

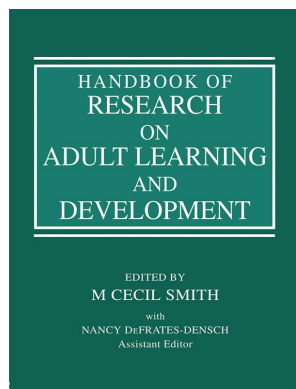
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Adjustment and Growth

Two Trajectories of Positive Personality Development across Adulthood

Ursula M. Staudinger and Eva-Marie Kessler

Theories of personality development typically describe changes in personality functioning during adulthood as “maturation” or “growth.” In a similar fashion, adult developmentalists have interpreted recent empirical findings on age-related changes in personality measures as being indicative of maturation across adulthood. We would like to suggest that not necessarily can any personality change occurring during adulthood and old age be interpreted as maturation, even though personality maturity is probably one of the few positive facets of the aging stereotype. It is part of lay wisdom that if there is anything positive about aging it is that we gain in experience and become more mature and dignified or even wise as we grow older (Heckhausen, Dixon, & Baltes, 1989). However, one of us has recently argued that the observed pattern of personality development across adulthood suggests that there are not one, but rather two types of positive personality development, that is, adjustment and growth (Staudinger, Doerner, & Mickler, 2005; Staudinger & Kunzmann, 2005). In this chapter, in contrast to some of the extant literature and lay theory, we will argue that as we age, on average, we tend towards optimizing adjustment rather than personality growth.

In the first section of this chapter, we will introduce our notions of adjustment and growth by outlining definitions and empirical markers for these two types of positive personality development during adulthood. In the second section, we will discuss and summarize empirical findings on age trajectories of personality development and thereby provide empirical support for these two kinds of developmental trajectories.

Two Types of Positive Adult Personality Development

Defining Personality Adjustment

Personality adjustment, according to our definition, refers to how well an individual is able to manage changing opportunities and constraints that arise from history-graded, age-graded, and idiosyncratic developmental contexts.

The criteria according to which the quality of adjustment is assessed can either be subjective or objective in nature. The prototypical subjective criterion of adjustment is how good one feels about the self (in a world of others). Bauer and McAdams (2004) have recently labelled this facet of positive development “socio-emotional well-being.” The classical objective criterion of adjustment is the degree to which an individual, according to societal norms, is successful in negotiating and mastering societal and biological demands, as well as their interaction. Helson and Wink (1987) have described the latter kind of positive development as functioning effectively within society or as social maturity. Freud’s theory of personality development is a prototypical example of an ontogenetic theory of adjustment (Freud, 1953).

For any human being, adjustment is an obligatory task throughout the life course (for the distinction between obligatory and optional tasks see also Schindler & Staudinger, in press). In its extreme form, adjustment can be a question of survival. With increasing age, however, adjustment becomes more challenging due to increasing constraints in and decreasing opportunities for replenishment of societal and material as well as biological resources (Staudinger, Marsiske, & Baltes, 1995). At the same time, fortunately, there is a normative increase (or at least maintenance) of personal resources that support the capacity for adjustment, such as professional skills, increasing competence in everyday problem-solving, adjustment-related self-regulation, and social support. Furthermore, the age-related increase in the awareness of life's finitude seems to be a strong and successful motivator for adjustment—at least in the sense of socio-emotional well-being (Charles & Carstensen, 1999).

The survival and success of any human community is dependent on a high “incidence rate” of successful adjustment. Societies usually cannot and do not leave adjustment processes to chance but take precautions to optimize them (e.g., schooling system, educational and developmental tasks (Staudinger & Kunzmann, 2005). Such measures, usually subsumed under the heading “socialization,” need to take care, however, that they do not lose sight of the synchronization of the subjective and objective side of adjustment. These two facets of personality adjustment not necessarily coincide at any given point in time. However, a society is well advised to take precaution that in the long run mastering rules and expectations (at least to a certain degree; objective adjustment) is not conflicting with individual members if this society leading a happy life (subjective adjustment) and vice versa. If this calibration process gets out of balance for many individuals it may result in political unrest, if it is the case for only some individuals it may result in emigration or psychopathology.

Defining Personality Growth/Maturity

We define personality maturity in terms of three facets, including a cognitive, emotional and motivational facets that entail: (i) deep and broad insight into self, others and the world, (ii) complex emotion-regulation (in the sense of tolerance of ambiguity), and (iii) a motivational orientation that is transcending self-interest and is investing in the well-being of others and the world. Note that all three facets need to come together in order for personality maturity to emerge.

