Ego Development during the Transition from Adolescence to Young Adulthood: A 9-Year Longitudinal Study

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Although Loevinger’s (1976) ego development theory represents a milestone approach to life-span personality development, little is known about ego development during the transition from adolescence to young adulthood, including the average gain in group means, whether individuals maintain their relative position to each other, and age-related changes in within-cohort variability. These issues are examined using the ongoing Block and Block Longitudinal Study. Across a 9-year interval—from age 14 to age 23—the findings indicate that: (a) the average person gains approximately 1.5 ego development steps, (b) within-cohort variability in ego development increases with age, (c) ego level at ages 14 and 23 is moderately related, (d) large individual differences exist in the timing and extent of ego development, and (e) the magnitude of change is smallest for individuals who have already reached the Self-aware level as adolescents. The findings suggest that the Self-aware level represents a developmental “hurdle” during the transition from adolescence to young adulthood. Possible explanations are explored in terms of pacers for ego development. © 1999 Academic Press

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Loevinger’s (1976, 1997) conception of ego development represents a milestone as opposed to a linear approach to life-span personality development. The start of ego development is located in early life and progress along the nine qualitatively different milestones continues into adulthood. Yet, long-term longitudinal studies of ego development are virtually absent, leaving key issues unresolved: (a) How large gains in ego level do individuals, on average, make across a particular time period (i.e., the question of absolute changes in group means)? (b) Do individuals maintain their relative position on the ego development continuum across a particular time period (i.e., the question of rank-order stability)? (c) Does within-cohort variability in ego levels increase with age? (d) Are certain transitions in ego level more difficult to achieve than others?

These questions are addressed within an ongoing longitudinal study in which ego development was measured twice: in middle adolescence (age 14) and in young adulthood (age 23). A brief overview of ego development theory and research is followed by a review of previous longitudinal research. Based on this review, five specific research aims are derived and tested.

Ego Development Theory

“Ego” refers to an organizing frame of reference that pulls together divergent experiences while simultaneously screening out discrepant information (Loevinger, 1976).1 Using William James’ distinction between I and Me, McAdams (1998) likens ego to I—the self as subject. On the other hand, dispositional traits, personal concerns, and life narratives reflect the Me—the self as object. “The ego’s relation to [these] three levels of personality is that of the I to the Me . . . Loevinger’s ego should function as the master orchestrator of traits, concerns, and narrations” (McAdams, 1998, p. 35). Thorne (1993) argues that the idea of ego as a core organizing function “resonates with today’s renewed interest in personality as purposive and goal based” (p. 53).

The continuum of ego development is marked along the way by nine qualitatively different milestones, each of which designates a new way of organizing experience of both self and the world (Loevinger, 1976, 1997; Loevinger, Carlson, Westenberg, & Lasker, 1998). (See Table 1 for a brief outline of major themes of each milestone.) The low end is marked by the Impulsive milestone (E2).2 Impulsive individuals easily yield to their impulses, depend

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1 Loevinger’s (1976) conception of ego development is not psychoanalytic. For comparisons with psychoanalytic conceptions of the ego and its development, see Loevinger (1976) and Westen (1998).

2 In fact, the Impulsive level of ego development is preceded by a stage in which “ego” comes into existence (E1). This level, however, was not accessible by means of the sentence
### TABLE 1

Some Characteristics of Levels of Ego Development

<table>
<thead>
<tr>
<th>Level</th>
<th>Impulse control</th>
<th>Interpersonal mode</th>
<th>Conscious preoccupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>E2. Impulsive</td>
<td>Impulsive</td>
<td>Egocentric, dependent</td>
<td>Bodily feelings</td>
</tr>
<tr>
<td>E4. Conformist</td>
<td>Respect for rules</td>
<td>Cooperative, loyal</td>
<td>Appearances, behavior</td>
</tr>
<tr>
<td>E5. Self-Aware</td>
<td>Exceptions allowable</td>
<td>Helpful, self-aware</td>
<td>Feelings, problems, adjustment</td>
</tr>
<tr>
<td>E6. Conscientious</td>
<td>Self-evaluated standards, self-critical</td>
<td>Intense, responsible</td>
<td>Motives, traits, achievements</td>
</tr>
<tr>
<td>E7. Individualistic</td>
<td>Tolerant</td>
<td>Mutual</td>
<td>Individuality, development, roles</td>
</tr>
<tr>
<td>E8. Autonomous</td>
<td>Coping with conflict</td>
<td>Interdependent</td>
<td>Self-fulfillment, psychological causation</td>
</tr>
</tbody>
</table>

*Reprinted by permission from Loevinger (1997).*

on others for control, need satisfaction, and view rules as arbitrary and punishment as retaliatory. The central preoccupation of the next milestone, the Self-protective ego level (E3), is to control self and others in order to further one’s own interests. Rules are understood and played with. The overarching rule of self-protective individuals is to stay out of trouble and not to be caught. Relationships are seen as exploitative.

