ABSTRACT

To assess Erikson’s life cycle model, 86 men, initially selected for health, were prospectively studied at age 21, and reassessed 32 years later at age 53. Using the Vaillant and Milofsky (1980) modification of Erikson’s model, 48 men (56%) achieved generativity, an advanced developmental stage, at follow-up. Results generally support Erikson’s model and show that generativity was significantly associated with successful marriage, work achievements, close friendships, altruistic behaviors, and overall mental health. Successful young adult predictors of Erikson’s model at midlife included a warm family environment, an absence of troubled parental discipline, a mentor relationship, and, most importantly, favorable peer group relationships. Significant predictors of Erikson’s model were of moderate effect size and involve young adult social relationships rather than physical symptoms or parental social class standing.

Erik Erikson’s life cycle model, particularly generativity, has had a major influence on adult development (McAdams, 2001; Vaillant & Milofsky, 1980). Although earlier theorists emphasized biological and child development, Erikson de-emphasized biological features in favor of psychosocial features of conflict and consequently reformulated Freud’s theory to extend developmental stages to adulthood, a period less marked than childhood by biological change.

Erikson (1963, 1982) suggested that human development generally follows an eight-stage epigenetic (or step-by-step) sequence of psychosocial maturation, three of which theoretically encompass adulthood. Each “stage” involves a
psychosocial conflict that, if successfully resolved, would be favorable (e.g., developing trust of others) rather than unfavorable (e.g., developing mistrust of others) for coping with subsequent conflicts or life tasks. Theoretically, success in mastering the tasks of one stage make mastering following tasks more likely, but struggles in mastering tasks of earlier stages may, in part, remain in some form through the life cycle (Erikson, 1963).

Stages or tasks (and dichotomous resolutions) include trust vs. mistrust, autonomy vs. shame and doubt, initiative vs. guilt, industry vs. inferiority, identity vs. role confusion, intimacy vs. isolation, generativity vs. self-absorption, and integrity vs. despair. Erikson maintained that these stages of development involved a “widening social radius” across the life span (Erikson, 1963, p. 276) encompassing the immediate family, peers, an intimate other, and, finally, the wider community and future generations. Development involved the capacity for mature social behaviors supported by past social experiences, and stages were functional rather than structural involving specific tasks (Vaillant & Milofsky, 1980). Although cultural factors were given consideration, Eriksonian theory emphasizes a pro-active, creative, integrating self in coping with change and conflict, interpreting cultural symbols, and propelling one through life cycle tasks.

Erikson’s eight stages were not necessarily mutually exclusive. Solving one crisis may reawaken strengths or weaknesses of earlier issues. For example, Erikson explains that it is a mistake to assume that a positive trait (such as trust) is achieved permanently. He maintained that successfully completing each life task achieves a “dynamic balance” of characteristics rather than a total, permanent victory of one dichotomous solution over another (Erikson, 1963). Moreover, in contrast to models which posit invariant sequences of development that are irreversible, Erikson’s stages involve tasks that are potentially reversible and do not necessarily follow a rigid sequence or specific timing (Vaillant, 1993). For example, in contrast to Levinson’s notion that adult development is tied to specific ages (Levinson, Darrow, Klein, Levinson, & McKee, 1978), other researchers present evidence showing that generativity appears at variable times of the life cycle, including young adulthood (McAdams, Hart, & Maruna, 1998; Stewart & Vandewater, 1998; Vaillant, 1993; Vaillant & Milofsky, 1980).

Overall, Erikson’s model of the life cycle provides metaphors that are heuristically useful for exploring human development, and investigators have attempted to define, measure, and validate the stages in empirical research (McAdams & de St. Aubin, 1992; Vaillant & Milofsky, 1980). Special emphasis has been given by researchers to studying generativity (Kotre, 1996; McAdams & de St. Aubin, 1998), Erikson’s seventh life stage that theoretically was likely to characterize midlife adults. Erikson defined generativity as “primarily the concern in establishing and guiding the next generation” (Erikson, 1963, p. 267). The generative stage characterizes a culmination of adulthood when the individual becomes a responsible guide or mentor for the next generation. McAdams and associates make the distinction between agentic and communion explanations for
generativity (McAdams & de St. Aubin, 1992; McAdams, Hart, & Maruna, 1998). Agentic explanations involve the desire to continue living in the next generation; communion explanations involve empathy or compassion for the well-being of others. Research suggests that both agentic and communal motivations are associated with generativity (Ackerman, Zuroff, & Moskowitz, 2000).

Vaillant and associates (Vaillant, 1993; Vaillant & Milofsky, 1980), in longitudinal research, assessed generativity in terms of specific, naturalistic behaviors of taking responsibility for others. Following Erikson, generativity was not merely defined as parenthood, but as actively involving oneself in mentoring, teaching, coaching, or caring for the next generation, or the wider community (Vaillant, 1993; Vaillant & Milofsky, 1980; Vaillant & Vaillant, 1990).

