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Growth Goals, Maturity, and Well-Being

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In 2 studies (125 college students and 51 adults), 2 forms of growth goals (exploratory and intrinsic) were compared with 2 forms of personality development (social–cognitive maturity and social–emotional well-being). Participants whose narratives of major life goals emphasized conceptual exploration were especially likely to have high levels of maturity (measured as ego development; J. Loevinger, 1976), whereas those whose goals emphasized intrinsic interests (K. M. Sheldon & T. Kasser, 1995) were especially likely to have high levels of well-being. Participants who had coherent hierarchies of growth goals on the levels of major life goals and everyday goals were especially likely to have high levels of personality development. Finally, growth goals accounted for some relationships between age and personality development. Growth goals are discussed in terms of intentional self-development and specific developmental paths.

If people can intentionally guide the development of their own personalities to some degree (Brandtstadter, 1999), then personal goals should bear some relation to personality development. Goals reveal what people want in life, how they intend to get it (Gollwitzer & Brandstätter, 1997), and orientations of personal values (Emmons, 1999; Sheldon & Kasser, 1995). In this article, we present two studies (one with college students, one with adults) relating personal goals and personality development. We identified goals that were oriented toward various types of personal growth, which we called *growth goals.* We expected that growth goals would correlate with personality development. We further expected that specific types of growth goals would relate differentially to two specific forms of personality development—namely, social–cognitive maturity and social–emotional well-being. We also expected that coherent hierarchies of growth goals (i.e., similarity in long-term and short-term growth goals) would be especially predictive of maturity and well-being. Finally, we examined the role of growth goals in the relationship between age and personality development.

Two Perspectives on Personality Development

In this article, we view personal growth and personality development[1] along two overarching trajectories. Theories of personality development tend to focus on one of two desired outcomes: social–cognitive maturity or social–emotional well-being. The first deals with *how complexly one thinks* about the self and others. The second deals with *how good one feels* about the self in a world of others. Theories of development typically describe a movement toward one or the other. For instance, theories of cognitive and social–cognitive development, notably those rooted in the work of Piaget (1970) or Vygotsky (1978), are primarily concerned with the process of attaining ever-greater capacities for thinking complexly about one's life and world. In contrast, clinically based theories of development, particularly those rooted in the theories of Freud (1953), Bowlby (1969), and Maslow (1968), are primarily concerned with the process of attaining an increasingly more pervasive sense of psychological health and well-being.

Several researchers have compared social–cognitive maturity and social–emotional well-being over time (e.g., Bauer & McAdams, in press; Block, 1971; Helson & Roberts, 1994; Helson & Wink, 1992; Vaillant, 1977; Vaillant & McCullough, 1987; Westenberg & Block, 1993). One consistent finding is that social–cognitive maturity, which is frequently assessed by Loevinger's (1976; Hy & Loevinger, 1996) measure of ego development, typically does not correlate with global measures of health and

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[1] We view personal growth as the more subjective facet of personality development. We use the term *personal growth* to characterize growth goals because they involve a focus on that which is personally meaningful to the individual (Brandtstadter, 1999; King, 2002). The term *personality development* is typically studied in a more objective, or at least ostensible, manner—using information that does not involve elaborated, subjective accounts of personal intentions (McAdams, 1995). Thus, even though we view personal growth as a subset of personality development, we use the term *personality development* to characterize our measures of maturity and well-being. The difference can be seen in the field's general perspective on the development of personality traits, which represents a prominent form of personality development. This view holds that traits are molded less by subjective intentions than by external biological and social forces (Harris, 1995; Plomin & Caspi, 1999), even though research on the intentional efforts to develop one's own personality traits is scarce. Part of the aim of these studies is to contribute to an understanding of the role of personal growth in personality development, namely in the form of intentional self-development.

well-being (e.g., Bauer & McAdams, in press; Bursik, 1991; King, Scollon, Ramsey, & Williams, 2000; Vaillant & McCullough, 1987; Westenberg & Block, 1993). In other words, the two facets of personality development seem to operate independently: People who can think complexly about their lives are just about as likely to be happy as unhappy.[2]

Social–Cognitive Maturity

Theories of social–cognitive personality development address the individual's increasing ability to understand the self and others. These theories are frequently rooted in Piaget's (1970) theory of cognitive development or Vygotsky's (1978) theory of social–cognitive development. Theories stressing the social component of development claim that cognitive abilities could only form in the way and to the degree they do by virtue of social interaction (e.g., Turiel, Smetana, & Killen, 1991; Wertsch, 1991; Youniss, 1980). Damon and Hart (1988) outlined four stages of self-understanding development in childhood and adolescence, with each successive stage based on an increasing ability to consider and integrate the perspectives of other people over time when thinking about the self. Kohlberg's (1969) theory of moral development and Loevinger's (1976) theory of ego development extend social–cognitive development beyond adolescence into adulthood.

Loevinger's (1976) theory addresses the social–cognitive structures through which individuals organize their lives and world in increasingly complex ways. The stages or levels of ego development can be used not only to plot an individual's development over time but also to differentiate individuals. The measure of ego development (Hy & Loevinger, 1996) has been described as "one of the most comprehensive constructs in the field of personality development" (Westenberg & Block, 1993, p. 792). The levels of ego development mark important distinctions in the ways, and degrees of complexity with which, individuals understand the self, others, and social situations. For example, the prototypical person at the conformist level has a conscious preoccupation with appearances and behavior, whereas the person at the conscientious level is preoccupied with more internal qualities such as motives and achievements (Loevinger, 1993). Thus the person at the conscientious level is better equipped to understand the intentions, values, and relationships of the self and others. As another example, three personality prototypes—conflicted, traditional, and individuated—were found to map onto ego development, respectively, at the lower (impulsive and self-protective), middle (conformist, self-aware, and conscientious), and higher (individualistic, autonomous, and integrated) stages of ego development (John, Pals, & Westenberg, 1998). Recent research has shown that social–cognitive maturity may be related to adaptive qualities of personality but not to global measures of health and well-being. For instance, higher levels of ego development have been related to changes over time in levels of responsibility, tolerance, and achievement via independence (Helson & Roberts, 1994) as well as to ego resiliency and interpersonal integrity, but not to self-ease (Westenberg & Block, 1993). One study found that divorced women who showed improvement in their level of adaptation to the divorce in the first year also showed an increase in ego level, but ego level at any one time did not correlate with adaptation or well-being (Bursik, 1991).

Social–Emotional Well-Being

Clinically based theories of human development—for example, psychoanalytic (Freud, 1953), object relations (Greenberg & Mitchell, 1983), attachment (Bowlby, 1969), psychosocial (Erikson, 1950/1994), and humanistic (Maslow, 1968) theories—typically address the individual's increasing ability to adjust to the social and emotional demands of everyday life. We are primarily concerned with the acquisition of well-being rather than with the avoidance or alleviation of difficulties such as depression (as in humanistic psychology and positive psychology; Maslow, 1968; Seligman & Csikszentmihalyi, 2000). Maslow (1968) claimed that people are oriented toward either growth or safety in their everyday lives and that a growth orientation more effectively facilitates psychological health and well-being. Humanistic psychologists claim that people who think about their lives predominantly in terms of certain values (e.g., wholeness, fairness, autonomy, empathy) are on the path to personal growth, that is, to greater levels of psychological health and well-being (Maslow, 1968; Rogers, 1961).

