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Adolescent Competence and the Shaping of the Life Course¹

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The life course is shaped by the interaction of cultural and social structural features with physical and psychological attributes of the individual and by the commitments and purposive efforts of the individual. In modern society, rationality and functionality have replaced tradition as determinants of individual choices in the transition to adulthood. Adolescent competence should lead to thinking through career and marital choices and inhibiting tendencies to make unwise choices. Therefore, competent adolescents should have more stable careers and marriages, and, because they will more often be rewarded for their attributes than will less competent ones, they should experience less personality change over the adult years. These hypotheses are largely confirmed with data from a longitudinal cohort studied for more than 50 years.

Societies and their cultures provide rough scripts and casts of characters whose interactions tend to shape individual lives. Physical and psychological attributes that reflect the interaction of genes and environmental influences also play a role in the creation of the individual life course. At the same time, the life course is a creation of the person; above all, human life is purposive. The basic premise on which this research was carried out is that, in the preadult years, general goals, abilities, and values are shaped by constitutional givens and by socialization experience in a particular sociocultural matrix and that these factors constantly interact with and modify the opportunities or obstacles that are encountered in the course of adult development.

¹ This is an extension and expansion of a paper presented at the meetings of the American Sociological Association in New York City in August 1986. The research was supported in part by grant AG-4178 from the National Institute of Aging. The most recent follow-up of all the subjects was funded by the MacArthur Foundation. I am indebted to Martin Gilens for organizing my computer files and programming much of the analysis as well as for helpful suggestions. Urie Bronfenbrenner, Robert Fiorentino, Carol Huffine, Davida Weinberg, and anonymous reviewers have all helped to improve the presentation of my argument and the evidence.

What one takes as the central focus of attention in studying the life course will depend on disciplinary perspectives, personal interests, and potentially available data. Psychologists are likely to be especially interested in continuity of personality through some segment of the life course (e.g., Block 1971; Costa and McCrae 1980); psychiatrists more often focus on the typical problems presented at different age levels (e.g., Erikson 1950; Gould 1978); and sociologists stress cohort effects and transitions from one stage or role set to another or performance within the most salient life roles (e.g., Elder 1974; Hogan 1981; Marini 1984; Riley, Johnson, and Foner 1972). My preferred conception of the life course entails negotiation by a reflexive self of a set of potentially available roles that are interlinked and to which persons commit themselves to varying degrees at different periods of their lives. I am less interested in the sequence of major events in transition from adolescence to adulthood (i.e., completion of education, leaving the parental home, initial employment, marriage) than in the adolescent's apparent readiness to take responsibility for self and the timing and firmness of commitments in employment and marriage. Above all, my focus will be on the consequences of early attainment of competence for occupational and marital careers and for personality stability or change over the life course.

CHOICE AND THE ORGANIZATION OF THE LIFE COURSE

In modern society, the individual has a greater number of potentially available roles to choose among than ever before, but the choices are constrained by the institutional structures within which the person must fit. Several writers on the life course (e.g., Kohli 1986; Mayer 1986; and Meyer 1986) have noted that the educational system, the world of occupations, and the period of retirement provide a very substantial degree of structure and scheduling for the individual life course. Much formal preparation is now needed for entering most occupational roles, preparation that entails education and the conferring of credentials. For career attainment, one can no longer plan to start at the bottom and work to the top in an industry or business; people entering at the bottom have no place to go, for jobs much above the bottom require specialized knowledge and skills that are not provided to workers in lower-level jobs. This is especially true in the "information society" of today, but it was largely true in the late 1930s and the 1940s, when the research subjects discussed here were making the transition to adulthood.

Rational assessment of opportunities has to a large degree replaced tradition as the primary basis for choices to be made. Moreover, selection for professional or bureaucratic careers strongly favors those who show high potential and plan for the development of that potential early in

their lives. Persons with special talents may achieve success through different routes than persons going into most professional and bureaucratic organizations and careers. Such special talents, especially artistic and athletic talents, may lead to high monetary and social rewards, but even here a high degree of training is likely to be required, and success is far less predictable than in professional and bureaucratic careers.

Adolescence is certainly not the period in which most persons are especially rational in their choices. It tends to be a time of highly labile emotions and of experimenting with varied experiences and identities. Erikson (1950) extolled using adolescence as a period of moratorium and saw a danger in "premature identity foreclosure." Adolescence is still a time of exploration and even moratorium for many youths, but a long moratorium may now entail serious costs to those without ample resources. Only youths from affluent families can continue their education and other less focused explorations without great struggle. Higher education, and possessing a reasonably clear idea of who and what one is and wants to be, now gives not only a head start but an acceleration that makes it difficult for late bloomers without special talents to catch up. Some degree of early identity closure—knowing what kind of person one wishes to be and the intellectual and moral enclave in which one wishes to participate—need not be foreclosure; it is almost essential for effective preparation for adulthood effectiveness. Thus I am not arguing that rationality prevails at adolescence but rather that there are considerable variations among adolescents in this respect and that later success is increasingly dependent on education and on making wise choices.

Given the constraints imposed by institutional structures and historical circumstances, the setting of realistic goals for oneself and preparation for reaching those goals should have payoff value. I hypothesize that personal orientations that entail such goal setting and preparation in adolescence will strongly influence the direction that the life course will take from early adolescence on. Adolescent choices will influence the major social roles occupied later in life, the stability of role performance, and the individual's attainment over the life course. School, work, and retirement may be phases in almost every life course, but they tell us only a small part of the life story. Depending on abilities, interests, and opportunities, individuals opt for different levels and types of education and allocate differing priorities to preparation for various adult roles. There exist general expectations as to when it is most appropriate to marry (Neugarten, Moore, and Lowe 1965), but these are less clear now than they were a generation ago, and it is individuals who decide when and whom to marry. It is individuals who decide if and when to have children and how many, although this decision may not be entirely under individual control. These choices may be left to chance; many adolescents

drift through their high school and early adult years riding whatever current there is, but, with drifting, the chances of a propitious landfall are diminished. All may not be lost, but those who, instead of drifting, set out with a plan will have a head start.

My argument (or my central hypothesis), then, is that it is important in the transition to adulthood to make choices that are to some degree thought through. They do not all have to be thought through in adolescence, but the competent adolescent will at least *begin* to contemplate these questions.

WHAT COMPETENCE ENTAILS

As a first approximation, competence entails knowledge, abilities, and controls. It entails knowing something about one's intellectual abilities, social skills, and emotional responses to others. It entails knowing one's interests and developing them. It entails knowing about available options and thinking about how to maximize or expand those options. Competence obviously also entails ability to make accurate assessments of the aims and actions of others in order to interact responsibly with them in pursuit of one's objectives. Further, the person must have sufficient self-confidence to pursue his or her goals and desires.

The life course begins to be organized by patterns and habits of intellectual analysis, interpersonal relations, and values and attitudes that are developed in the childhood and early adolescent years. I hypothesize that, by age 18, many young people will have developed the capacity to make realistic choices or at least to inhibit tendencies to make unwise choices. Parents or other adults who can provide an orientation to potential options and who can raise thoughtful questions to help the adolescent identify important issues can assist enormously. High intelligence and reasonable self-confidence will also enhance chances of success.

In his *Seasons of a Man's Life*, Daniel Levinson (1978) has suggested that no one life organization can have stability for more than a portion of a decade, because a life plan that fits one period will leave some of the individual's needs unfulfilled, so that there must be periodic reassessments and transitions. I propose that, if individuals choose wisely, they are more likely to remain satisfied with the choices that they have made. If they have anticipated future developments and contingencies and have the necessary abilities to do what they want to do, careful choices should produce more success than casual choices or mere drifting.

Studies of educational attainment among both men and women attest to the great importance of the family's socioeconomic status (SES), the adolescent's measured intelligence, and parental and peer encouragement

of higher education (Sewell, Hauser, and Wolfe 1980). In turn, educational attainment, coupled with continuing influences of the family's social status and the person's intelligence, predicts later occupational attainment to a high degree (Featherman 1980).

One might, indeed must, therefore look to measures of intelligence in the childhood years and to the family's prior economic status as early indicators of a general orientation toward achievement (whether measured by occupational status or other criteria). Long before the adolescent-to-adult transition, these are indicators of who is likely to make that transition via the route of longer school attendance and delayed entry into the labor market and perhaps the marriage market. They appear to be indicators both of socialization influences that promote desirable choices and of a greater probability of being able to sustain those choices and to achieve desired goals. Conditions that diminish chances, such as discrimination and economic instability, will lessen the predictive power of early competence.

EFFECTIVE COPING VERSUS MALADAPTATION

Recently, Glen Elder and his associates have presented a series of papers dealing with the transmission over several generations of maladaptive tendencies (especially those derived from early temper tantrums and lack of self-control) and, most recently, with the consequences for the individual life course of explosive behaviors in childhood (see, e.g., Caspi, Elder, and Bem 1988). Their "explosive children" are drawn from the population studied in this article. These subjects tend to be a subtype of those persons who show low competence in adolescence. Caspi et al. make a good case for the effects of personality on the life course, a topic that one can approach by focusing either on what makes for effective coping that leads to positive rewards or on what makes for maladaptive, self-defeating patterns that lead to "vicious cycles of development" as Brewster Smith (1968) observed.

