Personality Prototypes and Ego Development: Conceptual Similarities and Relations in Adult Women

Oliver P. John and Jennifer L. Pals
University of California, Berkeley

P. Michiel Westenberg
Leiden University

Three studies investigated how three personality prototypes (K. York & O. P. John, 1992) relate to J. Loevinger's (1976) stages of ego development (ED). Study 1 examined their conceptual similarities, and Study 2 their relations in a sample of adult women. In both studies, the personality prototypes mapped onto regions defined by multiple ED stages: The Individuated prototype was most likely to reach the high region of ED (Individualistic, Autonomous, and Integrated); the Traditional prototype was most likely to function in the middle region (Conformist, Self-aware, and Conscientious); and the Conflicted prototype was most likely to remain in the low region (Impulsive and Self-protective). In addition to these between-prototype differences, Study 3 explored whether differences in life outcomes within the prototypes are also related to ED; findings suggest that personality prototype and ego development may interact in shaping the life course.

Ask three individuals to complete the sentence "Raising a family . . .," and you may get three very different responses: One might say "it is not easy, but it is one of life's greatest satisfactions and opportunities for intimacy," another "it has been a wonderful experience," and a third "it's a drag." What types of individuals would produce these responses? According to Loevinger (1976, 1993), these individuals are functioning at different stages of ego development (ED): the first at the Autonomous stage, the second at the Self-aware stage, and the third at the Impulsive stage. According to York and John (1992), the three individuals differ in their basic personality prototype: the first is Individuated, the second Traditional, and the third Conflicted. How are Loevinger's (1976) stage model of ED and York and John's prototype model similar and different?

In terms of their basic assumptions and emphasis, the models share many similarities. Both models conceptualize individual differences in terms of different person categories, rather than dimensions; both characterize individuals in terms of their overall personality functioning, rather than in terms of particular variables; and both emphasize how that functioning is similar to and different from the personality functioning of other individuals (Block, 1971; Caspi & Silva, 1995; Magnusson, 1990). Thus, both models provide person-centered, rather than variable-centered, frameworks for understanding adult personality. However, the specific elements that constitute the two frameworks, and the methods by which they were derived, are quite different. Perhaps the most obvious difference is the number of person categories proposed: York and John (1992) emphasized three major prototypes, whereas Loevinger (1976, 1987) postulated eight measurable stages of ED. The prototypes were derived factor analytically to represent adult personality structure with a parsimonious set of broad and maximally independent categories, whereas the eight ED stages represent more fine-grained distinctions; their boundaries reflect developmental transitions that capture the gradual reorganization of various features of psychological functioning. And, finally, the prototypes were based on observer descriptions of individuals' personalities, whereas the ED stages are measured with a projective sentence completion test.

The main goal of the present research was to understand how the factor analytically derived personality prototypes and the stages of ED are related to each other. The need for such an integration was articulated more than 25 years ago by Block (1971), who speculated about the potential of "Loevinger's stages of ego development as an organizing continuum for personality types" (p. 248). However, Block did not have available a sample in which both personality-type and ED data were available for the same individuals, and the issue remained unresolved. Block emphasized the need for an empirical integration of these two kinds of person-centered approaches—how they converge and how they differ—and we agree that such an inte-

1 Although Loevinger's (1987) model includes nine theoretically postulated stages, the first stage (Symbiotic) is preverbal and therefore developmentally too early to be measured. Thus, throughout this article, we refer only to the eight measurable stages of ED.
The three major prototypes identified by York and John (1992) are briefly described in Table 1. They delineate basic modes of adaptation the individual has evolved over the life course. In adulthood, the Individuated prototype captures a combination of autonomy and creativity in thought and action with awareness and responsiveness to others. These women show a strong drive toward individualistic achievement and reach exceptionally high levels of self-actualization and creativity. Self and others are viewed as autonomous individuals yet are able to connect intimately. The Traditional prototype is defined by conventional, sex-typed behavior, devotion to others, and feelings of guilt. These women have adopted the prevailing cultural norms and emphasize close relationships with others and gaining acceptance at the cost of self-expression; the self is adapted to the needs of others. In this age cohort, they focused on marriage, rather than on work and career. The Conflicted prototype, finally, is defined by indications of psychological problems that involve both intrapersonal and interpersonal conflicts. The self shows a marked and unresolved ambivalence about making commitments.
The stages of ED represent a theory of personality development. Loebinger’s (1976, 1987) stage model of ED represents a rich and complex theoretical conception that has been empirically validated and refined over the past 30 years. Her theory postulates a sequence of qualitatively distinct stages of ego functioning. Ego functioning refers to the particular way in which individuals interpret their experience and make sense of the world, and each stage represents a qualitatively distinct way of doing so. The evolution of Loebinger’s theory has been inseparable from the development of the Washington University Sentence Completion Test (SCT; Loebinger & Wessler, 1970). The SCT is a projective measure in which individuals complete a series of sentence stems. The individual’s subjective way of construing experience is thought to emerge in this open-ended method of assessment and can be reliably coded for ED according to extensive and detailed coding manuals.

The stages of ED represent a theory of personality development and an account of individual differences in personality functioning. Personality development is conceptualized as the progression through these stages, and the individual’s assessed stage represents how far the individual has progressed along the ED continuum. However, the stages of ED are defined independently of chronological age, and people can remain at any stage in the sequence; thus, a range of stages will be represented.

The stages are qualitatively different points along a more or less hypothetical continuum. Ego development is the term for the common element in the stage sequence and the corresponding dimension of individual differences, a quasi-typology. There is an underlying assumption that the types found in adult life represent the trace of the developmental stages. (pp. 6–7)

Loebinger (1987) postulated eight measurable stages beyond the first (unmeasured) Symbiotic stage: Impulsive (2), Self-protective (3), Conformist (4), Self-aware (5), Conscientious (6), Individualistic (7), Autonomous (8), and Integrated (9). These stages represent successive degrees of maturity, complexity, and sophistication in the organization of experience and are said to require the integration and coordination of four domains of ego functioning: impulse control, interpersonal style, conscious preoccupations, and cognitive style; these domains have unique manifestations at each stage.

A brief description of the stages, adapted from Loebinger (1976; Hy & Loebinger, 1996), is given in Table 2. The four major content domains in which ED is manifested are column headings in Table 2, and the 8 measurable stages, ordered from top to bottom, are row headings. Consider, for example, how the domains of impulse control and interpersonal style are manifested at three of the stages. The Impulsive stage at the low end of ED is characterized by impulse control that is based on fear of retaliation and an interpersonal style that is egocentric, exploitative, and dependent. Moving on to the Conformist stage, we find impulse control based on obedience to rules and an interpersonal style emphasizing loyalty. Moving on further to the Individualistic stage, impulse control is now motivated by tolerance and respect for one’s own individuality and that of others, and the interpersonal style reflects an appreciation for both mutuality and independence in relationships with others.