The research on intrinsic versus extrinsic goals (Kasser & Ryan, 1996; Sheldon & Kasser, 1995, 2001), which is based on self-determination theory (Deci & Ryan, 2000) and plays a role in both humanistic psychology and positive psychology, is most closely related to the present study. Briefly, intrinsic goals involve a concern for personal growth and eudaimonistic happiness, meaningful relationships, and contributing to society, whereas extrinsic goals involve a concern for money, status, and physical appearance. Intrinsic goals have an established relationship to well-being (e.g., Kasser & Ryan, 1996; Sheldon & Kasser, 1995, 2001). Furthermore, the coherence of higher and lower level goals has been found to hold unique relationships to well-being (Sheldon & Kasser, 1995). Finally, intrinsic goals have been found to be among those that mediate the relationship between age and well-being, suggesting that one reason older people were found to be happier was that they were more likely to have intrinsic goals (Sheldon & Kasser, 2001).

Growth Goals and Personality Development

Life Span Growth Goals

In this study, we were especially interested in the growth orientations of people's major life goals. If any type of goal should relate to broad measures of personality development, major life

[2] Global measures of psychological health and well-being, unlike Loevinger's (1976) ego development, are generally not developmental per se, though they do measure degrees of the primary outcome desired in the clinically based theories of development. In this way, ego development and well-being can represent two broad facets of outcomes or attainments of personality development. Furthermore, by aligning maturity with social–cognitive development and well-being with social–emotional development, we do not mean to suggest that cognition and emotion are two entirely distinct properties. The ego development measure involves emotional concerns, and the well-being measures involve cognition (if only to evaluate one's well-being). However, the two measures do address more cognitive (how one thinks about the self and others) and more emotional (how one feels about the self in a world of others) phenomena, respectively, relative to each other.

goals should. We use the term *life span growth goals* to describe growth-oriented major life goals in order to emphasize the long-term (life span) nature of the goals in addition to the goals' orientation toward growth. In order to study life span growth goals that paralleled the two broad facets of personality (maturity and well-being), we operationally defined life span growth goals in two categories, exploratory life span growth goals and intrinsic life span growth goals. These two life span growth goals involved overt intentions to carry out the kinds of activities and mental processes that theoretically foster the two facets of personality development.

Exploratory life span growth goals. In the theories of social–cognitive maturity described earlier, the mechanisms of social–cognitive development involved some variant of Piaget's (1970) notions of assimilation and accommodation and extended them into the world of social interaction. For example, mechanisms of social–cognitive development involve the differentiation of new perspectives on the self and others as well as the integration of these perspectives into a new understanding of the self and the world that increases the individual's capacities for subsequent action (Bauer & Bonanno, 2001a; Block, 1971). We drew upon these developmental mechanisms to form the basis of exploratory life span growth goals, which involved the explicit expression of intentions to conceptually explore, integrate, deepen, or otherwise learn about new perspectives on the individual's life (see the Appendix and the Method section).

Intrinsic life span growth goals. Unlike theories of social–cognitive development, the clinically based theories of social–emotional development typically have not charted specific stages of attaining the target outcome (i.e., social–emotional well-being), nor have they clearly defined the key psychological mechanisms that foster social–emotional growth. However, Deci and Ryan's (2000) self-determination theory has specified one such mechanism: the enactment of (and even the mere striving to act on) values that promote autonomy, competence, and relatedness—namely, the values or motivations known as intrinsic (as opposed to extrinsic).[3] As the theory goes, as people act on intrinsic goals in an increasing variety of contexts, well-being should emerge more pervasively in their lives (Deci & Ryan, 2000). We based our definition of intrinsic life span growth goals on the operational definition of intrinsic goals. Intrinsic life span growth goals involved the overt expression of intentions to do things that were intrinsically motivating, such as to grow personally, to foster meaningful relationships, or to contribute something to society (Sheldon & Kasser, 1995; see the Appendix and the Method section).

Note: Growth distinctions via goal narratives. We note here that exploratory and intrinsic life span growth goals had some conceptual overlap—namely, both dealt with some form of personal growth. Thus, we expected that both types of growth goals would correlate with both maturity and well-being. However, exploratory life span growth goals dealt with a specifically cognitive form of growth (attaining new understandings), whereas intrinsic life span growth goals may have involved a concern for cognitive growth but not necessarily in an explicit manner. The key word here is *explicit.* In coding these goals, we looked for words that explicitly, not implicitly, referred to cognitive or social–cognitive growth, such as "exploring new ideas," "learning," and "deepening a relationship" (see Method section and Appendix). Intrinsically oriented goals in general (e.g., Sheldon & Kasser, 1995) may implicitly involve some form of cognitive or meaning-based exploration, but such intentions are not always explicit in people's descriptions of goals. This point leads to the important fact that the life span growth goals were garnered from narrative data (see Method section). Personal narratives yield more information about how a person interprets a particular event or goal, particularly compared with more common measures of personal goals, such as personal strivings (Emmons, 1986) and personal projects (Little, 1989). Narratives of goals give a more refined view of what people are thinking when they say they have a particular goal and—more important for this study—of the reasons why they have the goal in the first place. Thus, narratives of goals allowed us to distinguish the specifically exploratory elements from the intrinsic elements of life span growth goals.

Hypothesis 1. We expected that life span growth goals would correlate with personality development. We made a specific prediction that exploratory life span growth goals would be especially tied to social–cognitive maturity (ego development; Hy & Loevinger, 1996) whereas intrinsic life span growth goals would be especially tied to well-being (Diener, Emmons, Larson, & Griffen, 1985; Ryff & Keyes, 1995). The reason for this is that exploratory life span growth goals involved an explicit concern for conceptual development, which is a key ingredient of ego development. Intrinsic life span growth goals involved an explicit concern for the types of things that have been shown empirically to correlate with well-being. In recent research on narratives of memories (rather than goals), we found support for a very similar hypothesis: Integrative versus intrinsic themes in adults' stories of major life transitions corresponded differentially and respectively with ego development and well-being (Bauer & McAdams, in press).

Hierarchical Coherence in Growth Goals

Goal hierarchies. People have longer range and shorter range goals in life. Goals relating to maturity and happiness have been studied almost exclusively on a middle-range level of abstraction (Cantor & Kilhstrom, 1987)—that is, goals dealing not with major life goals (higher level) or with goals for what to do in the immediate moment (lower level), but rather with things such as everyday strivings (Emmons, 1986), personal projects (Little, 1989), and current concerns (Klinger, 1977). High, middle, and low here refer to levels of abstraction in terms of the breadth of time involved—longer term versus shorter term (Vallacher & Wegner, 1987). Goals on these different levels can be studied as hierarchically related (Carver & Scheier, 1999): Relatively long-term goals (such as life span growth goals) cannot be attained without taking smaller steps toward those goals; relatively short-term goals (such as everyday growth goals; see below) can set those specific smaller steps into action if the aims are coherent with the higher level goals.

Growth-goal coherence. We measured growth goals on two levels of abstraction: life span growth goals and everyday growth goals. To measure everyday growth goals, we coded participants' personal strivings (Emmons, 1986) for growth orientations in a

[3] Deci and Ryan (2000) did not use the term *mechanism,* but intrinsic motivation in self-determination theory and research often functions as a cause of social–emotional development.

manner similar to the coding of life span growth goals. Because both life span growth goals and everyday growth goals were coded for personal growth, we were able to measure whether people's goals were hierarchically coherent (i.e., conceptually similar, having similar aims or similar motivations for aims; see Method section). (However, we do not mean to say that everyday growth goals are low-level goals in an absolute sense—only that everyday growth goals are lower level goals, i.e., involving a shorter time span relative to life span growth goals.) Coherence in goal hierarchies has been shown to relate to well-being (King, Richards, & Stemmerich, 1998; Sheldon & Kasser, 1995).

