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GENERATIVITY IN ADULT LIVES: SOCIAL STRUCTURAL CONTOURS AND QUALITY OF LIFE CONSEQUENCES

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What are the contours and the consequences of generativity in adults' lives in the United States? Our inquiry originates with the larger question of how society structures adults' health and well-being. Framed by the social structure and personality perspective (House, 1981; Ryff, 1987), our study investigates the effects of age and educational stratification on generativity to understand how this aspect of adult life is shaped and

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touched by society. We hypothesize that generativity is shaped by social stratification processes embodied in educational attainment and aging. We also propose that having and acting on generative feelings influences the quality with which adults are able to lead their lives. Conceived of as a sociopersonal resource, generative feelings and behavior partly explain how social stratification affects adults' well-being as they age.

THE FACES OF SOCIETY AND SELF

Education and Age: Coordinates of Social Structure

According to Erikson (1950), generativity preoccupies midlife adults' hearts and minds. As the interest in guiding and molding the younger generation of individuals to become custodians of society (Kotre, 1984; McAdams & de St. Aubin, 1992), generativity is partly an ontological imperative. The reply to the generative invitation in middle adulthood depends on whether adults have established their identity and secured intimacy as young adults. Social structure, like age-graded processes,[1] shapes life by its constraints and opportunities. For example, as an accomplishment of late adolescence and young adulthood for many people, educational attainment is a launching pad for adult life (Karabel & Halsey, 1977). Education directly determines occupations and incomes (Sewell & Hauser, 1975, 1980) and indirectly affects numerous monetary sequelae (e.g., residence). Together, education and age are coordinates of social structure that, in concert, affect the quality of adults' lives, including their health and well-being.

How age and education intersect to influence quality of life has been examined from different theoretical perspectives, most of which have targeted physical health outcomes. The *divergence hypothesis* contends that social structural disparities in physical health increase as adults age. For example, Ross and Wu (1996) observed cross-sectionally and longitudinally that disparities in physical health and physical functioning between adults with different educational backgrounds diverge—and the divergence accelerates—with age. Divergence thus portrays social inequalities as worsening throughout life. The disadvantages of certain status characteristics and the advantages accrued from early opportunity and accomplishment are compounded with age. Similarly, the thesis of cumulative advantage (cf. Allison, Long, & Krauze, 1982) asserts that the fruits of education accumulate gradually with each added year of life. Social structural disparities in physical health represent an accelerating improvement for

[1]Development as purely ontogeny has been appended by life-span theorists (see Baltes, 1987; Dannefer, 1984, 1987; Featherman & Lerner, 1985), who cite the multiple determination of life through historical, social, as well as ontological, forces.

adults with more education as they age, whereas the health of older adults with less education gradually diminishes as they age. The theme of cumulative adversity is also evident in the double jeopardy thesis (Dowd & Bengtson, 1978) and in related studies of minority aging (Ferraro, 1987; Ferraro & Farmer, 1996), which examined the compounding of race and age-related discrimination as minorities become older adults.[2]

In contrast with the divergence hypothesis, the *convergence hypothesis* suggests that social structural differences in physical health and wellness diminish with age. The hypothesized convergence of educational disparities in physical wellness after middle adulthood could originate from structural lag (Riley, Kahn, & Foner, 1994) and the challenges of older adulthood (Dowd & Bengtson, 1978). The increase in the healthy life span of adults has not been accompanied, according to Riley and colleagues, by changes in social institutions that use the energy and talents of older adults. Without the opportunities to maintain and cultivate valued outlets, older adults are unable to engage in activities that are socially and personally rewarding.[3] Older adulthood might also consist of events and challenges that neutralize prior socioeconomic advantages. Aging creates, in effect, a level playing field. Even adults with cumulative advantages probably experience personal and physical losses that chip away at their physical health. Even if prior disadvantages are not neutralized with age, research now suggests that many adults successfully manage and adapt to life's vicissitudes. Theories posit and mounting evidence suggests that adults successfully age by amplifying assets and compensating for losses (Baltes & Baltes, 1990), as well as by choosing to spend time with people on the basis of the emotional closeness of the relationship (Carstensen, 1992). In short, a host of forces—institutional, biological, and psychological—could operate in concert to minimize the differences in physical health among older adults from various socioeconomic backgrounds.[4]

Studies show that convergence occurs during older adulthood (i.e., roughly after the ages of 60 to 65). Before converging in older adulthood, however, educational disparities in physical health actually diverge throughout younger and middle adulthood (House et al., 1990; House et al., 1994; cf. Maddox & Clark, 1992; cf. Taubman & Rosen, 1982). Social inequalities in health appear to mushroom during young and middle adulthood, becoming stagnant if not neutralized during older adulthood. The reduction of physical health inequalities is probably the result of processes

[2]See Smith and Waitzman (1994), who investigate the triple jeopardy of marital status, poverty status, and gender on the risk of mortality.

[3]For additional explanations (e.g., social policies) see Ferraro and Farmer (1996) and Ross and Wu (1995).

[4]It is plausible that structural lag is a jeopardizing condition that might promote educational disparities in health during older adulthood because it adds to and compounds pre-existing adversities.

leading up to (i.e., mortality), as well as defining (e.g., structural lag), older adulthood. The most impoverished and unhealthy adults are less likely to remain part of the population of older adults because they tend to die sooner than adults with better socioeconomic profiles (see e.g., Smith & Waitzman, 1994). Mortality starkly illustrates the gravity of social inequalities throughout the adult life span.

Generally missing from these prior literatures is discussion of the intervening processes that link age and education with health and well-being. That is, what are the mechanisms through which the social structural coordinates of age and education influence quality of life? As an aspect of the aging self, we see generativity as a possible route through which structural factors beget well-being. Toward illuminating the role of generativity in adults' lives, we investigate whether age and education shape generativity and whether, in turn, generative acts and feelings contribute to a sense of well-being. Elaborated next is our formulation of how generativity fits into and bridges the gap between social stratification and the quality of adult life.

Generativity as Nexus: Linking Society and Self

The question of the consequences of generativity (i.e., how it affects mental health and well-being) looms large, though it has been largely overlooked (cf. de St. Aubin & McAdams, 1995; MacDermid, De Haan, & Heilbrun, 1996). Reflecting its developmental profile (Erikson, 1950), research has focused on either the structure and meaning (Kotre, 1984; McAdams & de St. Aubin, 1992) or age trajectories of generativity (Ryff & Heincke, 1983; Ryff & Migdal, 1984; Peterson & Klohnen, 1995; Peterson & Stewart, 1993). This work suggests that generativity is a multifaceted construct that may be manifest in distinct ways. The issue of the personal use of generativity, however, receives little attention. Do generative adults benefit from feeling and acting generatively? We believe so because generativity exhibits individuals' longing to feel socially instrumental—needed by others and capable of creating positive results for others (see, e.g., Adler, 1979; Bakan, 1966; McAdams, 1996; Stewart, Franz, & Layton, 1988). By conception, generativity is the desire for and act of benefiting others. The personal ramifications of generativity are therefore often overlooked, remaining embryonic parts of theoretic developmental stages. Successful resolution of the generativity imperative paves the way for resolving the integrity task of older adulthood. Thus, seen as vital both socially (i.e., intergenerationally) and personally (i.e., developmentally), generativity should, we assert, explain variation in adults' health and well-being.

Invoking a social structural perspective, we propose that the question of generativity's consequences must be accompanied by consideration of

the forces that contour the expression and experience of generativity. As agents of generativity, adults and their behavior are shaped by context. Societal opportunities and constraints are structural factors that motivate or deter generative beliefs and action (McAdams & de St. Aubin, 1992). Reflecting accomplishment and expanding opportunity, educational attainment in particular might motivate generativity by instilling social concern and engendering the desire for reciprocity. Alternatively, lack of education and its associated privations and inequalities might create various forms of alienation and diminish personal agency (Mirowsky & Ross, 1989). Education can therefore shape generative feelings and behavior by contouring social interest and feelings of agency about generative action. Education-linked occupational and earnings disparities (Sewell & Hauser, 1975, 1980) also affect the distribution of personal resources (e.g., skills) that can be instrumental for guiding and assisting the next generation. Taking these observations together, we hypothesize that the amount of generativity—behaviors, commitments, and self-conceptions—will be greater among adults who have more, compared with fewer, years of education.