Again, there is a subjective as well as an objective side to personality maturity. The subjective facet of personality maturity is indexed by the degree to which an individual experiences and strives for personal growth as well as feels love and a need to care of others. Ryff's (1989) dimensions of personal growth and purpose in life prototypically describe the subjective facet of personality maturity. The objective facet of personality maturity is indexed by the degree to which an individual is able to approximate the ideal of personality development of wisdom as it has been described through historical times and across different cultures (Baltes & Staudinger, 2000). Ideal endpoints of human development have also been described in a number of developmental theories, for example, Erikson (1959), Kohlberg (1963), Labouvie-Vief (1982) or Loevinger (1976); for a review see Baltes, Lindenberger & Staudinger (1998). Mostly, these models work with a Piagetian notion of development assuming that it is the dialectic between assimilation and accommodation that promotes growth. In other words, our expectations need to continuously be challenged by new experiences and we need to *emancipate* ourselves in thinking and feeling and *transcend* the structures within which we have been socialized (e.g., Chandler

& Holliday, 1990). Thus, in contrast to adjustment, the gist of growth is not the mastery of given structures and procedures but their transcendence.

We submit that personality growth is not an obligatory, but rather an optional task for the individual throughout the life course. And in fact, the support that modern industrialized societies invest in this kind of positive development is usually far less than the support for personality adjustment. In the same vein, deviations of one's own subjective perception from culturally ideal standards of personality growth are quite rarely punished. This lack of facilitating societal mechanisms most likely contributes to the fact that the capacities for personality growth are less easily acquired than strategies for adjustment and that age-related increases in personality maturity are a rather rare event (e.g., Staudinger, 1999a).

It will be interesting to observe how modern industrialized societies will behave as they try to adapt to the massive increase in average life expectancy, increasing uncertainty due to fast changes as well as to increased cultural diversity in lifestyles due to migration and globalization. We argue that the innovativeness of a society, and therefore its long-term success and survival, is dependent on a certain percentage of individuals that does not only master and negotiate given rules, norms and expectations, but transcends given societal circumstances. Times of thorough historical change may require more societal investment in personality growth than usually is the case.

The two tracks of personality development, adjustment and growth, do not operate independently from each other. Primarily authors with a background in (positive) mental health have viewed adjustment as one important component of maturity (Allport, 1961; Freud, 1923/1961; Ryff, 1989; Sullivan, 1972). However, there is also another tradition that views adjustment as unrelated (Bauer & McAdams, 2004; Helson & Wink, 1987; Loevinger, 1976) or even negatively related with maturity (e.g., Mead, 1934). Fromm (1941) considered adjustment even as the most universal form of neurosis. In order to understand the rather complicated causal connection between these two trajectories of positive personality development, lifespan psychologists, as a first step, need to agree upon indicators of personality adjustment and maturity and then collect evidence on how those indicators change across time and how they are interrelated across time.

So far, we have presented theoretical evidence that the two trajectories of adult personality development result from different developmental goals, are embedded in different facilitative structures, and demonstrate different incidence rates. In the following, we will consult empirical evidence on age-related changes in different indicators of adjustment and maturity.

Indicators and Facets of Personality Adjustment and Maturity

A number of different indicators/facets of personality adjustment and maturity can be identified in the literature. We have selected some structural and some process-related personality concepts to exemplify our notions of personality adjustment and maturity: the Big Five, psychological well-being, self-concept, self-concept maturity, personal wisdom, and ego development on the structural side, and values, coping strategies, systemic regulatory processes (SOC), and emotion regulation on the process side (Funder, 2001; Staudinger & Pasupathi, 2000).

Many efforts to understand and identify indicators of personality development have focused on structural characteristics. However, structural approaches typically do not consider the underlying processes or dynamics, nor do they focus on the interplay between dispositions and particular situations (Mischel & Shoda, 1999). Most likely,

several important processes are involved in any given disposition. Understanding such processes is essential first to understanding how people will encode and respond to different situations that have implications for personality adjustment and growth, and second to developing interventions that promote positive development (Mischel & Mendoza-Denton, 2003). The following section is therefore divided into two parts, the first deals with structural and the second with process-related markers of adjustment or maturity.