Hypothesis 2. Our second hypothesis was that coherence between life span growth goals and everyday growth goals would hold unique relationships to personality development. We looked at exploratory growth-goal coherence and intrinsic growth-goal coherence. We predicted that participants with both exploratory life span growth goals and everyday growth goals (which were both exploratory and intrinsic; see Method section) would have high levels of ego development, whereas participants with both intrinsic life span growth goals and everyday growth goals would have high levels of well-being. Because coherence was a combination of life span and everyday growth goals, we also controlled for these component parts (see Table 1 for a conceptual overview of the variables).

Growth Goals and Age

Age and development. Age is a developmentally salient phenomenon that relates to both ego development and well-being. There is evidence that ego levels increase between adolescence and adulthood (Westenberg & Block, 1993).[4] Age has also been shown to correlate with well-being such that older people report generally higher levels of well-being than younger people (for a review, see Mroczek & Kolarz, 1998). However, age does not address the individual's active role in the developmental process (Neugarten, 1979). Chronological age happens *to* the person and ignores human intentionality and other psychological phenomena. Although age is important, it is only the launching pad for the questions of why and how social–cognitive and social–emotional development might occur. Indeed, when psychological variables such as extraversion and occupational stress have been considered, the well-being variance attributed to age has been shown to drop considerably (Mroczek & Kolarz, 1998). Recently, Sheldon and Kasser (2001) found that intrinsic goals were among those that mediated the relationship between age and well-being.

Hypothesis 3. In the event that age correlated with personality development (either ego development or well-being), we expected that growth goals in their various configurations (exploratory and intrinsic life span growth goals, everyday growth goals, exploratory and intrinsic growth-goal coherence) would at least partially mediate that relationship.

Method

The student study and the adult study involved the same measures. The constructs and predictions were also the same. For the sake of comparison and brevity, we describe the two studies together, rather than in the more typical format of presenting the two studies separately.

Participants

The college sample included 125 students at Northwestern University who volunteered to participate and received grade credit for a course on personality. Seventy-two percent of this sample were female, 33% were of a minority race, and the sample had a mean age of 19.8 years ($SD = 1.0$). For the adult sample, 51 adults from the Evanston, Illinois, area who had participated in interview-based studies previously (McAdams, 1993; McAdams, Diamond, de St. Aubin, & Mansfield, 1997; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001) were contacted to volunteer for a written study on life narratives and were paid $150 for participation. Seventy percent of this sample were female, 20% were of a minority race, and 80% held college degrees. The sample had a mean age of 51.7 years ($SD = 10.0$; range = 30–72) and a median household income of $55,000.

Measures: Overview

The present studies were part of a larger project on life narratives and targeted the portions of the project involving self-report measures of goals (life span growth goals and everyday growth goals), well-being, and ego development. Participants completed a booklet containing these and other measures at their convenience. Booklets typically took 2–4 hr to complete.

Measures: Life Span Growth Goals

Participants were asked to describe, in two separate paragraphs, two of their major goals in life (i.e., life span goals). After being told to think about their life's future in a broad sense and about their life span goals, participants were instructed, "You may have many goals, but please choose the two that seem the most important to you right now and describe each to us below. Please write a paragraph for each goal that explains what the goal is and how you are trying to or plan to achieve it." Narratives were then coded. Coders first identified what the goal was most centrally about, for example, success in love or work, obtaining something like a house or a marriage or financial security, or ongoing personal growth. These *types* of goals were not the focus of the coding. Any one of these types of goals could be coded in various ways. Rather, the target element of the narrative was the participant's predominant *reason* (or reasons) for having that life span goal. Often the underlying reasons for the goals were made explicit in the person's strategy for implementing the goal (Gollwitzer & Brandstätter, 1997; King et al., 1998). Each life span goal was coded for the presence or absence of (a) exploratory reasons and (b) intrinsic reasons (see below). The coding criteria were stringent. Two coders (Jack J. Bauer and an advanced graduate student) coded each life span goal, were blind to participants' scores on other measures, and had the following interrater reliabilities (kappas): exploratory life span growth goals, .62; intrinsic life span growth goals, .74. Discrepancies were resolved by discussion.

Coding for exploratory life span growth goals. Each life span goal was coded in a dichotomous fashion for the presence or absence of exploratory reasons. The presence of an exploratory life span growth goal was coded when the reason for (again, not the type of) the goal was explicitly to explore, to learn, to encounter new perspectives, or to seek conceptual challenges. The absence of an exploratory life span growth goal was coded when the goal did not explicitly mention those types of reasons (in other words, when the goal was nonexploratory). The typical nonexploratory goal involved a desire merely to have, to obtain, or to experience something, without an explicit concern for cognitive or conceptual growth. (We note that exploratory and nonexploratory life span goals were not separate

[4] However, like other social–cognitive theorists, Loevinger (1976) insisted that the individual stages of ego development cannot be defined according to age other than "that the earliest stages are rare after childhood and that the highest stages are impossible in childhood and rare even in adulthood" (p. 14).

Table 1
Two Broad Dimensions of Personality Development and Their Corresponding Variables

Theoretical dimensions of personality development	Measures of personality development	Measures of growth goals		
		Life span growth goals	Everyday growth goals	Growth-goal coherence
Social–cognitive maturity	Ego development (ED)	Exploratory life span growth goals	Everyday growth goals	Exploratory growth-goal coherence
Social–emotional well-being	Well-being (PWB and SWLS)	Intrinsic life span growth goals	Everyday growth goals	Intrinsic growth-goal coherence

Note. Each everyday growth goal was both exploratory and intrinsic. The pairing of exploratory life span growth goals with everyday growth goals constituted exploratory growth-goal coherence (even though everyday growth goals involved both exploratory and intrinsic concerns), because both the life span and everyday growth goals involved exploratory concerns. The same rationale applied to intrinsic growth-goal coherence. ED = Washington University Sentence Completion Test of Ego Development; PWB = Ryff's scale of personal well-being; SWLS = Satisfaction With Life Scale.

variables but two sides of the dichotomous variable "exploratory life span growth goals.") As mentioned earlier, we based this definition on the theoretical mechanisms of social–cognitive development, namely, the ability to differentiate and integrate new perspectives on the self and others (e.g., Bauer & Bonanno, 2001a; Damon & Hart, 1988). Because we were dealing with goal constructs, we looked for evidence that the underlying reason for pursuing a particular goal was for the purpose of exploring, investigating, or learning about (i.e., differentiating and integrating) new perspectives on the individual's life.

Coding for intrinsic life span growth goals. Each life span goal was coded in a dichotomous fashion for the presence or absence of intrinsic reasons. The presence of an intrinsic life span growth goal was coded when the reason for (again, not the type of) the goal was explicitly to foster personal growth, a meaningful relationship, or contributions to society or future generations (from Sheldon & Kasser, 1995). The absence of an intrinsic life span growth goal was coded when the goal did not explicitly mention those types of reasons (in other words, when the life span goal was nonintrinsic). A nonintrinsic life span goal involved either extrinsic reasons for having the goal (e.g., wanting to gain money, status, or approval; Sheldon & Kasser, 1995) or other reasons that did not fit the criteria for intrinsic life span growth goals (e.g., wanting to maintain or preserve—not improve or develop—one's health). (We emphasize again that we coded only the reasons for the goals, not the types of goals. Thus, the life span goal of "making money" could be coded as an intrinsic life span growth goal if the reasons for making money were to provide an education for one's children, i.e., reasons dealing with contributing to future generations. In contrast, the life span goal of contributing to a group larger than oneself could be coded as nonintrinsic if the reasons for making such contributions were grounded in gaining fame and prestige.) Finally, we note again that the intrinsic and nonintrinsic goals were not separate variables but two sides of the dichotomous variable "intrinsic life span growth goals." Examples of the different types of life span growth goals appear in the Appendix.