Turning to consequences, we further propose that generativity illuminates social structural disparities in adults' well-being. For us, generativity is a theoretical hybrid between the interpretive lens through which the self is viewed and the awareness of one's personal resources. With regard to the former, social–psychological theory delineates numerous avenues through which the self is conceived (e.g., social comparison and reflected appraisal; see House, 1981; Rosenberg, 1979). The ways of construing oneself explicate how forces of social stratification and inequality can undermine self-conception (see, e.g., Gecas & Schwalbe, 1983; Gecas & Seff, 1990; Rosenberg & Pearlin, 1978), thereby frustrating the allegedly universal motive to protect and maintain favorable self-imagery. Following these formulations, we see generativity as a lens of self-evaluation, drawing potentially on social comparisons ("What am I able to do for my children or community compared to others?") and reflected appraisals ("Am I seen by others as a person to whom others would come for advice?").

Awareness of personal resources is another route by which social structure factors, through generativity, influence life quality. Although everyone at some time experiences serious stressors and life events, the resources with which to deal with the vagaries of life are not distributed randomly. Higher socioeconomic status means that individuals have better personal (e.g., health care) and social (e.g., social support networks) resources to offset stress and life events (see House, Landis, & Umberson, 1988; Kessler, House, Anspach, & Williams, 1995; Ross & Wu, 1995, 1996; Williams, 1990). Our claim is that the self-perception that one has such resources is part of both the experience of generativity (e.g., "I am able to

do for others") and the mechanism through which it enhances, or its absence undermines, well-being. Unlike traditional resources, generativity is a personal resource given to society and the next generation, not necessarily used to extinguish the fires of one's own stress and life events (cf. Midlarsky, 1991). As a resource for others and as a way of viewing oneself favorably, generativity may explain some of the educational disparity in quality of life.

PSYCHOLOGICAL AND SOCIAL WELL-BEING: BAROMETERS OF SELF AND SOCIETY

Well-being is an under-used class of outcomes for monitoring the quality of adults' lives. Most studies of social stratification employ physical functioning, physical health, or risk of mortality as dependent measures, ignoring more positive features of physical and mental health (cf. Marmot, Ryff, Bumpass, Shipley, & Marks, 1997). In the subjective well-being literature, numerous studies document educational and age differences in well-being (Diener, 1984; Herzog, Rodgers, & Woodworth, 1982). Few studies, however, explore the theoretical intersection of education and age. Theoretical conceptions of well-being as anything more than life satisfaction or personal happiness are also scarce. Research even shows that almost everyone feels relatively happy (Diener & Diener, 1996), suggesting that many extant measures of well-being do not adequately capture or reach into the deeply divisive and powerful social conditions in society. However, considerable theory, organized along disciplinary lines, provides blueprints regarding the criteria of life and its qualities.

Sociological theory, for example, is replete with examples of the uncertain and laborious fit of individuals and society. The quality of our ties to one another and society affects us personally and likewise affects the machinations of society. Social wellness originates in the classic themes of anomie (Durkheim, 1951; Mirowsky & Ross, 1989; Seeman, 1959, 1983) and alienation (Israel, 1971; McLellan, 1977). The issue of solidarity is carried forward from classic sociology to queries about the unity and sympathies of individuals with society. Drawing on these theoretical roots, we explored multiple operational dimensions of social well-being (see Keyes, 1995, 1996a for more detail).

Each dimension of social wellness represents challenges that people face as social beings. People must try to cultivate a genuine sense of belonging in a world where they do not live their entire lives basking in the unconditional love of family or friends (social integration). Adults struggle to feel like and be valuable contributors to a world that does not value them equally or value them merely for being human (social

contribution). People also work toward making sense of what is a complex world (social coherence). Another challenge is to see some growth and evolution in a world that does not automatically change or improve (social actualization). Lastly, adults grapple with accepting other people, most of whom are strangers (social acceptance). Favorable resolution of these social challenges represents positive social functioning.

Psychological theory is also saturated with criteria of individual health and wellness. The continuity of themes in psychological well-being center around recognizing and striving to realize talents and potential (Waterman, 1993). The eudamonic quest is personified by self actualization (Maslow, 1968), full functioning (Rogers, 1961), individuation (Jung, 1933; Von Franz, 1964), and maturity (Allport, 1961), as well as stages of adult development (Erikson, 1959) and fulfillment of developmental tasks (see Ryff, 1982, 1984 for detailed reviews).

Each dimension of psychological well-being (see Ryff, 1989a, 1989b; Ryff & Keyes, 1995) indicates the challenges individuals encounter as they strive to function fully and realize their unique talents. Adults must strive to feel good about themselves, while facing complex and sometimes unpleasant personal aspects (self-acceptance). They attempt to develop and maintain warm and trusting interpersonal relationships in contexts that do not always engender warmth or trust (positive relations with others). People also seek some degree of self-determination and personal authority, in a society that sometimes surreptiously desires submission and blind obedience (autonomy). Another challenge includes striving to shape the immediate environment into what one needs and desires, despite a world that often resists shaping (environmental mastery). Adults also endeavor for a direction in life when the world offers none or provides unsavory alternatives (purpose in life). Lastly, people encounter the challenge of growing personally and realizing their potential because it is often easier but much less rewarding to remain the same but unhappy person (personal growth). Rising to life's psychological challenges elevates positive psychological functioning.

In summary, our research investigated whether and how generativity matters in adults' lives. As a sociopersonal resource, generativity is the capacity to give to others with the goal of maintaining society through the next generation. Society through social stratification structures adults' feelings of personal and social worth and capabilities to assist others. Generativity also matters because it affects self-evaluation and how adults feel about their lives. As generative adults, people realize their potential as a valuable resource that, when imparted to others, maintains and improves the quality of society. Feelings and expressions of generativity therefore address the psychological challenge toward self-realization and the social challenge of solidarity. Psychological and social wellness should therefore

be higher among individuals who report higher levels of each component of generativity. Lastly, generativity is a potential explanation of how education affects well-being. People with more education report higher levels of social and psychological well-being because they possess more social interest and view themselves as generative resources capable of helping others and the next generation. In short, social stratification helps to determine whether people perpetuate the quality of their lives and the quality of society through generative feelings and behavior.

The following sections of this chapter provide a description of the national probability sample with which we investigated the questions outlined above and provide a summary of our operational measures of key constructs. We then present the research findings on the social structural contours of generativity and its consequences for life quality.

RESEARCH SAMPLE

Underscoring our emphasis on how societal forces shape generativity, we conducted this research with a national probability sample showing wide diversity on key variables and constructs of interest (age, education, generativity, social, and psychological well-being). The sample, drawn with random-digit dialing procedures, consisted of noninstitutionalized, English-speaking adults, age 25 to 74, who resided in the 48 contiguous states, and whose household included a least one telephone. The first stage of the multistage sampling design selected households with equal probability through telephone numbers. Disproportionate stratified sampling was used at the second stage to select respondents. The sample was stratified by age and sex, with oversampling of men between the ages of 65 and 74. Working but nonhousehold numbers (e.g., business) were eliminated by definition. Working numbers that were unsuccessfully contacted 10 times (i.e., no answer by human or answering machine) were also eliminated as elements of the population. Field procedures were initiated in January 1995 and lasted approximately 13 months. With a response rate of 70% for the telephone phase and a response rate of 87% for the self-administered questionnaire phase, the sample consisted of 3,032 adults.

Adults who agreed to participate in the complete study were administered a computer-assisted telephone interview lasting 30 minutes on average. Adults were then mailed two questionnaire booklets requiring about 1.5 hours on average to complete. All respondents were offered $20, a commemorative pen, periodic reports of study findings, and a copy of a final study monograph as incentives for participation in all phases of the study.

Table 1 reports the demographic characteristics of the sample

TABLE 1
Sample Characteristics (N = 3,032): MacArthur Foundation's Successful Midlife National Study

Demographic Variable	Breakdown	Unweighted %	Weighted %
Age*			
	Young Adults, 25–39	33.2	40.5
	Midlife Adults, 40–59	46.0	40.3
	Older Adults, 60–74	20.8	19.2
Gender			
	Males	48.5	43.5
	Females	51.5	56.5
Education			
	12 Years or Less	39.2	51.5
	13 Years or More	60.8	48.5
Marital Status			
	Married	64.1	68.1
	All Others	35.9	31.9
Race			
	Caucasian	87.8	83.8
	African American	6.8	11.4
	All Other Races	4.4	5.7

Note. Sample weight consists of a poststratification component to match the sociodemographic distribution of the United States on the basis of the October 1995 Current Population Survey.
*Average age of the unweighted sample is M = 47.0 (SD = 13.1) and, when the sample is weighted, M = 45.3 (SD = 13.5).

when unweighted and when weighted. The sample weight adjusts for unequal probabilities of household selection and unequal probabilities of respondent selection within households. Moreover, the sample weight poststratifies the sample to match the October 1995 Current Population Survey proportions of adults on the basis of gender, age, race, education, and marital status, as well as the proportions of adults residing in metropolitan (nonmetro) areas and regions (Northeast, Midwest, South, and West) of the United States. On the one hand, the unweighted sample misrepresents the U.S. population in terms of most demographic characteristics. On the other hand, all components of the weighting variable are functions of independent variables, and multivariate estimates that were based on the unweighted sample should therefore be unbiased and efficient (Winship & Radbill, 1994) provided the model is correctly specified. Because conclusions of multivariate analyses (ANOVA and regression) are unchanged by weighting, we reported analyses of the unweighted sample.[5]

[5]One of a possible 21 two-way interactions of mean-level generativity by age, education, and gender varied with sample weighting. The interaction went from statistically significant (p < .05, weighted sample) to marginally statistically significant (p = .10, unweighted sample). We do not discuss the weight-contingent interaction because no other estimate was affected by sample weighting.