These brief descriptions show how Loebinger’s (1976) model captures both individual differences in the organization of experience and a way to conceptualize an individual’s trajectory of psychological growth—Loebinger viewed development in terms of successive degrees of complexity, openness, depth, and so-
Table 2
Characteristics of Stages of Ego Development in Loevinger's Model

<table>
<thead>
<tr>
<th>Ego Stage</th>
<th>Impulse Control</th>
<th>Interpersonal Style</th>
<th>Conscious Preoccupations</th>
<th>Cognitive Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsive (2)</td>
<td>Impulsive, afraid of retaliation</td>
<td>Dependent, egocentric, exploitative</td>
<td>Bodily feelings</td>
<td>Stereotyping, conceptual confusion</td>
</tr>
<tr>
<td>Self-protective (3)</td>
<td>Opportunistic, afraid of being caught</td>
<td>Wary, manipulative, exploitative</td>
<td>Self-protection, trouble, advantage, control</td>
<td>See above</td>
</tr>
<tr>
<td>Conformist (4)</td>
<td>Conformity to rules, shame</td>
<td>Cooperative, loyal, superficial niceness</td>
<td>Appearance, social acceptability, behavior</td>
<td>Conceptual simplicity, clichés</td>
</tr>
<tr>
<td>Self-aware (5)</td>
<td>Differentiation of norms, exceptions allowable</td>
<td>Helpful, aware of self in relation to group</td>
<td>Feelings, problems, adjustment</td>
<td>Multiplicity</td>
</tr>
<tr>
<td>Conscientious (6)</td>
<td>Self-evaluated standards, self-criticism</td>
<td>Intense, responsible</td>
<td>Differentiated feelings, motives, achievements</td>
<td>Conceptual complexity, idea of patterning</td>
</tr>
<tr>
<td>Individualistic (7)</td>
<td>Tolerance, respect for individuality</td>
<td>Mutuality, dependence as an emotional problem</td>
<td>Individuality, development, roles</td>
<td>Distinction of process and outcome</td>
</tr>
<tr>
<td>Autonomous (8)</td>
<td>Coping with conflict</td>
<td>Interdependence, respect for autonomy</td>
<td>Self-fulfillment, psychological causation</td>
<td>Increased conceptual complexity, broad scope, tolaration of ambiguity</td>
</tr>
<tr>
<td>Integrated (9)</td>
<td>Reconciliation of inner conflict</td>
<td>Cherishing of individuality</td>
<td>Identity</td>
<td></td>
</tr>
</tbody>
</table>


Phrasing in the organization of experience. Her model thus defines psychological maturity not as adjustment, happiness, or competence (Helson & Wink, 1987) but as personality functioning based on introspection, conceptual complexity and openness, an awareness and appreciation of individuality and conflict, and autonomy and intimacy in relationships.

How are the Three Prototypes Related to ED?

The "Regional" Hypothesis

How might York and John's (1992) personality prototypes and Loevinger's stages of ED be related? One hypothesis would be that there is no relation; personality prototype membership might tell us nothing about the individual's stage of ED. For example, in Gough's (1987) typology, personality type and level of maturity are conceptualized as independent; personality functioning is determined by the combination of both type and level of maturity. Another hypothesis would postulate one-to-one correspondences between one of the three prototypes (e.g., Individuated) with one of the eight ED stages (e.g., Individualistic). However, the set of eight ED stages defines a sequence of gradual and continuous transitions that capture the reorganization of various features of psychological functioning. Thus, adjacent stages will share some of these features. In contrast, the three adult prototypes describe basic modes of adaptation and represent a minimally necessary set of person categories chosen to be maximally independent and nonoverlapping. Thus, we suggest what might be referred to as a regional hypothesis: If the two approaches have hit on some of the basic features of personality functioning, each personality prototype should map onto a distinct region or interval of the ED continuum—that is, several stages. According to this hypothesis, each prototype captures features common to several adjacent stages of ED because the prototypes are defined more broadly and aggregate across some of the distinctions offered by the stages.

Hypotheses for Each Prototype

What particular regions of ED are highlighted by the prototypes? We have recently reviewed the literature on personality attributes related to ED in adulthood (Pals & John, 1998) and found three personality configurations that are similar to the three prototypes and also demarcate three regions of ED. Table 1 summarizes our hypotheses relating the three prototypes to these regions.

Individualized prototype. According to the typology, this prototype is open-minded and introspective, resilient under stress, and achievement-oriented. We suggest that individuals with this personality structure should be the most prevalent of the three prototypes in the high region of ED, defined by the Individualistic, Autonomous, and Integrated stages.

This prediction is consistent with recent findings about the personality characteristics related to high ED (see Pals & John, 1998). Individuals at the highest stages of ED have been found to be more open to new experience (McCrae & Costa, 1980), a trait also central to the Individualized prototype. Other attributes of the Individualized prototype have also been found to relate to high ED, such as ego-resiliency, intellectualism, and cultural sophistication (Westenberg & Block, 1993; Vaillant & McCullough, 1987); creativity (Helson & Roberts, 1994; Vaillant & McCullough, 1987); psychological-mindedness (Helson & Roberts, 1994); integration of caring and autonomy (Prager & Bai-
ley, 1985; McAdams, Ruetzel, & Foley, 1986); and interpersonal characteristics such as empathy, nurturance, affiliation, closeness, and tolerance (Carlozzi, Gaa, & Liberman, 1983; Nelson & Roberts, 1994; Westenberg & Block, 1993; White, 1985). These characteristics, taken together, define a notion of psychological maturity that is both well-captured by the Individualized prototype and forms a theme common to the post-Conscientious stages of ED—personality functioning that enhances mutuality in relationships, richness of understanding of self and others, and authentic self-expression.

Traditional prototype. Where might the Traditional prototype fit on the ED continuum? Individuals in this prototype adopt conventional norms and emphasize the fulfillment of duties, responsibilities, and the needs of others at the cost of self-expression. This personality structure suggests an individual who has developed to at least the Conformist stage (at which the individual is concerned with fitting in and following rules) but not beyond the Conscientious stage (at which the individual is concerned with adhering to values and standards that are both personally meaningful and socially responsible). Thus, we predicted that in adulthood, the Traditional prototype members would be the most prevalent in the middle region of ED, defined by the Conformist, Self-aware, and Conscientious stages.

This prediction is also consistent with recent findings that have linked several attributes of the Traditional prototype to stages in the middle region of ED, namely compliance or adherence to convention (Westenberg & Block, 1993), authoritarian attitudes (Browning, 1983), living according to traditional gender roles (Prager & Bailey, 1985), and a pleasant interpersonal style (Westenberg & Block, 1993). Taken together, these characteristics reflect themes common to the stages in the middle region of ED: a concern for standards (whether they are social norms or personally defined values) and an emphasis on others (whether the focus is on their approval, their needs, or their feelings). In Loevinger’s (1976) model, this level of development is the one attained by the average adult in normative samples. Although they are certainly competent adults and good citizens, these adults do not show the psychological sophistication and maturity characteristic of the high region of ED.

Conflicted prototype. Finally, where might the Conflicted prototype fall on the ED continuum? This prototype is characterized by various forms of interpersonal and intrapersonal adjustment problems, such as ambivalence about making commitments, dissatisfaction with self, hostility, defensiveness, and anxiety. Thus, we predicted that adults found in the low region of ED (Impulsive and Self-protective stages) would most likely be members of the Conflicted prototype. This prediction is consistent with Labouvie-Vief’s (1993) finding that although there are few adults at the lowest stages, their protocols “are typically characterized by what strikes one as a high level of hostility, rigidity, and foreclosed thinking: all indices, it would appear, of a degree of pathology” (p. 36). Several other studies (Rozsnafszky, 1981; Starrett, 1983; Westenberg & Block, 1993) have also shown that the Impulsive and Self-protective stages are related to hostility, unsocialized impulsiveness, and poor need regulation—all of which are associated with the Conflicted prototype.