Computing exploratory and intrinsic life span growth goals. Each life span goal was coded for the two growth dimensions in a dichotomous fashion; that is, each goal was exploratory or not and was intrinsic or not. Because each person described two life span goals, each person could have a total of 0, 1, or 2 exploratory life span growth goals as well as 0, 1, or 2 intrinsic life span growth goals. It is important to note that narratives of goals (like narratives of memories) typically reveal competing motivations or reasons for an action (or characteristic, or belief, etc.). However, any one narrative can be coded as reflecting one as opposed to the other reason predominantly—a matter of emphasis (Bauer & McAdams, in press).

Measures: Everyday Growth Goals

We used Emmons's (1986) personal strivings measure, which asks participants to provide 10 different responses of 1–2 sentences each to the sentence stem "I typically try to . . . ," which was repeated 10 times on a page. Personal strivings address what people typically try to do in everyday life. We refer to these goals as *everyday goals* to emphasize their distinction from our measure of life span goals. Life span goals addressed major life and relatively longer range goals with broader time frames and (because of the narrative format) more in-depth thought processes. With life span goals as higher level goals and everyday goals as (relatively) lower level goals (Vallacher & Wegner, 1987), we could study goal hierarchies and, more specifically, vertical goal coherence (Sheldon & Kasser, 1995).

Coding for everyday growth goals. Each everyday goal was coded in a presence–absence manner as either growth oriented or not. Unlike the coding for life span growth goals, the criteria for coding everyday growth goals included an emphasis on both exploratory and intrinsic concerns. Sheldon and Kasser (1995) defined intrinsic goals as goals that deal with personal growth, meaningful relationships, or contributing to society. We adopted this approach but with an additional criterion: The everyday goal must also have expressed an explicit concern for exploration, that is, exploring or learning or otherwise deepening one's conceptual understanding of something. Thus, each everyday growth goal included both exploratory and intrinsic concerns. It is important to note that each everyday goal with an exploratory emphasis, if coded separately, would also have been intrinsic (although not all intrinsic everyday goals would have been exploratory—e.g., striving toward an intimate relationship does not explicitly refer to conceptual exploration or learning or deepening). The reason for this was that the brief descriptions garnered from the everyday goal measure made nearly every exploratory striving (wanting to learn more, wanting to explore) sound intrinsic. In contrast, the richer narrative format of the life span goal measure allowed for distinctions between exploratory and intrinsic concerns such that not all exploratory life span growth goals were intrinsic or vice versa (e.g., wanting to learn more [an exploratory concern] in order to outshine others [a nonintrinsic concern] or wanting to contribute to society [an intrinsic concern] without necessarily wanting to learn or explore anything [a nonexploratory concern]). Two coders (Jack J. Bauer and an advanced graduate student) coded the strivings, were blind to participants' scores on other measures, and had an interrater reliability (kappa) of .76. Examples of everyday growth goals include (all beginning with "Typically I try to . . .") "remember that there are lessons in all of life's experiences and that I want to learn and grow," "look for ways to

deepen my relationship with my husband," and "be a catalyst to encourage others to continue to learn, grow, increase and create for themselves."

Computing everyday growth goals. We computed everyday growth goals by tallying the total number of everyday growth goals for each participant. Because of highly skewed distributions (which were probably due to the stringent coding system), presence–absence variables were created for each type of everyday growth goal and were used in statistical analyses with other variables.

Measures: Growth-Goal Coherence

We predicted that people who had coherent growth goals—that is, people who had growth goals on both life span and everyday levels—would be especially likely to have high levels of maturity and well-being. For the sake of conceptual simplicity, we condensed the life span and everyday growth-goal variables into dichotomous variables that compared, respectively, those who had life span growth goals with those who did not and those who had everyday growth goals with those who did not. We then computed coherence variables as the interaction of the life span and everyday growth goals. Because the variables were dichotomized and dummy coded (i.e., presence = 1, absence = 0), the interactions compared those who had goal coherence with those who did not. Because we measured exploratory life span growth goals and intrinsic life span growth goals, we computed variables for exploratory coherence and intrinsic coherence. (We note that even though each everyday growth goal involved both exploratory and intrinsic reasons, the pairing of exploratory life span growth goals with everyday growth goals constituted exploratory coherence, because both the life span and the everyday growth goals involved exploratory reasons. The fact that exploratory coherence also involved intrinsic concerns at the everyday level did not negate the fact that exploratory coherence was in operation for both levels of that goal hierarchy. Similarly, the pairing of intrinsic life plans and growth strivings constituted intrinsic coherence. In all tests of coherence, we controlled for the component parts of coherence, i.e., life span growth goals and everyday growth goals).

Measures: Personality Development

Ego development. The Washington University Sentence Completion Test of Ego Development (ED; Hy & Loevinger, 1996) asks participants to complete 18 sentence stems, for example, "When a child will not join in group activities . . . ," "A man's job . . . ," "My mother and I . . . ," "A wife should . . . ," and "Rules are . . . " Each item is scored according to guidelines, aggregated, and assigned a total protocol rating (TPR). The TPR scores correspond to different stages in personality development. Although Loevinger (1976) noted the difficulty in defining a single phenomenon that characterizes ego development, for the purposes of this study we view the ED stages as showing increasing capacities to think complexly about the self and others. Starting at Level 2 (with Level 1 being reserved for the presocial infant who as yet lacks an ego), the TPR scores are as follows: (2) Impulsive (passively dependent), (3) Self-Protective (opportunistic), (4) Conformist (following rules), (5) Self-Aware (fairness, consideration of rules), (6) Conscientious (self-evaluated standards), (7) Individualistic (respect for others' standards), (8) Autonomous (understanding of interdependence), and (9) Integrated (reconciles conflicts within a broader identity). An advanced graduate student, well-trained in the theory and measurement of ED, coded the responses. The ED scoring guidelines, which are self-instructive, have shown high levels of reliability and internal consistency (Loevinger & Wessler, 1970).

Well-being. Participants completed two scales of well-being, the Satisfaction with Life Scale (SWLS; Diener et al., 1985) and Ryff's multidimensional scale of personal well-being (PWB; Ryff & Keyes, 1995). The SWLS is a well-validated, simple, five-item measure of overall life satisfaction. The PWB measure is a well-validated, robust measure of six dimensions of well-being: Autonomy, Environmental Mastery, Personal Growth, Positive Relationships, Purpose in Life, and Self-Acceptance. We used the mean PWB score, aggregated from the six separate scales, for all analyses in this study.

Results

Preliminary Concerns

Descriptive statistics of growth goals appear in Table 2. Correlations appear in Table 3. Regression models for students and adults appear in Tables 4 and 5, respectively. There were no gender or socioeconomic status differences in any of the growth goals or in personality development. Students and adults did not differ significantly in their ED, SWLS, or PWB scores ($ps > .10$). Students' ED and SWLS scores did not correlate significantly, but their ED and PWB scores did correlate significantly (see Table 3). Adults' ED and well-being scores did not correlate significantly.

Bivariate Correlations

Life span growth goals. For students, exploratory life span growth goals and intrinsic life span growth goals correlated sig-

Table 2
Frequencies (and Percentages) for Goal Variables

	Students (n = 125) having goal values of			Adults (n = 51) having goal values of		
Variable	0	1	2	0	1	2
Exploratory life span growth goals	49 (39)	50 (40)	26 (21)	16 (31)	21 (42)	14 (27)
Intrinsic life span growth goals	15 (12)	39 (31)	71 (57)	14 (27)	16 (31)	21 (41)
Everyday growth goals	63 (50)	62 (50)		15 (29)	36 (71)	

Note. Figures represent the numbers of participants (percentages in parentheses) having certain numbers of growth goals. Dichotomous variables for everyday growth goals, which were collapsed owing to their highly skewed distributions, were used for all analyses and are presented here.