OPERATIONAL DEFINITIONS

Generativity

We measured behavioral, normative, and self-construed generativity (McAdams & de St. Aubin, 1992). The *behavioral measures* attempt to represent Erikson's (1950) notion of the expansion of care beyond oneself toward others. Respondents indicated whether they give emotional support (defined for respondents as comforting, listening to problems, or giving advice) in an average month to any of three generative targets. Subsequently, respondents indicated whether they provide, in an average month, unpaid assistance (defined for respondents as help around the house, transportation, or childcare) to any of three generative targets. The targets of emotional support and unpaid assistance are (a) children or grandchildren; (b) other family members or close friends; and (c) anyone else, such as neighbors or people at church. Each behavioral measure of generativity therefore ranges from 0 to 4, where 0 means a respondent does not give, for example, emotional support, and 4 means a respondent does give emotional support to all generative targets. As such, our behavioral measures of generativity reflected the extensiveness of individuals' expressions of generativity through emotional support and unpaid assistance.

We operationalize *generative commitment* through felt normative obligations to the primary domain and the civic domain of society. Our conception is more sociological, compared with McAdams' psychological conception (see McAdams, Hart, & Maruna, chapter 1, this volume) of generative commitment as personal investment in goals to act generatively. In our study, respondents were given a list of hypothetical situations and asked to rate how much obligation they would feel if the situation happened to them, on a scale from 0 (no obligation at all) to 10 (a very great obligation). The primary domain measured individuals' commitments to assist and care for other people in need. Three examples of the eight items measuring primary obligation are: (a) to raise the child of a close friend if the friend died, (b) to take your divorced or unemployed adult child back into your home, and (c) to drop your plans when your children seem very troubled. On the same scale from 0 to 10, respondents then indicated how much obligation they felt toward civic expressions of their commitments. Three examples of the six items comprising the scale of civic obligation are: (a) to serve on a jury if called, (b) to keep fully informed about national news and public issues, and (c) to work hard even if you don't like or respect your employer or supervisor. Higher scores on each scale indicate more obligation.

Lastly, generativity consists of *self-construal*, of which we measured three facets. First, our measure of *generative concern* consisted of three items that tap expectations for, control over, and thought and effort into one's

contributions to others. Looking 10 years into the future, respondents evaluated the quality of their contribution to the welfare and well-being of other people on a scale from 0 (worst) to 10 (best). Moreover, respondents judged the amount of control, on a 0 (no control at all) to 10 (very much control) scale, they think they have over their contributions to the welfare and well-being of other people. Lastly, each respondent indicated how much thought and effort, on a scale from 0 (no thought and effort) to 10 (very much thought and effort), they put into their contributions to the welfare and well-being of others these days. Higher scores indicate more concern for generativity toward others.

In turn, we used a reduced and slightly modified version of the Loyola Generativity Scale (R-LGS; original scale is LGS; McAdams & de St. Aubin, 1992) to measure what we call *generative qualities*. Respondents indicated whether six descriptive statements described them, on a scale from 1 (a lot) to 4 (not at all). Respondents evaluate whether others would say (a) that you have made unique contributions to society, (b) that you have important skills you can pass along to others, (c) that many people come to you for advice, (d) that you feel that other people need you, (e) that you have had a good influence on the lives of many people, and (f) that you like to teach things to people. Higher scores indicate that respondents view themselves as having more generative qualities. Keep in mind that McAdams and de St. Aubin (1992) conceived of the LGS as a measure of generative concern. We believe that the LGS in general and our R-LGS in particular measures self-conception ("Am I generative?") and that our measure of generative concern comes closer to operationalizing concern about one's generativity (i.e., "Do I think about whether, when, and how much I am generative?").

Last, we measured a constellation of personal characteristics that represents a putative facilitator of generativity. Respondents indicated how much, on a scale from 0 (not at all) to 10 (very much), they are (a) caring, (b) wise, and (c) knowledgeable. We believe that care, wisdom, and knowledge are a constellation of traits that define the essence of a generative personality and self-definition. Higher scores indicate the subjective assessment of the possession of more characteristics that delineate generative self-conception and probably encourage generative behavior.

Table 2 presents the descriptive statistics of the generative variables and scales. The scales possess adequate internal (α) reliabilities, ranging from .73 to .84. All scales and variables indicating components of generativity correlate positively, suggesting that individuals who express generativity to more people also feel more primary and civic obligations and also view themselves as more generative individuals with generative concerns, capabilities, and qualities. The correlations also suggest that our parsing of the generativity domain was reasonable and replicated McAdams and de St. Aubin's (1992) conceptual model. That is, the two behavioral

TABLE 2
Correlations and Descriptive Statistics of Generativity

Generativity	1	2	3	4	5	6	7
1. Emotional Support	—	.46	.18	.14	.18	.22	.09
2. Unpaid Assistance		—	.15	.12	.15	.20	.08
3. Primary Obligation			—	.44	.30	.22	.27
4. Civic Obligation				—	.29	.27	.31
5. Generative Concern					—	.42	.31
6. Generative Qualities (R-LGS)						—	.34
7. Generative Traits							—
M	2.0	1.2	59.9	47.0	20.7	17.0	23.9
SD	1.0	1.0	13.5	10.1	6.0	3.8	3.8
Range	0–4	0–4	0–80	0–60	0–30	0–24	0–30
Alpha Reliability	—	—	.83	.80	.78	.84	.73

All correlations are statistically significant at $p < .01$ (two–tailed).
Note. All variables and scales scored in positive direction; — means indicators do not form a scale measuring a latent construct.

components correlate more highly than with the normative and self-construal components, the two normative obligation scales correlate more highly than with the behavioral and self-construal components, and the scales of self-construed generativity intercorrelate more highly than with most other components.

Well-Being

Psychological well-being is measured with Ryff's (1989b) six dimensions of positive psychological functioning (see Exhibit 1 for scale definitions and items). In a prior national probability sample (Ryff & Keyes, 1995), the same 3-item scales used in this study replicated the proposed theoretical structure and age and gender profiles as obtained with the original 20-item scales. Social well-being is measured with Keyes' (1995) five dimensions of positive social functioning (see Table 3 for scale definitions and items). The 3-item scales used in this sample replicated the theoretical structure of social wellness using more extensive measures in a local probability sample (Keyes, 1996a). Moreover, the larger scales and the current 3-item scales exhibit construct validity (Keyes, 1996a). All social well-being scales correlate modestly with dysphoria and global well-being (happiness and satisfaction) and correlate minimally with physical health and perceived optimism. The scales of social wellness correlate strongly with measures of social health and functioning like anomie, perceived external control, perceived neighborhood quality, as well as with a measure whether individuals engage in prosocial community activities.

For present purposes, we investigated the consequences of generativity by using a composite index of psychological well-being (i.e., sum of 6 psychological well-being scales) and social well-being (i.e., sum of 5 social well-being scales).[6] Higher scores indicate more positive levels of well-being. The internal (α) reliability of the overall psychological wellness scale is .80, and the overall social wellness scale is .81. The correlation of social and psychological well-being is $r = .52$. ($p < .001$). The objectives of this study and the lack of theoretical specificity at this time argue against hypotheses of relationships of social structure and generativity with specific dimensions of psychological or social well-being. For practical reasons as well, we chose to elaborate the nuances of social structure and the multiple components of generativity, while working with two broad constructs of well-being as outcomes. Maintaining multidimensionality and complexity

[6]Respondents with missing data on only 1 of the 3 items on a scale were imputed the mean of the 2 items with data present. Respondents with missing data on 2 of the 3 items were imputed the value of the 1 item with data present. Respondents with missing data on all 3 items for a scale were omitted from the study. Only 35 (1.1%) respondents were omitted from the overall psychological well-being scale, and 52 (1.7%) were omitted from the overall social well-being scale.