I can hardly overstress the critical importance of timing in the acquisition of competence. Maturity tends to bring increasing skills in assessing what one must do to achieve success and smooth relationships with others. As we get older, we are more inclined to think of consequences before acting. Therefore, the attributes that distinguish highly competent adolescents from their peers are less likely to differentiate them in the later years. However, those who had the attributes in adolescence will have better prepared themselves for adult roles and will have selected, and been selected for, opportunities that gave them a head start. Thus, we are dealing not only with the importance of personality but also with

the strategic importance of an early attainment of competence. This is the most important point in my argument: the payoff value of early competence in contemporary, developed societies.

The sources of successful achievement and smooth life transitions are to be sought both in the person's own attributes, as given at birth and developed through childhood and adolescent socialization, and in subsequent experience of reasonably stable social and economic contexts and the absence of discrimination or impairment. Socialization for competence, coupled with a fair degree of native intelligence and economic opportunity, should prepare individuals for making realistic choices and acting on them as they negotiate the transition from adolescence into adulthood.

INDIVIDUAL AGENCY AND COMPETENCE

In recent years many behavioral and social scientists have stressed the importance of "individuals as producers of their own development" (Lerner and Busch-Rossnagel 1981; Brandtstadter 1984; Wells and Stryker 1988) and the critical phase of interaction in the early adolescent years of biological, cognitive, and sociocultural influences on cognitive development and on life chances. Brandtstadter (1984), in an article on personal and social control over development, stresses that effective "self-planned behavior" in the pursuit of personal goals, or in the service of particular values, rests on a knowledge of formal and informal cultural prescriptions and restrictions, on the constitutive rules for particular types of relationships, and on personal regulation. Such regulation entails (1) expectations about age-related changes and developmental outcomes, (2) subjective evaluations of expected developmental and age-related events, and (3) beliefs and assumptions about the possibilities of action in the face of such events in particular contexts. Realistic expectations and accurate assessments and assumptions should enhance the possibility of favorable outcomes.

There has also been renewed interest in competence or self-efficacy (Bandura 1977) as an important element in the individual's coping with life stress. Competence was earlier viewed primarily as an outcome variable, especially as a more promising successor to "adjustment," though with the recognition that competent persons produced other favorable outcomes for themselves (Foote and Cottrell 1955).

I shall not try to review the voluminous literature on this concept, but I will note that there is much support for the notion that some individuals are more effective than others in making positive events happen in the course of their development. Here I wish to show that longitudinal data can be brought to bear to demonstrate the extent to which an attribute

that I have called “planful competence” can influence the life course over a period of 40 or more years beyond adolescence. Elsewhere I shall present what evidence I can marshal as to the origins of planful competence.

COMPETENCE AS HERE DEFINED AND MEASURED

It is, however, necessary to spell out more fully what I mean by “planful competence” and to show its relationship to other conceptualizations and measures of adolescent competence. My formulation is quite similar to Brewster Smith’s (1968) conceptualization of competence in studying Peace Corps volunteers. Smith (1968, pp. 282–83) demonstrated the importance of self-respect, feelings of efficacy, realistic goal setting, intelligence, and dependability for successful Peace Corps performance. More recently, Grotevant and Cooper (1988), in analyzing the role of family experience in the adolescent’s career exploration, have proposed the following “key aspects of individual competence that mediate the capacity of adolescents to engage in such exploration” (p. 244): self-esteem, ego control and ego resiliency, and intellectual ability. In this article, adolescent “planful competence” is crudely measured by three (complex) components of personality, labeled self-confidence versus victimization, intellectual investment, and dependability. The reliable assessment of these components requires a substantial amount of information about a person’s behavior in various situations, but I believe that the components as assessed are consonant with the conceptualizations just mentioned. A fuller description of the measures will be given shortly.

PREDICTED CONSEQUENCES OF ADOLESCENT COMPETENCE

High competence should tend to lead adolescents to make more realistic choices in education, occupation, and marriage. Such choices should more frequently satisfy individual needs over longer periods than would be true of the choices of persons lower in competence. In addition, these competent individuals will enjoy the advantage of being seen as desirable mates and employees and as potential leaders. If this is so, persons possessing these attributes should lead more stable lives, and the changes that they make in roles and relationships will more often derive from new opportunities becoming available or from the effect of external events beyond their control rather than from dissatisfaction or failure in a particular relationship or activity. Further, those who make well-thought-out choices early on will tend to show greater stability in their relationships and their other commitments throughout the life course. They should be less likely to divorce and less likely to shift careers, and

their networks of significant others should have greater continuity and persistence.

The stability of a marriage depends on the attitudes, temperaments, and ever-changing role relationships of two persons. It may seem unreasonable to expect that the adolescent personality orientations of either spouse will markedly affect the stability of the marriage except in the instance of psychopathology or deviance. We know, however, that very early marriages and marriages made with minimal acquaintance tend to be much more short-lived than those based on longer acquaintance between persons reasonably mature at the time of marriage. Moreover, from earlier analysis by Skolnick (1981), we know that self-confidence and a low level of hostile tendencies are associated with high marital satisfaction. One might anticipate that most planful, competent young men and women will not marry until they feel that they know what they are getting into and are ready to work out their relationships. Obviously, one partner may be much more planful than the other, and either one may change or turn out to have attributes that make a stable marriage unlikely. Nevertheless, adolescent competence should pay off for both men and women. Whether competence pays off more for one sex than for the other is a matter to be assessed. Dependability and self-confidence will not only influence the choice but should make the chooser a better candidate for a successful marriage. Mutual choice under such circumstances should predict a lasting marriage (or at least *longer*-lasting marriage in a period when there is much instability in marital ties).

If competent adolescents do indeed show greater stability in relationships and other commitments, I hypothesize that they should also show less change in personality from one period to another throughout the life course. They should experience more positive feedback by virtue of their educational and occupational attainment, tending to enhance the attributes they already possess. They should experience fewer sharp disappointments in their early adult years and fewer negative life events. Those low in adolescent competence will less often find satisfying job opportunities; I would expect them more often to shift jobs as well as spouses, and they should experience more pressures to change themselves over the early adult years.

To summarize, I hypothesize that, among adolescents who came to adulthood at around the time of World War II or since, those high in "planful competence" as contrasted with those low in competence should

1. obtain more education;
2. have lower rates of divorce and multiple marriages;
3. have more orderly careers (men only);
4. achieve higher occupational status (men only);
5. less often experience life crises such as unemployment, alien-

ation of children, and other types of crises in which the individual's own behavior and dissatisfaction may play a role;

6. show less personality change over the life course (here, a period of 36–43 years beyond high school graduation).

Figure 1 presents a summary of hypothesized antecedents of adolescent planful competence and life patterns or experiences hypothesized as being affected by competence and as affecting personality stability over the life course. It collapses 50 years of data collection into three major periods: childhood and early adolescence, the senior high school years, and ages 53–62—the age of our study members at the time of most recent intensive follow-up. Apart from showing the effects of family SES, early IQ, and one measure of parenting on competence, this article will not deal with the antecedents of planful competence but rather with its consequences for the life course. Men's occupational attainment tends to be related to remaining in the same line of work and advancing within that line, but insofar as occupational experience affects personality stability, the orderliness of a man's career should be more important than his status level. Therefore, measures of both status and stability are of interest. In the case of women, almost none of whom had planned careers, I hypothesized that occupational involvement and attainment would be less related to competence and, if anything, would tend to produce personality change over the adult years because very few women had expected to become labor-force participants.

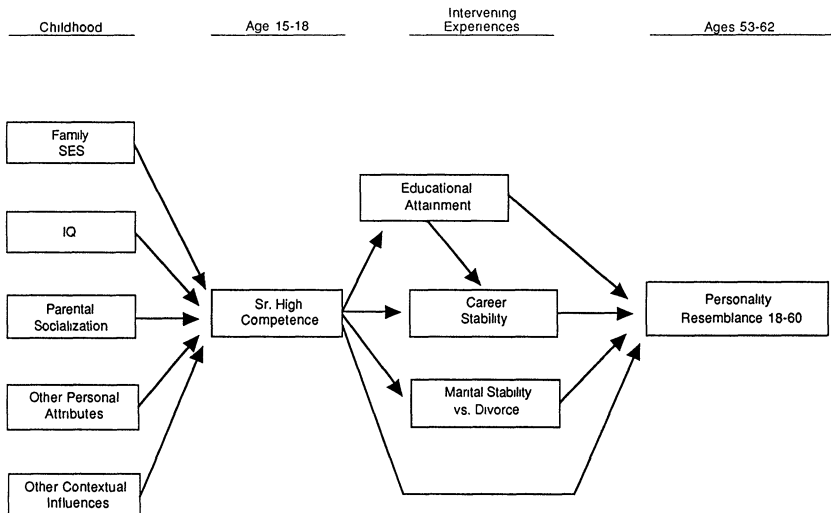


FIG. 1.—Hypotheses regarding antecedents and consequences of adolescent competence.