For each of the concepts, Table 9.1 and Table 9.2 depict markers of personality adjustment and/or maturity. Note that some of the indicators were originally conceptualized by researchers in order to describe positive functioning (adjustment and/or maturity), whereas others were not. In the latter case, we assigned them to either the adjustment or the growth trajectory based on the conceptualization of adjustment and growth introduced above.

Three further issues deserve consideration before we review the empirical evidence: (1) intentionality or automaticity; (2) correlates, antecedents, and consequences of adjustment and maturity; and (3) components or integrate whole. First, the issue arises whether the development of indicators of personality adjustment and maturity is conscious and intentional or whether it also encompasses automatic or intuitive processes. Even though reflexivity is one of the major discriminating features of the human species, it may not necessarily be the case that all positive features are conscious and linked to intentional action or reaction (Aspinwall & Staudinger, 2003). Rather, it is possible that human evolution, as well as ontogenesis, has produced “growth” as well as adjustment patterns of perception, action and reaction on an automatic and unintentional level (Berridge, 1999). Furthermore, we know from research on the acquisition of expertise that originally deliberative and intentional behavior across time becomes automatic and effortless. Thus, we proceed from the assumption that indicators of adjustment and

Table 9.1 Summary of Structural Indicators/Facets of Personality Adjustment and Growth

<i>Personality Concepts</i>	<i>Indicators/Facets of Adjustment</i>	<i>Indicators/Facets of Growth/Maturity</i>
<i>Big Five</i>	Emotional stability, agreeableness, conscientiousness (social)	Openness to experience, (social vitality)
<i>Psychological Well-Being</i>	Environmental mastery, self-acceptance	Personal growth, purpose in life
<i>Self-Concept</i>	Medium level of complexity of self-conceptions, associated with high level of self-concept integration	Medium complexity, high integration in content and valence, self-enhancing values, high self-esteem
<i>Self-Concept Maturity</i>	Medium level of complexity of self-conceptions, associated with high level of self-concept integration	High complexity, medium integration in content and valence, self-transcendent values, moderate self-esteem
<i>Personal Wisdom</i>	Medium ratings on the two criteria of self-insight and heuristics for growth, low ratings on interrelating the self, self-relativism, tolerance of ambiguity	High ratings on all five criteria: rich self-insight, heuristics for growth and self-regulation, interrelating the self, self-relativism, tolerance of ambiguity
<i>Ego Development</i>	Stage 3 (Conformist), Stage 4 (Self-aware), Stage 5 (Conscientious)	Stage 7 (Individualistic), Stage 8 (Autonomous)

maturity and their development can be conscious and intentional as well as automatic in nature. Second, indicators can differ in as much as they represent either direct operationalizations of adjustment or maturity or an antecedent or a consequence of personality adjustment or maturity. And finally, in a related vein, indicators differ in as much as they either contribute one facet to personality adjustment or maturity or represent adjustment or maturity as such.

Age Trajectories of Structural Markers of Personality Adjustment and Maturity

The Big Five

Relating our distinction between personality adjustment and maturity to the Big Five personality model developed and advocated by Costa and McCrae (1980), it is the absence of neuroticism, and the presence of agreeableness and conscientiousness that is associated with personality adjustment. The presence of openness to experience, in contrast, is related with personality growth. Extraversion is a quite complex characteristic that has been suggested to be composed of two facets, social assurance and social vitality (Helson, Kwan, John, & Jones 2002; Roberts, Robins, Caspi, & Trzesniewski, 2003). Social assurance (e.g., dominance, norm adherence, independence) increases with age and fits well with our notion of personality adjustment, whereas social vitality (e.g., sociability, empathy, social presence) seems to be one antecedent for personality growth and shows age-related decreases.

Empirical evidence suggests that during adulthood (the lack of) neuroticism is a good predictor of adjustment. Across studies, neuroticism shows strong links with negative affect (Costa & McCrae, 1980; Diener & Fujita, 1995; Watson & Clark, 1992). Neuroticism has often been viewed as the dispositional underpinning of negative affect and even has been used as a negative indicator of mental health. Furthermore, agreeableness and conscientiousness are moderately strong predictors of adjustment. Agreeableness and conscientiousness seem to be associated with subjective well-being instrumentally by engendering conditions and behaviors that facilitate or maintain subjective well-being. In fact, agreeableness and conscientiousness have been shown to predict subjective well-being over and above neuroticism (McCrae & Costa, 1991).