EXHIBIT 1
Operational Definitions (High Scorers) and Indicators of Theory-Guided Well-Being Dimensions

Psychological	Social
Self-Acceptance: possess positive attitude toward the self; acknowledge and accept multiple aspects of self; feel positive about past life. 1. *I like most parts of my personality (+).* 2. *When I look at the story of my life, I am pleased with how things have turned out so far (+).* 3. *In many ways I feel disappointed about my achievements in life (−).*	*Social Acceptance*: have positive attitudes toward people; acknowledge others and generally accept people, despite others' sometimes complex and perplexing behavior. 1. *People who do a favor expect nothing in return (+).* 2. *People do not care about other peoples' problems (−).* 3. *I believe that people are kind (+).*
Personal Growth: have feeling of continued development and potential and are open to new experience; feel increasingly self-knowledgeable and effective. 1. *For me, life has been a continuous process of learning, changing, and growth (+).* 2. *I think it is important to have new experiences that challenge how I think about myself and the world (+).* 3. *I gave up trying to make big improvements in my life a long time ago (−).*	*Social Actualization*: care about and believe society is evolving positively; think society has potential to grow positively; think society is realizing potential. 1. *The world is becoming a better place for everyone (+).* 2. *Society has stopped making progress (−).* 3. *Society isn't improving for people like me (−).*
Purpose in Life: have goals and a sense of direction in life; present and past life are meaningful; hold beliefs that give purpose to life. 1. *Some people wander aimlessly through life, I am not one of them (+).* 2. *I live one day at a time and don't really think about the future (−).* 3. *I sometimes feel as if I've done all there is to do in life (−).*	*Social Contribution*: feel they have something valuable to give to society; think their daily activities are valued by their community. 1. *I have somethlng valuable to give to the world (+).* 2. *My daily activities do not produce anything worthwhile for my community (−).* 3. *I have nothing important to contribute to society (−).*

Environmental Mastery: feel competent and able to manage a complex environment; choose or create personally suitable contexts.

1. *The demands of life often get me down (−).*
2. *In general, I feel I am in charge of the situation in which I live (+).*
3. *I am good at managing the responsibilities of daily life (+).*

Autonomy: are self-determining, independent, and regulate behavior internally; resist social pressures to think and act in certain ways; evaluate self by personal standards.

1. *I tend to be influenced by people with strong opinions (−).*
2. *I have confidence in my own opinions, even if they are different from the way most other people think (+).*
3. *I judge myself by what I think is important, not by the values of what others think is important (+).*

Positive Relations With Others: have warm, satisfying, trusting relationships; are concerned about others' welfare; capable of strong empathy, affection, and intimacy; understand give-and-take of human relationships.

1. *Maintaining close relationships has been difficult and frustrating for me (−).*
2. *People would describe me as a giving person, willing to share my time with others (+).*
3. *I have not experienced many warm and trusting relationships with others (−).*

Social Coherence: see a social world that is intelligible, logical, and predictable; care about and are interested in society and community.

1. *The world is too complex for me (−).*
2. *I cannot make sense of what's going on in the world (−).*
3. *I find it easy to predict what will happen next in society (+).*

Social Integration: feel part of community; think they belong, feel supported, and share commonalities with community.

1. *I don't feel I belong to anything I'd call a community (−).*
2. *I feel close to other people in my community (+).*
3. *My community is a source of comfort (+).*

Note. A negative sign indicates an item that is reverse-coded. The response option is *agree* or *disagree* (*slightly*, *moderately*, or *strongly*) that the item is self-descriptive.

simultaneously across all facets of generativity and all components of psychological and social well-being produces an unwieldy analytic and interpretive challenge.

Social Structure

Age and education were the two primary social structural coordinates in our analysis. Age was coded into young adulthood (ages 25 to 39), midlife (ages 40 to 59), and older adulthood (ages 60 to 74) to represent periods of adult life (e.g., see Levinson, 1978). Education was measured as the highest grade of school or year of college completed. We coded education into a dichotomy, coded 0 for respondents with 12 or fewer years of education and coded 1 for respondents with 13 or more years of education. Dichotomizing education slightly reduces the correlation between education and well-being but better represents what we feel is one of the deeper divisions to originate from education (e.g., occupational stratification into blue and white collar).

Our regression models also included several social structural control variables that might affect both educational attainment and wellness and could affect both generativity and wellness. We adjusted our regressions for gender, marital status (married or cohabiting = 1; else = 0), parental status (have biological or adopted children = 1; none = 0), employment status (working or self-employed = 1; other = 0), racial status (Whites = reference category; all others dummy coded separately—Black; Native American or Aleutian Islander/Eskimo; Asian or Pacific Islander; Multiracial; and Other Race). Last, we controlled for self-perceived physical health 10 years ago and current physical health, measured on scales from 0 (worst) to 10 (best).

RESEARCH FINDINGS

Our presentation of research findings begins with investigation of the social structural shape of generativity. Of interest is whether our age and educational groups showed differences on the various measures of generativity. To answer these questions, we conducted multiple, followed by univariate, ANOVAs, which test mean-level differences of each component of generativity by education and age, adjusting for any gender differences. We then investigate the consequences of generativity with regression procedures, attempting to illustrate the purported positive association of generativity with well-being and the extent to which generativity explains educational differences in well-being.

The interactive effects of education and age on well-being are also examined to investigate the divergence and the convergence hypotheses of social structure. Cross-sectionally, the convergence and divergence hy-

potheses predict a positive main effect coefficient of the regression of well-being on education. However, the convergence hypothesis predicts a negative, whereas the divergence hypothesis predicts a positive, coefficient reflecting the interaction of education with age. The negative interaction coefficient signifies how much the beneficial effect of more, compared with less, education diminishes with age; a positive interaction reflects how much more beneficial educational attainment is for adults as they age.

The Social Structural Contours of Generativity

We provide graphic summaries of how various aspects of generativity are shaped by age and education (see Table A, Appendix, for descriptive statistics of each dimension by education, gender, and age). The figures are organized according to the statistical findings; that is, we graph age and education differences, or their interaction, only if they emerge as statistically significant effects in the multivariate and subsequent univariate analyses. Moreover, though not part of the theoretical focus of this chapter, gender played a prominent role in the expression of generativity, and its effects on well-being are, therefore, presented (the gender effects are substantively interpreted in the discussion). Multivariate (ANOVA) tests revealed statistically significant mean-level differences in aspects of generativity by education, Wilks $F(7, 2877) = 12.9$, $p < .001$; by age, Wilks $F(14, 5756) = 23.1$, $p < .001$; and by gender, Wilks $F(7, 2877) = 25.6$, $p < .001$. Subsequent univariate tests showed that age shapes all aspects of generativity. Education, too, structures most dimensions of generativity. In some instances, the impact of education and age on generativity depends on gender.

Figure 1.a plots the social contouring of the *extensiveness of emotional support to others*. Women, compared with men, extend their emotional support to more people; for gender main effect, $F(1, 2952) = 69.2$, $p < .001$. Gender differences in the extensiveness of emotional support parallels research showing that mothers, compared with fathers, provide more types of help to their children (Rossi & Rossi, 1990; see chapter 9). In general, emotional support is more extensive among midlife and older adults—for age main effect, $F(2, 2952) = 16.7$, $p < .001$, and among more educated adults—for education main effect, $F(1, 2952) = 21.9$, $p < .001$. The effects of education and age on emotional support are interactive; for age by education, $F(2, 2952) = 13.2$, $p < .001$. As Figure 1.a reveals, the interaction shows that education does not structure emotional support for younger adults. Perhaps young adults invest their energy and attention in their careers and their families, suggesting that the demands of young adulthood could level the educational differences in the behavioral expression of generativity.