In contrast to the egocentric perspective characteristic of the Impulsive and Self-protective individuals, the Conformist person (E4) is attuned to the needs, expectations, and opinions of others. Approval is valued, disapproval is feared. Everyone is or ought to be similar, just as rules of conduct and appearance apply to everyone. Conformity should not be confused with conventionality: a Conformist person may rigidly adhere to nonconventional standards. The Self-aware level (E5) is characterized by the awareness of personal feelings and thoughts in both self and others. The examination of inner life is accompanied by a sense of being different from others. Exceptions to rules are allowable, deviant behavior and opinions are tolerated. A good relationship is defined by the sharing of one’s innermost feelings and thoughts.

3 Although the Self-aware stage was previously considered a transitional level, situated between the Conformist and the Conscientious levels, “[e]vidence gathered by several hands . . . 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).
The Conscientious ego level (E6) is marked by a strong sense of responsibility for one’s own thoughts, values, and behavior as well as for the welfare of others. Guilt does not arise from breaking rules per se, but from betraying one’s own standards and from hurting others. Conscientious individuals are self-critical and concerned with self-improvement. The Individualistic stage (E7) is characterized by a sense of individuality and personal identity and by insight in psychological causation and development. Inner life and outer life are clearly differentiated, as are the different roles people occupy. Inner conflicts are appreciated, such as between dependency and independency needs. The Autonomous level (E8) derives its name from the respect for other people’s need for autonomy. It also refers to a certain amount of liberation from a too-strong sense of responsibility for self and others. Autonomous individuals accept the inevitable limitations, conflicts, and paradoxes of the human condition.4

Although the sequence of ego development shows family resemblance to cognitive-developmental theories (e.g., Kohlberg, 1969; Selman, 1980), Loevinger’s model is not aimed at cognitions, reasoning skills, or verbal intelligence. Ego development concerns “impulses and methods for controlling impulses, personal preoccupations and ambitions, interpersonal attitudes and social values—what psychologists normally call personality” (Blasi, 1998, p. 15).

Differences in the timing and extent of development cause individual differences in ego level maturity within each age cohort. The ego development sequence may therefore be viewed as a quasi-typology: within a given age cohort, the different levels of ego development represent a personality typology. Ego development “is at once a developmental sequence and a dimension of individual differences in any age cohort” (Loevinger, 1976, p. 13).

Measurement of Ego Development

Ego development is typically assessed by means of the Washington University Sentence Completion Test (WUSCT; Loevinger, 1985; Loevinger & Wessler, 1970; Hy & Loevinger, 1996). An impressive body of research, totaling more than 300 studies, supports the reliability and the construct validity of the WUSCT (cf. Westenberg, Blasi, & Cohn, 1998; Carlson & Westenberg, 1998). Ego development is related to alternative measures of psychological maturity (e.g., Helson & Wink, 1987; McCrae & Costa, 1983) and to alternative accounts of psychosocial development (e.g., Adams & Fitch, 1982; Snarey, 1998). The continuum of ego development represents a dimension of individual differences and a personality typology within a

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4 At the high end of the scale, Loevinger presumes the existence of the Integrated level (E9), somewhat akin to Maslow’s self-actualizing person. However, this level is so rare that it cannot be described reliably and is not relevant for most research purposes.
given age cohort (e.g., John, Pals, & Westenberg, 1998; Pals & John, 1998; Westenberg & Block, 1993). Adult ego levels may be linked to childhood and adolescence ego levels (Westenberg, Jonckheer, Treffers, & Drewes, 1998), and ego development—as measured by means of the WUSCT—cannot be reduced to verbal intelligence (e.g., Cohn, 1991; Newman, Tellegen, & Bouchard, 1998) or to socioeconomic status (e.g., Browning, 1987). (For further evidence of construct validity of the WUSCT, see Hauser, 1976; Loevinger, 1979, 1998; Westenberg et al., 1998.)

Longitudinal Studies of Ego Development

This summary of longitudinal studies of ego development is organized around two issues: absolute changes in mean group scores and the maintenance of rank-order stability over time. Absolute changes in group means over time have been the focus of several longitudinal studies (cf. Cohn, 1998, for a recent review of findings). Overall, the magnitude and direction of change appear related to the length of the time period and the age of the cohort studied. Cohn’s review, which also includes cross-sectional studies, suggests that gains in ego level are steepest in late childhood and early adolescence, slow down during late adolescence, and are relatively infrequent in adults. For example, Gfellner (1986) found consistent gains in mean ego level scores across a 4-year interval in a high school sample (grades 7/8 through grades 11/12), whereas Loevinger et al. (1985) found smaller and relatively inconsistent gains across a 4-year interval in a college sample. Although some older individuals continue to make progress (e.g., Bursik, 1991; Helson, Mitchell, & Hart, 1985; White, 1985), these gains are minor compared to those observed in younger persons.