In contrast, openness to new experiences is discussed as the most central concomitant of personality maturity (Compton, 2001; Schmutte & Ryff, 1997; Staudinger, Lopez, & Baltes, 1997). In this vein, openness to experience shows strong associations with “purpose in life” and “personality growth,” as defined below (Schmutte & Ryff, 1997). In a similar fashion, openness is positively correlated with ego development (Einstein & Lanning, 1998; McCrae & Costa, 1980), emotional complexity (Kang & Shaver, 2004), maturity of coping strategies (Costa, Zonderman, & McCrae, 1991), general and personal wisdom (Staudinger et al., 2005), and various other constructs related to personality growth (McCrae & Costa, 1997). At the same time, openness to new experience is not significantly correlated with indicators of adjustment such as subjective well-being. The reason may be that new experiences often imply challenges to adjustment that are not always mastered.

Taking into account cross-sectional and longitudinal evidence, the empirical consensus regarding stability and change of the five “basic” personality traits can be described as follows: Neuroticism decreases across adulthood (Mroczek & Spiro, 2005; Roberts, Walton, & Viechtbauer, 2006) and may show some increase again very late in life (Small, Hertzog, Hulthsch, & Dixon, 2003); agreeableness and conscientiousness increase during

adulthood (Helson & Kwan, 2000; Srivastava, John, Gosling, & Potter, 2003); and, openness to new experiences declines in later adulthood (Roberts et al., 2006). In an interesting cross-sectional study comparing samples between age 14 and 83 years from Korea, Portugal, Italy, Germany, Czech Republic, and Turkey, McCrae and colleagues (McCrae et al., 2000) found a highly similar pattern of mean-level age differences in these different cultures.

We suggest that this pattern of mean-level changes across adulthood and into old age, that is, the decrease in neuroticism combined with increases in agreeableness and conscientiousness can be interpreted as evidence for a normative increase in personality adjustment across the life span. The decline in openness that is observed in later adulthood according to our approach reflects the fact that personality maturity does not show normative increase but rather stability and later even decline.

Psychological Well-Being

Another theoretical framework that informs us of our two types of personality development across adulthood is the conception of “psychological well-being,” as defined by Carol Ryff (Ryff, 1989; Ryff & Keyes, 1995). She developed a measure of psychological well-being based on models of personality development. This measure encompasses the following dimensions: *environmental mastery* (choosing or creating environments suitable to one’s psychic conditions), *self-acceptance* (holding positive attitudes toward oneself), *autonomy* (having an internal locus of evaluation), *positive social relations* (ability to form warm, trusting interpersonal relations), *personal growth* (continuing to develop one’s potential, to grow and expand as a person), and *purpose in life* (beliefs that convey the feeling there is purpose in and meaning to life).

In factor analyses, the dimensions of environmental mastery and self-acceptance load on the same factor conjointly with indicators of adjustment such as life satisfaction and positive/negative affect (Compton, 2001; Keyes et al., 2002; Mickler & Staudinger, 2007). The behaviors and attitudes subsumed under “personal growth” and “purpose in life” do not primarily serve adjustment-related goals but help to grow and transcend given structures. Indeed, personal growth and purpose in life show close relations with indicators of personality maturity such as personal wisdom and self-concept maturity (Doerner & Staudinger, 2007; Mickler & Staudinger, 2007). Autonomy and positive relations seem to be of relevance for both personality growth and adjustment. The ability for having intimate relationships and to evaluate oneself by personal standards are clearly a characteristic of a mature personality (Allport, 1961; Heath & Heath, 1991; Maslow, 1994), but, at the same time, represent important prerequisites for adjustment.

And, again, environmental mastery and self-acceptance follow a different age trajectory than personal growth and purpose in life during adulthood and old age. Replicating the trends of prior findings, in a large representative sample (N = 1108) purpose in life and personal growth showed negative age differences (with scores of the oldest respondents significantly lower than those of the two younger age groups; Ryff & Keyes, 1995). In contrast, the other two facets—environmental mastery and self-acceptance—showed positive age differences. These positive age differences again can be described as highly functional for mastering developmental tasks.

In sum, we suggest that the pattern of mean-level changes in environmental mastery and self-acceptance is indicative of normative (in the sense of statistical average) age-related increases in personality adjustment. Simultaneously, the developmental pattern in personal growth and purpose in life seems indicative of a decrease in personality

maturity. Again, as before in the case of the Big Five, we find a distinctive developmental pattern for indicators of personality adjustment as compared to those of growth.