Except for the first three stages based in childhood, Vaillant defined and measured four of Erikson’s life stages in prospective longitudinal research across adulthood. Vaillant modified Erikson’s sequence by including an additional stage, career consolidation, which came after intimacy and preceded generativity (Vaillant, 1993; Vaillant & Milofsky, 1980). In a longitudinal study, Vaillant and Milofsky (1980) found that a general sequence of Erikson’s psychosocial development occurred through the life cycle, and men who had achieved generativity were more likely to have mastered the earlier developmental tasks of industry, intimacy, and career consolidation than men who had not achieved generativity.

This research applies Erikson’s model to a group of men initially selected for health. Although this research is severely limited by exploring life stages only in men and excluding women, it improves upon many other investigations of adult development by prospectively studying young adult predictors of midlife generativity over 32 years—one of the longest follow-up studies conducted. Much of the research on generativity and adult models of development has been based upon cross-sectional research rather than longitudinal research (McAdams, 2001). Unburdened by retrospective distortions, prospective, longitudinal research more accurately depicts development. The length of this study makes this a rare sample, and the predictors explored include new measures such as a mentor relationship and troubled parental discipline which may fit an Eriksonian maturational model.

Vaillant’s modification of Erikson’s model is used in this study (Vaillant, 1993; Vaillant & Milofsky, 1980). Life stage categories were based on responses to questions concerning naturalistic behaviors in family, work, and community settings in assessing the five life stages of industry, identity, intimacy, career consolidation, and generativity. The specific questions explored in this research include:

1. What percentage of men selected for health in young adulthood achieves generativity by midlife? Is generativity associated with the successful completion of other adult life tasks such as intimacy and career consolidation? Is overall mental health associated with generativity?
2. Do family environment and psychosocial developmental factors predict adult life stage and marital status at midlife? Do parental social class or physical symptoms in young adulthood predict subsequent life stage 32 years later?

METHOD

Sample

The initial sample included 94 men who were prospectively studied as undergraduate and graduate college students in Chicago in 1958 and 1959 (Grinker, 1963; Grinker, Grinker, & Timberlake, 1962; Grinker & Werble, 1974; Westermeyer, 1998). The men were selected for healthy adjustment, displaying no major psychopathology.

Of the 94 men studied, 87 (93%) were reassessed in a 32-year follow-up (Westermeyer, 1998). Due to insufficient information, one of these men could not be rated for Erikson’s adult life stages. Of the seven men lost to follow-up, one died, one refused participation, and five could not be located. There are no statistically significant differences between the eight men not rated for life stage and the 86 men successfully followed and rated for Erikson’s life stages in terms of the 1959 predictors or demographic items explored in this research.

The 86 men in this study averaged 21 (range 17 to 29) years of age at the initial assessment, and they averaged 53 (range 48 to 63) years of age at the 32-year follow-up. Seventy-nine (92%) of the men are White and 76 (88%) of the men were of various Protestant denominations. Forty-four (51%) of the men were from parental social classes I to III, and 42 (49%) of the men were from parental social classes IV and V, according to the Hollingshead-Redlich (1958) system, and 73 (85%) of the 86 men had never been married in 1959. All of the men were high school graduates, and most were from intact, two-parent families.

All but three of the 86 men were selected from a small Christian college, which trained many of its students for employment in the YMCA and other community organizations. Prior to attending the college, many of the men were recruited by YMCA directors and personnel to be trained for careers in the YMCA. About two-thirds of the men could identify a specific mentor who influenced them to attend the college or prepare for social service work, and 71% of the men in 1959 had planned for careers in the YMCA as executive officers, physical education directors, and other personnel.

Initial 1959 Assessment

All the men completed a 700-item questionnaire in 1959 (Grinker et al., 1962). The questionnaire assessed several different areas, including demographic information, parental and family relationships, friendships, physical health and illness, attitudes, activities, and personality characteristics. It included current symptoms
and functioning and recalled information from childhood. The following items were explored as predictors of 32-year outcomes:

**Warm Family Environment**

This scale summarizes six forced-choice questionnaire items retrospectively assessing a positive, emotionally warm family environment. Items include subjects’ ratings of: 1) home life happy and peaceable; 2) parents get along well; 3) family enjoys doing things together; 4) family is permissive of independence; 5) parents show affection to children; and 6) gets along with parents. Items were summed into an overall Warm Family Environment rating ranging from 0 to 6 (Mean = 5.0; $SD = 1.5$). The split-half reliability (using the Spearman-Brown correction) for this scale is .81.

**Troubled Parental Discipline**

This scale summarizes six forced-choice items retrospectively assessing problematic parental discipline in childhood and adolescence and includes: 1) discipline is upsetting; 2) discipline is unfair; 3) overall inconsistent (discipline); 4) overall unpredictable (discipline); 5) mother (discipline) is not consistent; and 6) father (discipline) is not consistent. Items were summed into an overall Troubled Parental Discipline rating ranging from 0 to 5 (Mean = 1.8; $SD = 1.5$). The split-half reliability (using the Spearman-Brown correction) for Troubled Parental Discipline is .78.