Adult personality growth and change are responsive to the conditions of occupational and family life that prevail for a given cohort, but in periods of high social stability I believe that selection processes based on early competence will play a major role in shaping the life course. Early choices are likely to produce lifelong consequences. This then is the problem I address in mobilizing data from the archives of longitudinal studies at Berkeley.

THE BERKELEY LONGITUDINAL STUDIES²

Between 1928 and 1931, three longitudinal studies were begun at the Institute of Child Welfare (now the Institute of Human Development) at the University of California, Berkeley. All three have endured long beyond the childhood years. The Guidance Study was initiated by Jean Macfarlane in 1928 with 248 boys and girls selected from every third birth in Berkeley from January 1, 1928, to June 30, 1929. Half the cases were designated to be the experimental subjects, their parents to receive guidance in child care, and the other half were to serve as controls. Because only the guidance group was studied intensively during childhood and adolescence, analyses of adolescent personality orientations are limited to members of that group. Guidance Study members were contacted again at ages 30, 40, and 53 for intensive assessments.

The Berkeley Growth Study was a much more circumscribed study of mental, motor, and physical development in infancy and early childhood, entailing frequent observation and testing in the early months of life with a subsample of 60 hospital-born children of white native-born parents, children who were born in the same time period as that covered by the Guidance Study. Studied through adolescence, they were reassessed at ages 37 and 53. Finally, the study originally designated as the Adolescent Growth Study (now the Oakland Growth Study) was initiated in 1931 to examine the social, intellectual, and physiological development of a cross section of boys and girls from preadolescence through the high school years. The sample comprises slightly over 200 boys and girls ranging in age from 10 to 12 at the time of their graduation from one of five Oakland elementary schools. These children constituted the large majority of graduates who subsequently attended a particular academically demanding junior high school that served as a center of research operations. They approximate a random sample of the white students except for elimination of students regarded as academically deficient (primarily males from lower-working-class homes) and those whose parents did not speak En-

² The studies are more fully described in Eichorn (1981).

glish. Oakland Growth Study subjects were interviewed intensively at ages 37, 48, and 62.

The original study groups comprised slightly over 500 boys and girls, of whom approximately 390 remained in the studies through the high school years. Data were secured from 281 study members and from the majority of their spouses in a recent follow-up that was implemented when the study members ranged in age from 53 to 62 years. A substantial segment of those lost to the study moved away during the school years, and at least 50 study members had died prior to the last follow-up; I estimate that the last follow-up obtained current data on roughly four-fifths of the sample under study at high school graduation and still surviving to the present time. It may be noted that there are two age cohorts differing in age by seven or eight years. For the analyses to be reported here, the three samples have been merged. While data collection in the early years often entailed different techniques and instruments (though with some overlap), all three have been subject to exactly the same follow-up procedures and measures in their later middle years.

The Guidance Study relied very heavily on interviews, while the Oakland Growth Study and the Berkeley Growth Study relied much more heavily on observations, inventories, and tests. Merging the studies therefore posed a serious challenge to somehow securing comparable classification. Thirty years ago, my colleagues and I sought comparability in classifications of personality and social functioning by the use of Block's (1961) California Q-sort.³ The California Q-sort consists of 100 descriptive terms written on small cards, relating to personality and behavior (e.g., "has a wide range of interests," "is calm and relaxed in manner," "has hostility toward others"). These cards are sorted into nine piles according to whether they are highly descriptive (9) or not at all descriptive (1) of the person. Judges (experienced clinical psychologists and social workers) read through materials relating to a given period in the study member's life and then sorted the items of the Q-sort according to their salience in describing the person at this period. The resulting, roughly normal, distribution provides an ideographic characterization of the individual, that is, a description of what are the most salient and least salient attributes of a given person, regardless of how that person's characteristics compare with those of other persons. Because of the large number of items entailed, however, this unique characterization correlates very substantially with a nomographic or normative classification (comparing

³ The original set of 100 items (Block 1961) was rephrased somewhat for application to the adolescent subjects in their junior high and senior high school years to give as close equivalency as possible to attributes phrased for the adult years.

relative levels on the same attributes) based on unforced ratings.⁴ No judge ever sorted more than a single life period for any subject, nor did any judge involved in the sorting have a knowledge of the study members in periods prior to or subsequent to that for which they were sorting. Thus there is complete independence in the scores for each period. To enhance reliability, at least two sorts were done for each person at each period.

Personality Q-sorts were performed for the junior and senior high school years for all study members seen in the first adult follow-up, except control subjects in the Guidance Study, and for the adult years for all those interviewed at each period, most recently at age 53–54 for the younger cohort and age 61–62 for the older. Where an individual's data for any period were seriously incomplete, the data set lacks Q-sorts. The lack is, unfortunately, most serious in the adolescent years; we lack Q-sorts from the high school years not only for the control subjects but also for those not seen at the first adult follow-up. Funding for adolescent sorting had been provided only at that initial follow-up, and the cost of additional adolescent sorts was beyond the budgetary limits of subsequent grants. In general, unavailability of early Q-sorts does not have a biasing effect but rather constricts the number of subjects. For most analyses that relate adolescent personality measures to later outcomes, 60–70 cases are available.

The Q-sort enables us not only to assess personality at each time period but also to examine the amount of personality change for any individual from one period to another, subject to the constraint that the mean reliability of the Q-sort profile for an individual, representing the composited ratings of two or three judges for each period, ranges from .69 to .76. When allowance is made for attenuation due to unreliability, correlations between time periods that exceed .50 for any person suggest relatively little change, while those below .30 suggest substantial change.

A new technique of component analysis, developed by Millsap and Meredith (1988), was applied to scores on the Q-sort items from all periods to yield a set of six components of personality that can then be scored for each period.⁵ These components, more stable than individual items, provide my primary measure of personality or personal orientations. The index of planful competence in the analyses to be reported is the sum

⁴ A subsample of 30 cases was coded on a 1–9-point scale in response to concerns of reviewers of an earlier grant proposal. Mean values of almost all items differed insignificantly from those derived from the forced normal distribution prescribed for the Q-Sort.

⁵ Mean scores on the components differ considerably over the life course. For details, see Haan, Millsap, and Hartke (1986).

of the three components: *dependable*, *intellectually invested*, and *self-confident versus victimized*.

When I compared the correlations of junior high competence and those of senior high competence with later life outcomes, the senior high assessments were almost always more highly predictive. Nevertheless, a compositing of the two assessments yields a gain in reliability that appears to offset the relatively modest changes from junior to senior high (interperiod correlations of .75 for males and .65 for females). Therefore I have consistently used as a measure of adolescent competence the mean of the scores for the junior and senior high school years. In a few instances, other measures from only the senior high years will be employed when age changes bring marked changes in behavior (e.g., interest in the opposite sex becomes much more salient in senior high).

Further description of the components of competence is called for. "Dependable," the most crucial element, loads most heavily on the positive end on the following items: "is a genuinely dependable and responsible person," "is productive, gets things done," and "tends toward over-control of needs and impulses." Dependable persons received low scores, on the other hand, on "tends to be rebellious," "is self-defeating in regard to his/her own goals," and "characteristically pushes and tries to stretch limits; sees what he/she can get away with." Thus we have the connotation of responsible, dependable behavior but also of self-control, regard for the rules of everyday life, and freedom from self-defeating tendencies (suggesting a degree of ego resilience).

"Intellectually invested" incorporates both intellectual ability and the effective use of one's intelligence. On the positive end it incorporates "genuinely values intellectual and cognitive matters," "has a high degree of intellectual capacity," and "is introspective; self-observing; concerned with self as an object." Attributes loading negatively are "is uncomfortable with uncertainty and complexities," "values self and others in terms set by the group, like 'popularity,' presumed adolescent norms, social pressures" (i.e., conventional, conforming), and "disorganized and maladaptive when under stress or trauma; has a small reserve of integration," another attribute that connotes low ego resilience.

Finally, "self-confident versus victimized" connotes both a measure of self-esteem and the ability to interact in a positive way with others. The strongest positive contributions come from "feels satisfied with self," "is calm, relaxed in manner," and "is cheerful." On the negative end, we have "self-pitying; feels cheated and victimized by life," "behaves as if generally fearful in manner and approach," and (again) "is self-defeating." A number of other attributes connoting positive or negative tendencies in behavior have lower-level loadings.

Thus the concept of planful competence not only entails the notions of

dependability, productivity, and effective use of one's intelligence but also self-esteem and the ability to interact positively with others. Because of the small number of cases involved, the scores of the three components (which have approximately equal SDs) are simply added together to obtain the index of planful competence for use in multiple regression analyses. In any instance where a single component correlates more strongly than the index does, the single component will be reported.

Data are available on the number of jobs held by men and women and the orderliness of careers (based on complete occupational histories derived from each follow-up), and the most recent interviews contained several indicators of career satisfaction and career stability. The interviewer asked, for example: "Thinking back over your whole work life, when would you say you felt quite certain that you were doing the *kind* of work that you wanted to do, or have you never felt that way?" Early career stabilization in a satisfying occupation gives us one index of stability. Never finding a congenial kind of work gives us the other extreme. Orderliness of career and the variable we named "when sure" are the measures of stability used for the men in the study.