It merits special attention that the magnitude of change appears linked to the Self-aware level. Groups of individuals who initially score well below the Self-aware level display the greatest average gains over time. In contrast, groups that initially score at or somewhat beyond the Self-aware level show less or no average gain—a pattern observed for both adults (Kitchener et al., 1984; Loevinger et al., 1985; Redmore, 1983; White, 1985) and adolescents (Gfellner, 1986; Kitchener, King, Davison, Parker, & Wood, 1984; Redmore & Loevinger, 1979). Indeed, groups that initially score well above the Self-aware level displayed a slight regression in their ego level when retested (Loevinger et al., 1985; Redmore, 1983; White, 1985). This finding suggests that the Self-aware level is a stage to which some people may eventually revert even if they have reached, at least temporarily, more advanced ego levels.

Despite this apparent convergence toward the Self-aware ego level, large and meaningful individual differences in ego level are found in all age cohorts. In fact, variation in ego level is expected to increase with age given the increasing potential for higher ego levels in older individuals (Loevinger,
This hypothesis, however theoretically reasonable, has yet to be empirically tested. Currently, it is therefore unclear how the convergence toward the Self-aware level can be reconciled with the expected increase in the variability of ego level. Even though many individuals do not develop beyond the Self-aware ego level, a sizable minority moves on to higher ego levels (e.g., Holt, 1980).

Rank-order stability expressed in correlational terms has been a second focus of longitudinal research. Generally, low to moderate longitudinal correlations characterize adolescent samples (e.g., Redmore & Loevinger, 1979; Gfellner, 1986), whereas moderate to high longitudinal correlations characterize adult samples (e.g., Kitchener et al., 1984; Bursik, 1991; Loevinger et al., 1985). However, although significant correlations may reflect stability in the rank-order positioning of individuals within a sample over time, this coefficient has limitations as a longitudinal measure (Block, 1971) and may obscure meaningful variations in ego development patterns. The few longitudinal studies that have analyzed intraindividual changes in adult ego level have found substantial individual differences in the timing and extent of adult ego development (Adams & Fitch, 1982; White, 1985).

Limitations of Previous Longitudinal Research on Ego Development

Several limitations characterize previous longitudinal studies (Cohn, 1998). First, they have studied individuals over relatively short time periods. In short-term studies, gains and regressions in ego level may simply reflect measurement error. These studies may be seen as test–retest studies rather than examinations of true developmental change. Longer time periods are needed to detect reliable ego level changes, particularly beyond the Self-aware stage.

Second, previous research was limited to examination of either adolescence or the immediate postadolescent years. The observation that Self-aware adolescents are least likely to make ego level advances (e.g., Gfellner, 1986) may simply be an artifact of this age restriction. We do not know the degree to which the Self-aware adolescents move on to higher ego levels once adolescence is left behind.

Third, previous longitudinal studies are typically characterized by very high attrition, ranging from 30 to 60% (Redmore, 1983; White, 1985; Loevinger et al., 1985; Gfellner, 1986; Adams & Fitch, 1982; Redmore & Loevinger, 1979). Evidence suggests that attrition is related to the initial ego level (Gfellner, 1986). The attrition of participants who received low initial scores but would have shown substantial ego growth upon second testing may deflate observed changes. Conversely, if participants who fail to make significant ego level changes are most likely to leave studies prior to completion, the magnitude of reported change would be inflated. Either way, attri-
tion rates averaging about 50% pose a serious challenge to the validity of previous longitudinal studies.

The Current Study: Description of Specific Research Aims

Due to limitations of previous longitudinal research, key issues remain unresolved. The current study was designed to expand our knowledge in the following five domains:

The first aim is to test the hypothesis that significant changes in group means occur between ages 14 and 23. The expectation is that, on the average, significant increases in group means will be observed during this 9-year time span. Based on previous cross-sectional and longitudinal research, it is predicted that the average gain will exceed one ego level and approach two ego levels.

The second aim is to test the hypothesis that variation in ego level maturity increases with age. Based on ego development theory, individual differences in ego level are expected to increase because of individual variation in the extent and timing of ego development. Some people may cease to develop at low levels, others may rapidly progress toward higher ego levels.

The third aim is to test the extent to which participants maintain their relative (or rank-order) position in ego level over time. Ego development theory provides no clear answer to this question, but suggests that the timing and extent of growth vary widely across individuals. The rank-order stability across this 9-year period is therefore expected to be low to moderate.