**Peer Social Adjustment Scale**

The Peer Social Adjustment Scale assessed current capacity for friendships with peers. It was based on the summary score of self-reported favorable responses to 17 separate checklist items prospectively assessing current relationships in 1959. Some items refer to capacity for relationships (e.g., warm, likeable), and some items refer to number and closeness of friends (e.g., has many friends), and other items concern difficulties in relations with other people (e.g., hard to make friends, tough to confide). Favorable responses are summarized into an overall Peer Social Adjustment Scale ranging from 4 to 18 (Mean = 14.1; $SD = 2.9$) (split-half reliability using the Spearman-Brown correction = .77).

**Mentor**

In response to an open-ended question regarding referral to the college, 69% of the men identified a specific mentor, and this variable is explored as a predictor.
Parental Social Class and Physical Symptoms

Predictors also include parental social class and physical symptoms. Parental social class was based on father’s job status and educational level in 1959 according to the 5-point Hollingshead-Redlich Scale (Hollingshead & Redlich, 1958). Inter-rater reliability for the Hollingshead-Redlich scale was .86. The men were also asked in 1959 if they were currently bothered “often,” “sometimes,” or “not at all” by 11 physical symptoms including headaches, stomach aches, asthma, ulcers, and skin rashes. These symptoms were dichotomized (present often or sometimes versus not at all) and summed into an overall scale ranging from 0 to 11 (Mean = 2.5; SD = 2.0) (split-half reliability using the Spearman-Brown correction = .84).

32-Year Follow-Up Assessment

The structured and semi-structured questionnaire given at 32-year follow-up included detailed assessments of: 1) work, family, and social adjustment; 2) physical health and illness; 3) spare-time and vacation activities; 4) charitable, religious, and community activities; 5) political activities, attitudes, and voting behavior; and 6) psychiatric symptoms, medications, and treatment (Westermeyer, 1998). Using the same questionnaire for all 86 men, 12 (14%) were reassessed by personal interview, 29 (34%) were reassessed by phone, and 45 (52%) were reassessed by mail (N = 45, 52%) an average of 32 (range 31 to 35) years after their initial assessment in 1959. Erikson’s life stages or other outcomes in this study did not vary by data collection method.

Assessment of Erikson’s Adult Life Stages

Erikson’s adult life stages were assessed at follow-up based on a scale devised by Vaillant and Milofsky (1980). The first three stages typically occurring in childhood (e.g., trust, autonomy, and initiative) were not rated in Vaillant’s scale and were not relevant for this adult group. The five stages or tasks in the Vaillant-Milofsky scale were: Stage 4, industry; Stage 5, identity; Stage 6, intimacy; Stage 6-A, career consolidation; and Stage 7, generativity. Vaillant and Milofsky (1980) expanded Erikson’s stages to include career consolidation (Stage 6-A) following Stage 6, intimacy.

All subjects were categorized in one of the five adult life stages by the author blind to information collected in 1959. Inter-rater reliability for Erikson’s Adult Life Stages, as well as other follow-up outcomes, were based on the agreement of the author and a research assistant on ratings of 30 of the 86 subjects. Inter-rater reliability (Pearson correlation) for Erikson’s Adult Life Stages based on this subsample was .76.
The rating of Adult Life Stage involved an overall assessment based on several objective questions that addressed each of the five stages. Brief definitions and the specific data used to assess the five adult stages are as follows:

**Industry**—Industry (Stage 4) was defined as never fully self-supporting or still not living independent of institutions or family of origin. Information used to assess Stage 4 included four closed-ended questions on living arrangements, current job status, income, and time unemployed in the last ten years, and two listings by the respondents of schools attended (and degrees earned) since high school and job placements since college.

**Identity**—(Stage 5) was defined as self-supporting, independent of family, but unable to achieve intimacy. Men would achieve the identity stage if they had been self-supporting for most their lives, although they could have periods of unemployment in their lives. Information used to assess this stage included the six items above to assess the Industry Stage that would demonstrate independent employment and income as well as living independent of parents. In addition, information on intimacy in marriage and with others (which is described below) was used to assess this stage.

**Intimacy**—Intimacy (Stage 6) was defined as having achieved a long lasting, stable, interdependent relationship at some point in a person’s life without having achieved a stable career specialization. The intimate relationship was usually defined as marriage, but the relationship could include an interdependent, long-standing friendship as well. Subjects were asked a close-ended question about their marital status and they were asked to list the year of marriage, divorce, etc. Also, eight close-ended questions devised by Vaillant (Vaillant, 1977) were used to assess the quality of marital relationships.

Although intimacy was usually based on a long-standing stable marriage, eight other objective questions assessed number, quality (i.e., very close, close, somewhat close, and not close), and frequency of contact (i.e., daily, monthly, yearly, never) with friends. An overall rating of social adjustment was made based on number and closeness of friends and frequency of contact with friends (inter-rater reliability = .81) (Westermeyer, 1998).

**Career Consolidation**—Career Consolidation (Stage 6-A) was not initially part of Erikson’s life stages but was added by Vaillant and Milofsky (1980) based on their empirical research. This stage was defined as achieving a stable career with intimacy, but with little responsibility for others. This stage involves attaining a specialized, stable career as measured by commitment, competency, contentment, and adequate compensation (Vaillant, 1993; Vaillant & Milofsky, 1980).