The problem of assessing stability in the life course is much more difficult for women than for men. The great majority of those women who came to adolescence just before or just after World War II were, from an early age, oriented to getting married after they had finished their education. As several women commented in reviewing their lives with us, they were "programmed for marriage." This was as true for those who went to college as for those whose education did not extend beyond high school. Most of them worked for a year or two, rarely as much as five years, and then left the labor force for 10 or 20 years, if not for life. Most did ultimately return to the labor force, and they did so for a number of reasons, among them the termination of marriage. Therefore there is little reason to expect that early planfulness had much to do with orderly careers or later occupational attainment except for the handful of women who consistently pursued careers of their own. Most women's early adult lives were contingent on the careers of their husbands.

Personality change from adolescence to the early adult years, as well as over the adult years, is assessed by comparison of individual Q-sort profiles, based on 72 items with consistently high reliabilities, available for adolescence and each follow-up. That is, for each individual, the adolescent score on each item is correlated with the score for the item as of later maturity. The correlation coefficient then becomes a resemblance score, or, if subtracted from one, a change score. When we assess the effects of early competence, we can at the same time ask, To what degree have various intervening experiences—specifically education, occupa-

tional careers, divorce—influenced personality change over the adult years?

A subsample of 60 cases selected randomly from the group was interviewed two years after the last general follow-up to inquire, retrospectively, how they viewed their lives. Of particular interest are their answers to questions about their self-knowledge in adolescence and their awareness of the options available to them. The major variables used in the analyses to be reported are shown in table 1, with means and SDs. Other variables will be described when introduced. Matrices of intercorrelations of all the major variables utilized are given in the Appendix in tables A1 and A2.

RESULTS

Family social status and intellectual ability are among the postulated determinants of adolescent competence and have been demonstrated to influence many life outcomes. Both variables are significantly related to the overall index of competence and to the components “intellectually invested” and “dependable” but not to “self-confident.” (For examination of the intercorrelations of the components and of their relationships to parental SES and IQ, see App. tables A1 and A2.) In a multiple regression, IQ at age 18 and parental SES at birth account for roughly one-fifth of the variance in adolescent competence for females and three-tenths for males.⁶

The components of competence are moderately intercorrelated, the strongest relationship being that between intellectual investment and dependability—.60 for males, .41 for females—with self-confidence and intellectual investment also significantly related for both sexes. The components are sufficiently strongly related for males to suggest that, in combination, they may provide a useful index for the multifaceted concept of competence, but the much lower intercorrelations for females suggest that a composite index of competence based on these components is likely to be less satisfactory for the women. As we shall see, single

⁶ Many aspects of early parenting appear to influence competence: parental harmony, stress on achievement, consistent rule enforcement, and maternal attentiveness are all significantly correlated to competence, though differentially for boys and girls. Because of the small sample, however, it is not feasible to include more than two other variables with IQ in multiple regressions. When the best two parenting measures are included with IQ at age 12, the explained variance in adolescent competence (adjusted R^2) is raised to 37% for females and 50% for males. Sample size is the major rationale for seeking a single powerful index that can serve as a proxy for family background, native abilities, and socialization experiences in childhood in studying life outcomes.

TABLE 1

MAJOR VARIABLES UTILIZED, WITH MEANS AND STANDARD DEVIATIONS

Variable	Mean	SD
Parental SES (combined Hollingshead [weighted] scores for mother's education and father's education and occupation at subject's birth):*		
Male	53.7	24.6
Female	55.7	22.9
Adolescent IQ (Wechsler-Bellevue form 1 for Guidance Study and Berkeley Growth Study and 1937 Stanford-Binet for Oakland Growth Study):		
Male	122.5	12.9
Female	118.2	10.9
Depression deprivation (percentage unemployed or with 30% income loss [Elder 1974]):		
Male	49.2	50.0
Female	54.8	50.0
Adolescent planful competence (see text for description and for details on component relationships; range, -60 to +141):		
Male	39.5	54.0
Female	36.7	41.4
Educational attainment (Hollingshead scale: 1 = graduate professional training; 7 = less than seven years):*		
Male	2.26	1.1
Female	3.04	.95
Occupational status (Hollingshead [unweighted] categories as of current or last job if retired within five years):*		
Male	2.48	1.50
Female	3.31	1.10
Orderly career (1-6 scoring: 1 = all jobs in same field, with increasing responsibility; 6 = frequent shifting, with little continuity):*		
Male	2.11	1.3
Female	2.99	2.0
"When sure" in right job (career stage or age at which men say they felt in right line of work: 1 = while in college or by age 20; 2 = from time began work or in twenties; 3 = in thirties; 4 = after age 40; 5 = never have; men only, asked at ages 53-62)...	30.08	1.21
Percentage of years in labor force (percentage of years in labor force between completion of education and age at 1982 follow-up; women only).....	44.4	29.0
Personality profile resemblance, adolescence to later maturity (Pearson r between scores on 72 items common to adolescent and age 53-62 personality Q-sorts):		
Male	.294	.286
Female	.283	.252
Marital satisfaction (mean of self-rating and judges' rating, both made at ages 53-62, weighted equally for 1-10 scale):		
Male	7.2	1.7
Female	6.8	1.9
Competence in later maturity (same components as adolescent planful competence, assessed at 53-62):		
Male	70.5	48.8
Female	59.9	45.8

* Sign reversed for correlations.

TABLE 2

ORDINARY LEAST SQUARES REGRESSION OF ULTIMATE EDUCATIONAL ATTAINMENT
ON VARIABLES ASSESSED BEFORE HIGH SCHOOL GRADUATION

INDEPENDENT VARIABLES	EDUCATIONAL ATTAINMENT				
	Males			Females	
	Zero Order	β		Zero Order	β
		Model A	Model B		
Parental SES	.44**	.15	.11	.62**	.36**
IQ at age 17-18	.56**	.25*	.23*	.52**	.29**
Planful competence	.68**	.54**	. . .	.40**	. . .
Self-confident.....	.33**	. . .	. . .	.09	. . .
Intellectually invested.....	.63**	. . .	.31*	.42**	.02
Dependable.....	.61**	. . .	.34**	.47**	.30**
Adjusted R^2		.55	.56		.45
N		70	70		74

NOTE.—Regression uses Hollingshead educational scale with signs reversed. An ellipsis indicates the variable was not entered.

* $P < .05$.

** $P < .01$.

components, especially dependability, will frequently be found to exert more influence than the composite in multiple regression models for female study members.

Educational Attainment

In general, family SES and IQ have been found to be the strongest predictors of educational attainment for both sexes, with the former variable usually somewhat stronger for females. Table 2 shows the zero-order correlation and regression coefficients of these background variables with subsequent educational attainment and those of the components of planful competence as well as the index of competence itself.⁷ All three components of the competence index correlate significantly with educational attainment for males, while self-confidence is unrelated for females.

For males, the composite index and two components of competence correlate more substantially with educational attainment than does either

⁷ The Hollingshead educational scale has been used in all of the analyses of educational attainment here presented. It is, of course, very highly correlated with years of school completed. The mean value of years of school completed by members of the sample studied is 15.9 for males ($SD = 2.5$) and 14.3 for females ($SD = 2.2$).

parental SES or IQ. Since the composite index yields the highest correlation, it alone was used together with IQ and parental SES (model A) to predict educational attainment. Because the contribution of self-confidence is modest, a second model including the separate components—"intellectually invested" and "dependable"—together with IQ and SES (model B) was tried, and it explains a shade more variance than does the use of the competence index alone.

For females, at the level of zero-order correlations, parental SES and IQ are more strongly related to educational attainment than either the index of competence or any of its components. Dependability and intellectual investment nevertheless show substantial correlations, and both are superior to the composite index, so the two components were entered into the multiple regression model in place of the index of competence. Intellectual investment no longer shows an effect when IQ is entered into the predictive model, but dependability remains a highly significant contributor to explained variance. For both sexes, adolescent dependability appears to be an extremely important ingredient in high educational attainment. Self-confidence is less important than the other two components of competence, but for males especially, high adolescent competence adds substantially to the amount of variance explained by parental SES and IQ.

Occupational Attainment

The strongest predictors of occupational attainment in the standard models based on large samples are family SES, IQ, and educational attainment (Sewell et al. 1980). Table 3 presents the zero-order correlations and the standardized β coefficients showing the influence of these variables and of planful competence on ultimate occupational attainment when all four independent variables are entered in a multiple regression. For males, each of the components of competence is substantially related to occupational attainment, and the largest contribution to explained variance in occupational attainment comes through adolescent competence. The variance explained by the four-variable model of ultimate occupational attainment for men (.54) compares with the .468 reported by Sewell et al. (1980) using a 17-variable model. Many of the 17 variables, such as parents' income, family intactness, parental, peer, and teacher encouragement, and occupational status aspirations, are precisely the diet by which competence is nurtured. The measure of competence in the high school years, then, encapsulates the result of many positive early experiences that will ultimately be manifested in high occupational attainment.