According to Loevinger’s (1976) model, in adults these personality characteristics suggest an unusual lack of psychological maturity. Although this lack of maturity should be true of some Conflicted individuals, this prototype is defined more broadly and encompasses less pathological attributes as well, such as anxiety and dissatisfaction with self and others; moreover, some Conflicted individuals are quite aware of their psychological problems. Similarly, Loevinger argued that mental health is not an explicit part of the definition of ED and that psychological problems may be found at any stage (see also Hauser, 1993). What should differ across ED stages is the nature of the manifestation of such problems, not simply whether or not problems exist. Thus, connections with ED are likely to be more complicated for the Conflicted prototype than for the other two prototypes: Although the adults in the low ED region should primarily be members of the Conflicted prototype, we expected to find Conflicted individuals in the higher regions of ED as well.

Study 1: Conceptual Relations Between Personality Prototype and ED Stage Definitions in the CAQ

How could one examine the conceptual relations between the personality prototypes and the ED stages? The approach we took in Study 1 was to compare how the two models are defined conceptually within the same instrument: the CAQ. Because York and John’s (1992) prototypes were derived from analyses of CAQ personality descriptions, each prototype is defined by a particular constellation (or profile) of behavioral, affective, and cognitive attributes across the 100 CAQ personality items. Similarly, a CAQ definition of each ED stage was available from a panel of experts who had independently Q-sorted each stage according to ED theory, thus allowing us to define the three ED regions with the same 100 CAQ items. The CAQ thus provided a common language to measure the conceptual similarity between the prototypes and the regions of ED. We predicted that the Individualized prototype would be conceptually most similar to the high region, the Traditional prototype to the middle region, and the Conflicted prototype to the low region.

Method

The CAQ. Block (1978; see also Block, 1971) constructed the 100-item CAQ to provide a comprehensive, generally applicable, and standardized language for describing the full range of individual differences in personality functioning (e.g., Block, 1971). The CAQ is a general-purpose assessment instrument; it thus avoids the limitations of other instruments that are specifically focused on one or a few predetermined dimensions of personality.

One usage of the CAQ is for describing the personalities of individuals by arranging the 100 items into a forced, nine-step quasi-normal distribution in which one extreme is most descriptive and the other least descriptive of the individual. The arrangement of the 100 items provides a CAQ profile that represents the individual’s particular personality configuration. This was the way the CAQ was used by York and John (1992) to derive their prototypes. A second usage of the CAQ is to conceptually define personality constructs. Because of its comprehensiveness and conceptual openness, the CAQ has been used to create expert-defined operationalizations of a broad array of personality constructs (see Block, 1991). That is, an expert arranges the 100 CAQ items to represent not the personality of an individual but the conceptual definition of the personality construct of interest. The CAQ was used in this manner to define the stages of ED.

Definition of the personality prototypes. York and John (1992) pro-
provided a detailed description of the procedures they used to derive prototypes from CAQ personality descriptions of the Mills women when they were 43 years old (see the Method section of Study 2 for a more detailed description of the sample). Each participant's personality was independently described with the CAQ by at least three judges. The information about each participant available to the judges consisted of extensive descriptive and qualitative material, including detailed answers to a wide range of open-ended questions about participants' personal histories, demographic background, current life situations, vocational interests and aspirations, prospects and concerns for the future, and so on. The judges were drawn from a pool of nine, including three with doctorates and six graduate students in clinical psychology.

The coefficient alpha reliability of the resulting Q-sort composites averaged .75 (Wink, 1992). To derive prototypes with inverse factor analysis, York and John (1992) intercorrelated the participants' composite CAQ profiles across the 100 items and factored the resulting correlation matrix. The definition of each prototype is captured by the CAQ profile of factor scores for the 100 items.

Definition of ED and the three major regions. In contrast to the empirically derived prototypes, theory-based CAQ profiles of the stages of ED were generated by two experts (Jane Loevinger and Lawrence D. Cohn). They independently generated a separate profile for seven of the eight stages from Impulsive (2) to Autonomous (8). A definition of the integrated stage (9) was not attempted because the experts felt that the CAQ did not contain sufficient unique indicators of this stage (see Westenberg & Block, 1993). The agreement between the two experts was substantial (mean interjudge correlation = .84). For each stage, the judges' two profiles were averaged to yield a composite profile. A high value for an item in a profile indicates the item is descriptive or salient in characterizing that ED stage, whereas a lower value indicates the item is uncharacteristic of that stage.

To index the three major regions of ED of interest here, we aggregated the CAQ profiles for the Impulsive and Self-protective stages into a composite for the low ED region (α = .88), the Conformist, Self-aware, and Conscientious stages into a middle-region composite (α = .71), and the Individualistic and Autonomous stages into a high-region composite (α = .94). To illustrate the CAQ definition of these three regions, Table 3 presents examples of CAQ items rated as most characteristic of each region.

Results and Discussion

Testing the regional hypotheses. To index the conceptual similarity between the personality prototypes and the three regions of ED, we correlated the CAQ profile of each prototype with the CAQ profile of each region across the 100 CAQ items. The index of similarity is thus a correlation coefficient ranging from -1.0 (conceptually opposite) to +1.0 (conceptually identical). The more positive the correlation, the more similar are the two constructs; the more negative, the more dissimilar. Zero correlations indicate the constructs are unrelated.

To test our hypotheses, we compared the similarity correlations for the three prototypes within each region. As predicted for the high region of ED, we found the Individualized prototype had the highest similarity correlation (.69), which was significantly higher than the similarity correlations for both the Traditional prototype (.37) and the Conflicted prototype (-.22), as shown by t tests for the difference between dependent correlations, both ts(97) > 3.1, ps < .01. Thus, the Individualized personality prototype configuration emphasizes attributes similar to those in the high region of ED, tapping a similar notion of psychological maturity. As shown in Table 3, this notion of maturity includes valuing independence and autonomy as well as warmth and closeness in relationships, introspection, broad interests, and a concern with self-development.

For the middle region of ED, the Traditional prototype had the highest similarity correlation (.69), significantly higher than the values for the Individualized prototype (.44) and the Conflicted prototype (-.19), both ts(97) > 2.5, ps < .05. The CAQ attributes that define this middle region of the ED continuum (see Table 3) describe an individual who judges self and others in conventional terms, emphasizes being with others, delays gratification unnecessarily, and readily experiences guilt—attributes that are also characteristic of the Traditional prototype and fit with the conventional gender role of this cohort, which is another important characteristic of the Traditional prototype (see Table 1).

Finally, for the low region of ED, the Conflicted prototype had the highest similarity correlation (.36), significantly higher than the values for the Individualized prototype (-.37) and the