To assess this stage, a work history was collected from each subject, including periods of unemployment and explanations for each job transition. Based on this information, a 5-point rating of time employed in the last 10 years was made (Davis & Smith, 1989) to help assess competency. In addition, a 4-point
forced-choice item assessed current job satisfaction (for rating contentment and commitment), two questions assessed monthly and total family income (for rating compensation), and two questions assessed supervisory responsibility and occupational job status (to help rate competency). An occupation or job status rating was made according to an 8-point system devised by Hollingshead and Redlich (1958) (inter-rater reliability = .90). Employment competency was characterized by long-term employment in a high status job that often had supervisory responsibility.

Theoretically, career consolidation includes aspects of establishing an identity (Vaillant & Milofsky, 1980), and men who achieved a stable career without intimacy were rated at the identity stage rather than the career consolidation stage. In contrast, men who achieved intimacy without a stable career specialization were rated at the intimacy stage.

**Generativity**—Generativity (Stage 7) was defined as having clear responsibility for others, successful in work, and achieved intimacy. Thus, those who achieve generativity have, by definition, successfully attained career consolidation (Stage 6-A). Generativity or clear responsibility for others was not rated merely upon the basis of parenthood, but included assessments of taking responsibility for other people as demonstrated in specific behavioral acts.

Items used to globally assess generativity included assessments of supervising or coaching others, mentoring or teaching others, involvement and closeness with children, donations, community and religious service, political activity, and volunteer or charitable activity. Objective forced-choice questions assessed quality of relationship (i.e., very close, close, somewhat close, and not close) and frequency of contact (i.e., daily, monthly, yearly, never) with each child. A 4-point close-ended question assessed religious attendance.

Seven specific questions assessed charitable and political activities. Using a forced-choice question, subjects were asked if they performed any charitable or volunteer work and, if they did, to list the activity and the time spent on the activity per week. Based on this information, a 3-point rating of hours spent on volunteer or charitable activities was made (inter-rater reliability = .82). In addition, another question assessed total financial contribution to charities each year.

A closed-ended question was collected on memberships in any community organization, professional groups or political party. Subjects then were asked to list the organizations they joined and to provide information on any offices ever held in these organizations. Two forced-choice questions also assessed voting behavior. Based on the above items, a 4-point political activity rating was made (inter-rater reliability = .81).

Thus, the global rating of the Adult Life Stage Scale was based on specific data in four domains: 1) self-support; 2) an intimate relationship; 3) a specialized career identity; and 4) a major responsibility or care of other people. Stage 4 (industry) was based on unfavorable performance in all domains; Stage 5 (identity) was
based on successful self-support and possibly a specialized, stable career without intimacy or responsibility for others; Stage 6 (intimacy) was based on achieving an intimate relationship and self-support without a specialized career or responsibility for others; Stage 6-A (career consolidation) was based on achieving self-support, intimacy, and a stable career without responsibility for others; and Stage 7 (generativity) was based on success in all four domains.

Other Outcomes at Follow-Up

In addition to Adult Life Stage, the prediction of marital status was also explored in this research. Marital status was rated as: 1) never married; 2) married but currently separated or divorced; and 3) currently married.

Other outcomes explored in relation to generativity include the Global Assessment Scale (GAS), a 100-point overall rating of mental health (Endicott, Spitzer, Fleiss, & Cohen, 1976). The scale summarized various symptoms, work functioning, and social adjustment (inter-rater reliability = .82). Also, 29 current symptoms from the 90-item Hopkins Symptoms Checklist (HSCL) were assessed (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) (split-half reliability with the Spearman-Brown correction = .86).

RESULTS

Erikson’s Adult Life Stages and Marital Status at Follow-Up

All of the men achieved industry (Stage 4) and had established independent living apart from parents or institutions by the 32-year follow-up. Also, nine (11%) men achieved identity (Stage 5), eight (9%) men achieved intimacy (Stage 6), 21 (24%) men achieved career consolidation (Stage 6-A), and 48 (56%) of the 86 men achieved generativity (Stage 7) by midlife follow-up.

The nine men categorized at the identity stage (Stage 5) were self-supporting for most of their adult lives. However, they had not demonstrated an interdependent intimate relationship in their lives and so were not categorized at Stage 6 (intimacy). Most of these men had not achieved a specialized career identity. The following vignette is an example of the identity stage:

Mr. Y at age 51 had never married and described himself as a “recluse.”
He claimed one close friend but had not talked to him for many years. Mr. Y is steadily employed but is not involved in charitable or volunteer activities. Although experiencing phobia, depression, and other symptoms, he has never sought therapy.

The eight men at the Intimacy Stage had an intimate relationship with someone during their lives without achieving a stable career or specialized career identity. An example of the Intimacy Stage (Stage 6) is as follows:
Mr. Z has been married for 20 years and has two children. Despite a college education, he is underemployed working sporadically in a restaurant. He reports being dissatisfied with his job. Although in good health, he has few friends and he is not involved in community service.