For women, however, our index of adolescent planful competence is

TABLE 3

ORDINARY LEAST SQUARES REGRESSION OF OCCUPATIONAL STATUS IN LATER MATURITY (AGE 53–62) ON ANTECEDENT MEASURES OF MALES AND RECENTLY EMPLOYED FEMALES

INDEPENDENT VARIABLES	OCCUPATIONAL STATUS				
	Males		Females		
	Zero Order	β	Zero Order	β	
				Model A	Model B
Parental SES	.20	.05	.43**	.08	. . .
IQ at age 18	.51**	.06	.50**	.17	.40**
Educational attainment	.57**	.23*	.58	.21	.32**
Adolescent competence.....	.71**	.60**	.20	. . .	. . .
Self-confidence	.46**	. . .	.01	. . .	. . .
Intellectual involvement	.59**	. . .	.35**	.20	. . .
Dependability	.66**	. . .	.05	. . .	. . .
Percentage of years in labor force			.17	. . .	.22*
Adjusted R^2		.54		.23	.45
<i>N</i>		64		45	45

NOTE.—An ellipsis indicates the variable was not entered.

* $P < .05$.

** $P < .01$.

inconsequential as a predictor of ultimate occupational attainment. Of the components, only intellectual investment shows a significant zero-order correlation with occupational status, and that only modestly. Intelligence and family status predict educational attainment, as we have seen above, and, both at the zero-order level and in multiple regression models, educational attainment is by far the strongest predictor of occupational attainment for this cohort of women. Indeed, the four variables used to predict men's occupational attainment (substituting intellectual investment for the competence index) explain no more variance in women's occupational attainment than that explained by education alone. The small amount of variance explained for women is largely a consequence of the cohort we are dealing with—women born in the 1920s. Only about half have had more than 10 years of steady labor-force participation. Women who were in the labor market for short periods would be unlikely to benefit greatly in occupational status from high intelligence or high educational attainment. Moreover, in this cohort, high adolescent competence tended to be associated with marriage to a man of relatively high educational and occupational status and to rearing a family rather than pursuing a career (except for that small group of women who obtained graduate education). Women's competence scores correlated with the number of children they bore at .41, and the more

children a woman had, the less her labor-force participation ($r = -.25$, $P < .01$).

If the model explaining a woman's occupational attainment includes a measure of her amount of participation in the labor force (in this case the percentage of years in the labor force after completion of education), the amount of variance explained is more than doubled, but the components of competence do not add to the contributions of education and IQ. As in the case of educational attainment, adolescent intellectual investment is a much less powerful predictor for females than adolescent IQ when both are employed to predict ultimate occupational status.

Men's Career Stability and Satisfaction

I consider now the relationship between the index of planful competence and (1) the orderliness of men's careers and (2) recent self-reports as to when study participants felt sure they were doing what they really wanted in their occupational careers. The orderliness of a man's career is strongly related to his occupational attainment, since orderliness is defined partly in terms of increasing job status within a sequence of functionally related jobs (Wilensky 1961). A man's feeling sure that he is in the right job is not so strongly related to occupational attainment as is orderliness of career but is perhaps more clearly an indication of having made the right choice for himself. Both orderliness and the feeling of being in the right job relatively early in one's career are significantly related to adolescent competence (correlations of .39 and .45, respectively). Both educational and occupational attainment also correlate substantially with the orderliness of a man's career, and one might anticipate that all of the contribution of adolescent competence comes through these two variables. This is not the case. Inclusion of adolescent competence in a multiple regression with educational and occupational attainment to predict orderliness raises the amount of variance explained (adjusted R^2) from .23 to .28.

Neither educational nor occupational attainment is significantly related to a man's reporting that he felt sure, relatively early in his career, that he was in the right job. The strongest correlates are having been assessed as dependable and intellectually invested in adolescence. Of men who had scored in the top third on the index of planful competence, two-fifths said that they had felt certain they were in the right line of work either while they were still in school or right from the beginning of their careers, and only one man (of 22) said he had never found the right line of work. Of those in the bottom third, on the other hand, only 16% felt that they had been in the right line of work early on, and nearly two-fifths reported that they had *never* found the right line of work for themselves. Men

high in planful competence experienced only one-third as many shifts in occupation or career goals as those low in adolescent competence, and those low in competence occupied significantly more jobs over the course of their careers.

Men's satisfaction with their jobs and especially with their careers is somewhat related to adolescent competence but only because of a much stronger relationship to adolescent self-confidence: $r = .36$ for the Michigan facet-free measure of job satisfaction (Quinn and Staines 1979). As in many other studies of job satisfaction, no appreciable relationship between occupational level and job satisfaction is found in this sample (see Staw, Bell, and Clausen 1986).

Marital Careers

Each of the components of adolescent competence was associated with earlier, rather than later, age at marriage for men, though the relationship was significant only in the case of self-confidence. For women, as expected, those who had been highly dependable in adolescence married significantly later than their peers, while the other two components were essentially unrelated to age at marriage. Women's educational attainment influenced their age at marriage far more than did men's.

Competent adolescents were only slightly less likely to divorce than were their less competent peers. However, higher scores on the single component adolescent dependability predicted less likelihood of divorce ($r = .34$, $P < .01$) for women. Also significantly related to divorce for both sexes were interest in the opposite sex while in senior high school and, for women only, age at marriage. When these two variables are entered along with "dependable" into a logistic regression, "dependable" is the only variable to retain a significant relationship to divorce ($P < .02$, for women only).

For both sexes, significant relationships were found between competence and number of marriages. When the men and women of the sample were ranked on adolescent planful competence, more than 90% of those in the top third were married only once, as against only a little over half of those in the bottom third. No one in the top third was married as many as three times, but among both men and women in the lower third, roughly one in seven had been married three or more times.

For men, both adolescent intellectual involvement and dependability were significant predictors of number of marriages, the former having a stronger correlation ($.33$, $P < .01$) than the total competence index. Neither adolescent IQ nor educational attainment was significantly correlated with number of marriages, but occupational status in later maturity was ($r = .37$, $P < .002$). In a multiple regression, combined with intellec-

tual involvement and dependability, occupational status alone shows a significant effect on number of marriages. It is not clear whether multiple marriages impede career progress or whether successful men are less likely to become divorced more than once. There is not a significant (or even appreciable) relationship between a man's being divorced once and his occupational status.

Women who scored high on adolescent planful competence also had significantly fewer marriages, but again dependability showed a stronger relationship ($r = .31$, $P < .01$) than did the index of competence. When adolescent dependability is entered into a multiple regression with interest in the opposite sex as of senior high school and age at first marriage, it is dependability that yields the strongest standardized β (significant at $P < .02$), and together the three variables account for roughly one-fourth of the variance in number of marriages for women (model significant at $.0001$). The prediction for men is much more modest.

Marital satisfaction shows a relationship to adolescent competence for women ($r = .35$, $P < .01$) but not for men. While all three components of adolescent competence are positively related to women's marital satisfaction, adolescent self-confidence shows the strongest relationship ($r = .40$), as strong as any combination of antecedents used in the multiple regression.

Planful Competence, Role Stability, and Lifetime Personality Change

The issue of personality constancy or change has long been debated, and the number of published discussions has multiplied greatly during the past decade or two (Mischel 1968; Block 1977; Costa and McCrae 1980; Nesselroade 1988). Certain facets of personality, especially cognitive skills, have high stability, while others seem much more variable over situations and over time. Most discussions of constancy or change deal with population or average continuity, but clearly some people change more than others. To my knowledge, few studies have addressed this question. Perhaps the most sophisticated one that did address it was Block's (1972) report based on data from a 1958–59 follow-up of the Guidance Study and the Oakland Growth Study members included in this article, demonstrating that subtypes of adolescent personality varied greatly in degree of personality change from adolescence to the early thirties.

The hypothesis to be tested here is that men and women who scored high on adolescent planful competence show substantially less change in personality from their adolescent years to later periods in the life course than do those low in competence. Stability of roles and relationships should provide a social framework for the maintenance of personal orien-

tations. This does not imply that under conditions of high stability in one's social matrix no personality change takes place. Rather personality change should be less for persons whose commitments remain reasonably constant than for those who go through a succession of changes in their most salient roles and relationships. In addition, attributes that lead to positive rewards should be reinforced, so that there should be greater continuity on this score as well.

Overall, personality profiles in later maturity show little resemblance to those of adolescence. The median correlation between individuals' adolescent personality profiles on the 72 most reliable Q-sort items and their profiles at the latest follow-up is .30 for men and .28 for women.

Do those men and women who had been highly competent in adolescence show less change than their less competent peers? Yes, and to a remarkable degree. The zero-order correlations between the index of planful competence in adolescence and the resemblance of personality profiles over the ensuing 40–45 years are .72 for men and .46 for women (both significant at $P < .001$). Men who ranked in the top third on adolescent competence had a median personality resemblance score (correlation between senior high personality scores and scores at ages 53–62) of .56 while those in the bottom third had a median score of only .16. For women the comparable medians were .40 and .18, respectively.