<table>
<thead>
<tr>
<th>Region of ED</th>
<th>Highly characteristic CAQ items</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Values own independence and autonomy</td>
</tr>
<tr>
<td></td>
<td>Is introspective</td>
</tr>
<tr>
<td></td>
<td>Has a wide range of interests</td>
</tr>
<tr>
<td></td>
<td>Is concerned with philosophical problems</td>
</tr>
<tr>
<td></td>
<td>Has high aspiration level for self</td>
</tr>
<tr>
<td></td>
<td>Is comfortable with uncertainty and complexities</td>
</tr>
<tr>
<td></td>
<td>Has warmth; capacity for close relationships</td>
</tr>
<tr>
<td></td>
<td>Is aware of self; concerned with self-development</td>
</tr>
<tr>
<td></td>
<td>Does not deny unpleasant thoughts and experiences</td>
</tr>
<tr>
<td>Middle</td>
<td>Judges self and others in conventional terms</td>
</tr>
<tr>
<td></td>
<td>Is a genuinely dependable and responsible person</td>
</tr>
<tr>
<td></td>
<td>Is aware of the impression he/she is making on others</td>
</tr>
<tr>
<td></td>
<td>Behaves in sympathetic and considerate manner</td>
</tr>
<tr>
<td></td>
<td>Has readiness to feel guilt</td>
</tr>
<tr>
<td></td>
<td>Emphasizes being with others; gregarious</td>
</tr>
<tr>
<td></td>
<td>Does not express hostile feelings directly</td>
</tr>
<tr>
<td></td>
<td>Delays gratification unnecessarily</td>
</tr>
<tr>
<td></td>
<td>Is consistent in behavior and attitudes</td>
</tr>
<tr>
<td>Low</td>
<td>Is extrapunitive; tends to transfer or project blame</td>
</tr>
<tr>
<td></td>
<td>Characteristically pushes limits</td>
</tr>
<tr>
<td></td>
<td>Is power oriented</td>
</tr>
<tr>
<td></td>
<td>Is unable to delay gratification</td>
</tr>
<tr>
<td></td>
<td>Tends to be self-defensive</td>
</tr>
<tr>
<td></td>
<td>Is thin-skinned; sensitive to criticism or insult</td>
</tr>
<tr>
<td></td>
<td>Lacks self-insight into own motives and behavior</td>
</tr>
<tr>
<td></td>
<td>Does not readily feel guilt</td>
</tr>
<tr>
<td></td>
<td>Behaves in an ethically inconsistent manner</td>
</tr>
</tbody>
</table>


2 The standardized item profile values are available from P. Michiel Westenberg.
Traditional prototype (-.57), both \( t(97) > 5.9, p < .01 \). This finding is consistent with the hypothesis that in adults the low region of ED implies marked maladjustment. In fact, it is difficult to conceptualize "healthy" personality manifestations of ED in individuals in this region given their characteristic lack of psychological and, specifically, interpersonal maturity. Indeed, the CAQ items judged by the experts as characteristic of the low region of ED (see Table 3) are likely to lead to serious problems in the interpersonal domain (is unable to delay gratification, tends to be self-defensive, characteristically pushes limits, lacks self-insight, etc.).

**Descriptive findings for the prototypes across all seven ED stages.** We also conducted a secondary analysis to provide more descriptive detail about the way the prototypes were conceptually related to the seven individual stages for which CAQ profile definitions were available. Conceptual similarity between the three prototypes and the seven stages was again indexed by correlations computed across the 100 CAQ items. The resulting 21 similarity correlation coefficients were transformed into a linear metric using Fisher's \( r \)-to-\( Z \) transformation and are graphed for each prototype across the seven ED stages in Figure 1.

What conclusions do the patterns of similarity correlations shown in Figure 1 suggest? For the Individuated prototype, Figure 1 shows an overall linear pattern, beginning with strong dissimilarity (negative correlations) for the lowest ED stages and increasing monotonically to strong similarity (positive correlations) for the Individualistic and Autonomous stages. For the Traditional prototype, Figure 1 shows that the similarity correlations formed the expected curvilinear pattern: highly dissimilar to the Impulsive and Self-protective stages and highly similar to the middle range of stages, peaking in conceptual similarity at the Self-aware stage. For the highest stages of ED, however, the similarity coefficients were only moderately positive, following a decreasing trend consistent with our regional hypothesis for this prototype.

For the Conflicted prototype, the similarity correlations in Figure 1 formed a nonlinear pattern across the ED stages, with

![Figure 1. Conceptual similarity of each personality prototype to the stages of ego development defined in the CAQ (the similarity index is a Fisher's Z-transformed correlation coefficient).](image-url)
some notable characteristics. First, as predicted, the positive similarity correlations with the two lowest stages (Impulsive and Self-protective) contrasted with the moderately negative similarity correlations for the rest of the stages. Second, the similarity correlations for the Conflicted prototype showed some evidence of curvilinearity in that the lowest similarity value was obtained for the Conformist stage. Third, the similarity correlations for the Conflicted prototype were generally closer to zero than were those for the Individuated and Traditional prototypes, suggesting that the Conflicted prototype did not show as much conceptual similarity with the ED stages as did the other two prototypes.

In summary, the findings provided substantial support for our regional hypotheses, both when we aggregated the individual stages into the three regions and when we considered separately the seven stages defined within the CAQ.

The use of the CAQ was central to this study because it provided a standard language that made it possible to assess the conceptual similarity between the prototype and stage constructs. At the same time, the CAQ imposes a finite set of items that limits the ways in which complex constructs like ED can be described. Thus, it is possible that some of the findings of Study 1 may be attributed to the "Procrustean" effort to define ED within the CAQ. Moreover, although the two experts agreed substantially in their definitions of the ED stages, their agreement was not perfect, and the higher stages of ED were less clearly differentiated from each other than ED theory would suggest (Westenberg & Block, 1993; see also Rozsnafiszky, 1981, p. 108).

Study 2 was designed to address these limitations; our main goal was to verify the hypothesized relations when ED was measured not with the CAQ but with the projective test designed by Loevinger and Wessler (1970) specifically to capture the dynamic functioning of individuals across all stages of ED.

Study 2: Relations Between Prototypes and Stages in Adult Women

Study 2 tested the relations between the personality prototypes and ED regions in terms of individual differences in a sample of adult women. ED was measured with the SCT, Loevinger and Wessler's (1970) projective sentence-completion measure designed to determine the overall stage of ego functioning achieved by an individual. The sample had been classified as members of the Individuated, Traditional, or Conflicted prototype in "Vbrk and John's (1992) research. In Study 2, each participant had a standard language that made it possible to assess the conceptual similarity between the prototype and stage constructs. At the same time, the CAQ imposes a finite set of items that limits the ways in which complex constructs like ED can be described. Thus, it is possible that some of the findings of Study 1 may be attributed to the "Procrustean" effort to define ED within the CAQ. Moreover, although the two experts agreed substantially in their definitions of the ED stages, their agreement was not perfect, and the higher stages of ED were less clearly differentiated from each other than ED theory would suggest (Westenberg & Block, 1993; see also Rozsnafiszky, 1981, p. 108).

Study 2 was designed to address these limitations; our main goal was to verify the hypothesized relations when ED was measured not with the CAQ but with the projective test designed by Loevinger and Wessler (1970) specifically to capture the dynamic functioning of individuals across all stages of ED.

Method

Participants. The women were participants in the Mills longitudinal study (Helson, 1967) and had graduated from college in 1958 or 1960. The data used in the present study were collected when the women were, on average, 43 years old. Prototype membership based on the CAQ personality descriptions was available for 103 participants, and 83 of them had also completed the SCT (Loevinger & Wessler, 1970).3

Personality prototype membership at age 43. We used the adult prototype classifications reported by York and John (1992). They conducted an inverse factor analysis of consensual CAQ personality descriptions of the participants and cross-validated the results across random halves of the total sample. York and John then used the participants' loadings on these replicated prototype factors to classify each woman into one of three groups. Of the 83 women included in the present research, 37 were Individuated, 30 Traditional, and 16 Conflicted.

Measuring ED with sentence completions. At age 43, ED was measured with the SCT. This projective test requires the participant to complete 36 sentence stems and is designed to assess an individual's core stage of ego functioning as one of the eight measurable stages in Loevinger's model (see Table 2). Each of the sentence stems elicits a vast array of completions. For example, consider the stem "When I am criticized . . ." An example of a response at the Self-protective stage is "I get mad and hit somebody." An example of a Self-aware response is "I feel deeply hurt and as if the other person doesn't like me." Finally, an example of an Autonomous response is "I like it because I can learn from others and see in myself what others see in me."