Table 3
Correlations for Student and Adult Samples

Variable	1	2	3	4	5	6	7	8	Age
1. Exploratory life span GG	—	.69***	.29*	.64***	.42**	.41**	.27*	.24†	.23
2. Intrinsic life span GG	.40***	—	.19	.46**	.65***	.32*	.38**	.39**	.32*
3. Everyday GG	.41***	.31***	—	.61***	.69***	.48***	.27*	.30*	.32*
4. Exploratory GG coherence	.57***	.30***	.46***	—	.34**	.54***	.13	.12	.25†
5. Intrinsic GG coherence	.37***	.29***	.45***	.53***	—	.38**	.41**	.34*	.34*
6. ED	.52***	.24**	.52***	.56***	.52***	—	.14	.07	.26†
7. PWB	.16†	.38***	.24**	.25**	.30***	.24**	—	.73***	.43**
8. SWLS	.16†	.40***	.24**	.27**	.30***	.13	.71***	—	.35**

Note. Students' (n = 125) Pearson correlations appear below the diagonal; adults' (n = 51) Pearson correlations appear above. For all correlations involving nonparametric variables, Spearman correlations were significant at the same level. GG = growth goals; ED = Washington University Sentence Completion Test of Ego Development; PWB = Ryff's scale of personal well-being; SWLS = Satisfaction With Life Scale.
† $p < .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

nificantly (see Table 3). For adults, exploratory and intrinsic life span growth goals correlated significantly. Thus, in both samples, life span growth goals that were oriented toward exploration were likely to be intrinsically oriented as well. We turn now to correlations between life span growth goals, maturity, and well-being. For students, exploratory life span growth goals correlated significantly with ED scores and marginally significantly with PWB and SWLS scores. Students' intrinsic life span growth goals correlated significantly with ED, PWB, and SWLS scores. For adults, exploratory life span growth goals correlated significantly with ED and PWB scores and marginally significantly with SWLS scores. Adults' intrinsic life span growth goals correlated significantly with ED, PWB, and SWLS scores. Thus, exploratory life span growth goals and intrinsic life span growth goals correlated with both maturity and well-being. However, the magnitude of those correlations was stronger for the predicted relationships of Hypothesis 1. To determine the relative degree of those magnitudes, we next ran regressions of personality development on growth goals (see below).

Everyday growth goals. For students, everyday growth goals correlated significantly with exploratory life span growth goals, intrinsic life span growth goals, and ED, PWB, and SWLS scores (see Table 3). For adults, everyday growth goals correlated significantly with exploratory life span growth goals, with ED, PWB, and SWLS scores, but not with intrinsic life span growth goals. Thus, everyday growth goals (which involved both exploratory and intrinsic concerns) correlated with both maturity and well-being.

Growth-goal coherence. For students, exploratory growth-goal coherence correlated significantly with ED, PWB, and SWLS scores (see Table 3). Students' intrinsic growth-goal coherence correlated significantly with ED, PWB, and SWLS scores. For adults, exploratory growth-goal coherence correlated significantly with ED scores but not with either PWB or SWLS scores. Adults' intrinsic growth-goal coherence correlated significantly with ED, PWB, and SWLS scores. Thus, participants whose growth goals were coherent at the levels of major life goals and everyday goals had higher levels of personality development. We next tested via

Table 4
Students: Regression Models of Personality Development on Growth Goals

	ED		PWB		SWLS	
Model	β	R^2	β	R^2	β	R^2
1. Exploratory life span GG	.52***	.27	.16†	.02	.16†	.02
2. Intrinsic life span GG	.24**	.05	.38***	.14	.40***	.15
3. Everyday GG	.52***	.27	.24**	.05	.24**	.05
4. Exploratory life span GG	.51***	.26	.02	.13	.00	.14
Intrinsic life span GG	.04		.37***		.40***	
5. Exploratory life span GG	.37***	.38	.08	.05	.07	.05
Everyday GG	.37***		.21*		.22*	
6. Intrinsic life span GG	.09	.27	.34***	.15	.36***	.16
Everyday GG	.50***		.14		.13	
7. Exploratory life span GG	.32***	.40	.01	.05	.04	.04
Everyday GG	.17		.07		.12	
Exploratory GG coherence	.28*		.21		.13	
8. Intrinsic life span GG	.09	.27	.33*	.17	.35*	.18
Everyday GG	.28		.22		.22	
Intrinsic GG coherence	.24		.40***		.39**	

Note. GG = growth goals; ED = Washington University Sentence Completion Test of Ego Development; PWB = Ryff's scale of personal well-being; SWLS = Satisfaction With Life Scale.
† $p < .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Table 5
Adults: Regression Models of Personality Development on Growth Goals

Model	ED		PWB		SWLS	
	β	R^2	β	R^2	β	R^2
1. Exploratory life span GG	.41**	.15	.27*	.05	.24†	.04
2. Intrinsic life span GG	.32*	.09	.38**	.12	.39**	.14
3. Everyday GG	.48***	.22	.27*	.05	.30*	.07
4. Exploratory life span GG	.36*	.14	.02	.11	.07	.12
Intrinsic life span GG	.07		.37*		.44*	
5. Exploratory life span GG	.30*	.28	.21	.08	.16	.08
Everyday GG	.40**		.21		.26†	
6. Intrinsic life span GG	.24*	.26	.34**	.15	.35**	.18
Everyday GG	.44***		.21		.24†	
7. Exploratory life span GG	.12	.32	.34†	.10	.28	.08
Everyday GG	.18		.17		.17	
Exploratory GG coherence	.36†		.13		.12	
8. Intrinsic life span GG	.16	.29	.57**	.20	.50**	.19
Everyday GG	.33*		.42*		.37*	
Intrinsic GG coherence	.22		.44*		.28	

Note. GG = growth goals; ED = Washington University Sentence Completion Scale of Ego Development; PWB = Ryff's scale of personal well-being; SWLS = Satisfaction With Life Scale.
† $p < .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

regression models whether these relationships held beyond the effects of life span growth goals and everyday growth goals individually (see below).

Age. Analyses with chronological age were only conducted for the adult sample because of the disparity between the two samples' sizes and the small age range of the student sample. Also, as mentioned earlier, the student and adult samples did not differ significantly in ED, PWB, or SWLS scores. Adults' age correlated significantly with intrinsic life span growth goals, everyday growth goals, exploratory growth-goal coherence (marginally), intrinsic growth-goal coherence, and ED (marginally), PWB, and SWLS scores (see Table 3). Age did not correlate significantly with exploratory life span growth goals. Thus, older participants were at least marginally more likely than younger participants to have intrinsic life span growth goals, both kinds of growth-goal coherence, maturity, and well-being. We next tested via regression models whether growth goals mediated the relationships between age and personality development (see below).

Exploratory Versus Intrinsic Life Span Growth Goals

Part of the prediction for the first hypothesis was that specific types of life span growth goals would correspond predominantly with specific types of personality development. To test this prediction, we ran a series of regression models. We begin with the results for the students. Regressing ED scores on exploratory and intrinsic life span growth goals simultaneously, we found that exploratory life span growth goals predicted ED scores significantly but that intrinsic life span growth goals did not (see Table 4). Regressing PWB scores on the two growth goals, we found that intrinsic life span growth goals predicted PWB scores significantly but that exploratory life span growth goals did not. Regressing SWLS scores on exploratory and intrinsic life span growth goals simultaneously, we found that intrinsic life span growth goals predicted SWLS scores significantly but that exploratory life span growth goals did not. The same pattern was found for the adults; that is, exploratory life span growth goals, but not intrinsic life span growth goals, predicted ED scores significantly, whereas intrinsic life span growth goals significantly predicted PWB and SWLS scores, but exploratory life span growth goals did not (see Table 5). Thus, even though both exploratory and intrinsic life span growth goals predicted both maturity and well-being, exploratory concerns seemed to drive the relationship between life span growth goals and maturity, whereas intrinsic concerns seemed to drive the relationship between life span growth goals and well-being.

