The studies yielded a number of theoretically interesting findings. First, we confirmed that people show systematic cross-role variability (or inconsistency) in the Big-Five personality traits (Smith & Williams, 1992). Specifically, participants reported being relatively most extraverted in the friend role, most neurotic in the student role, most conscientious in the employee role, most open to experience in the romantic partner role, and least agreeable in student and child roles. Despite our

Table 7  
*Associations of SCD, Mean Role Authenticity, and Role Conflict With General Well-Being Measures in Study 2: Zero-Order Correlations and Beta Coefficients Resulting From Simultaneous Entry*

Measure	SCD		Mean role authenticity		Role conflict		<i>R</i>
	<i>r</i>	$\beta$	<i>r</i>	$\beta$	<i>r</i>	$\beta$	
Depression	.38**	.17†	-.43**	-.28**	.30**	.16†	.48**
Identity integration	-.38**	-.16	.44**	.29**	-.32**	-.18*	.49**
Perceived stress	.38**	.19†	-.38**	-.21*	.32**	.20*	.47**
Self-esteem	-.36**	-.17†	.37**	.20†	-.28**	-.16†	.44**
Symptomatology	.38**	.23*	-.32**	-.08	.42**	.33**	.50**

Note. SCD = self-concept differentiation.

†  $p < .10$  (marginally significant). \*  $p < .05$ . \*\*  $p < .01$ .

focus on cross-role variation and its meaningfulness, results of this research could equally be cited as strong evidence for the cross-role consistency of Big-Five traits. Specifically, in both Studies 1 and 2, alpha coefficients representing the consistency of traits across roles exceeded .80, supporting the position that Big-Five traits are global, transcontextual personality dispositions (McCrae & Costa, 1984). In short, one could view these results as supporting both the consistency and the inconsistency position on traits, inasmuch as participants showed both rank-order stability and situational specificity in their trait ratings (Funder & Colvin, 1991; Roberts & Donahue, 1994).

Proponents of the five-factor model have traditionally focused on evidence for consistency, as they strive to make the case for the Big-Five traits and to develop reliable measures of them. The danger of this strategy is that it may "divert attention . . . from the dynamic, reciprocal relationship between persons and situations" (Smith & Williams, 1992, p. 414). Notably, Smith and Williams further observed that nothing in the five-factor model precludes consideration of the effects of situational or role-related forces on traits. Our research represents an attempt to focus on role-based variations in the Big-Five traits and outlines one promising way of investigating this relatively unexplored area. For example, future studies could examine the particular environmental and contextual factors that lead people to manifest different levels of the Big-Five traits in different roles.

A second major finding of this research was that cross-role variations in felt authenticity were predictive of cross-role variations in the Big-Five traits. McCrae and John (1992) observed that nothing in the five-factor model precludes a focus on the dynamic or intrapersonal sources of trait behavior and, in fact, called for such work. The current results suggest that there may be a dynamic relationship between the degree of authenticity a person feels within a particular role and the degree that all of the Big-Five traits (reversing Neuroticism) are manifested within that role. Specifically, the more genuine and self-expressive participants felt within a given role, the more extraverted, agreeable, conscientious, open to experience, and nonneurotic they were in that role. By achieving greater choicefulness in and identification with one's different roles, these within-subject results imply that one may become more outgoing, responsible, cooperative, receptive, and cheerful in those roles, all of which characteristics may provide unique adaptive and functional benefits (Buss, 1991). Of course, the proposition that levels of authenticity cause levels of trait expression cannot be directly supported by these correlational data. Furthermore, we do not mean to suggest that being more authentic necessarily entails expressing higher levels of Big-Five traits; of course, it may sometimes be appropriate to be less extroverted, conscientious, agreeable, or open to experience within a particular role, or more neurotic, depending on the circumstances.

A third important finding in these studies involved the substantial correlations of both authenticity- and consistency-based self-integration constructs with measures of satisfaction and well-being. The authenticity-to-well-being results concur with the prior theorizing of humanistic and phenomenologically oriented psychologists (May, 1983; Rogers, 1963), according to which authenticity and autonomy are associated with being a more fully functioning person. They also concur with more recent empirically based models, which have shown the impor-

tance of experiential autonomy for well-being (Deci & Ryan, 1985, 1991; Ryff, 1995; Sheldon & Kasser, 1995; Sheldon et al., 1996). The consistency-to-well-being results concur with Donahue et al.'s (1993) findings concerning the overly differentiated or fragmented self, supporting theirs and the Jamesian view that *Zerrissenheit* or torn-aparthood is not an optimal condition for human adjustment. It is interesting to consider the finding that differentiation or inconsistency is problematic, in light of the provocative portrait of the postmodern, saturated self proposed by Gergen (1991). Whereas Gergen and others herald the coming dominance of multiple identities and shifting personas, and view models of self-consistency and integration as outmoded ideologies, evidence from the current studies suggests that there are functional costs to assuming varied identities, costs that postmodern theorists may, to date, have underacknowledged.