Loevinger (1979) showed that the SCT has good reliability and validity for research purposes. The SCT is scored according to a series of careful procedures documented in a detailed manual (Loevinger & Wessler, 1970; Loevinger, Wessler, & Redmore, 1970). Following the procedures recommended by Loevinger, two trained raters independently scored the SCT protocols of the present sample (Picano, 1984). SCT responses were transcribed from the original test forms and grouped by item. The raters independently assigned an ego stage rating to each of the responses and then computed a cumulative frequency distribution of the 36 ratings for each participant. A Total Protocol Rating (TPR) was then calculated for each participant through the application of the standard scoring (ogive) rules available in the manual. The original TPRs assigned independently by the two raters correlated .87, suggesting excellent scoring reliability. Raters agreed on the TPR for 68% of the cases, and for 98% they were within one stage of agreement (Picano, 1984). When the raters disagreed on a case, they discussed the entire protocol and arrived at a compromise TPR.

The women ranged in ED from Impulsive (Stage 2) to Integrated (9). The Conscientious stage (6) was both the mean and the modal stage (M = 6.0, SD = 1.2). Not surprisingly, our sample of college-educated women had a modal ego stage score about one stage higher than average adult samples in which the modal stage is typically Self-aware. "Evidence gathered by several hands (e.g., Holt, 1980) indicates that the self-aware level, far from being a transition in personality development, is a stable level of adult life, in fact, the most frequently found in most settings where people can be reached for testing" (Loevinger, 1993, p. 11).

3The judges who provided the CAQ personality descriptions for the prototypes did not see the subjects' SCT responses or scores and were blind to our interest in ED.
Control variables: verbal intelligence and socioeconomic background. Participants' Verbal Scholastic Aptitude Test (SAT) scores, obtained from college records at age 21, served as an estimate of verbal intelligence ($M = 531, SD = 91$). As an estimate of SES background (i.e., their family of origin), we used the level of education attained by their fathers. Father's education was measured on a 5-point scale ($0 = \text{less than high school}, 1 = \text{high school}, 2 = \text{some college}, 3 = \text{college degree}, 4 = \text{advanced graduate level education}; M = 2.6, SD = 1.3$).

In the present sample, SCT scores showed a moderate positive correlation with Verbal SAT scores ($r = .20, p < .10$). SCT scores were not related to father's level of education ($r = -.08, ns$).

Results and Discussion

Main effects. The mean SCT scores for the three prototypes followed the predicted ordering. The Individuated prototype had the highest mean of 6.4 ($SD = 1.1$), followed by the Traditional prototype with a mean of 5.8 ($SD = .9$), and the Conflicted prototype had the lowest mean of 5.4 ($SD = 1.6$). The means differed significantly, as shown by a one-factorial analysis of variance with prototype membership (Individuated, Traditional, and Conflicted) as a between-subjects variable, $F(2, 80) = 5.6, p < .01$. In a second analysis, we tested whether the association between prototype membership and ED depended on verbal intelligence or the family's SES. An analysis of covariance using both variables as covariates showed that the main effect of prototype membership remained significant, $F(2, 77) = 5.1, p < .01$. Finally, we tested the significance of the predicted ordering of the prototypes on their mean levels of ED using an a priori contrast, with weights of 1 for Individuated, 0 for Traditional, and −1 for Conflicted; this contrast was also significant, $t(80) = 3.1, p < .01$.

Distributional differences. We next examined whether the distributions of the three prototypes differed across the ED regions as predicted. These distributions are given in Figure 2 separately at each stage of ED. Because there was only 1 participant in Stage 2 and 1 in Stage 9, we combined Stage 2 with 3 and Stage 9 with 8. The percentage of participants at each stage who were Individuated prototype members is represented by the black portion of the bar, the percentage of Traditional prototype members is white, and the percentage of Conflicted prototype members is gray. As expected, a chi-square test indicated that the prototypes were distributed differentially across the stages, $\chi^2(10, N = 83) = 23.5, p < .01$.

To test whether the distribution of the three personality prototypes across the ED stages differed as predicted by our regional hypotheses, we conducted a series of more specific chi-square analyses. With respect to the Individuated prototype members, we had predicted that they would be the most prevalent prototype in the high region of ED (Individualistic, Autonomous, and Integrated stages). We conducted a chi-square analysis of the distribution of the Individuated prototype members (scored as a dichotomous variable: Individuated vs. Not Individuated) at the high versus low ED stages (Stages 7, 8, or 9 vs. all other stages). The Individuated prototype members were indeed more likely than the other two prototypes to be in the high ED region, $\chi^2(1, N = 83) = 5.5, p < .05$. This effect is elaborated further in Figure 2: None of the participants at the lowest stages were Individuated prototype members, but more than 80% of the participants at the highest stages were Individuated. Moreover, the percentage of Individuated prototype members at each stage increased from the Self-aware to the Integrated stage. In other words, the Individuated prototype demonstrated an essentially linear relation with ED consistent with results of Study 1, in which the Individuated prototype was conceptually dissimilar to the lowest stages and increased in similarity with the higher stages. More generally, this positive association between the Individuated prototype and the high region of ED shows that both models capture a similar version of psychological maturity, not only conceptually (Study 1) but also in the assessed personalities of the women.

To test whether members of the Traditional prototype would be most prevalent in the middle region of ED, we conducted a chi-square analysis contrasting the middle region of ED with the stages in all other regions. As predicted, the Traditional prototype was more likely than the other prototypes to be in the middle region, $\chi^2(1, N = 83) = 4.6, p < .05$. Figure 2 further illustrates that (a) none of the Traditional prototype members fell below the Conformist stage, (b) all the participants at the Conformist stage were Traditional prototype members, and (c) none of the Traditional prototype members scored above the Individualistic stage. This curvilinear relation between the Traditional prototype and ED is consistent with the conceptual findings of Study 1. This positive association between the Traditional prototype and the middle region of ED supports the idea that the common features of the stages in this region—the conventional tendencies of being standard-following and concerned about others—are well-captured by the Traditional prototype.

With respect to the Conflicted prototype, we had predicted that the members of this prototype would be more likely to be found in the low ED region than the members of the other two prototypes. Again, we conducted a chi-square analysis to test this prediction about the distribution of the Conflicted prototype members across the low region (vs. all others), and the results supported our prediction, $\chi^2(1, N = 83) = 13.0, p < .01$. As shown in Figure 2, the women in the low region of ED were all members of the Conflicted prototype, supporting further the conceptual finding from Study 1 that some of the features of this ED region—defensiveness, hostility, and poor impulse regulation—are shared with the Conflicted prototype.

However, it was not the case that all Conflicted prototype members scored in the low ED region on the SCT. As shown in Figure 2, none of the Conflicted prototype members scored at the Conformist stage but some were found at the Self-aware through Autonomous stages. Thus, it seems that the Conflicted...
prototype members were either pre-Conformist or post-Conformist; consistent with our expectation that the Conflicted prototype would show a complex relation with ED, both Study 1 and Study 2 suggest that the Conflicted prototype might have a curvilinear relation to ED. In Study 1 the personality profile of the Conflicted prototype was conceptually most dissimilar to the Conformist stage, and in Study 2 the Conflicted prototype members scored above or below the Conformist stage, but not at that stage. As mentioned earlier, Loevinger (1976) argued that psychological maladjustment is not linearly related to ED and can occur at any stage; our findings suggest further that experience of conflict and distress is particularly unlikely at the Conformist stage. Similarly, Loevinger (1993) recently speculated that “perhaps Conformists are better adjusted people” (p. 12) because they are less aware of inner conflicts than individuals at the higher, post-Conformist stages.