Figure 1.b illustrates a different, and more simplistic, pattern of find-

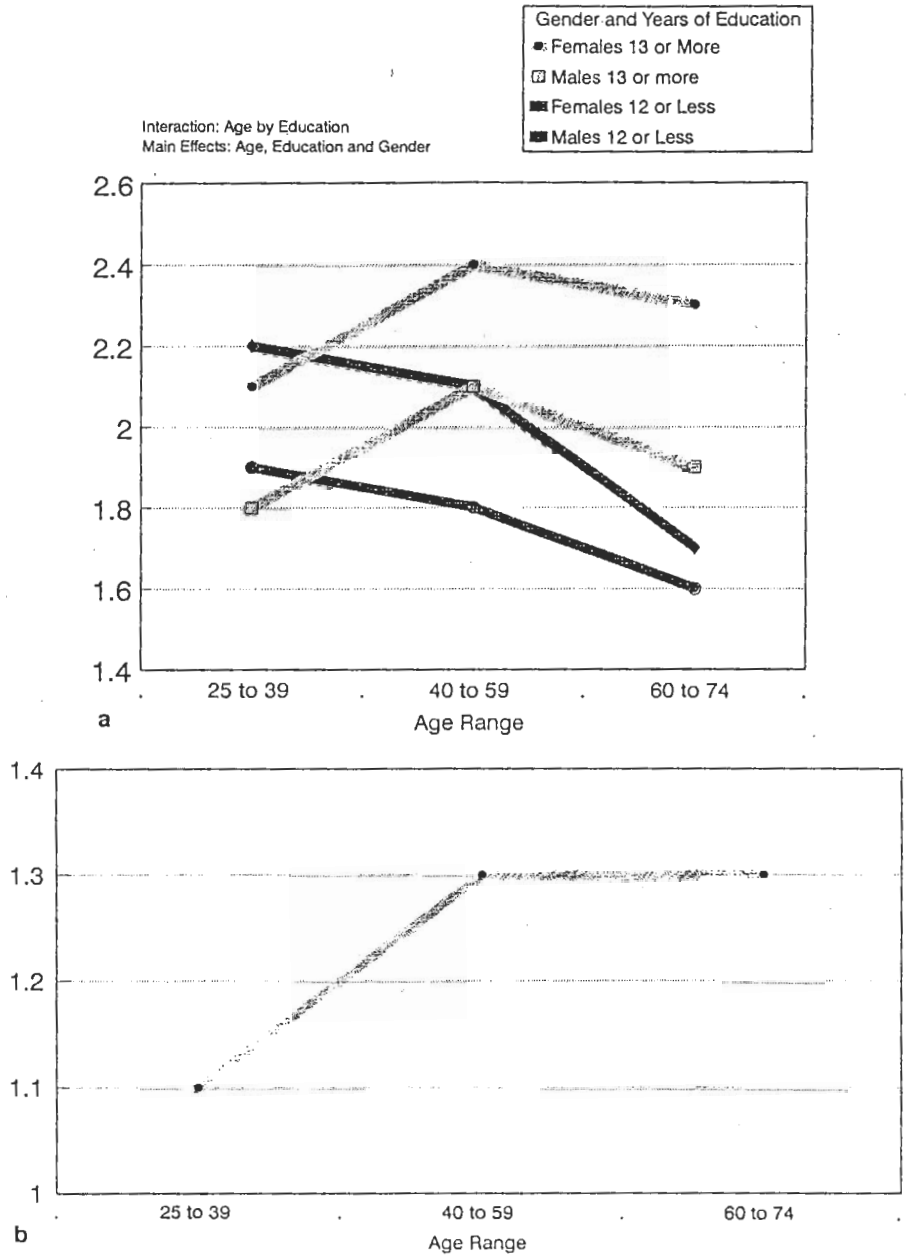


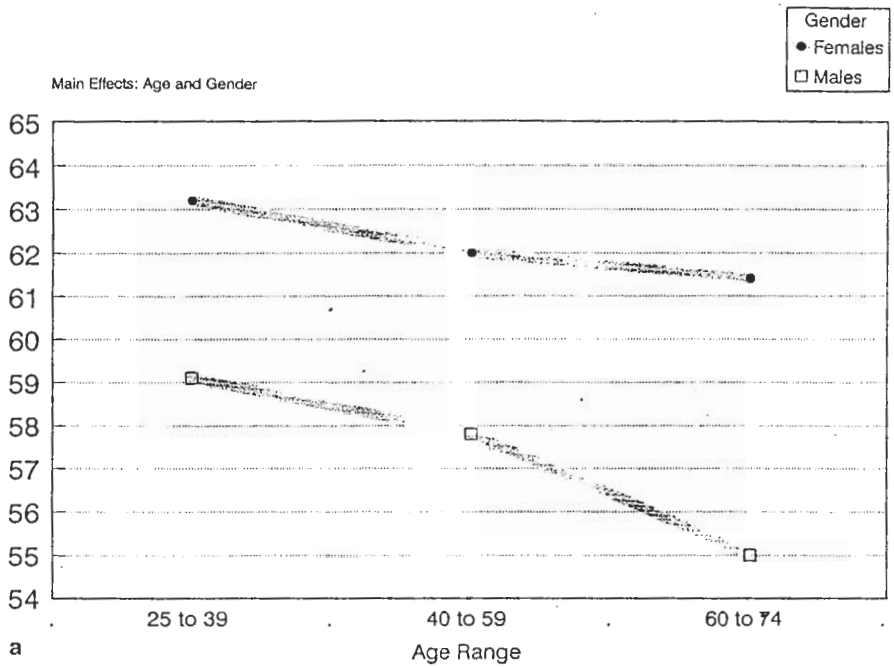
Figure 1. Mean levels of generative behavior. a, mean extensiveness of emotional support; b, mean extensiveness of unpaid assistance.

ings for the second behavioral indicator of generativity: *extensiveness of unpaid assistance to others*. Here, there is only a main effect of age, $F(2, 2952) = 13.8$, $p < .001$, with the figure showing that younger adults provide unpaid assistance to fewer people. We note, however, that all adults are generative for at least one other person—all age groups report providing support or assistance to at least one person on average. Among midlife and older adults, more than one other person is the recipient of generative emotional support and assistance, a trajectory perhaps reflective of weaker or more specific commitments and obligations during young adulthood.

Analysis of the normative components of generativity suggests, however, that generative norms and social commitments are not uniformly lower among young adults. For example, as illustrated in Figure 2.a, younger adults feel more *primary obligation* than midlife and older adults; for age main effect, $F(2, 2952) = 11.8$, $p < .001$. Our findings therefore suggest that younger adults appear to be more invested in the specific familial domain. Younger adults, in other words, feel a greater obligation to help other people and children. Women also feel more obligation than men to assist other people; for gender main effect, $F(1, 2952) = 89.1$, $p < .001$. Primary obligations are felt equally, however, by adults of each educational background. Regardless of educational attainment, commitment to the intimate circle of people and children appear palpable and salient.

Alternatively, Figure 2.b shows that younger adults feel less *civic obligation* than midlife and older adults; for age main effect, $F(2, 2952) = 61.6$, $p < .001$. Education also contours civic obligations, with those of higher educational levels feeling more obligated to assist society and its institutions; for education main effect, $F(1, 2952) = 23.8$, $p < .001$. Perhaps because of the inequalities experienced and social value imputed to individuals of different educational backgrounds, adults with more education feel more obligation and commitment to society (see also Mirowsky & Ross, 1989). Finally, gender contours civic obligations, with women reporting higher levels than men; for gender main effect, $F(1, 2952) = 6.0$, $p < .001$. Women therefore feel more obligated than men to assist social institutions as well as people.

Analyses of the first component of self-construed generativity, *generative concern*, revealed significant differences by age, $F(2, 2886) = 8.8$, $p < .001$; education, $F(1, 2886) = 18.0$, $p < .001$; and gender, $F(1, 2886) = 48.9$, $p < .001$; as well as revealed an interaction of the effect of age by gender, $F(2, 2886) = 6.4$, $p < .01$, on generative concern. As shown in Figure 3.a, adults with 13 years or more of education feel more concern for others' welfare and well-being than adults with 12 or fewer years of education. Moreover, younger and midlife adults report more concern than older adults. Although women generally report more generative concern than men, older men and older women report about the same level of concern. Thus, although they do not extend their generativity to as many



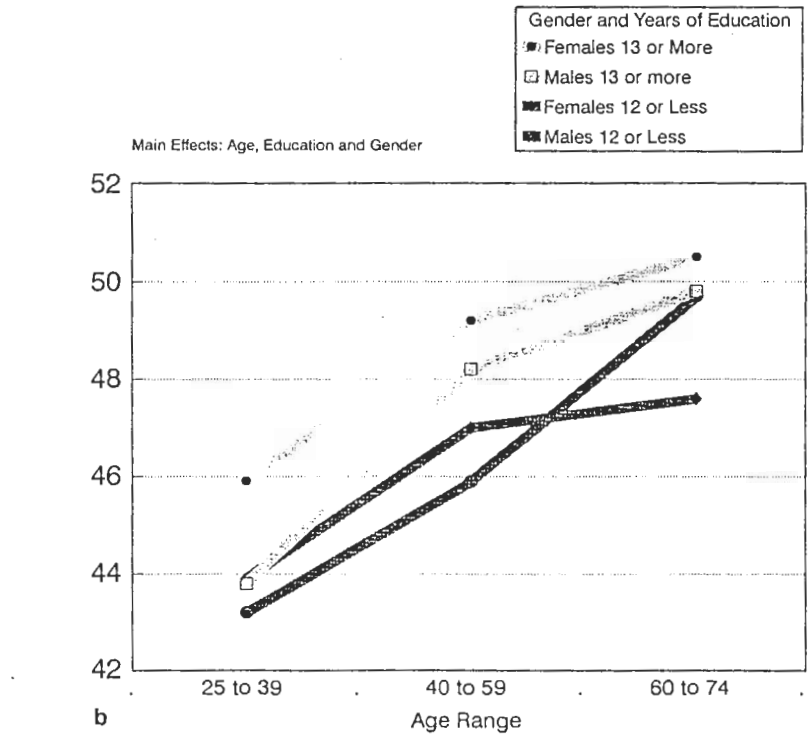


Figure 2. Mean levels of generative commitment. a, primary; b, civic obligations.

people or feel as much obligation to society as midlife adults, young adults think about, try, and expect to contribute to others' welfare and well-being as much as midlife adults. Education also appears to structure concern, perhaps by instilling self-reflection or the feeling that one's educational advantage should be reciprocated socially.