Growth-Goal Coherence

The following regression models tested whether people who had vertical coherence in their life span and everyday growth goals were especially likely to have high levels of personality development. We measured growth-goal coherence (in both exploratory and intrinsic forms) as the interaction of life span growth goals and everyday growth goals. Thus our analyses fit the following pattern: regressing a personality-development variable (either ED, PWB, or SWLS scores) on life span growth goals (exploratory or intrinsic, whichever was relevant), everyday growth goals, and growth-goal coherence (exploratory or intrinsic, whichever was relevant). For the sake of brevity, this section focuses on the regressions testing: (a) whether participants who had exploratory coherence had independently higher ED scores and (b) whether participants who had intrinsic coherence had independently higher PWB and SWLS scores.

Exploratory growth-goal coherence. For students, we found significant predictors of ED scores in exploratory life span growth goals and exploratory growth-goal coherence but not everyday growth goals (see Table 4). For adults, we found that exploratory growth-goal coherence predicted ED scores marginally significantly, whereas neither exploratory life span growth goals nor everyday growth goals predicted ED scores significantly (see Table 5). Thus, students and adults who had exploratory coherence

in both their life span and their everyday growth goals had at least marginally higher levels of maturity, beyond the individual effects of life span and everyday growth goals. Regressions of well-being on exploratory growth-goal coherence, which were not part of the predictions, appear in Tables 4 and 5.

Intrinsic growth-goal coherence. For students, we found significant predictors of PWB scores in intrinsic life span growth goals and intrinsic growth-goal coherence but not growth strivings (see Table 4). We next found that intrinsic life span growth goals predicted SWLS scores significantly, as did intrinsic growth-goal coherence, but everyday growth goals did not. For adults, we found that intrinsic life span growth goals, everyday growth strivings, and intrinsic growth-goal coherence each predicted PWB scores significantly (see Table 5). We also found that intrinsic life span growth goals ($\beta = .50$, $p < .01$) and everyday growth goals ($\beta = .37$, $p < .05$) predicted SWLS scores significantly, but intrinsic growth-goal coherence did not. Thus, students and adults who had intrinsic coherence in their life plans and everyday strivings had generally (with one exception) higher levels of well-being beyond the individual effects of life span and everyday growth goals. Regressions of ED scores on intrinsic growth-goal coherence, which were not part of the predictions, appear in Tables 4 and 5.

Table 6
Adults: Regression Models of Ego Development on Growth Goals and Age

Model	ED β	ED ΔR^2	ED F for ΔR^2	ED Model R^2
1. Age	.27†			.05
2. Exploratory life span GG	.28*			.11
Age	.17	.03	1.54	
3. Everyday GG	.43**			.24
Age	.13	.02	0.94	
4. Exploratory life span GG	.15			.26
Everyday GG	.32†			
Exploratory GG coherence	.21			
Age	.06	.00	0.02	

Note. For Models 2–4, the growth goals (GG) were entered as Step 1, and then age was added to the equation as Step 2. For Models 2 and 3, *df* for the F test = 1, 48; for Model 4, *df* = 1, 46. ED = Washington University Sentence Completion Test of Ego Development.
† $p < .10$. * $p \leq .05$. ** $p \leq .01$.

Growth Goals and Age

The following regression models tested whether growth goals mediated the relationship between age and personality development. We highlight in the text only those models in which the specific growth goal(s), age, and type of personality development each related to each other. In these regression models, the growth goals were entered as Step 1, and then age was added to the equation as Step 2. In presenting these regression models, we consider regressions of ego development in the first section and regressions of well-being in the second section. Within each of these sections, we start by considering regressions of the personality development variable on the relevant life span growth goals variable and age, then on everyday growth goals and age, and finally on the relevant growth-goal coherence variable (including life span and everyday growth goals) and age. We adhered to the methods for establishing mediation outlined by Baron and Kenny (1986). All findings for regressions with age appear in Tables 6 and 7.

Growth goals, age, and maturity. As reported earlier, adults' age ($M = 52$ years, $SD = 10$; range = 30–72 years) correlated marginally with ED scores but did not correlate significantly with exploratory life span growth goals. A regression showed that age no longer predicted ED scores marginally when exploratory life span growth goals were considered (see Table 6). However, exploratory life span growth goals could not be said to serve as a mediating factor, because older adults were not more likely than younger adults to have exploratory life span growth goals. Because age did correlate significantly with everyday growth goals, we regressed ED scores on age and growth strivings and found that growth strivings predicted ED scores significantly, whereas age did not. Thus, growth strivings significantly mediated the marginal relationship between age and ED scores. Age correlated marginally significantly with exploratory growth-goal coherence, but exploratory growth-goal coherence did not play a unique role in the age–ED relationship.

Growth goals, age, and well-being. As reported earlier, older adults were more likely than younger adults to have intrinsic life span growth goals, everyday growth goals, intrinsic growth-goal coherence, and high levels of both forms of well-being. The primary question here was whether growth goals might account for the relationship between age and well-being. In a regression of PWB scores, we found that intrinsic life span growth goals predicted PWB scores significantly, as did age (see Table 7). Thus, intrinsic life span growth goals did not mediate the age–PWB relationship. In a regression of SWLS scores, we found that intrinsic life span growth goals predicted SWLS scores significantly, but age did so only marginally. Thus intrinsic life span growth goals marginally significantly mediated the relationship between age and life satisfaction: Older adults reported higher life satisfaction than younger adults, but this fact was in part explained by the fact that older adults were more likely to have life plans that were geared toward things like meaningful relationships and contributing to society rather than things like money and status. Turning to everyday growth goals, we regressed PWB scores on everyday growth goals and age and found that age predicted PWB scores significantly, but everyday growth goals did not. Using the same model with SWLS scores, we found that everyday growth goals predicted SWLS scores significantly but that age did so only marginally. Thus we found opposite mediational results with everyday growth goals: Age partially mediated the relationship between everyday growth goals and PWB scores, whereas everyday growth goals partially mediated the relationship between age and SWLS scores. Finally, we considered intrinsic growth-goal coherence. Regressing PWB scores on the model of intrinsic growth-goal coherence plus age, we found that all four variables predicted PWB scores significantly (see Table 7). Regressing SWLS scores on the same model, we found that intrinsic life span growth goals, everyday growth goals, and intrinsic growth-goal coherence predicted SWLS scores significantly but that age did not. Thus, intrinsic growth-goal coherence mediated the relationship between

Table 7
Adults: Regression Models of Well-Being on Growth Goals and Age

Model	PWB β	PWB ΔR^2	PWB F for ΔR^2	PWB Model R^2	SWLS β	SWLS ΔR^2	SWLS F for ΔR^2	SWLS Model R^2
1. Age	.43**			.17	.35**			.11
2. Intrinsic life span GG	.27*			.22	.33*			.19
Age	.34**	.22	6.54*		.24†	.05	3.22†	
3. Everyday GG	.20			.19	.29*			.16
Age	.36**	.12	7.19*		.26†	.05	3.49†	
4. Intrinsic life span GG	.68***			.39	.63***			.34
Everyday GG	.49**				.48**			
Intrinsic GG coherence	.60**				.42*			
Age	.32*	.09	6.87*		.19	.03	2.28	

Note. For Models 2–4, the growth goals (GG) were entered as Step 1, and then age was added to the equation as Step 2. For Models 2 and 3, *df* for the *F* test = 1, 48; for Model 4, *df* = 1, 46. PWB = Ryff's scale of personal well-being; SWLS = Satisfaction With Life Scale.
† $p < .10$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

age and life satisfaction but not between age and multidimensional well-being.