We also directly compared authenticity and consistency-based measures of self-integration as simultaneous predictors of adjustment and well-being. On the basis of our assumption that cross-role variations in traits are in part caused by cross-role variations in authenticity, we had expected that measures of authenticity would outperform measures of consistency as predictors of well-being. This was true at the role level of analysis, but at the person level of analysis, the SCD measure maintained an independent effect on psychological well-being. In Study 2, we extended this comparison by adding an additional construct, role conflict, that we believed might help explain the lingering SCD effect. We found, however, that all three variables (i.e., high role authenticity, low self-concept differentiation, and low role conflict) contributed uniquely to the prediction of well-being, suggesting three independent avenues for influencing or changing well-being.

To us, it still remains an open question why differentiation per se predicts negative outcomes, above and beyond the influence of the two process variables we examined, authenticity and role conflict. One explanation is that differentiation, authenticity, and conflict are in fact functionally distinct dimensions of personality organization and thus should not be expected to be empirically reducible to one another. Another explanation is that, despite the fact that one might feel very authentic in behaving very differently in different roles, and also feel very little conflict between those distinctive modes of self, still, the development and maintenance of such inner diversity exerts a substantial strain and cost (Linville, 1987). Future research will be necessary to explore these issues.

In conclusion, we suggest that dynamic conceptions of personality may have something to contribute to trait perspectives, particularly when the focus in trait ratings is shifted from the self in general to the self in specific roles. Trait theories have been criticized for missing the dynamic patterning of behavior (McAdams, 1992; Pervin, 1994); the current data suggest that the humanistic concept of psychological authenticity may help to explain why people evidence varying styles of behavior in different areas of their lives. We also set out to compare two concepts of being true to oneself: that it entails showing consistent trait profiles across different roles, as trait theory and the self-fragmentation model suggest, and that it entails feeling authentic and self-expressive across different roles, as humanistic and phenomenological models suggest. We found substantial

convergence between the two concepts of self-integration, raising the possibility that, indeed, "we act most freely when we express our enduring dispositions" (McCrae & Costa, 1994, p. 175). It appears that, more often than not, one's true self and one's trait self are one and the same.

### References

- Amabile, T. (1996). *Creativity in context*. Boulder, CO: Westview Press.
- Barnett, R. C., & Baruch, G. K. (1985). Women's involvement in multiple roles and psychological distress. *Journal of Personality and Social Psychology*, 49, 135-145.
- Baruch, G. K., & Barnett, R. C. (1986). Role quality, multiple-role involvement, and psychological well-being in mid-life women. *Journal of Personality and Social Psychology*, 51, 585-589.
- Block, J. (1961). Ego-identity, role variability, and adjustment. *Journal of Consulting and Clinical Psychology*, 25, 392-397.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117, 187-215.
- Briggs, S. R. (1992). Assessing the five-factor model of personality description. *Journal of Personality*, 60, 253-293.
- Burke, P. J., & Tully, J. C. (1977). The measurement of role-identity. *Social Forces*, 55, 881-897.
- Buss, D. M. (1991). Evolutionary personality psychology. *Annual Review of Psychology*, 42, 459-491.
- Cohen, S., & Hoberman, H. M. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology*, 13, 99-125.
- Cohen, S., Kamarack, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 385-396.
- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1989). *NEO-PI/FFI manual supplement*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (1995). Solid ground in the wetlands of personality: A reply to Block. *Psychological Bulletin*, 117, 216-229.
- deCharms, R. (1968). *Personal causation: The internal affective determinants of behavior*. New York: Academic Press.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Deci, E. L., & Ryan, R. M. (1991). A motivational approach to self: Integration in personality. In R. Dienstbier (Ed.), *Nebraska Symposium on Motivation: Perspectives on motivation* (Vol. 38, pp. 237-288). Lincoln: University of Nebraska Press.
- Donahue, E. M., Robins, R. W., Roberts, B. W., & John, O. P. (1993). The divided self: Concurrent and longitudinal effects of psychological adjustment and social roles on self-concept differentiation. *Journal of Personality and Social Psychology*, 64, 834-846.
- Emmons, R. A. (1986). Personal strivings: An approach to personality and subjective well-being. *Journal of Personality and Social Psychology*, 51, 1058-1068.
- Emmons, R. A., & King, L. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*, 54, 1040-1048.
- Epstein, S. (1983). A research paradigm for the study of personality and motivation. In M. M. Page (Ed.), *Nebraska Symposium on Motivation* (Vol. 30, pp. 91-154). Lincoln: University of Nebraska Press.
- Funder, D. C. (1994). Explaining traits. *Psychological Inquiry*, 5, 125-127.
- Funder, D. C., & Colvin, C. R. (1991). Explorations in behavioral consistency: Properties of persons, situations, and behaviors. *Journal of Personality and Social Psychology*, 60, 773-794.
- Gergen, K. J. (1991). *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48, 26-34.
- Harter, S., & Monsour, A. (1992). Developmental analysis of conflict caused by opposing attributes in the adolescent self-portrait. *Developmental Psychology*, 28, 251-260.
- Kasser, T., & Ryan, R. M. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65, 410-422.
- Kasser, T., & Ryan, R. M. (1996). Further examining the American dream: Well-being correlates of intrinsic and extrinsic goals. *Personality and Social Psychology Bulletin*, 22, 281-288.
- King, L. A., & King, D. W. (1990). Role conflict and role ambiguity: A critical assessment of construct validity. *Psychological Bulletin*, 107, 48-64.
- Kuhl, J. (1986). Action control: The maintenance of motivational states. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 101-128). Berlin: Springer.
- Lindbergh, A. M. (1955). *Gift from the sea*. New York: Random House.
- Linville, P. (1987). Self-complexity as a cognitive buffer against stress-related illness and depression. *Journal of Personality and Social Psychology*, 52, 663-676.
- Magnusson, D., & Endler, N. S. (Eds.). (1977). *Personality at the crossroads: Current issues in interactional psychology*. Hillsdale, NJ: Erlbaum.
- May, R. (1983). *The discovery of being*. New York: Norton.
- McAdams, D. P. (1992). The five-factor model in personality: A critical appraisal. *Journal of Personality*, 60, 329-361.
- McCrae, R. R., & Costa, P. T., Jr. (1984). Personality is transcontextual: A reply to Veroff. *Personality and Social Psychology Bulletin*, 10, 175-179.
- McCrae, R. R., & Costa, P. T., Jr. (1994). The stability of personality: Observations and evaluations. *Current Directions in Psychological Science*, 3, 173-175.
- McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, 60, 175-215.
- Mischel, W. (1968). *Personality and assessment*. New York: Wiley.
- O'Brien, E. J., & Epstein, S. (1988). *The Multidimensional Self-Esteem Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Pervin, L. A. (1994). A critical analysis of current trait theory. *Psychological Inquiry*, 5, 103-113.
- Radloff, L. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Roberts, B. W., & Donahue, E. M. (1994). One personality, multiple selves: Integrating personality and social roles. *Journal of Personality*, 62, 199-218.
- Rogers, C. (1963). The actualizing tendency in relation to "motives" and to consciousness. In M. R. Jones (Ed.), *Nebraska Symposium on Motivation* (Vol. 11, pp. 1-24). Lincoln: University of Nebraska Press.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ryan, R. M. (1993). Agency and organization: Intrinsic motivation, autonomy and the self in psychological development. In J. Jacobs (Ed.), *Nebraska Symposium on Motivation: Developmental perspectives on motivation* (Vol. 40, pp. 1-56). Lincoln: University of Nebraska Press.
- Ryan, R. M. (1995). Psychological needs and the facilitation of integrative processes. *Journal of Personality*, 63, 397-427.
- Ryan, R. M., Deci, E. L., & Grolnick, W. S. (1995). Autonomy, relatedness, and the self: Their relation to development and psychopathol-