Analysis of self-construed *generative qualities* (i.e., R-LGS) also revealed main effects of age, $F(2, 2886) = 8.6$, $p < .001$; education, $F(1, 2886) = 63.0$, $p < .001$; and gender, $F(1, 2886) = 11.1$, $p < .001$; along with an interaction of the effect of education by gender, $F(1, 2886) = 8.7$, $p < .01$. Figure 3.b shows that midlife adults perceive themselves as greater resources for teaching, guiding, and assisting others than younger and older adults. Moreover, the educational disparity in the perception of oneself as a generative resource is greatest for women. More education appears to promote everyone's generative self-conceptions, but education seems a particular enhancement to women's self-images as people who can guide and teach others and to whom others come for advice.

Last, analysis of trait-like characteristics that *facilitate generativity* showed main effects of age, $F(2, 2886) = 6.8$, $p < .001$; and gender, $F(1, 2886) = 17.1$, $p < .001$; as well as an interaction of education by gender, $F(1, 2886) = 3.9$, $p < .05$. Figure 3.c illustrates that, with age, adults view themselves as increasingly caring, wise, and knowledgeable. Moreover, women with more education define themselves as a more characteristically generative than women with 12 or fewer years of education. However, higher educational attainment does not coincide with increased generative qualities for men. In fact, men with more education tend to feel less personally generative than men with 12 or fewer years of education.

The Life Quality Consequences of Generativity

What are the personal benefits and possible costs of generativity? Does generativity explain the relationship of education, as well as age, with overall wellness? We performed hierarchical regression of psychological and social well-being onto the indicators of social structure and each set of measures reflecting the components of generativity. Step 1 regresses each composite of well-being (psychological or social) onto the control variables and education, age, and the interaction term (computed by multiplying education by the age dummy variables). If the interaction of education and age was not statistically significant at any step, we reestimated the final set of equations omitting the interaction term. We note that our order of the entry of each generativity components—behavioral aspects are entered before normative and self-construal aspects—is not an implicit causal argument. Although our cross-sectional design does not permit testing of causal

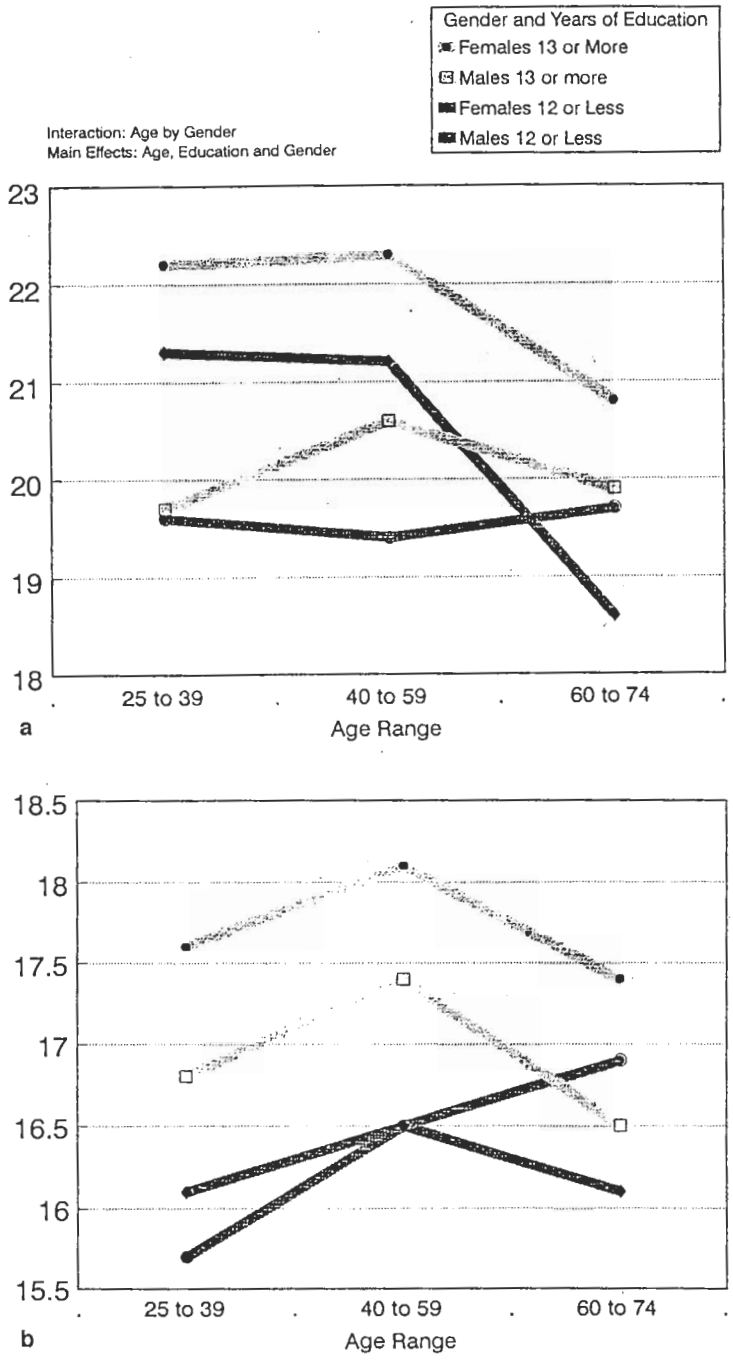
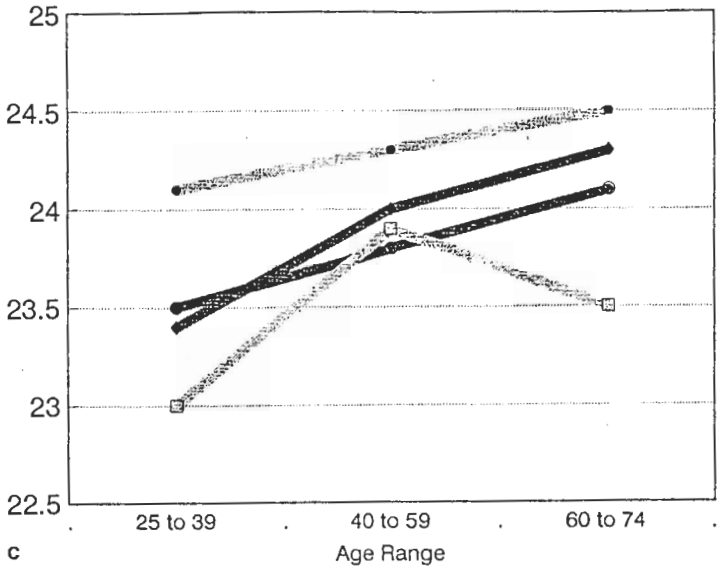


Figure 3. Mean levels of generative self-conception. a, generative concern; b, generative qualities (R-LGS); and c, civic obligation.



c

Figure 3 Continued.

directionality, we see the various components of generativity working reciprocally and interactively through time.

The top of Table 3 presents the hierarchical regression of psychological well-being onto the independent variables. The disparities of psychological well-being by education neither diverge nor converge with age. The interaction of education and age was therefore dropped from the final models. However, adults with 13 or more, compared with 12 or fewer, years of education feel psychologically healthier. Older adults at each educational level, with all other variables held constant, report higher levels of overall psychological well-being than do younger adults; midlife and younger adults report similar overall psychological well-being profiles. Moving to step 4, the final model shows that nearly all measures of generativity predict psychological well-being. Supporting more people emotionally, feeling more obligated to civic society, having more generative concern for others' welfare and well-being, seeing oneself as more of a generative resource, and possessing more generative personal qualities correspond with higher levels of psychological well-being. Thus, generative behavior, generative social obligations, and generative self-definitions are key ingredients in the recipe for psychological wellness.