The 21 (24%) of the 86 men who achieved Career Consolidation attained intimacy at some time in their lives with a successful career, but did not meet the criteria for generativity. An example of career consolidation (Stage 6-A) follows:

Mr. I is a 49-year-old married man with two adult children. He has had a successful career as a mid-level administrator. He likes the competitive nature of his job, and he says he is very good at his work. Mr. I does not belong to any organization and he is not involved in charitable or political activity or community service.

The 48 (56%) of the 86 men who achieved Erikson’s generativity stage had usually established successful long-term marriages. They achieved a stable and successful job in which they were satisfied, competent, and well compensated, and they assumed major responsibility for the well being of others in diverse activities, either at work or in the community. Many generative men were involved in charitable foundations and in political/community activities. They gave of themselves in various endeavors—coaching, teaching, and mentoring young people. Some were creative in starting new organizations, writing books, or leading groups.

However, permanent resolution of intimacy did not always occur among these men. Three men were responsible or generative for others and had achieved intimacy earlier in life; yet, having been separated or divorced, were not currently intimate with another person. An example of generativity follows:

At age 60, Mr. A was financially independent and happily married describing his wife as “my best friend.” After ending a successful career as a school administrator, he sells real estate helping “other people find homes.” He keeps a vegetable garden by which he says “I feed the neighborhood.” Mr. A finds time for extensive community service and charities. He serves on a hospital board and works on historical renovation projects. Mr. A plans to write a book on adult education.

Most of the men had achieved successful marriages by the 32-year follow-up. Sixty-three (73%) of the 86 men were currently married (with 16 of these men divorced and remarried), 13 (15%) of the men were currently separated or divorced (and not remarried), and 10 (12%) of the men had never married.

**Characteristics of Adult Life Stages and Relationships Among Outcomes**

Table 1 presents data (Pearson correlations) on select outcomes explored at 32-year follow-up and the four life stages achieved by the men: identity, intimacy,
career consolidation, and generativity. As expected, many outcomes are strongly associated with life stages because, in part, these items were defining characteristics of these categories. For example, marital status is strongly associated with advanced life stage because, by definition, man in the identity stage had not yet formed an intimate relationship. Thus, none of the nine men in the identity stage had ever married.

Similarly, most other outcomes were significantly associated with higher life stage and include measures of close relationships, measures of career success, and

<table>
<thead>
<tr>
<th>Areas of outcome</th>
<th>Generative n = 48</th>
<th>Career n = 21</th>
<th>Intimacy n = 8</th>
<th>Identity n = 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently married</td>
<td>44 (92%)</td>
<td>13 (62%)</td>
<td>6 (75%)</td>
<td>0</td>
</tr>
<tr>
<td>Top job class&lt;sup&gt;a&lt;/sup&gt;</td>
<td>31 (66%)</td>
<td>8 (38%)</td>
<td>0</td>
<td>1 (11%)</td>
</tr>
<tr>
<td>No time unemployed in last 10 years</td>
<td>39 (81%)</td>
<td>11 (52%)</td>
<td>3 (38%)</td>
<td>3 (33%)</td>
</tr>
</tbody>
</table>

| Overall social adjustment<sup>b</sup>        | 1.9 (0.7)         | 2.8 (1.3)    | 4.1 (1.0)     | 4.3 (1.0)     | .69 < .001    |
| Number of close friends                      | 3.4 (1.9)         | 3.0 (2.3)    | 0.6 (0.9)     | 1.2 (1.9)     | .41 < .001    |
| Political activity<sup>c</sup>               | 1.9 (0.9)         | 2.7 (0.7)    | 2.9 (0.4)     | 2.9 (0.6)     | .44 < .001    |
| Charitable participation<sup>d</sup>         | 1.5 (0.7)         | 2.4 (0.7)    | 2.5 (0.8)     | 2.6 (0.9)     | .49 < .001    |
| Global Adjustment Scale                      | 89 (10.9)         | 70 (13.5)    | 63 (7.5)      | 57 (13.0)     | .70 < .001    |

<sup>a</sup>Highest category of eight categories of Hollingshead-Redlich Occupation Scale.  
<sup>b</sup>A 5-point scale that ranges from excellent (1) to poor (5) social adjustment.  
<sup>c</sup>A 4-point scale that ranges from excellent (1) to poor (4) political activity.  
<sup>d</sup>A 3-point scale that ranges from 3 or more hours of charitable participation per week (1) to no hours of charitable participation per week (3).

Notes: Pearson correlations are based on the full range of scores for each variable. Numbers for correlations vary between 85 to 86 depending upon the availability of data. All associations between outcomes and life stages are in the hypothesized direction.
measures of taking responsibility for others. Other outcomes involving potential generative acts associated with higher life stage include number of children fathered by the men \( (r = .36; p < .001) \), number of individuals supervised by the men \( (r = .29; p < .01) \), and donations made by the men to charities in the year prior to follow-up \( (r = .33; p < .01) \).