The fourth aim is to test the hypothesis that the rate of ego development slows down once the Self-aware level has been reached. Based on the findings of previous studies, Impulsive to Conformist 14-year-olds are expected to make highly significant gains over the 9-year period, whereas individuals who have already reached the Self-aware level (or beyond) at age 14 are expected to make relatively small gains.

The fifth aim is to conduct a detailed analysis of intraindividual patterns of ego development, especially with respect to individuals who have moved beyond the Self-aware level during the course of the study. Analyses of individual patterns also allow for the inspection of ego level regressions. Only a few regressions are expected during the transition from adolescence to young adulthood.

METHOD

Participants

Participants took part in the Block and Block ongoing longitudinal study of ego and cognitive development (Block & Block, 1980; Block, 1993; Gjerde, 1995). The participants live primarily in urban settings and are heterogeneous with respect to social class and parental educational background. About two-thirds of the participants are European-American, one-
quarter are African-American, and one-twentieth are Asian-American. Participants were re-
cruited into the study at age 3, attending either a university-run nursery school or a parent-
run cooperative nursery school. The participants were assessed at ages 3, 4, 5, 7, 11, 14, 18, and 23. The data included in this study were collected during the age 14 and age 23 assessments.

At age 14, the Washington University Sentence Completion Test of Ego Development (WUSCT; see below) was administered to 104 participants; at age 23, the WUSCT was admin-
istered to 100 participants. Ninety-eight participants completed the WUSCT at both assess-
ments. Of the 104 participants who completed the WUSCT at age 14, 1 did not take part in the age 23 assessment and 5 did not complete the WUSCT at age 23, leaving 98 participants (47 males and 51 females) with WUSCT scores at both ages.

One additional male participant was excluded because: (a) he was the single participant who scored at the Individualistic level (E7) at age 14 and (b) he had regressed four ego levels to be Self-protective (E3) at age 23. The exclusion of this participant raised the attrition number to 7 (7.3%). The remaining 97 participants were representative of the 104 participants assessed at age 14 in terms of gender and ego level scores.

Measuring Ego Development

Ego development was evaluated using the Washington University Sentence Completion Test of Ego Development (WUSCT; Loevinger, 1985). At age 14, the 32-item adolescent version was used (Form 2-77); at age 23, the 36-item adult version was employed (Form 81) (see Loevinger, 1998). At both ages, the WUSCT was administered individually by highly trained examiners.

The WUSCT was scored according to established procedures (Hy & Loevinger, 1996; Loe-
vinger & Wessler, 1970). For each sentence stem, item responses were typed out, made anony-
mous, and randomized across subjects. Responses were independently rated by two experi-
cenced raters. Perfect interrater agreement (both ratings at the same ego level) for particular items ranged from 67 to 89% ($M = 78\%$). Within-one-stage interrater agreement (disagreement not larger than one successive stage) ranged from 91 to 98% ($M = 96\%$). In case of disagree-
ment, the raters discussed and resolved any differences to reach a “compromised” rating. After all the responses were rated, they were resorted to the respective WUSCT protocols to yield a profile of item ratings for each participant.

Two total scores were computed: a Total Protocol Rating (TPR) and an Item Sum Score (ISS). The TPR is based on the cumulative frequency distribution of the item ratings and was assigned on the basis of cut-off points given by Loevinger and Wessler (1970; see also Hy & Loevinger, 1996). The ISS was computed by summing the item ratings. To make the sum of the 32-item ratings at age 14 comparable to the sum of the 36-item scores at age 23, the ISS at age 14 was multiplied by 36/32.

RESULTS

Ego Level at Age 14 and Age 23

At age 14, four ego levels were represented, ranging from the Self-protective through the Conscientious level. At age 23, six ego levels were re-
presented, ranging from the Self-protective through the Autonomous level. The modal level at age 14 was Conformist for females and Self-protective for males. The modal level at age 23 was Self-aware and Conscientious for fe-
males and Self-aware for males. (The exact distribution of ego levels is pre-
sented in Table 4.)
Specific Aim 1: Group Gains in Mean Ego Level Scores

Paired t tests were used to examine mean group changes in ego level. As seen in Table 2, the results indicate significant gains in ego level between ages 14 and 23, with increases in mean scores (both TPR and ISS) being significant for both genders. These findings support the first hypothesis: across the 9-year time period studied, the average growth in ego level approached 1.5 steps. Females scored higher than males at both ages, and the female advantage increased slightly but significantly. A repeated-measures ANOVA indicated that the Age × Gender interaction was statistically significant for both TPR (F = 4.11, p < .05) and ISS (F = 4.95, p < .05) scores.

Specific Aim 2: Variability in Ego Level Scores as a Function of Age

As also shown in Table 2, a one-tailed F test indicated that the variance of the ego level scores at age 23 was moderately but significantly larger than the variance of the ego level scores at age 14. This effect was more pronounced for ISS scores (F = 2.02; p < .01) than for TPR scores (F = 1.42; p < .05). A significant gender effect was not observed. The significant increase in ego score variability with age also indicates that participant attrition did not cause a restricted range of ego level scores.