Table 4 shows the contribution of the total index of competence and each of the components to personality resemblance at the early adult

TABLE 4
REGRESSIONS OF PERSONALITY (SELF) RESEMBLANCE, SENIOR HIGH TO EARLY ADULTHOOD, AND SENIOR HIGH TO LATER MATURITY, ON ADOLESCENT COMPETENCE AND ITS COMPONENTS

INDEPENDENT VARIABLES	PERSONALITY RESEMBLANCE IN ADULTHOOD			
	Males		Females	
	Senior High– Early Adult	Senior High– Later Maturity	Senior High– Early Adult	Senior High– Later Maturity
Adolescent competence				
index (r)	.52**	.72**	.52**	.46**
Components in multiple regression (β):				
Self-confident	.03	.35**	.01	.20
Intellectually invested	.28*	.30*	.30**	.11
Dependable	.32**	.22	.35**	.34**
Adjusted R^2	.27	.49	.30	.19
N	91	68	96	75

* $P < .05$.

** $P < .01$.

follow-up (ages 30 and 37) and the most recent follow-up (ages 53–62). It will be noted that for males there is greater resemblance with adolescent personality in later maturity than there was when the men were in their thirties, while the reverse is true for females. The relatively modest decrease for women and the increase in resemblance with adolescent personality for men may seem surprising, since considerable personality change took place during the 23–25 years that intervened between these follow-ups. Intermediate change is itself predictable to a surprising extent, but further discussion takes us beyond the scope of this paper. Suffice it to note that personalities continue to change through the adult years, and different phenotypic manifestations appear to reflect life circumstances (see Peskin and Livson 1981). It is for this reason that the term resemblance (at a given period) seems preferable to stability or continuity.

Entered into a multiple regression equation, each of the three components is to some degree related to personality resemblance for both sexes. Early self-confidence becomes a more potent predictor of personality resemblance to later maturity than to early maturity, though it is not quite significant for women. Dependability is the most significant predictor to early adulthood for both sexes, but for men it drops off somewhat in its contribution to resemblance in later maturity. Having been intellectually invested in adolescence shows a similar drop-off for women.

I hypothesized that planful competence should affect personality stability because adolescent competence insures a more stable network of roles and relationships over the life course. This receives only modest support, however. Table 5 shows the zero-order correlations and the standardized β 's relating personality resemblance to planful competence and three mediating variables from figure 1: educational attainment, divorce, and occupational attachment (women) or orderliness of career (men).⁸

The zero-order correlation between adolescent competence and personality resemblance over the life course is so high in the case of men that no other variable comes close to having a significant effect when competence is part of the regression equation. For women, whose adolescent competence is slightly less strongly related to personality resemblance, work attachment contributes significantly to resemblance while divorce appears to diminish resemblance, although the latter relationship is not quite significant statistically.⁹ For men, divorce has no apparent effect.

⁸ Occupational attachment is an index that combines orderliness of career with duration and steadiness of labor-force participation. For a full description see Clausen and Gilens (1990).

⁹ Divorce does significantly diminish personality continuity between senior high school and the early adult years ($\beta = -.24$, $P < .02$), and this was the period during which most divorces occurred.

TABLE 5

ORDINARY LEAST SQUARES REGRESSIONS OF PERSONALITY (SELF) RESEMBLANCE FROM ADOLESCENCE TO LATER MATURITY ON ADOLESCENT PLANFUL COMPETENCE AND INTERVENING EXPERIENCES

INDEPENDENT VARIABLES	PERSONALITY (SELF) RESEMBLANCE OVER ADULT YEARS			
	Males		Females	
	Zero Order	β	Zero Order	β
Adolescent competence.....	.72**	.67**	.46**	.53**
Educational attainment.....	.51**	.07	.15	.15
Orderly occupational career ^a	.40**	.11	.11	.22*
Divorced.....	.01	.02	-.30**	-.17
Adjusted R^2		.57		.29
N		62		69

^a Values for women represent work attachment.

* $P < .05$.

** $P < .01$.

Thus, apart from adolescent competence, no pathway to personality resemblance for men, and only one for women, is statistically significant.

Although work attachment and educational attainment appear to enhance personality continuity (persistent high resemblance) of women while divorce diminishes it, substituting different intervening variables modifies the regression coefficients enough to give one pause. For example, the number of children a woman raised makes no contribution to explained variance in personality continuity but reduces somewhat the contribution of both divorce and work attachment. It would appear that the normative shifts in women's roles and consciousness over the intervening years have been so great that early competence has served them less in preserving continuity of personality. The small size of the sample available for the assessment of competence and of personality change (69 women) does not permit more definitive delineation of the pathways to personality continuity or change beyond the dominant effects of adolescent competence.

There does not appear to be a significant relationship between intergenerational occupational mobility and personality change. Adolescents from the working class were less likely than middle-class adolescents to score high on planful competence, but if they did score high, they were more likely to be upwardly mobile. Those upwardly mobile men show roughly the same degree of personality stability over the life course as do competent adolescents from the middle class. The small size of the sample precludes analysis of class differences in the nature of such changes as

may occur. While planful competence in adolescence accounts for half of the variance in the men's personalities in later maturity, there are obviously many sources of influence for change in addition to the three intervening variables here examined—for example, the attributes of marital partners, military service and other adventitious events,¹⁰ changes in social contexts, and purposive shifts in interests and objectives even for persons who experience relatively stable lives.

Life Satisfaction

Only a crude index of life satisfaction was available at the time of the most recent follow-up, one derived from a "life chart," on which study members graphed the level of their life satisfaction from early childhood to the present. This was mailed to study members before they were interviewed, and roughly two-thirds mailed back completed charts. It was anticipated that interview respondents would complete the chart when the interviews took place, but time pressures precluded this. This inability to complete the chart limits the feasibility of multiple regressions using other variables that were available for only limited segments of the respondents most recently seen, such as women's occupational attainment or marital satisfaction, for example. Nevertheless, the relationships found are of considerable interest.

Women who had scored high on adolescent competence plotted their life satisfaction higher over the entire life course, on the average. Stronger than the relationship with the index of competence at ages 54–62, however, was that with the component "self-confident versus victimized" in adolescence ($r = .39$, $P < .01$). Strongest of all was the relationship between marital satisfaction (reported on a different occasion at ages 54–62) and general life satisfaction ($r = .53$, $P < .001$). Neither IQ nor educational attainment was significantly related to reported life satisfaction, again paralleling women's marital satisfaction. Women's marital satisfaction and life satisfaction were thus both strongly influenced by self-confidence and a positive orientation to meeting life's challenges in the adolescent years.

For men, on the other hand, neither the index of adolescent competence nor the component "adolescent self-confidence" predicted current life satisfaction as plotted on the life chart. Marital satisfaction was significantly associated with general satisfaction but to a lesser degree than

¹⁰ The timing of such events is itself likely to be influenced by adolescent competence. For example, men who entered military service early in World War II were described by Elder (1986) in terms that strongly connote lower adolescent competence than were late entrants.

in the case of women. However, men who had been high in adolescent competence plotted their life satisfaction at a higher level through their twenties, thirties, and forties, but not their fifties and sixties. This would seem to reflect the greater success of competent men in the earlier decades of their lives, but as retirement neared for many (and a fifth of the older group had already retired) career success did not necessarily make for greater satisfaction.

Competence and Psychological Health

At each period, the index of competence is highly correlated with a measure of psychological health developed by Livson and Peskin (1967), which consists of a composite of four clinical psychologists' ideal Q-sort profile for a "psychologically healthy person." The correlations between the index of competence and the measure of psychological health range from .74 and .79 for adolescent males and females, respectively, to .83 and .93 for males and females as of later maturity. Given the reliability of the Q-sort items, these correlations suggest that, in later years, competence and psychological health are almost synonymous. It is therefore important to note that adolescent psychological health is not nearly so powerful a predictor of educational or occupational attainment for men, number of marriages for both sexes, or marital satisfaction for women as is adolescent competence. However, adolescent psychological health vies closely with adolescent competence as a predictor of personality continuity over time. It seems obvious that the two concepts should be closely related, for poor psychological health connotes lack of self-confidence and an inability to utilize one's abilities effectively. In a multiple regression analysis with all three components, self-confidence accounts for all of the association in adolescence between competence and psychological health for males and almost all for females. But it is the combination of dependability and intellectual investment that accounts for the better prediction of men's occupational attainment and career stability and of women's marital stability.

Competence across the Life Span

A detailed analysis of the life experiences and events that led to enhancement or decline in competence over the adult years is beyond the scope of this paper. Most men and women who had scored low on adolescent competence increased their scores on all three components in the adult years, as would be expected, when they took on the roles of worker, spouse, and parent. Divorce had slight negative connotations for the later life competence ratings of both men and women, and the greater the

number of a woman's children, the more negative was the effect of child rearing on her competence in later maturity. On the other hand, strong occupational involvement enhanced both self-confidence and intellectual investment of women (Clausen and Gilens 1990).