In addition, favorable overall mental health, as assessed by the Global Assessment Scale, was strongly associated with higher adult life stage \( (r = .70; p < .001) \). Factors not significantly associated with the Adult Life Stage Scale included years of education \( (r = .17; \text{n.s.}) \) and symptoms (i.e., Hopkins Symptoms Checklist) \( (r = .17; \text{n.s.}) \).

In addition to being associated with the Adult Life Stage Scale, the outcome domains were generally associated with each other. For example, higher job status was significantly associated with marriage \( (r = .28; p < .01) \), good overall social adjustment \( (r = .46; p < .001) \), and charitable activity \( (r = .28; p < .01) \). Success in one domain (e.g., career) usually did not come at the expense of other domains (e.g., intimacy, care for the next generation).

Although various outcomes were often tautologically associated with Erikson’s Adult Life Stages and each other, lives could be complex and outcomes were not uniformly associated with generativity. For example, effect sizes between various outcomes and the Adult Life Stage Scale do not exceed .49. Some generative men reported few friends despite having achieved intimacy or periods of unemployment in the past 10 years, despite having achieved career consolidation.

**Relationships Among Predictors**

Among predictors, warm family environment was significantly associated with higher parental social class \( (r = .24; p < .05) \) and an absence of troubled parental discipline \( (r = .25; p < .05) \). Good peer social adjustment was significantly associated with an absence of troubled parental discipline \( (r = .22; p < .05) \). Other predictive relationships were not statistically significant, and effect sizes among predictors were low.

**Prediction of Adult Life Stage**

Table 2 presents Pearson correlations for the six predictors and the Adult Life Stage Scale. Most importantly, four predictive scales assessed in 1959 were significantly associated with adult life stage 32 years later. The generative men at follow-up were more likely than non-generative men to have had: 1) a warm family environment; 2) an absence of troubled parental discipline; 3) a mentor relationship; and 4) good peer social adjustment in 1959. The predictive relationships involve weak to moderate (but not strong) predictive utility over a 32-year period. Physical symptoms in young adulthood and parental social class standing were not significantly predictive of subsequent life stage.
A regression analysis revealed that the six predictors explained .25 (adjusted $r^2$) of life stage variance demonstrating that the effect size of the collective predictors is moderate and most predictive variance remains unexplained. In addition, a stepwise regression showed that the most important predictor was peer group social adjustment (adjusted $r^2 = .13$), followed in importance by an absence of discipline problems (adjusted $r^2 = .05$) and a mentor relationship (adjusted $r^2 = .05$).

Results indicate complex associations between predictors and adult life stage. For example, most men were from intact families in which they reported warm relationships and few troubled discipline problems with parents. Although warm families were associated with generativity, many of the men who failed to achieve generativity also reported warm families as young men.

### Table 2. Young Adult Predictors of Erikson's Model at 32-Year Follow-Up

<table>
<thead>
<tr>
<th>Erikson’s model of adult life stage at midlife</th>
<th>Generative $n = 48$</th>
<th>Career $n = 21$</th>
<th>Intimacy $n = 8$</th>
<th>Identity $n = 9$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young adult predictor</td>
<td>$n$ (%)</td>
<td>$n$ (%)</td>
<td>$n$ (%)</td>
<td>$r$</td>
</tr>
<tr>
<td>Mentor identified</td>
<td>37 (80%)</td>
<td>13 (62%)</td>
<td>5 (63%)</td>
<td>2 (25%)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td></td>
</tr>
<tr>
<td>Warm family environment</td>
<td>5.3 (1.2)</td>
<td>5.0 (1.7)</td>
<td>3.9 (2.0)</td>
<td>4.6 (1.6)</td>
</tr>
<tr>
<td>Troubled parental discipline</td>
<td>1.3 (1.3)</td>
<td>2.4 (1.4)</td>
<td>2.4 (2.1)</td>
<td>2.2 (1.3)</td>
</tr>
<tr>
<td>Good peer social adjustment</td>
<td>14.8 (1.9)</td>
<td>13.8 (3.4)</td>
<td>15.3 (1.6)</td>
<td>10.2 (3.9)</td>
</tr>
<tr>
<td>Parental social class</td>
<td>3.2 (1.3)</td>
<td>3.2 (1.2)</td>
<td>3.6 (1.5)</td>
<td>3.2 (1.2)</td>
</tr>
<tr>
<td>Physical symptoms</td>
<td>2.2 (1.6)</td>
<td>2.7 (2.0)</td>
<td>2.8 (1.7)</td>
<td>3.2 (3.4)</td>
</tr>
</tbody>
</table>

**Notes:** Pearson correlations are based on the full range of scores for predictors and outcomes. Numbers for correlations vary between 83 to 86 depending on the availability of data. All associations between predictors and adult life stages are in the hypothesized direction.
Although peer social adjustment at age 21 was significantly associated with generativity at midlife, some generative men had restricted social relationships as young men. Thus, lack of friendships in young adulthood were not necessarily disabling in terms of future social involvements. Individuals could grow out of relatively difficult family or social circumstances and develop intimate or generative relationships later in life.