Discussion

The purpose of these studies was to examine the links between growth goals and personality development. First, we found for the most part that participants who had any form of growth goal were likely to have high levels of both maturity and well-being. Second, we found that specific kinds of growth goals were especially geared toward specific kinds of personality development. Third, we found that participants with growth-goal coherence—participants whose long-term growth goals matched their shorter term growth goals—were especially likely to have high levels of maturity and well-being. Finally, we found that growth goals accounted in part for relationships between age and personality development. We discuss these findings with an aim toward contributing to an understanding of intentional self-development (Brandtstadter, 1999).

Life Span Growth Goals, Generally and Specifically

All forms of growth goals (exploratory life span growth goals, intrinsic life span growth goals, everyday growth goals, and both forms of growth-goal coherence) correlated significantly with all forms of personality development (ego development, multidimensional well-being, and satisfaction with life), with only some exceptions concerning exploratory growth goals. The reason for this is that all growth goals shared much in common conceptually—notably, an explicit concern for fostering some kind of personal growth. Although we distinguished the life span growth goals in terms of the cognitive or emotional spin on the desired growth, often the two spins coincided in the same goal, as evidenced by the significant correlations between the two growth goals in both samples. Thus, growth goals in general (especially intrinsically oriented growth goals) seemed to relate to social–cognitive and social–emotional forms of personality development.

Still, despite their similarity, the two growth goals mapped differentially onto measures of maturity and well-being, suggesting that the different underlying reasons that people have for their goals relate to specific kinds of personality development. Exploratory life span growth goals and intrinsic life span growth goals each correlated with both ego development and well-being, but multiple regressions suggested more uniform relations between exploratory life span growth goals and ego development and between intrinsic life span growth goals and well-being. Participants whose life span goals emphasized exploring new perspectives in life, helping others develop, or seeking new challenges seemed especially able to think more complexly about the self and others. Participants who organized their life span goals primarily around attaining happiness, meaningful relationships, or contributing to society (rather than attaining money, status, or approval) were especially likely to have higher levels of well-being.

In other words, what one becomes is related to what one tries to do. This lends support to the notion of intentional self-development (Brandtstadter, 1999). For example, if one wishes to attain greater integration or meaning in life, yet one does not explicitly plan to do so, the yields may fall short. Or if one wants to be happy but strives primarily toward social status and approval, happiness is not as likely to result as it is if one focused on personal growth or meaningful relationships. Furthermore, goals—particularly long-term life goals—need not be fulfilled for their meanings to exert an influence on one's life (Baumeister, 1991). Life span goals, as higher level (Carver & Scheier, 1999; Smith, 1999; Vallacher & Wegner, 1987) goals, provide a framework for interpreting a wide range of one's thoughts, feelings, behaviors, and events, thereby influencing how one perceives one's life at any point in the process of enacting those goals. Thus, people's mere intentions for steering their lives in a particular direction are the first concrete step in getting there. (However, these findings were not longitudinal; see our comments in the *Limitations and Directions* section.)

Similarly, from a narrative perspective, development conforms in part to actions and making sense of them (e.g., Piaget, 1970; Vygotsky, 1978), a process known as mediated action (Wertsch, 1991). Personal goals, particularly when studied as narratives (which explicitly reveal personal intentions and reasons for action; Bruner, 1990), indicate not only the types of actions that are likely to ensue but also (and more importantly) how future actions are

likely to be interpreted. Actions interpreted in a social–cognitive manner will strengthen social–cognitive abilities, resulting in social–cognitive development, whereas actions interpreted in a social–emotional manner will strengthen social–emotional abilities, resulting in social–emotional development. The capacity of narratives to distinguish maturity and well-being has been found in previous work on life-defining memories (Bauer & McAdams, in press; King et al., 2000) but not on major life goals. Of course, personality development depends not only on personal intentions but also on impersonal social and biological forces (Lerner & Walls, 1999). However, it seems reasonable that personal goals do contribute to an individual's particular path of development in ways that could not possibly be accounted for by impersonal social and biological forces, though evidence either way is difficult to find.

Hierarchical Coherence of Growth Goals

We found that people whose life span growth goals were coherent with their everyday growth goals were especially likely to have high levels of personality development. Whether students or adults, individuals had higher levels of ego development (at least marginally) if their life span growth goals and everyday growth goals both aimed toward conceptual exploration. Similarly, whether students or adults, individuals had higher levels of well-being if their life span growth goals and everyday growth goals aimed toward intrinsically meaningful activities (the only exception being with adults' life satisfaction). In other words, people who wanted to explore their worlds, learn new things, and challenge themselves—in both the long term and the short term—were more mature from a social–cognitive perspective. Similarly, people who wanted to establish personal growth, meaningful relationships, and contributions to society—in both the long term and the short term—were happier. These findings extend similar findings on goal coherence (King et al., 1998; Sheldon & Kasser, 1995; Sheldon, Kasser, Smith, & Share, 2002) by (a) including the study of social–cognitive maturity and (b) controlling for the two underlying components of goal coherence, life span growth goals and everyday growth goals. This approach provided an especially rigorous test of the unique relationship between goal coherence and personality development: Something about growth-goal coherence corresponded to personality development in a way that was not explained by life span growth goals or everyday growth goals as individual (and simultaneous) factors.

There are several theoretical reasons why growth-goal coherence would play a powerful role in personality development. Coherent goal hierarchies are essential for intentional self-development, which is a long-term process that demands concrete, intermediate steps. Coherent goal hierarchies provide a method for implementing longer term goals (Gollwitzer & Brandstätter, 1997), giving a practical means–end structure for an individual's major life goals (King et al., 1998). If a person's major life goal is to gain ever-greater perspectives on life (an exploratory life span growth goal) or to have meaningful relationships (an intrinsic life span growth goal), then having everyday goals and activities that directly apply to those broader goals should foster the attainment of those broader goals. Also, linking higher and lower level goals provides a powerful, two-way source of personal meaningfulness: Vertical goal hierarchies enable a person to endow lower level interpretations of his or her everyday life with the greater meaning of major life goals while simultaneously validating those broader life meanings as at least partially realized in the world of everyday actions (see Bauer & Bonanno, 2001b; Baumeister, 1991).

Growth Goals Across Adulthood

We found that older adults, compared with their younger counterparts, had marginally higher levels of ego development and significantly higher levels of well-being (see also Mroczek & Kolarz, 1998). Our third hypothesis predicted that growth goals would mediate such relationships. In five of eight possible cases, we found that growth goals partially mediated the relationship between age and personality development to at least a marginally significant degree. We first consider age and ego development. Older adults were not more likely than younger adults to have exploratory life span growth goals but were more likely to have everyday growth goals and to have exploratory growth-goal coherence (marginally). As predicted, the marginally significant relationship between age and ego development was mediated by everyday growth goals as well as by exploratory growth-goal coherence. In other words, the fact that older adults had marginally higher levels of ego development was partially explained by two facts: (a) Older adults were more likely to have growth-oriented everyday goals, and (b) older adults were marginally more likely to have coherent life span and everyday goals that emphasized conceptual exploration and learning. Turning to age and well-being, we found that growth goals did not account for a significant portion of the relationship between age and personal well-being. However, we did find that growth goals did partially mediate the relationship between age and life satisfaction. Intrinsic life span growth goals and everyday growth goals each mediated the relationship between age and life satisfaction to a marginally significant degree, whereas intrinsic growth-goal coherence significantly (though partially) mediated the relationship between age and life satisfaction. In other words, older adults had higher life satisfaction than younger adults, but this was partially explained by the fact that older adults were more likely to base their goals on intrinsic concerns—especially for individuals who had growth goals at both the life span and the everyday levels.