One would not expect as high a correlation between adolescent competence and competence at maturity as was found with personality stability, for as competence generally rose with maturity, the SD of each of the components was approximately halved. Nevertheless, there was substantial continuity, especially for males. For constant samples (those seen at each follow-up), the male autocorrelations were .62 from adolescence to ages 30 or 37, .60 to ages 41 or 48, and .53 to ages 54 or 61. For women, however, the comparable correlations were consistently lower: .32 to ages 30 or 37, .29 to 41 or 48, and .32 to 54 or 61. Women's life experiences were far less under their control than were men's, and early competence led to life patterns less likely to enhance later competence.

Table 6 reveals that all but one of the components as assessed in adolescence are positively and significantly related to the total index in later maturity. The adolescent index of competence significantly predicts all later components except dependability for females (not shown in table 6). In a multiple regression, however, most of the contribution from adolescent components to competence of males in later maturity comes from "dependable." This one component is, in fact, more strongly related to later life competence than is the adolescent index; it strongly predicts self-confidence and intellectual investment as well as dependability in later maturity. It also predicts the measure of psychological health

TABLE 6
CORRELATIONS BETWEEN ADOLESCENT COMPETENCE INDEX AND INDEX IN LATER MATURITY, AND REGRESSION OF COMPETENCE IN LATER MATURITY ON COMPONENTS OF ADOLESCENT COMPETENCE

ADOLESCENT COMPETENCE MEASURE	COMPETENCE IN LATER MATURITY			
	Males		Females	
	Zero Order	β	Zero Order	β
Competence index	.53**	. . .	.32**	. . .
Components:				
Self-confident	.30**	.05	.20	.14
Intellectually invested	.39**	.06	.25*	.16
Dependable	.57**	.51**	.22*	.16
Adjusted R^2		.30		.07
N		70		79

* $P < .05$.
** $P < .01$.

in later maturity better than does psychological health in adolescence. For women, none of the components achieves significance in a multiple regression predicting competence in later maturity, though the coefficient for the composite index is significant at $P < .004$.

The meaning of my index of competence undoubtedly changes as persons become mature. Its early power reflected attributes that in adolescence connoted readiness to take on or prepare effectively for adult roles. Perhaps the most striking shift in meaning is manifest in the markedly diminished correlation between intellectual investment and dependability for both sexes (not shown in tables). In later maturity it is self-confidence that relates most strongly to dependability *and* to being intellectually invested, for both sexes, while the latter two variables are negligibly related. This helps to explain why, of the three components, self-confidence in later maturity is most strongly associated with propitious outcomes, such as men's job satisfaction and feelings about their careers, and women's marital and life satisfaction. Nevertheless, the three components of the index still appear to connote competent performance and superior interpersonal relationships in later maturity. Indeed, as noted above, in the later years the measures of competence and of psychological health appear to reflect the same concept.

Retrospective Assessments of Early Orientations

Randomly selected subsamples of 32 men and 28 women were interviewed to review their lives in 1985. Their retrospective life accounts were compared by level of planful competence assessed as of the high school years, dividing men and women into three groups of roughly 10 each, high, medium, and low in planful competence. There were few significant differences between the very small groups of men who had been high or low in planful competence in their high school years, but those that emerged are highly interesting. Those men high in early competence were more likely to report, 40–45 years later, that they had known their strengths and weaknesses while adolescent ($P < .05$), and they were much more likely to report that they had been aware of the options available to them ($P < .01$). They did not claim earlier maturity, but they less often reported severe crises in their early and middle adult years. Those who had been planfully competent were somewhat more likely to attribute the shaping of their lives to the good parenting they received, while those low in competence more often felt that their parents had failed them, though neither finding quite attains significance in these very small comparison groups. Early competence is totally unrelated to men's views of whether they have remained pretty much the same or have changed over the life course; overwhelmingly, both highly compe-

tent and less competent men see themselves as essentially unchanged through the adult years, despite the great difference in actual degree of change.

There were no significant differences in recollections of adolescence among the three groups of women classified on the basis of adolescent competence, though those who had been most competent were somewhat more likely to have thought about the qualities they would like in a marriage partner. Unlike the men, however, all but one of the women who had been highly competent in adolescence reported that they had been unaware of the options available to them. Again and again I heard variations on the theme, "I was programmed for marriage."

DISCUSSION

Before attempting to sum up the ways in which early competence tends to shape the life course, I must issue a caveat. Competence not only tends to lead to favorable outcomes and to a smoother life course, but it tends to promote continued participation in a research program that has endured for more than 50 years. No other variable predicts attrition of the sample as strongly as does adolescent competence. Among men in the top third of the ranking on adolescent competence, 93% participated in the most recent follow-up, while only 68% of those in the bottom third participated. For women, the spread was slightly less, ranging from 71% to 89%. This means that the current sample was self-selected for superior performance and the findings overstate the degree of stability in personality and careers that would be found if there had been no differentials in attrition. That said, it is equally true that the strong relationships found between early competence and later life performance might be even stronger if those lowest in adolescent competence had been retained in the sample. Fortunately, there remain in the sample a substantial number of persons who were seen in adolescence as lacking in the elements of what I have called planful competence, so we can trace the consequences of both high and low competence. The consequences of early attainment of competence are obviously related to the norms of the society and to the circumstances that each cohort faces, but I believe that the benefits of early competence will continue to accrue for adolescents making the transition to adulthood today.

Planful competence in adolescence may be considered both a measure of maturity that provides a "head start" and a measure of attributes associated with effective functioning throughout the adolescent and adult years. It is evident that planful, competent adolescents had fewer disruptions of marriage and career over the middle years than did less planful, less competent ones. They less often reported difficulties along the way

in the decade-by-decade review of their lives. The data do not support Levinson's assertion that the preadult era is "only a prelude to adult living" and that "its result is an immature and still vulnerable individual making his entry into the adult world" (Levinson 1978, p. 21). Many adolescents may have been immature and vulnerable, but many others were planful, competent, and reasonably self-assured as they looked ahead to their adult years. Those who were most mature and competent tended to assess the options available to them; they made more considered choices and they were better prepared to work through the problems of adaptation that marriage and careers require. Their competence led to superior opportunities and superior achievements. Men who were in adolescence less planful, mature, and competent had much less orderly lives. Many of these men attained mature competence in the early adult years, but others never found a job that brought lasting satisfaction or a wife with whom they could live in harmony. It was in this group that recurrent life crises most often occurred, crises due to career disruption, to marital conflict and marital dissolution, and to feelings of alienation and depression.

For the women in our sample, the concept and index of social competence was much less powerful than that for the men. Although each of the components of competence tended to be positively related to favorable outcomes, sometimes one or sometimes a pair proved to be more highly predictive than the index itself. Adolescent dependability clearly had the strongest effect on educational attainment and marital stability, but intellectual investment was the only element of the competence index that even marginally enhanced occupational achievement (with parental SES and IQ held constant) for women who entered the labor force. Adolescent self-confidence, which was strongly linked with physical attractiveness, predicted both marital satisfaction and life satisfaction more strongly than any other component. Yet when it came to the prediction of number of children borne and the prediction of personality resemblance over the adult years, the index of adolescent competence surpassed each of the separate components in the amount of variance explained. Moreover, in the later years, there is stronger coherence to the concept of competence, in that both intellectual investment and dependability are much more strongly related to self-confidence than in adolescence, despite their lesser relationship to each other.

Given the cultural norms of the 1930s and early 1940s, when our study members moved into adolescence, the differences between competence for men and for women were perhaps inevitable. When a woman's primary adult roles were marital and parental, highly competent women tended to devote themselves to those roles. Recall that one of the strongest correlates of women's adolescent competence was the number of children

they bore. Yet the rearing of children does not in itself appear to have enhanced competence as assessed here; to the contrary, in their late fifties and early sixties the number of their children proves to have no association with the index of competence. Historical shifts in values and in expected roles would lead one to expect that, for the daughters of our study members, adolescent competence would be more strongly associated with occupational attainment than with number of children. Initial analyses of data from a sample of offspring studied at ages 14–18 and again at 28–32 find this to be the case, despite a much less adequate assessment of adolescent competence. To the extent that women now have many more options and can prepare to take advantage of them, planful competence should have more payoff value than it did for their mothers.

The success of early competence in predicting long-term outcomes, including personality continuity, derives both from the greater effectiveness of competent persons and from the greater ability of competent adolescents to make choices that would serve them well in their later years. Competent men and women were better able to marshal, draw on, and maintain social support and to achieve their objectives. They received positive feedback, confirming the persons that they were. Beyond adolescence neither scheduled transitions nor adventitious life events seem to have major effects on the most salient features of their personalities, especially in the case of males. As Haan, Hartke, and Millap (1985) have reported, “males generally made their own luck.”

A fairly common reaction to my concept and to the evidence of stability in the lives of competent persons is to suggest that they must be dull, relatively rigid persons. The opposite is true. They are not seen as histrionic, but among the positively scored items that make up the components of competence are “arouses liking,” “interesting,” “values independence,” “thinks unconventionally.” And, at the other extreme, consider what they are *not*: fearful, distrustful, uncomfortable with uncertainty, self-defeating. Within the group that scores high on adolescent competence there is, of course, variation. Not all sail smoothly through life. And, conversely, some men and women who achieved social and emotional maturity later than their peers have been highly successful and have had enormously satisfying lives. Much remains to be done in delineating subtypes. A few of the highly competent do indeed seem rigid, as do many more of the least competent. But the competent are far more often people one would like to know.