Specific Aim 3: Relative Consistency in Ego Level Scores over Time

Across-time correlations provide the first measure of rank-order stability in ego level scores. These correlations, presented in Table 2, show that ego level at age 23 can only partly be explained on the basis of ego level scores at age 14. Although statistically significant, the absolute magnitude of the longitudinal correlations for the whole sample was moderate to low: ego level at age 14 correlated .33 (TPR) or .31 (ISS) with ego level at age 23. When these analyses were conducted separately by gender, significant longitudinal correlations were only obtained for males. However, based on Fisher’s transformation of correlation coefficients to standard scores, the correlations for males and females were not significantly different from one another, neither for TPR nor ISS scores. Note that the relatively low correlations between ego level at the two ages cannot be attributed to a restricted range of ego level scores at age 23 (see results under “Specific Aim 2”).

An ANOVA was conducted to investigate which part of the ego level continuum contributed the most to rank-order (in)stability. To examine the extent to which ego level at age 14 predicted ego level at age 23, ego level at age 14 was entered as the independent variable and ego level at age 23 as the dependent variable. The results, presented in Table 3, indicate a moderate but significant relation between the two ages (F = 5.75; p < .01). The Scheffe test indicated a significant difference between the Self-protective
<table>
<thead>
<tr>
<th></th>
<th>Age 14</th>
<th>Age 23</th>
<th>Mean difference</th>
<th>t</th>
<th>F-ratio</th>
<th>r</th>
</tr>
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<tr>
<td></td>
<td>N</td>
<td>M*</td>
<td>SD</td>
<td>M*</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Total Protocol Rating (TPR)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>97</td>
<td>3.97</td>
<td>.81</td>
<td>5.32</td>
<td>.96</td>
<td>1.35</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td>4.06</td>
<td>.73</td>
<td>5.61</td>
<td>.83</td>
<td>1.55</td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>3.87</td>
<td>.86</td>
<td>5.00</td>
<td>1.01</td>
<td>1.13</td>
</tr>
<tr>
<td>Item Sum Score (ISS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>97</td>
<td>151.92</td>
<td>12.10</td>
<td>180.08</td>
<td>17.19</td>
<td>28.16</td>
</tr>
<tr>
<td>Female</td>
<td>51</td>
<td>153.54</td>
<td>11.18</td>
<td>185.43</td>
<td>15.12</td>
<td>31.89</td>
</tr>
<tr>
<td>Male</td>
<td>46</td>
<td>150.13</td>
<td>12.94</td>
<td>174.15</td>
<td>17.56</td>
<td>24.02</td>
</tr>
</tbody>
</table>

Note. Repeated-measures ANOVA for TPR: ***F (age) = 168.59; **F (sex) = 7.83; *F (age-by-sex) = 4.11.
Repeated-measures ANOVA for ISS: ***F (age) = 250.18; **F (sex) = 10.03; *F (age-by-sex) = 4.95.
Age is used as a between-subjects effect and sex and age-by-sex are used as within-subjects effects.
* On the scale of ego development 3 = Self-protective, 4 = Conformist, 5 = Self-aware, and 6 = Conscientious.
*** p < .001; **p < .01; *p < .05; 'p < .10.
TABLE 3
Analysis of Variance of the Longitudinal Predictability of Ego Level Scores

<table>
<thead>
<tr>
<th>Ego level at age 14</th>
<th>N</th>
<th>Ego level at age 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>E3. Self-Protective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>31</td>
<td>4.77(^a) (.92)(^c)</td>
</tr>
<tr>
<td>Female</td>
<td>11</td>
<td>5.18 (.60)</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>4.55 (1.0)</td>
</tr>
<tr>
<td>E4. Conformist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>40</td>
<td>5.58 (.96)</td>
</tr>
<tr>
<td>Female</td>
<td>27</td>
<td>5.78 (.89)</td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>5.15 (.99)</td>
</tr>
<tr>
<td>E5. Self-aware(^a)</td>
<td>26</td>
<td>5.58 (.76)</td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>5.62 (.77)</td>
</tr>
<tr>
<td>Male</td>
<td>13</td>
<td>5.54 (.78)</td>
</tr>
</tbody>
</table>

\(^a\) The two Conscientious participants at age 14 were added to the Self-aware group. The exclusion of these two individuals did not change the results.
\(^b\) Mean ego level score (Total Protocol Rating).
\(^c\) Standard deviation.

(E3) group on the one hand and the Conformist (E4) or Self-aware (E5) groups on the other. The Conformist and Self-aware groups were not significantly different in terms of the TPR scores at age 23. This pattern was replicated with the ISS scores at age 23 as the dependent variable. Although the developmental pattern appeared different for males and females (see Table 3), the Gender × Ego level interaction term was statistically insignificant ($F = .92$, ns).