Study 3: Exploring Within-Prototype Differences as a Function of ED and ED-Prototype Interactions in Determining Life Outcomes

Our first two studies addressed how the personality prototypes would map onto Loevinger’s (1976, 1987) theory (Study 1) and measure (Study 2) of ED. With that goal in mind, we tested the three regional hypotheses, which emphasize the commonalities shared by subsets of ED stages. However, Loevinger’s theory postulates distinct characteristics for each stage that are deemphasized by this approach—characteristics that might serve to highlight potential differentiations within the prototypes. For example, the Traditional prototype was most prevalent in the middle region of ED and captures features common to the middle stages. However, the stages in this region also represent a developmental sequence that captures significant personality change in Loevinger’s theory. Thus, our findings for the Traditional prototype raise the question of how Traditional prototype members differ from each other as a function of ED.

The results for the Conflicted women also suggest potential differentiations within this prototype. As expected, all of the women scoring in the low region of ED were members of the Conflicted prototype. However, we also found Conflicted women in the post-Conformist range. This curvilinear pattern raises the question of how Conflicted women at lower ED stages differ from those at higher stages.

In contrast to the complexities suggested by the findings for the Traditional and Conflicted prototypes, the results for the Individuated prototype were quite straightforward. In both Studies 1 and 2, the Individuated prototype mapped directly onto the high ED region. Loevinger (1976) argued that the stages in this region represent more subtle, thematic variations on her general notion of psychological maturity, rather than the dramatic qualitative transformations found at the lower level transitions. We therefore expected more substantial within-prototype differentiations for the Traditional and Conflicted women than for the Individuated women, who, as a group, seem more psychologically coherent as a function of ego development. Thus, in the interest of space, we omit the Individuated group from
the present analyses and focus on the Traditional and Conflicted groups for whom we can articulate specific hypotheses.

**Differentiations Within the Traditional and Conflicted Prototypes**

**Traditional prototype.** As demonstrated in Study 2, the Traditional women were most prevalent in the middle region—a range of ED encompassing a major transition during which the individual acquires the cognitive capacity to self-reflect and appreciate multiplicity in attitudes, views, perspectives, and so forth. Thus, the Traditional prototype is likely to include women who differ in cognitive complexity and self-reflection. Given these differences, we expected that Traditional women lower in ED should show relatively unquestioned acceptance and undifferentiated views of social roles and norms, whereas those higher in ED should be more open to alternatives and have more complex views of themselves in their basically traditional roles.

How might these differences be manifested within the Traditional prototype? In terms of identity (Marcia, 1966), we expected Traditional women lower in ED to show more evidence of identity foreclosure than those higher in ED. According to Mallory’s (1984, 1989) definition, foreclosed identity characterizes individuals who follow authority without questioning and relate to people in conventional ways rather than engaging in an active search for identity characterized by introspection and openness to new experiences, change, and conflict.

In addition to identity, we also expected the Traditional women to manifest ED-related differences in their life choices, outcomes, and personal views. Given their commitment to the then-normative roles of wife and mother, we predicted that Traditional women lower in ED would adhere to their conventional gender role more closely, achieve less recognition in the realm of work, and have less complex (i.e., more uniformly positive) views of family life than would those higher in ED. More generally, within the Traditional prototype, higher ED should relate to less conventional life choices and more complex views of the generally traditional gender role chosen by this prototype.

**Conflicted prototype.** As shown in Study 2, Conflicted women were found not only at the lowest ED stages (Impulsive and Self-protective), but also at the higher stages. How would the Conflicted women at the lowest stages differ from those at the higher stages? Given that the lowest stages of ED are indicative of interpersonal immaturity, we expected that the Conflicted women low in ED would have difficulties forming and maintaining close relationships. In contrast, those higher in ED, while not free of psychological conflicts, should find it easier to make long-term commitments in the interpersonal domain.

In terms of identity, then, the Conflicted women higher in ED should show more identity achievement (Marcia, 1966), which Mallory (1984, 1989) has defined as a commitment to a coherent set of values and stable relationships with others; in contrast, those lower in ED may lack the interpersonal maturity needed for identity achievement through relational commitments. In addition to identity achievement, these within-type differences in interpersonal maturity should also be manifested in the life outcomes of the Conflicted women. In particular, we expected that the Conflicted women higher in ED would have a more stable and cohesive family life than would those lower in ED.

**Interaction Between Prototype Membership and ED**

So far, we have considered the hypothesis that, within each prototype, members differ from each other as a function of ED. A second, stronger hypothesis is that there are differential patterns of correlations for the prototypes, suggesting an interaction between ED and prototype membership in predicting identity, life outcomes, and personal views. In other words, the same stage of ED may manifest itself differently depending on the personality prototype being considered. For example, we predicted a negative relation between ED and traditional commitments to family life for the Traditional prototype, reflecting less conventional choices and views for these women, but a positive relation for the Conflicted prototype, reflecting a greater capacity to form and maintain a stable family life for these women. The interaction hypothesis, if true, suggests that ED and prototypes are both important determinants of life outcomes, and that neither can be reduced to or subsumed by the other.

**Overview**

Our first question was whether ED can predict individual differences within each prototype. To test this hypothesis, we correlated ED with the dependent variables separately across the members of each prototype. In a second step, we tested the interaction hypothesis. Because the differential correlations within prototypes might be due to differential ranges of ED within the prototypes, we used moderated multiple regression to test for interaction effects, thus controlling for main effects of both ED and prototype membership. In these analyses, we examined differences within the prototypes; thus, sample sizes were necessarily small and the findings from these exploratory analyses should be interpreted cautiously.

**Method**

**Participants.** Participants were selected from the Mills Longitudinal Study (see Study 2). The analyses focused on the subset of 46 women who were classified as either Traditional (N = 30) or Conflicted (N = 16) at age 43 and had also completed the SCT at that age.

**Identity status.** Marcia’s (1966) identity statuses were scored from the CAQ (see Study 2) using expert-generated CAQ prototypes derived by Mallory (1984, 1989) and validated by Helson, Stewart, and Ostrove (1995). As defined in the CAQ, the identity prototypes form two basic dimensions (Helson et al., 1995). One dimension contrasts achieved identity (i.e., individuals who have made a commitment to a coherent set of values and stable relationships with others) with diffuse identity (i.e., individuals who are too conflicted or psychologically immature to make identity commitments, especially in relationships with others). The second dimension contrasts foreclosed identity (i.e., individuals who follow authority without questioning and relate to people in conventional ways) with identity in moratorium (i.e., individuals engaged in an active identity search characterized by introspection and openness to new experiences, change, and conflict). Specifically, we used the identity achievement and foreclosure scores from the CAQ (see Helson et al., 1995).

**Life outcomes in family and work.** The feminine social clock index was an overall family-and-career variable at age 43 based on the choice and timing of commitments to family or career between 21 and 43 (Helson et al., 1984) and distinguishes between women who sought their place primarily in the family (scored 1) and those who sought their place through an upwardly mobile career (scored 0). Thus, high scores
indicate that the woman had undertaken the then-common feminine social clock project, which Helson et al. defined to include women who had married and had their first child by age 27, had maintained an intact marriage through age 43, and did not have an upwardly mobile career.