Several sociologists have reacted to my initial presentation of these ideas by suggesting that this is primarily a psychological theory. I do not so view it. It should not be necessary to explain that humans are organisms, thinking persons, sharers of a cultural heritage that defines desired

goals, and participants in a series of negotiated roles that are part of a larger structure. That structure operates according to rules. Persons who know how to use the rules to achieve their objectives are favored, whether we are talking about academic performance, the selection of job candidates, the promotion of managers, or the utilization of health services. One's personal attributes may be valued or devalued by others. Talent and intelligence obviously come into play in negotiating life roles, and in most realms they are recognized and frequently tip the balance in selection processes.

The effects of occupational disruptions as a result of social change and economic depression, of illness and of a variety of other misfortunes, as well as the effects of movements for women's liberation and greater civil rights, can obviously diminish the predictability and stability of future lives. Chance encounters also shape our lives, but as Bandura (1982) has noted, values and personal standards mediate the effects of such encounters, as do the social milieus in which people operate. But some events and circumstances may be overwhelming. Some of the highly competent will fall by the wayside. Moreover, some persons with great abilities and talents may not manifest those talents from the start. They may make their opportunities at a later date. I do not mean to suggest that competence insures success or happiness. Indeed, there is no evidence that at the threshold of retirement those who were highly competent adolescents are happier than those who were not. They are not superior in personal warmth, but neither are they less warm. They *are* better off, and they appear to have somewhat more positive relationships with their children. On the whole, they seem better satisfied with their lives, even if the men do not score themselves higher on the life chart. They express less dissatisfaction and see themselves more positively.

Much more work is needed on sharpening the concept of planful competence and developing more adequate means of measuring it. The power of the index here utilized rests on my having had many kinds of data, secured by different methods in different situations and over many occasions. One cannot hope to have such rich data except for relatively small samples, but a combination of interviews of adolescents and their parents, inventories, and testing should make possible reliable and valid measures at far less cost than was entailed in the Berkeley studies. In addition, more thought needs to be given to the nature of competence at various age levels. The measure presented here turns out to be almost synonymous with psychological health in the later years. Featherman, Smith, and Petersen (1990) have proposed a concept of "adaptive competence" in old age that entails both rational problem solving and "reflective planning" to deal with the ill-structured dilemmas of later life. We need to delineate more precisely the facets of competence and, in particu-

lar, their sources, not merely in childhood and adolescence but in middle and old age. We need to assess the extent to which the effects of role loss in the later years may be offset by what Gove, Ortega, and Style (1989) have called the maturational perspective on aging, entailing an enhanced sense of social ease and a more thoroughly integrated self-concept in the healthy elderly.

Competence in the senior high school years is the product of the interaction of many influences. Genetic givens and the circumstances of biological development set potentials and limitations. The personalities of parents and other early caretakers, along with patterns of child rearing, strongly influence the development of the child's own personality—the ability to control impulses, to mobilize resources, and to relate to others. Preliminary analysis of the antecedents of adolescent competence finds substantial correlations with high parental demand for independence and achievement in the preadolescent years. Firm and consistent discipline and strong parental attention and support at all antecedent periods also contribute to the prediction of adolescent planful competence, even when family SES and the child's IQ are controlled for. Thus early socialization contributes greatly toward producing adolescent orientations that will permit the individual to make wise choices and to pursue them successfully not only in the transition to adulthood but for much of the life course.

APPENDIX

TABLE A1

CORRELATION MATRIX, COMPETENCE, ITS COMPONENTS, AND PRINCIPAL LIFE COURSE MEASURES FOR MALE SUBJECTS
WITH ADOLESCENT PERSONALITY DATA

Variables	1	2	3	3a	3b	3c	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Parental SES ^a		28**	21*	06	27**	23*	31**	18	15	01	07	05	01	-17	06	09	05	03	-27	08
2. IQ at age 18			56**	16	65**	48**	60**	46**	07	-07	-18	-12	-12	28*	18	29**	34**	40**	-17	29*
3. Adolescent competence.....				70*	85**	86**	69**	73**	39**	-45**	-22	-08	-25*	27*	06	52**	46**	72**	06	53**
a. Self-confident.					42**	40**	33**	46**	36**	-29*	-31*	08	-08	22	08	26*	35**	59**	21	30*
b. Intellectually invested.....						60**	68**	60**	22	-32*	-16	-14	-26*	25*	02	47**	36**	60**	11	39**
c. Dependable							63**	71**	38**	-47**	-09	-09	-24*	19	06	49**	41**	58**	08	57**
4. Educational attainment ^a								63**	19	-29**	-15	-12	-21	23	05	39**	36**	50**	13	48**
5. Occupational status (1982) ^a ..									42**	-34**	-13	-17	-37**	22	12	39**	53**	56**	02	57**
6. Orderly career ^b										-48**	-12	-06	-13	09	11	33**	45**	41**	22	32**
7. When sure of occupation											03	-11	01	-20	-10	-33**	-21	-32*	-24	-25
8. Age at first marriage												-23	-17	-36**	-33*	07	-11	-12	-03	-13
9. Divorced.....													75**	03	14	00	-09	01	29	-35**
10. Number of marriages.....															12	15	-06	-18	-16	35**
11. Number of children.....																25*	07	14	10	25*
12. Marital satisfaction																	-11	01	02	16
13. Personality resemblance from high school to thirties (1958) ..																				24
14. Personality resemblance from thirties to later maturity (1982)																		33	70**	09
15. Personality resemblance from high school to later ma- turity (1982).....																			39**	15
16. Life satisfaction (1982)																			12	43**
17. Competence, later maturity (1982).....																				09
$\bar{X}$	53.7	122.5	39.5	3.0	-24.4	100.4	2.26	2.31	2.11	3.20	24.6	.29	1.32	2.99	7.2	.33	.44	.30	6.57	71.1
SD	24.6	12.9	54.0	35.1	46.8	50.8	1.1	1.3	1.3	1.2	4.1	.46	.65	1.6	1.7	.27	.27	.29	1.9	48.9
N	90	85	92	92	92	92	70	68	66	61	62	75	71	70	62	91	68	68	37	70

^a Values are from Hollingshead education and occupation scales with signs reversed.

^b Sign is reversed.

* $P < .05$.

** $P < .01$.

TABLE A2

**CORRELATION MATRIX, COMPETENCE, ITS COMPONENTS, AND PRINCIPAL LIFE COURSE MEASURES FOR FEMALE SUBJECTS
WITH ADOLESCENT PERSONALITY DATA**

Variables	1	2	3	3a	3b	3c	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Parental SES		36**	36**	05	43**	26**	52**	37**	10	-30**	08	-10	-18	30**	33**	23**	04	01	33**	18
2. IQ at age 18.....			41**	02	58**	25*	50**	40**	-06	-20	00	-01	-09	19	06	19	13	-15	03	16
3. Adolescent competence.....				61**	80**	74**	40**	20	08	-04	11	-17	-24**	40**	36**	52**	19	46**	30**	32**
a. Self-confident					27**	13	-09	03	03	-12	-05	05	-03	25*	40**	12	04	27*	39**	20
b. Intellectually invested						41**	42**	34**	06	00	00	-06	-15	34**	15	47**	24*	30**	20	25*
c. Dependable.....							47**	04	08	-03	26*	-34**	-31**	24*	19	49**	11	41**	04	22*
4. Educational attainment ^a								41**	15	-01	-41**	-30**	-32**	05	08	37**	14	15	13	13
5. Occupational status (1982) ^a ..									26	16	-02	01	01	06	31	07	19	03	42*	07
6. Orderly career										13	19	-30**	-09	-01	18	10	05	11	-07	17
7. Percent of years in labor force.....											01	01	11	-36**	-03	-01	02	14	-26	03
8. Age at first marriage												-31**	-33**	-20	07	15	-02	11	18	19
9. Divorced													52**	-01	-09	-36**	-24*	-30**	05	-18
10. Number of marriages														20	-05	-23*	-24*	-16	-16	-38**
11. Number of children															11	32**	-06	16	20	-04
12. Marital satisfaction																02	11	14	54**	42**
13. Personality resemblance from high school to thirties (1958)																	28**	59**	07	18
14. Personality resemblance from thirties to later maturity (1982)																		12	-20	36*
15. Personality resemblance from high school to later ma- turity (1982)																			15	23
16. Life satisfaction (1982).....																				34*
17. Competence, later maturity (1982)																				
$\bar{X}$	55.7	118.2	36.7	6.4	-17.9	48.2	3.04	3.31	2.99	.44	21.5	.24	1.38	2.75	6.8	33	.44	.28	6.0	60.6
SD	22.9	10.7	41.4	17.2	20.4	19.9	.95	1.1	1.99	.29	2.6	.43	.95	1.5	1.9	.25	.23	.25	2.1	47.4
N	101	94	102	102	102	102	81	52	80	76	88	87	85	85	61	97	79	76	48	80

^a Values are from Hollingshead education and occupation scales with signs reversed.

* $P < .05$.

** $P < .01$.

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