These results indicate that being at a relatively low ego level at age 14 (i.e., the Self-protective level) predicts being at a relatively low ego level at age 23 ($M = 4.77$). The contrast between being at a moderate or high ego level at age 14 (i.e., Conformist versus Self-aware level) was not observed at age 23 insofar as both groups reached, on the average, the same ego level at age 23 ($M = 5.58$). In other words, participants identified as Self-protective at age 14 did not fully catch up with the remaining participants, whereas individuals identified as Conformist or Self-aware at age 14 had become indistinguishable at age 23.

In sum, the moderate to low rank-order stability of ego level scores supports the notion of large individual differences in the extent of ego development progress during the transition from adolescence to young adulthood.

Specific Aim 4: The Impact of the Self-Aware Stage

Data presented under “Specific Aim 3” also pertain to the proposition that development slows down once the Self-aware level has been reached. The results presented in Table 3 show that the 31 participants starting at the Self-protective level at age 14 made the largest gains, moving beyond the Conformist level toward the Self-aware level (mean increase or difference...
TABLE 4
Intraindividual Trajectories of Ego Development (TPR)\(^a,b\)

<table>
<thead>
<tr>
<th>Ego level at age 14</th>
<th>Ego level at age 23</th>
<th>E3</th>
<th>E4</th>
<th>E5</th>
<th>E6</th>
<th>E7</th>
<th>E8</th>
<th>Total</th>
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<tr>
<td>E3 All</td>
<td></td>
<td>3</td>
<td>7</td>
<td>16</td>
<td>4</td>
<td>1</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>1</td>
<td>7</td>
<td>3</td>
<td></td>
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\(^a\) E3, Self-protective level; E4, Conformist; E5, Self-aware; E6, Conscientious; E7, Individualistic; E8, Autonomous.

\(^b\) Numbers in italics indicate regressions.

score of 1.77); the 40 participants identified at age 14 as Conformists made the next largest gains, ending up halfway between the Self-aware and Conscientious level (\(M\) increase = 1.58). In contrast, the 24 participants identified at age 14 as Self-aware made relatively small gains halfway toward the Conscientious level (\(M\) increase = .58).

An ANOVA analysis of these difference scores yielded highly significant results (\(F = 14.37, p < .001\)). Scheffe tests indicated a significant difference between the increases made by Self-protective and Conformist individuals on the one hand and Self-aware individuals on the other. The increases made by Self-protective and Conformist individuals were not significantly different statistically. This pattern was replicated with the ISS scores. The Gender \(\times\) Ego Level interaction term was statistically insignificant. These results indicate that 14-year-old Self-aware individuals make less progress compared with less mature 14-year-old individuals across the 9-year time span.

Specific Aim 5: Intraindividual Patterns of Ego Development

The intraindividual patterns of ego development are presented in Table 4. As expected, the total number of regressions across the 9-year interval was minimal. Only two of the 97 participants regressed one level of development (2.1%).
Twenty-one participants did not move on to a next level of development (21.6%), 26 participants progressed one ego level (26.8%), 39 progressed two ego levels (40.2%), 7 participants progressed three levels (7.2%), and 2 participants progressed four ego levels (2.1%). This pattern was basically similar for participants starting out at the Self-protective or Conformist ego levels: the smallest proportion stayed at the same level (10%), twice as many progressed one level (23–27%), and the largest group progressed two or more ego levels (60–68%). In contrast, the reverse pattern was observed for participants starting out at the Self-aware ego level: the largest proportion (58%) remained Self-aware 9 years later, the next largest proportion progressed one step (29%), and the smallest group progressed two ego steps (13%). This contrast provides additional evidence for the conjecture that development slows down once the Self-aware level has been reached.

Paradoxically, development beyond the Self-aware level was less likely for 14-year-old Self-aware individuals (42%) than for 14-year-old Conformist individuals (60%): 4 of every 10 Self-aware participants at age 14 had managed to move on to a higher level by the age of 23, whereas 6 of every 10 Conformist participants had managed to move beyond the Self-aware level. This statistically significant difference \( \chi^2 = 4.17, df = 1, p < .05 \) is particularly interesting given that Conformist individuals started out at a lower level as 14-year-olds. Thus, age-14 Conformists had a slightly better prognosis of reaching the Conscientious level or beyond by the age of 23 than their Self-aware peers.

A closer inspection of Table 4 indicates that the group of Conformists advancing beyond the Self-aware level is disproportionally made up of females: 67% of the Conformist females advanced beyond the Self-aware level, whereas only 46% of the Conformist males advanced beyond the Self-aware level. This difference, however, did not approach statistical significance \( \chi^2 = 1.54, df = 1, ns \). For Self-aware individuals at age 14 there was no gender difference in the degree of development beyond the Self-aware level: for both sexes, 58% remained Self-aware, whereas 42% had advanced to a higher ego development level.