As an index of work achievement, we used status level in work, a measure scored from employment information provided by the women gainfully employed at age 43. Status level of work had been scored on a 7-point scale according to the amount of autonomy, responsibility, training, skill, and prestige involved (see Helson, Elliott, & Leigh, 1989).

Views of family life. There were three variables: home cohesiveness, mixed views of motherhood, and problems with children. To measure how the women viewed the relationships in their families, we used self-reports of home cohesiveness. On a 5-point scale, the women indicated the degree to which family members do a lot of things together and are mutually supportive. The other two variables measured the relative complexity of the woman’s views and experience of their mother role. Mixed views of motherhood was rated on a 4-point scale. On the low-complexity end, this self-rating indicated that the woman was uniformly positive about her experience as a mother, whereas on the high-complexity end, the rating indicated awareness of both positive and negative aspects of mothering. The other variable was problems with children, which was a coding of whether or not the women admitted problems with their children in their responses to an open-ended question about motherhood.

Results and Discussion

Within-prototype correlations. We first examined for each prototype how ED was related to our three sets of dependent variables: (a) identity status, (b) life outcomes in family and work, and (c) personal views of family life. These correlations, computed separately within the Traditional prototype and within the Conflicted prototype, are reported in Table 4. As in Study 2, we tested whether these correlations depended on verbal intelligence or SES. Partial correlations showed that when the effects of both of these variables were controlled, the effect sizes remained essentially unchanged.

Traditional prototype. With respect to identity, we expected that Traditional women lower in ED would be characterized by foreclosure, showing a more closed, rigid, and unquestioning approach to identity than those higher in ED. Consistent with this prediction, Table 4 shows that within the Traditional prototype, ED was negatively correlated with identity foreclosure. Thus, ED differentiated the extent to which the Traditional women critically examined themselves in their commitments and questioned identity choices, rather than simply adopting the expectations and strictures associated with their gender role identity.

The life outcome data provided more specific evidence for the hypothesis that among the Traditional women ED is related to less conventional life choices. First, considering the overall pattern of family and work commitments, the negative correlation between ED and the feminine social clock project (see Table 4) shows that the Traditional women lower in ED were more likely to have undertaken and maintained this gender role project. In terms of objectively scored career achievement, the higher ED Traditional women were more likely to pursue successful careers as shown by the positive correlation between ED and status level in work.

Finally, the Traditional women’s personal views and experiences of family life increased in complexity and differentiation with higher ED. As shown in Table 4, the two relevant variables were both positively correlated with ED: The higher ED Traditional women expressed more mixed views of motherhood and were more willing to admit problems with their children. Overall, these findings suggest that in terms of both life outcomes and personal views, the Traditional women low in ED adhered more closely, if not rigidly, to the conventional female gender role, whereas those high in ED were less conventional and more complex in the way they defined and adapted the female gender role for themselves. In other words, in line with their greater cognitive complexity and self-reflection, the Traditional women higher in ED made the then-normative role for women more individualized and personally meaningful.

Conflicted prototype. We expected that at higher ED the Conflicted women would be more committed to and more likely to maintain stable and mature relationships, thus showing greater identity achievement. At lower ED, in contrast, Conflicted women were expected to be too ambivalent and interpersonally immature to successfully establish such long-term identity commitments, thus lacking identity achievement. Consistent with this prediction, Table 4 shows that identity achievement correlated positively with ED within the Conflicted prototype. Thus, ED differentiated the Conflicted women in the extent to which they were able to make identity commitments and maintain a stable sense of identity.

Although Study 3 focuses on the Traditional and Conflicted prototypes, the correlations between ED and the variables in Table 4 within the Individuated prototype may be of interest to ED researchers. All but one of these correlations were nonsignificant; ordered as in Table 4, the correlations were .01, −.23, −.12, .22, .02, −.39 (significant at p < .05), and −.13.

A reviewer commented that ED might be uniquely related to creativity within the Conflicted prototype, such that Conflicted women at higher ED stages would be able to transcend neurotic conflicts through creative

---

Table 4

<table>
<thead>
<tr>
<th>Age 43 variable</th>
<th>Correlation with ED within the prototype</th>
<th>βs for type by ED interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traditional prototype</td>
<td>Conflicted prototype</td>
</tr>
<tr>
<td>Identity dimensions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement (vs. diffusion)</td>
<td>.12</td>
<td>.53*</td>
</tr>
<tr>
<td>Foreclosure (vs. moratorium)</td>
<td>-.64*</td>
<td>-.27</td>
</tr>
<tr>
<td>Life outcomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feminine social clock</td>
<td>-.36*</td>
<td>.50*</td>
</tr>
<tr>
<td>Status level in work</td>
<td>.56*</td>
<td>.28</td>
</tr>
<tr>
<td>Views of family life</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Home cohesiveness</td>
<td>.24</td>
<td>.62*</td>
</tr>
<tr>
<td>Mixed views of motherhood</td>
<td>.52*</td>
<td>-.34</td>
</tr>
<tr>
<td>Admits problems with children</td>
<td>.60*</td>
<td>-.08</td>
</tr>
</tbody>
</table>

a Computed in regression analyses across the members of both prototypes.

* p < .05.
We used the life outcome data to test whether the higher ED women in the Conflicted prototype followed a more stable life path in terms of family, reflecting the greater interpersonal maturity afforded by ED. As predicted, ED was correlated positively with undertaking the feminine social clock project. This finding, that the higher ED women in this prototype were more likely to pursue the family-oriented trajectory typical of this cohort of women, suggests that their conflicted personality functioning interfered less with establishing and maintaining relationships through marriage and family life than it did for those lower in ED. In fact, they rated their families as higher in terms of joint activities and mutual support, as shown by the positive correlation between ED and home cohesiveness, a broad indicator of the perceived quality of within-family relationships.

Finally, the association between ED and status level in work is of some interest. If the low ED women in the Conflicted prototype did not undertake the feminine social clock project because they instead focused on career success, this correlation would be negative. However, the nonsignificant positive correlation of .28 suggests this was not the case. In line with our findings for identity achievement, it appears that the low ED women in the Conflicted prototype were less successful in the family domain and at least no more successful than the higher ED women in the career domain.  

**Regression analyses testing the interaction hypothesis.** In a second set of analyses, we tested the idea that ED and prototype membership interact in predicting the outcome variables. Did the relations between ED and the dependent variables differ for the two prototypes, as suggested by the two columns of within-prototype correlations in Table 4? To find out, we conducted a series of moderated regression analyses predicting each dependent variable from ED, prototype membership (i.e., Conflicted vs. Traditional), and the interaction between the two (cf. Aiiken & West, 1991). The third column in Table 4 gives the betas for the interaction term that is of interest here. Note that the interaction term is independent of both main effects and therefore cannot be attributed to differential ranges of ED within the two prototypes. In five of the seven analyses, the interaction term was significant. Nonetheless, sample sizes in these exploratory analyses were small; thus, interaction effects need to be interpreted cautiously until replicated. Again, including the effects of both verbal intelligence or the family's SES in the regressions did not change the interaction effects reported in Table 4.

The general conclusion suggested by these interaction findings is that ED is manifested differently in the two personality prototypes. Consider, for example, the feminine social clock project. The correlations showed that Traditional women higher in ED were less likely to adhere to the feminine social clock, whereas Conflicted women higher in ED were more likely to follow this life path. Because the regression analysis controls for the main effect of ED, the significant interaction makes the stronger point that the same stage of ED has different implications for adherence to the feminine social clock depending on whether one's personality structure is Traditional or Conflicted. To illustrate the nature of this interaction, Figure 3 graphs the data for the two prototypes by three stages of ED: Self-aware, Conscientious, and Individualistic. This range of ED is informative because these are the only three stages where both prototypes coexist. As Figure 3 shows, there was a clear crossover interaction such that at the Self-aware stage the Traditional women were more likely to follow the feminine social clock than Conflicted women, whereas the reverse was true at the Individualistic stage.