- ogy. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Vol. 1. Theory and methods* (pp. 618–655). New York: Wiley.
- Ryan, R. M., Sheldon, K. M., Kasser, T., & Deci, E. L. (1996). All goals were not created equal: The relation of goal content and regulatory styles to mental health. In J. A. Bargh & P. M. Gollwitzer (Eds.), *The psychology of action: Linking motivation to cognition and behavior* (pp. 7–26). New York: Guilford.
- Ryff, C. D. (1995). Psychological well-being in adult life. *Current Directions in Psychological Science*, 4, 99–104.
- Shadel, W. G., & Cervone, D. (1993). The big five versus nobody? *American Psychologist*, 48, 1300–1302.
- Sheldon, K. M. (1995). Creativity and goal conflict. *Creativity Research Journal*, 8, 299–306.
- Sheldon, K. M., & Emmons, R. A. (1995). Comparing differentiation and integration within personal goal systems. *Personality and Individual Differences*, 18, 39–46.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531–543.
- Sheldon, K. M., Ryan, R. M., & Reis, H. R. (1996). What makes for a good day? Competence and autonomy in the day and in the person. *Personality and Social Psychology Bulletin*, 22, 1270–1279.
- Smith, T. W., & Williams, P. G. (1992). Personality and health: Advantages and limitations of the five-factor model. *Journal of Personality*, 60, 395–423.
- Spielberger, C. D., Gorsuch, R., & Lushene, R. (1979). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.
- SPSS, Inc. (1988). *SPSS-X user's guide* (3rd ed.). Chicago: Author.
- Turiel, E. (1974). Conflict and transition in adolescent moral development. *Child Development*, 45, 14–29.
- Veroff, J. (1983). Contextual determinants of personality. *Personality and Social Psychology Bulletin*, 9, 331–343.
- Waterman, A. S. (1990). Personal expressiveness: Philosophical and psychological foundations. *Journal of Mind and Behavior*, 11, 47–74.
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*, 64, 678–691.
- Watson, D., & Clark, L. A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality*, 60, 441–476.
- Wild, J. (1965). Authentic existence: A new approach to "value theory." In J. M. Edie (Ed.), *An invitation to phenomenology: Studies in the philosophy of experience* (pp. 59–78). Chicago: Quadrangle Books.

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