A significant gender difference was observed only for the individuals who were at the Self-protective level at age 14. Female Self-protective individuals were likely to have moved on to the Self-aware level or beyond (91%). In contrast, this progress occurred for a significantly lower percentage of the Self-protective males (55%; \( \chi^2 = 4.04, p < .05 \)). The larger proportion of Self-protective females advancing to the Self-aware level or beyond, combined with the slightly larger proportion of Conformist females moving beyond the Self-aware level, may account for the statistically insignificant yet modestly consistent gender difference in the rank-order stability of ego level scores across the 9-year time span.
DISCUSSION

The results support the five main hypotheses. Across a 9-year time span, from middle adolescence into young adulthood, (a) ego development increases, on average, by approximately 1.5 ego levels; (b) the range and variation of ego level scores increases; (c) longitudinal (rank-order) stability in ego level within the sample is moderate or low; (d) on average, development slows down once the Self-aware level has been reached; and (e) regression in ego level is relatively rare. The 1.5-level average gain is the largest increase reported by any published longitudinal study. The finding that variation in ego level scores increased has not been examined by previous studies, but is consistent with ego development theory. The results generally support ego development theory and contribute further to the construct validity of the WUSCT.

Consistent with previous research (e.g., Gfellner, 1986; Holt, 1980), the modal ego level for adolescents was the Conformist level and the modal ego level for young adults was the Self-aware level. Consistent with a recent meta-analysis of gender-differences (Cohn, 1991), females obtained significantly higher ego level scores than males.

The finding that ego level maturity is highly variable across a 9-year time period is consistent with the proposition of large individual differences in the timing and extent of ego development. Some participants started at a relatively low ego level, others started at a medium or a high ego level. In addition, some participants made large gains, others kept a steady pace, and yet others failed to make gains. This pattern explains why the rank-order stability was moderate or low: by and large, individuals do not maintain their rank-order position in terms of ego level.

More detailed analyses, however, indicated that relatively immature 14-year olds, as a group, remained relatively immature at age 23—as determined by their placement rank within the sample at the two ages. Yet, approximately 50% of the Self-protective adolescents had reached the Self-aware level 9 years later—the modal level of psychosocial maturity among young adults (e.g., Holt, 1980)—and a smaller but sizeable group had moved on to even higher ego levels (16%). On the other hand, the distinction between being moderately mature (i.e., Conformist) or precocious (i.e., Self-aware or Conscientious) at age 14 had disappeared by age 23. In other words, to be precocious at age 14 does not guarantee being precocious at age 23, and to be moderately mature at age 14 does not preclude being precocious at age 23.

Consistent with the proposition that development slows down once the

Gfellner (1986) found increases of similar magnitude, but this study included an intermediate level between the Self-protective and the Conformist levels, while counting the successive transitions as full steps.
Self-aware level has been reached, age-14 Self-aware individuals make significantly less progress in comparison with their Self-protective and Conformist peers. Even across a 9-year time period, Self-aware adolescents, as a group, are likely to remain halfway between the Self-aware and the Conscientious level in early adulthood. In contrast, the Self-protective and Conformist groups of adolescents are likely to make three times as much progress, approaching or surpassing the Self-aware level. Somewhat surprisingly, the transition to the Conscientious level and beyond was made more frequently by age-14 Conformists than by age-14 Self-aware adolescents. This finding suggests a developmental paradox: the developmentally most advanced adolescents appear at risk for developmental arrest, whereas more moderately mature adolescents appear to progress more easily to higher ego levels. In terms of the developmental outcome in early adulthood, a moderate rather than a relatively high adolescent ego level appears to be advantageous. This finding was unanticipated and is not readily explainable in terms of present theory or data. Thus, replication is required before an attempt to interpret this finding is made.

The observation that relatively little development occurred beyond the Self-aware level is consistent with findings of other longitudinal studies. Self-aware adolescents display relatively small gains in ego level which, in terms of their magnitude, are comparable to the small gains displayed by adults (Gfeller, 1986; Redmore, 1983; White, 1985). In contrast, adolescents and adults who scored well below the Self-aware level have been reported to display significant gains in ego level upon retest (Loevinger et al., 1985; Redmore, 1983; White, 1985). Indeed, some adults scoring well above Self-aware had regressed in their ego level (e.g., Loevinger et al., 1985). In the present sample, only three participants scored beyond the Self-aware level at age 14, and two of these three had regressed to earlier ego levels by the age of 23. Albeit consistent with the adult literature, the regressions in the present study are too few to warrant meaningful interpretations. For example, we cannot exclude the possibility that these few regressions are due to measurement error.