Thus, the real-life manifestations of ED in the Traditional prototype were different from those in the Conflicted prototype, even for the same stage of ED. Why? We argue that the Traditional women higher in ED adhered less to the feminine social clock because of their greater self-reflection and openness to alternatives, whereas the Conflicted women higher in ED adhered more to this path because of their greater capacity to form and maintain interpersonal commitments. The complexity and self-reflection of the higher ED Traditional women and the inter-

---

8 This interpretation is consistent with the finding that within the Conflicted prototype, lower ED was associated with having no social clock ($r = -.53, p < .05$), an index that describes women who established neither a family-oriented nor a career-oriented life path by age 43.
personal maturity of the higher ED Conflicted women are generally characteristic of the high ED women, but the aspect of ED that was critical in determining adherence to the feminine social clock project depended on the individual's personality prototype. In general, then, we suggest that the individual's personality prototype makes some features of ED more central than others in determining life outcomes.

**General Discussion**

Taken together, our findings revealed both convergences and interactions between York and John's (1992) prototypes and Loevinger's (1976) stages of ED. Two-person-centered models of adult personality that have emerged from rather different theoretical and methodological traditions. In the first two studies, we confirmed three regional hypotheses about convergences between the two models. Both conceptually (Study 1) and in a sample of adult women (Study 2), the prototypes were associated with single stages of ED but with different regions: Women reaching the ED stages in the high region were most likely members of the Individuated prototype, those in the middle region Traditional, and those in the low region Conflicted. Given that Loevinger's stages of ED specify a theory of psychological growth, our findings imply that the Individuated women were also the ones who attained the highest levels of psychological maturity, followed by the Traditional and then the Conflicted women.

Although Studies 1 and 2 showed that the prototypes broadly correspond to the regions of ED, this does not mean that ED can be reduced to a three-way distinction. Study 3 explored ED differences within the Traditional and Conflicted prototypes and suggested two major findings. First, ED predicted systematic variations within these prototypes. Thus, whereas Studies 1 and 2 emphasized shared features of adjacent ED stages captured by the more broadly defined personality prototypes, Study 3 emphasized the greater specificity afforded by the individual ED stages by demonstrating meaningful differentiation within the prototypes. Second, Study 3 suggested that ED and personality prototype interacted in determining life outcomes, illustrating the value of using both systems jointly as they interact in shaping the life course. In particular, the relations of ED to life outcomes differed between the Traditional and the Conflicted prototype in several domains, such as the degree to which the women adhered to the then-typical gender roles of wife and mother. More generally, these interaction effects (Study 3) show that, despite the broad similarities between the two conceptions (Studies 1 and 2), they differ in important ways and neither can be reduced to the other.

Several limitations of this research should be recognized. York and John (1992; Ostrove & John, 1994) derived and replicated their prototypes to describe personality structure in women, and the present research also involved women as participants. Certainly, future research should examine the relations between personality prototypes and ED in men. This research requires (a) examining personality prototypes in men and (b) relating these prototypes to ED. First, some theorists have argued that prototypes in adult men may differ from those in women (Block, 1971). However, Caspi's (1998) recent review of the empirical literature suggests that three similar personality prototypes recur across male and female samples, instruments, and even ethnic groups. Second, assuming that similar male prototypes were to be found, should we expect the same relations between ED and these prototypes? Note that Loevinger's (1976, 1987) theory characterizes the ED stages independently of gender, and the ED experts in Study 1 did not generate separate ED profiles on the CAQ for women and men. Thus, from the perspective of ED theory, the relations between ED and the underlying personality structure captured by the prototypes are not expected to diverge for the two sexes. Nonetheless, even if the underlying personality structures in men and women are found to be the same, we would still expect gender differences in the way these structures are manifested in behavior and life path. Although we would expect ED and personality prototype to interact in determining life outcomes for men, as we found for women in Study 3, the particular life outcomes would differ as a function of the gendered contexts in which women and men live.

Another potential sample limitation is that our participants were college graduates. This could be a problem because SES tends to be associated with ED (Loevinger, 1976). Indeed, our participants scored, on average, one ED stage higher than more representative samples. Nonetheless, our sample showed a substantial range and variability on the SCT, and our results show that this variation was certainly sufficient to permit a test of our hypotheses. In fact, the higher mean ED level in this sample of middle-aged adults conferred an important advantage: The sample included a substantial number of individuals in the high region of ED—individuals who are relatively infrequent in the samples of adolescents and college students typically studied. This was particularly important because it permitted a strong test of two of our hypotheses: (a) the association of Individuated prototype membership with the high region of ED and (b) the association of Traditional prototype membership with the middle region. Most important, however, was the finding that verbal ability and family's SES did not affect our findings in either Study 2 or 3. Thus, the relations demonstrated here cannot be attributed to a confounding of the measurement of ED with either general intelligence (e.g., Costa & McCrae, 1993, p. 21) or socioeconomic background.

One final limitation is that we studied ED and personality prototype membership at only one point in time. Whereas we used the ED stages as a typology of individual differences in adulthood, the stages also represent a developmental sequence in an individual's life. Very little research has used the SCT longitudinally to chart the course of ED over time in adulthood (see the recent review by Cohn, 1998). If SCT scores in adulthood indeed represent the end point of progressing through the ED stages, then the regional findings from Study 2 imply that the prototypes are associated with distinct developmental histories. Longitudinal research is needed to examine the interplay of ED and personality prototypes over time. At this point, we know

---

9 These three prototypes have been labeled (a) Resilient, who, like the Individuated women, have a generally well-adjusted personality profile and show the most academic achievement; (b) Overcontrollers, who, like the Traditional women, are highly agreeable and conscientious and try to please others; and (c) Undercontrollers, who, like the Conflicted women, show signs of maladjustment, especially low resiliency in the face of stress and impulsive expression of antagonism and hostility.
little about how much either ED or the prototypes change in the same individual during adulthood. Cohn's meta-analysis of cross-sectional studies showed little evidence for change in ED after the college years. Although these findings suggest that ED is not associated with age per se, there may be some individuals who do show change. Perhaps the personality prototypes can help pinpoint who these individuals are. For example, in midlife, the prototypes might either predispose individuals to new experiences that facilitate further growth (e.g., Individuated prototype) or narrow their range of experiences, therefore limiting growth (e.g., Traditional prototype). Alternatively, life experiences that lead to changes in ego stage may be accompanied by changes in personality prototypes. Future research needs to study these kinds of person–environment interactions (Caspi & Bem, 1990) to understand patterns of both stability and change.

Overall, these convergences and interactions between the adult personality prototypes and ED are promising—they begin an integration of two approaches to personality functioning that so far have remained largely unconnected. We suggest that these approaches offer complementary rather than contradictory perspectives on the same psychological phenomena. Like Loewinger (1993), we view the connections between the prototypes and the stages described here as "a form of macrovalidation of the central personality structure that all are aiming at or discovering" (p. 5).

References


McAdams, D. P., Ruetzel, K., & Foley, J. M. (1986). Complexity and generativity at mid-life: Relations among social motives, ego develop-


Received August 20, 1996
Revision received May 29, 1997
Accepted May 30, 1997