Generativity also explains social structural differences in psychological wellness. The difference in psychological well-being between older and younger adults is not explained by behavioral generativity at step 2. Rather, the age difference disappears when psychological well-being is

TABLE 4
Hierarchical (Ordinary Least Squares) Regression of Well-Being

Regressors	Step 1 b	Step 1 β	Step 2 b	Step 2 β	Step 3 b	Step 3 β	Step 4 b	Step 4 β
Psychological Well-Being (N = 2,888)								
12 Yrs or Less Education	—	—	—	—	—	—	—	—
13 Yrs or More Education	4.2**	.14	3.9**	.13	3.5**	.12	3.0**	.10
Young Adults	—	—	—	—	—	—	—	—
Midlife Adults	.40	.01	.35	.01	−.17	−.01	−.73	−.03
Older Adults	2.0**	.05	2.2**	.06	1.4	.04	1.2	.03
Extensiveness Emotional Support			1.6**	.11	1.2**	.08	.61*	.04
Extensiveness Unpaid Assistance			.61**	.04	.40	.03	.04	.01
Primary Obligation					.09**	.08	.02	.02
Civic Obligation					.22**	.16	.09**	.06
Generative Concern							.15**	.06
Generative Qualities (R-LGS)							.74**	.20
Generative Traits							.82**	.22
intercept	70.9		68.7		57.1		39.9	
R^2	.16		.17		.21		.32	

Social Well-Being (N = 2,891)								
Education by Midlife Adults	1.0	.03	.75	.03	.58	.02	.75	.03
Education by Older Adults	3.6**	.08	3.1*	.07	2.9*	.07	3.7**	.08
12 Yrs or Less Education	—	—	—	—	—	—	—	—
13 Yrs or More Education	4.4**	.16	4.2**	.16	3.8**	.14	2.8**	.11
Young Adults	—	—	—	—	—	—	—	—
Midlife Adults	1.8*	.07	1.8*	.07	.70	.03	.27	.01
Older Adults	1.0	.03	1.5	.05	−.37	−.01	−.59	−.02
Extensiveness Emotional Support			1.6**	.11	1.2**	.09	.61*	.04
Extensiveness Unpaid Assistance			1.1**	.08	.86**	.07	.43	.03
Primary Obligation					−.01	−.01	−.06**	−.06
Civic Obligation					.34**	.26	.24**	.18
Generative Concern							.29**	.13
Generative Qualities (R-LGS)							.74**	.21
Generative Traits							.23**	.07
intercept	44.9		42.3		30.7		20.4	
R^2	.11		.14		.20		.28	

Note. All models adjust for marital, parental, employment, and racial status, as well as gender, current health, and health 10 years ago. Results are based on unweighted data.
*p < .05; **p < .01 (two-tailed).

regressed onto generative obligations at step 3. Although mean-level analyses reveal that older adults engage in more extensive generative behavior, the heart of the difference in overall psychological well-being between younger and older adults is that older adults feel less obligated to care for other people but feel more obligated to care for society and its institutions. Step 2 through step 4 also show that the generativity components explain about one-third of the relationship between education and psychological well-being. Behavioral generativity at step 2 reduces the education coefficient by only 7%. Generative norms, at all levels of generative behavior, reduce the educational coefficient another 10% at step 3. Net of generative behavior and norms, the self-construal measures of generativity reduce the educational coefficient by another 17% at step 4.

In contrast to psychological well-being, disparities in overall social wellness by education diverge with age. The step 1 regression equation reveals a positive interaction coefficient of education by age. Adults with more education feel socially healthier than adults with 12 or fewer years of education. However, the educational disparity in social well-being increases dramatically among older adults. The final model at step 4 reveals that all generativity components predict social well-being. Providing emotional support to more people and having more civic obligation, more generative concern, more generative resources, and more generative qualities coincide with better overall social well-being. Every element of generativity that predicts better psychological well-being also predicts better social wellness. The one glaring difference is that feeling more primary obligation, all other things being equal, corresponds with lower social well-being. Some commitments may exact personal costs, perhaps because feeling obligated to care for others prevents individuals from rising to the challenges of social well-ness.

Generativity explains social structural differences in social well-being. As with psychological wellness, the age difference in social well-being (between midlife and younger adults) is not explained by behavioral generativity at step 2. Instead, the age difference reduces to zero, when social well-being is regressed onto generative obligations at step 3.

Midlife adults are socially healthier than younger adults, apparently because midlife adults are relieved of primary obligations and free to be obligated to civic society—and that is regardless of the extensiveness of their emotional support and unpaid assistance to others. Moreover, step 2 through step 4 show that the generativity components explain upwards of 40% of the relationship between education and social well-being. At step 2, behavioral generativity reduces the main effect of education by only 5%, while generative norms reduce the main effect of education by another 10% at step 3. Self-construals of generativity reduce the main

effect of education by as much as 26% at step 4. On the other hand, the educational disparity among older adults (i.e., the interaction) is reduced 14% by behavioral generativity at step 2 and only 6% by generative norms at step 3. Generative self-conception does not explain the divergence in older adulthood. Insofar as divergence reflects the cumulative advantage of valuable resources, the educational gap in social health for older adults is best explained by the transmission of one's own resources (e.g., emotional support) to more people, rather than flattering self-conceptions as generative.

DISCUSSION AND FUTURE DIRECTIONS

Individuals are embedded and stratified in society. The objective of our research is to move toward understanding how social stratification affects adults' health and well-being. Because social stratification connotes personal worth and shapes personal experiences and access to resources, one's position in society can be a blessing or a curse. Social placement affects whether and how much adults perceive that they have valuable skills and knowledge that they can impart to others. In other words, all forms of generativity (i.e., self-conception, norms, and behavior) are central to understanding how social stratification affects health and well-being. Generativity is therefore noteworthy from the angles of social science as well as the helping professions and politics for at least three reasons.

First, society contours generativity. Midlife and often older adults, adults with more education, and women tend to exhibit greater levels of diverse aspects of generativity than young adults, adults with fewer years of education, and men. In two instances, young adults show more generativity through generative concern for others' welfare and well-being and much more obligation to primary ties than midlife and older adults. Consistent with Erikson's (1950) argument that younger adulthood demands identity and intimacy, we believe that younger adults' lower levels on most other aspects of generativity reflects pressures from career and family. Perhaps relieved of primary obligations, midlife and older adults give emotional support and unpaid assistance to more people and feel less primary but more civic obligations.

Such a simple summary belies the complexity of social structural effects on self-conceived generativity. Perhaps representing another potent social force (i.e., position), gender also was found to contour all levels of generativity, and some of the effects of age and education on self-conception depend on gender. Prior theory (e.g., Gilligan, 1982) and literatures (see, e.g., Helson, 1997) have argued for and have tended to show the importance of social relationships and caring for women. Con-

sistent with the posited priority of caring and of relationships for women, our data and findings show that women report higher levels than men on nearly all aspects of generativity (the exception is the extensiveness of unpaid assistance). Beyond providing more emotional support and feeling more obligated for primary relationships, the women in the MacArthur Midlife study also report feeling more obligated than men for the maintenance of civic society. Thus, women also extend their care beyond immediate familial relationships to the larger sphere of society, perhaps reflecting the changing patterns of women's dual roles as parent and employee. Moreover, our findings show that women also define and perceive themselves more generatively than men. Women appear to think more about (i.e., concern for) their generative acts, they see themselves as greater generative resources and they define themselves with more generative traits than men.

But, gender also intermingles interactively with age and education. Prior to older adulthood, women exhibit more generative concern than men. Older men and women show the same amount of generative concerns, perhaps because they now have common experiences (e.g., structural lag) that affect their self-images. Education, too, generally promotes more positive generative self-conceptions. Compared with men, women with more education see themselves as greater generative resources and as more caring, knowledgeable, and wiser than women with less education. Women apparently receive a self-concept boost from education, which drives a deeper socioeconomic wedge among women than among men. The greater educational disparity among women possibly creates inequalities in the distribution of generative resources. Insofar as women remain the primary caretakers that directly guide and mold their children (see, e.g., Rossi & Rossi, 1990), the relatively deeper socioeconomic disparity in generativity among women implies a downward spiral. That is, results suggest that children born into lower socioeconomic conditions should be unlikely to receive the kind of guidance that increases their odds of becoming adults who, in turn, will generatively act to perpetuate their own health and a healthy society.