The consistent finding that relatively many individuals—both adolescents and (young) adults—do not manage to overcome the Self-aware level suggests the presence of some kind of “ceiling” effect in development. At the same time, it should be recognized that this study included participants no older than 23 years of age. Longitudinal examinations of ego development from early into middle adulthood are required before firm conclusions about ego development beyond the Self-aware stage are made.

Yet, we may speculate why the transition to the Conscientious ego level appears particularly difficult during the period covered by this study. This is a complex issue, partly because the mechanisms underlying progress from one particular stage to another are not well understood. One possible answer
is to approach this issue in terms of pacers for development. That is, which personal characteristics or external circumstances would serve to stimulate or “pace” ego development, which specific pacers would stimulate development beyond the Self-aware level, and why and when would such pacers be either absent (and inoperative) or present (and operative)?

Intervention studies have been designed to deliberately raise the ego level of the participants (for a brief review, see Cohn, 1998). These studies were, by and large, based on the presumption that role-taking experiences, such as peer-mentoring and counseling experiences, would induce ego growth. Such intervention studies, by and large, were successful only if the average level at pretest was well below the Self-aware level. Since these studies failed to significantly raise the ego level of Self-aware individuals, role-taking experiences do not appear to contribute to development beyond this level.

Development may be expected when interpersonal environments disconfirm expectations associated with a particular ego level. An effective pacer for development might require repeated confrontations in everyday interaction with people who have moved beyond one’s own ego level. This conjecture may explain the steep growth patterns of the Self-protective and Conformist adolescents. Their frame of reference is likely to be challenged by environments expecting prosocial attitudes and awareness of personal feelings and goals. Similarly, an effective pacer for development beyond the Self-aware level might involve frequent interactions with people at or beyond the Conscientious ego level. Individuals who have been able to make the transition to higher ego levels could, in principle, challenge the Self-aware mental frame of reference, thus inducing them to move on to higher ego levels. In contrast, if one is surrounded by people below or at the Self-aware ego level, the challenge—perhaps even the need—to move on to higher levels is absent.

A related reason for the apparent lack of ego development growth beyond adolescence may be that many adults are in the position to select interpersonal environments that fit their current ego level. For example, Nettles and Loewinger (1983) found a very high rate of assortative mating in terms of ego level. This result suggests that adults are able to select or construct interpersonal environments that reinforce rather than challenge their frame of reference—or what Caspi and Bem (1990) refer to as proactive person–environment interaction. Possibly, Self-aware adolescents may also, for reasons not fully understood, select environments that do not challenge their current state of mind.

We may also speculate that contemporary American cultural norms stimulate growth toward the Self-aware level but fail to further challenge the Self-aware individual’s mental frame of reference once this level has been reached. Sennett (1978), in his seminal work The Fall of the Public Man, has described American society in ways that would seem to support this
conjecture, in particular his description of a culture “ruled by intimate feelings as a measure of the meaning of reality” (p. 326). Alternatively, the difficulty to move beyond the Self-aware level may to some extent be age-related, partly because adolescence is a time when feelings and relationships are emphasized (e.g., Thorne, Cutting, & Skaw, 1998). In other words, the “pull” toward the Self-aware level may be due to a general cultural norm, an age-specific norm, or a combination of both.

In exploring the reasons for the “braking effect” of the Self-aware level, it should be recognized that a sizeable proportion of the participants had already advanced beyond the Self-aware level in young adulthood. If there is a general “pull” toward the Self-aware level, how then are some individuals able to move beyond this level? Loevinger (1976) sees the specific transition toward the Conscientious level as a major shift hardly explainable in terms of external pacers: “For the essence of the Conscientious Stage is to be at least partially liberated from socially imposed rewards and punishments. How can one manipulate rewards so as to free a person from responding to them and being shaped by them? . . . How people liberate themselves from the dominion of external rewards and punishments is a central mystery of human development . . .” (p. 28). The development beyond the Conscientious level may therefore be based on internal pacers, including intelligence or personality traits.

Future studies need to examine why some individuals remain at the Self-aware level, whereas others progress to higher levels. Does this difference depend on one’s ego level during adolescence, as suggested by the current findings, or is it more a matter of being exposed to the proper pacers, regardless of age? Which are the appropriate pacers for development beyond the Self-aware level—internal or external?

The only two longitudinal studies of ego development that have administered the WUSCT at more than one point in time on adults beyond college age included only female participants and covered very short time periods (1–2 years; Bursik, 1991; White, 1985). There are no longitudinal studies of ego development that study both men and women over significant periods of adulthood (e.g., early to middle adulthood). The present findings emphasize the need for longitudinal studies beyond young adulthood in order to better understand the process of the crucial transition from the Self-aware to the Conscientious level of ego development.

REFERENCES


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