**Prediction of Marital Status at Follow-Up**

Additional analyses explored the relationship of young adult predictors with marital status at midlife. Two significant predictors of adult life stages were also significantly predictive of marriage 32 years later: mentor relationship ($r = .30; p < .01$) and good peer social adjustment ($r = .49; p < .001$). However, warm family environment ($r = .19; p < .08$), troubled parental discipline ($r = .11; n.s.$), physical symptoms ($r = .03; n.s.$), and parental social class ($r = .12; n.s.$) in young adulthood did not predict marital status at midlife.

**DISCUSSION**

Overall, most (56%) men initially selected for health in young adulthood successfully achieved Erikson’s seventh stage, generativity, by midlife and were making major contributions to the wider community and future generations. Generativity was not only of obvious help to others, but it also was significantly associated with various successes and mental health among the men themselves. The rate of generativity in this study was similar to the 55% generativity rate reported by Vaillant (1993) for the Grant Study of College Men and was somewhat greater than the generativity rates for two other groups studied by Vaillant (1993); the Terman sample of women (i.e., 43%), and a sample of working class men (i.e., 41%).

**Predictors of Erickson’s Model of the Life Cycle**

In terms of predictors prospectively assessed 32 years earlier, generative men were more likely than non-generative men to report warm families without parental discipline difficulties, a mentor relationship, and close friendships in young adulthood. Although Erikson’s first three stages were not assessed in this research, these successful predictors of subsequent life stage involved social and family relationships rather than physical symptoms or social class status and theoretically fit Erikson’s concept of an expanding social radius across the life cycle. For example, a warm family environment and an absence of troubled parental discipline suggest relationships with parents conducive to developing trust in human relationships. Other long-term, longitudinal research suggests that warm relationships with parents successfully predict subsequent close
relationships (Franz, McClelland, & Weinberger, 1991) as well as Erikson’s life stages and generativity (Vaillant & Milofsky, 1980). In contrast, the neglect and abuse of children (and other trauma) have been found to be precursors of mental illness in adulthood (Johnson, Cohen, Brown, Smailes, & Bernstein, 1999; Widom, 1999).

In support of Peterson and Stewart (1996), who explored the predictive value of mentor relationships assessed in TAT stories, an identified mentor in young adulthood predicted life stage and generativity 32 years later. A mentor relationship suggests a capacity for closeness with an experienced member of the previous generation which may be helpful for guidance in activities (the industry stage) or forming a sense of self (the identity stage) in adolescence or young adulthood. A mentor roots one in history and links one to past experiences and events in preparation for the future. Those men able to take in or internalize a mentor in young adulthood were more likely than those without mentors to marry and establish successful, satisfying careers and, in turn, became responsible for others by midlife.

In particular, closeness to peers seems to be a central task of childhood, adolescence, and young adulthood, and it was the most important predictor of midlife generativity as well as subsequent marriage in this study. Developmentally, peer relationships form a psychological foundation to build upon and grow in subsequent intimate, career, and generative relationships. Successful human contact in one social domain lends itself to forming the confidence and capacity for human commitment and contact in other social domains. The findings of this study support research suggesting that good social relationships predict subsequent adjustment in samples selected for health (Stein & Newcomb, 1999; Vaillant & Milofsky, 1980) and in samples selected for mental illness (Westermeyer, 1993; Westermeyer & Harrow, 1984).

In accord with other research showing that social class was not predictive of outcome (Long & Vaillant, 1984) or Erikson’s life stages (Vaillant & Milofsky, 1980), parental social class was not predictive of Erikson’s life stages in this study. The lower social class individuals in this group were generally from stable, intact households. Furthermore, physical factors in this group were not predictive of life stage or marital status 32 years later. Previous research shows that these men were, as a group, physically fit in middle age and physical symptoms were not associated with mental health at follow-up (Westermeyer, 1998).

**The Life Cycle Model vs. The Life Course**

Erikson’s life cycle model suggests that human development unfolds over a sequence of eight stages or tasks. However, life course theory suggests that human development is not so clearly ordered as Erikson’s life cycle stage theory would suggest (Cohler, 1982; McAdam, 2001; Neugarten, 1979). Whereas Eriksonian theory emphasizes a dynamic ego and factors internal to the individual in driving development over social context (Vaillant, 1993), life course theory suggests
that larger social and historical processes may have a powerful impact on how
development is understood and defined within cohorts and individual lives
(Cohler, Hostetler, & Boxer, 1998). For example, Elder (1974) has shown the
strong effects of the Great Depression on families and opportunities for jobs,
and Elder, Pavalko, and Hastings (1991) have shown the varying impact of World
War II on different cohorts of men.

Whereas a life course perspective emphasizes social forces external to the
individual, a life span perspective emphasizes factors internal to the individual,
including genetic and biological factors in addition to ego development and
choices made by the individual. Erikson’s life stages are powerfully associated
with overall mental health in the current research, and many mental illnesses
have a genetic or biologic component (Gottesman, 2001) that may disrupt devel-
opment. The severely mentally ill in particular may be strongly affected by
biologic factors, and they are less likely than others to achieve the developmental
tasks of intimacy and career, or live independently of parents or institutions
(Westermeyer, 1993; Westermeyer & Harrow, 1988).