Past research has found that other factors in personality (e.g., broad personality traits) account for the age–well-being relationship (Mroczek & Kolarz, 1998). In studying intentional self-development, it is important to find out how personal (i.e., intentional) factors account for relationships between impersonal factors (e.g., age) and personality development. Sheldon and Kasser (2001) found that intrinsic goals (on the level of everyday strivings) were among those goals that mediated the age–well-being relationship (where well-being involved an aggregate of life satisfaction plus positive and negative affect). The findings with regard to the first two hypotheses pointed to different ways that people's goals correspond to personality development. The findings related to these hypotheses suggested that people's intentions might explain in part why people both mature and become happier as they age. However, we must add that although growth goals statistically accounted for relationships between age and personality development, we also found some evidence that growth goals did not. Thus we interpret these findings not as a final word on the matter by any means, but as a base on which to refine empirical

questions on such matters. For instance, we think it is important to investigate the differences between personal well-being and life satisfaction when considering age differences and growth goals: The present study and the Sheldon and Kasser (2001) study found that intrinsic goals played a role in mediating the relationship between age and life satisfaction, but the present study did not find that intrinsic goals mediated the relationship between age and personal (multidimensional) well-being.

Limitations and Directions

At this point we wish to point out some cautions regarding interpretation. First, on the topic of development, this was a cross-sectional study. We did not attempt to measure development over time, though the operational definitions of exploratory and intrinsic goals were based on theoretical mechanisms of development. Longitudinal studies would help address questions of intentional self-development more directly. For example, do growth-oriented intentions lead to heightened personality development over time? Do individuals actually adopt more intrinsically motivated goals as they get older?

Second, we emphasize that this study was correlational. We did not assume that growth goals caused the development of maturity or well-being nor that high levels of personality development created growth-oriented goals (which could well have been the case). Thus we have been careful not to say that the growth goals measured here led to personality development. In fact, we prefer to think that general underlying patterns of thinking and feeling about one's life were driving both the narrative variables and the variables of personality development (Bauer & Bonanno, 2001b).

Third, the samples came from relatively privileged populations, which likely influenced their goals toward value systems not representative of larger populations. The fact that the student and adult samples did not differ in terms of personality development (and, notably, in terms of ego development) may be attributed to the fact that the student sample, on average, came from a population with cognitive or intellectual privilege. Differences in the two samples' sizes and age ranges also made some perhaps more desirable analyses awkward or impossible.

Fourth, we do not mean to suggest that personality development be equated only with social–cognitive maturity and social–emotional well-being. We viewed personality development at a broader level of analysis, in terms of simply the thinking and feeling sides of development. However, personal growth and personality development could also be conceived of as having many dimensions within social–cognitive maturity (e.g., related concepts such as identity development and moral development) and social–emotional well-being (e.g., approaching happiness, avoiding anxiety and depression). (Of course, personality development could be approached in a different way altogether, e.g., in the intentional cultivation of myriad personal skills. Still, we feel the present model covers two broad trajectories of personality development under which many forms of personality development can be categorized.)

Fifth, the measure of everyday growth goals combined exploratory and intrinsic concerns instead of separating them. Given our coding system, we think the only way to separate the two growth orientations would have been to use a narrative measure of everyday goals, as we did with the life span goals. This would have helped refine the studies conceptually while perhaps making the findings more robust.

Finally, personal growth is not primarily about attaining a particular level of development (e.g., as measured in levels of ego development) but is more about a continual process of identifying, refining, and cultivating one's personal interests (see Rogers, 1961). What we suggest is that a well-rounded and high-level portrait of personal growth and personality development should involve the study of intentions to pursue exploration and intrinsic interests in conjunction with the study of the increasing abilities to think complexly about one's life and to feel good about it as well.

Conclusion

The main conclusions from this article are as follows. First, people who strive toward personal growth are likely to have higher levels of personality development. Second, people who strive toward specific kinds of personal growth are likely to have developed specific kinds of personality development, at least concerning the broad developmental trajectories of social–cognitive maturity and social–emotional well-being. Third, people who integrate their major life goals and their everyday goals by focusing on growth are in a unique position to have higher levels of personality development. Fourth, relations between age and personality development can be accounted for in part by looking at people's individual goals. Finally, growth goals, particularly when studied in narrative form, open a window for researchers and therapists to understand whether people's intentions are likely to lead in personally desirable directions—namely, toward a more complex understanding of their lives and toward a heightened sense of well-being.

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Appendix

Examples of Life Span Growth Goals

Each life span growth goal was coded as being either exploratory or nonexploratory as well as being either intrinsic or nonintrinsic. Thus, each life span goal could fit into one of four categories (exploratory and intrinsic, exploratory and nonintrinsic, etc.). For each of the four combinations of life span goals, we provide two excerpts, the first from the adult sample (1) and the second from the student sample (2):

Exploratory and intrinsic. (1) "To be as integrated physically, emotionally, intellectually, spiritually as I can be . . . exploring my own process and to develop/continue intimate relationships with family and friends." (2) "I would like to get married and have children . . . I'm trying to learn about myself before I can begin learning how to make myself a part of another person. In my marriage, I want to be happy and use my marriage to continue to explore the world around me." *Explanation:* Both participants expressed a desire (a) to learn about the self (exploratory) and (b) for personal growth and to cultivate meaningful relationships (intrinsic). However, not all exploratory life plans focused on the self. *Another example:* "My first and most important goal is that my two sons have happy, productive, successful lives . . . How am I planning to achieve this? Mostly by watching and listening to my kids. The more I know about what they think and how they feel, the better I'll be able to know how to help them get where they want to go." *Explanation:* This participant wanted (a) to learn about his sons (exploratory) in order (b) to understand how to help them do what was personally meaningful to them (intrinsic).

Nonexploratory and intrinsic. (1) "My desire is to simplify my life in every way—to sell our house and live in a place that requires less responsibility, to use fewer clothes, have less furniture, and strive for quality rather than quantity." (2) "I want to stay happy . . . I want to get married. I want to have children. I want to give back to my community." *Explanation:* Neither participant mentioned a desire to explore or learn new perspectives on that environment (nonexploratory). However, both participants expressed a desire for an intrinsically satisfying environment (intrinsic).

Exploratory and nonintrinsic. (1) "My first life goal is to continue teaching until I retire . . . I will have to adapt to new developments in my field and to new approaches to teaching students. Our department has just significantly revised our master's course sequence, and I will need to be ready." (2) "My primary goal is to do well in school to get a job. I work hard on it. I study a lot, try every day to perfect my thinking. Materialistic goal." *Explanation:* Both participants expressed an interest in (a) learning new things (exploratory) but (b) gave no explicit reason why those things held any intrinsic interest (nonintrinsic). The first person conveyed the sense of having to learn more to keep up with requirements rather than to understand more about something interesting. The second person overtly declared the materialistic or extrinsic intent of the goal (keeping in mind that a person could strive to develop his or her cognitive capacity for the primary purpose of either enriching the lives of others or gaining superiority over others).

Nonexploratory and nonintrinsic. (1) "I'd buy a house, one that is larger than my present home. Save enough for a down payment or accumulate enough in my 401k and take out a loan. Pay off my consumer debt." (2) "My first life goal is to become a success at whatever profession I choose . . . I would want to 1. be respected among my peers and 2. earn enough money in order to live comfortably and provide everything for my family as well as do and see everything in this world that is appealing to me. That would make me a success." *Explanation:* Both participants gave no indication of wanting to explore their worlds (nonexploratory). The first participant was preoccupied with money, and the second, with money and status (nonintrinsic).

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