Second, generativity contours quality of life. Generative behavior, generative norms, and generative self-conception predict and possibly promote psychological and social well-being. The strong relationship of generativity and well-being reflects, we believe, the fact that generativity is fundamental to individuals feeling good about themselves and for judging their lives as worthwhile and meaningful. The embodiment of generativity is feeling that one has something valuable to give to society and is able to do for others. Guiding and assisting others, in turn, probably both reflects and promotes one's own feelings of social integration. Through generativity, adults act as custodians of society and probably gain the feeling that they are integral to perpetuating their communities. Perhaps for such reasons

and more, we find in our study that all aspects of generativity predict well-being. Having extensive generative emotional support and generative obligations to society, focusing more concern on being generative, and possessing more generative personal qualities predict better overall psychological and better overall social well-being. In only one instance did an aspect of generativity prove to be costly. Feeling more obligated to primary ties seemed to suppress adults' overall social well-being. In general, though, all components of generativity appear to be effective responses to the psychological challenges (e.g., self-acceptance) and the social challenges (e.g., social contribution) of life.

Third, generativity explains socioeconomic disparities in well-being. The presence or absence of generative feelings and behavior explain in part how social inequalities possibly promote or hinder adults' health and well-being. As an explanatory mechanism, generativity is a theoretical hybrid that combines nuances of self-perceived personal worth and resources. Education purportedly affects adults' agency and self worth, which translates into less extensive generative behavior, normative (e.g., civic) obligation, and less flattering images of oneself as generative. With more education, adults feel that they have valuable skills and experience. With education, adults feel more committed and obligated to society—in essence, they feel more vital to making society work. With education, adults assist and encourage more people and children—in essence, they become a vital part of society. The impact of social stratification is therefore profound and far-reaching. That is, stratification affects the quality of adults' lives by affecting whether they are likely to behave in ways (e.g., generative assistance to others) that undoubtedly affect the health of the social system.

Generativity does not, however, appear to have the same amount of explanatory power throughout adulthood.[7] That is, generativity explained anywhere from about 33% to 40% of the variance between education and well-being for younger and midlife adults. On the other hand, generativity explained only about 25% of the variance between education and well-being of older adults. The differential explanatory power of generativity by age contradicts mean-level results because younger adults report lower levels on most aspects of generativity than midlife and older adults. Two important implications stem from the explanatory role of generativity. First, as a source for social renewal—a concern shared by sociologists (Durkheim, 1897/1947)—generativity has the capacity to reduce socially stratified dis-

[7]The analysis separately regressed the composite scale of well-being onto education and age, as well as the control variables, for each age group of adults. Subsequently, the composite scales of well-being were regressed onto education and age, the controls, and all (i.e., all 7 components) indicators of generativity for each age group of adults. Our intent was to observe whether and what aspects of generativity explained educational disparities in well-being for each age group of adults. Results are available on request.

parities in well-being. Because generativity is shaped by as fundamental a process as education, the implication is that the perpetuation of a healthy society depends, as always, on assurance of educational opportunity and healthy schools. The role of generativity suggests a new story line in these frequently heard messages. Greater educational opportunity and attainment can surely create healthier wage earners and tax payers. If political trends away from national toward more local governance and involvement continue, the relationship of education and generativity becomes increasingly salient because education affects the predilection for ordinary individuals guiding and assisting the next generation.

The second implication is theoretical. The differential explanatory power of generativity by age suggests that educational disparities in quality of life are less amenable to explanation and reduction with age. This does not appear to reflect mean-level differences of generativity by age. Though it is possible that we could find a different set of explanatory variables that work well for all age groups, the point is that age-graded tasks and activities are implicated in how social structural processes affect lives throughout adulthood. Life-span issues, as well as cohort experiences, can dictate the types of processes that explain social structural differences in health and well-being. Moreover, there is an inverse and complex relationship between the process and products of education and aging. With age, educational attainment becomes increasingly distal. The effects of education, as adults age, become increasingly proximal. Thus, the apparent resistance of education to being explained in older adulthood could reflect our efforts to explain educational attainment rather than the effects of education in older adulthood. Put differently, as we age, education has more effects. Researchers, however, attempt to explain the same structural designation (i.e., years of education) for all adults. What this argues for is more process models like the social structure and personality framework that use developmentally sensitive explanatory variables such as generativity. In short, future research on adult development and successful aging should focus attention on the impact of social structure. At the same time, we would argue for a life-span perspective to the study of social stratification. Does social stratification affect adults' lives in the same ways throughout adulthood? Illustrating the relevance of classic theory, Erikson's conceptions of developmental tasks point to possible age-graded explanatory constructs.

Extant theories of the intersection of education and age focus on the mutual effects of education and age on health and wellness rather than focus on the explanation of educational differences with age. Double jeopardy and cumulative advantage theories argue that the educational disparities in health and wellness diverge with age, whereas structural lag, age as a levelling status, and processes of successful aging argue that educational disparities converge with age. Our study supports the divergence hy-

pothesis. However, we observe that differences in social, but not psychological, well-being between adults with different educations diverges in older adulthood. What this suggests is that the ability of adults of different educational backgrounds to handle the psychological challenge of self-realization is constant at all ages. Whatever psychological challenges are possibly added with age are apparently managed successfully by most adults. However, aging may introduce social challenges that older adults simply cannot or do not care to manage.

This study is one of the first attempts to investigate generativity in a large probability sample of adults. Future research would nonetheless benefit from longitudinal assessments to permit disentangling the relationships of generativity and well-being. Moreover, researchers should measure the purported explanatory aspects of generativity—the interpretative and resource aspects that help to explain the relationship of social structure and well-being. For example, the interpretive side of generativity could be ascertained through social comparisons of generative resources, reflected appraisals of generative traits, and self-perceptions that are based on generative behavior. We also know relatively little about the unique class of resource mechanisms in which people give valued resources to others rather than use the resources themselves (e.g., social networks and supports) to stave off stress (see Keyes, 1995, 1996b). Understanding how guiding and helping others directly affects adults' health and well-being would fill a void in the conception and understanding of how giving and getting resources touches the lives of adults (see also Marks, 1990; Midlarsky, 1991). Research on all fronts will help to explicate the role of generativity in adult lives—its social structural contours and quality of life consequences.

APPENDIX

TABLE A
Mean Generativity Dimensions by Education, Gender, and Age

	12 Years or Less						13 or More Years					
	Males			Females			Males			Females		
Generativity	25–39	40–59	60–74	25–39	40–59	60–74	25–39	40–59	60–74	25–39	40–59	60–74
Emotional Support	1.9	1.8	1.6	2.2	2.1	1.7	1.8	2.1	1.9	2.1	2.4	2.3
	(1.0)	(1.1)	(1.2)	(0.9)	(1.0)	(1.2)	(1.0)	(0.9)	(1.0)	(0.9)	(0.8)	(0.9)
Unpaid Assistance	1.1	1.2	1.2	1.1	1.3	1.1	1.1	1.2	1.4	1.1	1.4	1.4
	(1.0)	(1.1)	(1.1)	(1.0)	(1.1)	(1.2)	(0.9)	(1.0)	(1.1)	(0.9)	(1.1)	(1.1)
Primary Norms	58.9	57.2	54.6	64.4	62.9	60.8	59.4	57.6	55.1	62.7	61.1	61.5
	(12.7)	(14.4)	(18.6)	(12.4)	(12.9)	(15.8)	(12.4)	(13.0)	(13.2)	(11.8)	(12.8)	(12.4)
Civic Norms	43.2	45.9	49.7	43.9	47.0	47.6	43.8	48.2	49.8	45.9	49.2	50.5
	(10.3)	(10.6)	(10.7)	(10.6)	(11.2)	(11.2)	(10.1)	(8.7)	(9.9)	(9.0)	(8.6)	(9.1)
Concern	19.6	19.4	19.7	21.3	21.2	18.6	19.7	20.6	19.9	22.2	22.3	20.8
	(6.0)	(6.8)	(7.0)	(5.9)	(5.8)	(7.9)	(5.6)	(5.5)	(5.6)	(4.8)	(5.2)	(7.1)
Qualities	15.7	16.5	16.9	16.1	16.5	16.1	16.8	17.4	16.5	17.6	18.1	17.4
	(3.7)	(3.7)	(4.2)	(3.7)	(3.8)	(4.0)	(3.6)	(3.8)	(3.6)	(3.4)	(3.7)	(3.8)
Traits	23.5	23.8	24.1	23.4	24.0	24.3	23.0	23.9	23.5	24.1	24.3	24.5
	(4.0)	(3.9)	(3.9)	(4.6)	(4.0)	(4.6)	(3.7)	(3.5)	(3.9)	(3.3)	(3.5)	(3.5)
Unweighted *N*	156	239	129	184	277	174	329	435	157	323	413	154

Note. Standard deviation in parenthesis. Unweighted *N*s are averaged over the Generativity dimensions.

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