Self-Concept and Self-Concept Maturity

Both in the literature on personality adjustment and on growth, there is a long tradition to investigate the structure of the self-concept as an indicator of positive personality functioning. The structure of the self-concept is often investigated in terms of (1) its *complexity* and (2) its *integration* (Campbell, Assanand, & Di Paula, 2003). There are certain conceptual differences in what is meant by complexity.

Complexity has been defined as the number of factors, perspectives and roles involved in one's thoughts and actions (Allport, 1961), the interlocking of multiple psychological functions (such as emotion, cognition, and motivation; e.g., Labouvie-Vief, 1982), and the level of abstraction and reasoning underlying one's motives (Loevinger, 1976; Maslow, 1994). Complexity as used here refers to the number of perspectives an individual adopts with regard to himself or herself, as indicated by the number of non-redundant self-aspects or content categories of the self-definition (Linville, 1987). *Integration* often is defined as the similarity of self-aspects, as indicated by the correlation of trait ratings across different domains of the self-concept (Donahue, Robins, Roberts, & John, 1993). High similarity between self-aspects indicates high self-concept integration (Diehl, Hastings, & Stanton, 2001).

Research has shown that it is important to consider *complexity* and integration conjointly when investigating personality adjustment. A moderately complex, but highly integrated self-concept has been demonstrated to be associated with adjustment as previously defined (for a review, see Doerner, 2007). In a recent study on self-concept maturity, however, we found that it was high complexity combined with only a moderate degree of integration that was indicative of personality maturity (Doerner & Staudinger, 2007).

Unfortunately, different investigators have used different measures to assess the structure of the self-concept. Little is known about the validity of those instruments, and, thus, the results are often difficult to compare. Some authors use open self-descriptions (Freund & Smith, 1999; Labouvie-Vief, Chiodo, Goguen, Diehl, & Orwoll, 1995), whereas others use prefixed lists (Fitts, 1977; Gough & Bradley, 1996). Therefore, despite a huge amount of literature on the structure of the self-concept, its association with indicators of positive development has not been fully understood yet. It is much better understood, however, in terms of adjustment than in terms of growth.

Number of Self-Aspects, Self-Concept Complexity: Age Differences, Adjustment and Growth. The few studies that have investigated the number of self-aspects separately from their integration have mostly demonstrated the "stress-buffering" effect that an accrual of roles has on mental health, particularly in old age (Coleman, Antonucci, & Adelman, 1987; Dietz, 1996; Helson, Elliot, & Leigh, 1990; Thoits, 1986; Vandewater, Ostrove, & Stewart, 1997). Studies that examine the effect of number of self-aspects on psycho-social adjustment come to the same conclusion (Koch & Shepperd, 2004; Rafaeli-Mor & Steinberg, 2002; Solomon & Haaga, 2003). However, a very large number of self-aspects can also be indicative of role strain or identity uncertainty (Block, 1961). Furthermore, a high number of self-aspects frequently goes along with an intense engagement in self-reflection, which in turn is more likely to induce negative affect, self-doubts, and uncertainty (Brown & Dutton, 1995; Silvia & Gendolla, 2001; Wicklund & Eckert, 1992; Wilson & Dunn, 2004).

Therefore, there is empirical reason to assume that it is indeed a medium number of self-domains that is optimal with regard to adjustment (Doerner & Staudinger, 2007).

Across different approaches, self-concept complexity has been considered as an important facet of personality maturity (Allport, 1961; Maslow, 1994; Loevinger, 1976; Heath, 1968; Labouvie-Vief, 1982). The very few empirical studies on the association of self-complexity and personality maturity support this assumption. Labouvie-Vief, Chiodo, Goguen, Diehl, and Orwoll (1995) used open self-descriptions as a measure of self-complexity and found a significantly positive relation between this measure and ego development. In a study by Hauser, Jacobson, Noam, and Powers (1983), complexity of the self-concept was defined as complexity vs. simplicity in rating patterns across a number of self-descriptive attributes (e.g., patient, hostile) and a number of relevant contexts (e.g., now; in the eyes of my friend). This measure of self-complexity was significantly related to ego development in an adolescent sample. Furthermore, two studies by Evans (Evans, 1994; Evans, Brody, & Noam, 2001) yielded a significant association between self-concept complexity and the maturity of psychological defenses and ego development, respectively. In this study, self-concept complexity was assessed as the similarity between reactions to various self-relevant scenarios. However, different authors (Assagioli, 1978/1989; Block, 1961; Erikson, 1968; James, 1890/1948; Rogers, 1961) have argued that a high level of self-complexity comes always at the risk of losing consistency and a sense of self. Therefore, the cognitive dimension of personality growth has to be characterized by a high degree of self-concept differentiation as well as a medium degree of self-concept integration—that is, a proper balance between role rigidity and role confusion (Block, 1961; Doerner & Staudinger, 2007).