The various factors emphasized by life span and life course theories are both
important. Systems theory suggests that internal strengths and vulnerabilities
interact with environmental assets and liabilities in complex ways to influence
adult development (Grinker & Westermeyer, 1985).

Patterns of Development

In support of Eriksonian theory, generative men appeared to have mastered
earlier developmental tasks. The generative men often retrospectively reported
experiencing family warmth in childhood and adolescence, and prospectively
reported close peer friendships and mentors as young adults. They then appeared
to forge independent identities apart from parents and mentors and achieved
intimacy, career success, and wider social involvements in community service
and care for the next generation in activities in which the men themselves became
parents and mentors by midlife.

Although the generative men achieved Erikson’s earlier developmental tasks,
the sequencing and timing of these achievements could not be determined in the
current research. Information for this sample was collected at only two points
in time separated by an average 32-year period, and consequently it is impos-
sible to determine if stages or tasks were achieved in the hypothesized sequence
or if a particular stage was unique to young or middle adulthood.

Unlike Piaget’s and Kohlberg’s models of development, Erikson (1963) main-
tained that adult life stages do not necessarily follow an invariant sequence
of development, and the tasks of each stage remain in play throughout lives.
Unlike Levinson’s life stage model, Eriksonian development is open-ended,
with stages not appearing at fixed ages (Vaillant & Milofsky, 1980). Furthermore,
a stage may be skipped in development or individuals may regress, and issues
pertaining to a stage could reappear or linger across the life cycle. Although theoretically the successful completion of tasks build on one another—the life tasks are renewed each day in each life—the struggles of childhood, adolescence, and young, middle, and older adulthood interact and overlap. Thus, Vaillant (1993) correctly notes that one task or stage is not necessarily superior to another.

Major Limitations of the Research

Three major limitations of this study should be noted. First, sampling restrictions limit the generalizability of the findings. A major shortcoming of the sample is an exclusive focus on men rather than women. Gilligan (1982) has questioned the applicability of the Erikson’s model to women, although other research has demonstrated that Erikson’s model applies to women as well as men (Vaillant, 1993; Vaillant & Vaillant, 1990).

In addition, many of these men were selected to train as personnel for the YMCA, and selection criteria for attending the college included their motivation and capacity to serve others. Therefore, it is not so surprising that most men achieved generativity in this study because altruism was a dominant concern for many of the men throughout their lives. In addition, most men were from intact, warm families, and a more representative sample of men may increase the predictive utility of warm family environments. Obviously, more research needs to be done to replicate these results in women and men from other cultures and historical cohorts.

Second, several investigators have maintained that life stages, especially intimacy, are difficult to assess (Franz et al., 1991; Vaillant, 1978). Although marital status is a highly reliable measure, it is a poor measure of intimacy. In general, measures of life stages are crude approximations of Erikson’s dynamic metaphors, and life tasks such as identity, intimacy, generativity, and ego integrity defy easy measurement. Although life stage assessments based on marriage and work outcome may be reliably measured, more valid assessments have yet to appear.

Third, associations among outcomes involve a tangle of tautological relationships. Obviously many outcomes were, in part, criteria for assessing adult life stages. Moreover, success in one domain may influence or be influenced by success in other domains. For example, marriage and parenthood may easily involve one in care for the next generation, or career success may bestow resources that assist generativity. The causal factors likely involve a myriad of internal (life span) and external (life course) factors in developmental interactions that are difficult to unravel.

Change and the Life Cycle

It is important to note that the effect sizes of predictors to subsequent outcome were moderate, and most variance of life stage development remains unexplained.
in this study. Although future research may more accurately assess relevant predictors and outcomes (and possibly increase effect sizes), individuals continue to change across the life cycle, and change often lowers predictive effect size. Inspections of individual lives indicate that, for many, there were difficulties and opportunities along the way. Whereas divorce, mental illness, job loss, and other occurrences could disrupt progress, friends, spouses, mentors, and therapists could facilitate progress through developmental stages.

Finally, Vaillant and Milofsky (1980) note that generativity seems to involve an affective capacity for involving oneself in others—rather than a cognitive understanding of the merits involved. In this regard, Erikson (1963) points out the importance of timing in this process and the “readiness” of the individual to take on the next task. Consequently, the story of these lives is not complete; change is a part of life, and living brings new development and renewed acts of intimacy and generativity.

Future follow-ups of the men may find regression or progression in individual lives. Many adjustments must be made with retirement, the death of family members and friends, and, finally, facing one’s own physical decline in illness and death. Following Erikson’s suggestion, the eighth life task of “ego integration” versus “despair” will more easily be negotiated if the men’s life script supports the feeling that something larger than the self—something that outlives the self—is given to future generations. If life satisfaction or an absence of depressive symptoms is an indication of ego integrity rather than despair, many of these men may be well along to achieving Erikson’s eighth stage.

REFERENCES


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