In contrast to widely held theoretical assumptions about age trajectories in self-concept complexity, but in line with the present distinction between personality adjustment and maturity, the empirical evidence neither illustrates an increase (as suggested by Markus & Herzog, 1991; Neugarten, 1968; Perlmutter, 1988) nor a decrease (as suggested by disengagement theory, i.e., Cummings & Henry, 1961) in the number of self-aspects across the life span. Instead, the number of self-aspects seems to remain relatively stable throughout adulthood, although empirical evidence is scarce. For example, in a cross-sectional study conducted by Mueller, Wonderlich, and Dugan (1986), college students and older adults were asked to select self-descriptive attributes from a large set of descriptors. No age differences were found in number of selected attributes. Doerner and Staudinger (2007) recently yielded a similar result. Using an adapted version of the Linville self-complexity measure (Linville, 1985), they found no difference in number of self-aspects between younger and older adults (20–40 years vs. 60–80 years old).¹ It seems that the structure of the self-definition is not very sensitive towards age-graded changes in life circumstances.

Self-Concept Integration: Age Differences, Adjustment, and Growth. In terms of the relationship between self-concept integration and adjustment, on theoretical grounds, a case has been made for a quadratic relationship—such that a medium degree of self-concept integration would be associated with the highest level of adjustment (Block, 1961). However, empirical evidence, despite some inconsistent findings (Gramzow et al., 2004), all in all confirms a linear association between self-concept integration on psychological health and well-being (Campbell et al., 2003; Diehl et al., 2001; Lutz & Ross, 2003). Even though high integration is associated with adjustment throughout adulthood, first results indicate that this effect is significantly more pronounced in older adults (Diehl et al., 2001).

In terms of age trajectories in self-concept integration, it is widely assumed that it is around the onset of adulthood that the conflicts of adolescence raised by opposing self-aspects tend to alleviate, and the self-structure becomes more and more integrated across adulthood (Arnett, 2000; Moneta, Schneider, & Csikszentmihalyi, 2001). Most theories and evidence covering adulthood expect this trend to continue linearly over the rest of the life span (Markus & Herzog, 1991; Neugarten, Havighurst, & Tobin, 1961; Whitbourne & Connolly, 1999). When it comes to empirical research, in one of the few studies on this topic, cross-sectional data indicate an inverted-u-shaped relationship between self-concept integration and chronological age for the age range from 20 to 88 years, with the peak (i.e., the highest degree of self-concept integration) being located in middle adulthood (Diehl et al., 2001). In contrast, Doerner and Staudinger (2007) found that the degree of integration of self-aspects is higher for older adults (60–80 years) than for younger adults (20–40 years). The latter result at least indirectly corresponds to the increase in identity certainty across adulthood (Cramer, 2004; Sheldon & Kasser, 2001; Stewart & Ostrove, 1998).

In sum, we demonstrated that the self-concept is a domain of psychological functioning that is highly relevant to our notions of personality adjustment and maturity. However, the association with indicators of adjustment and maturity has not yet been fully understood. Furthermore, empirical evidence on age trajectories, particularly with regard to self-concept integration, is equivocal (partly due to variation in measurement). Therefore, the presently available results only provide first evidence with regard to our distinction between personality adjustment and personality maturity: The finding that self-concept complexity remains stable throughout adulthood supports our assumption that personality growth may not increase normatively in old age. And at the same time, the result that self-integration seems to increase with age supports our tenet that personality adjustment increases normatively during adulthood and old age.

Self-Concept Maturity: Definition and Age Trends. Most of the available self-concept research has concentrated on the stress-buffering effect of self-concept structure (see also Baltes, Staudinger, & Lindenberger, 1996). Only recently, a measure of personality maturity based on the self-concept literature has been developed (Doerner & Staudinger, 2007). Besides considering the facets of self-complexity and self-integration jointly, it is necessary to introduce an emotional as well as a motivational facet to arrive at an indicator of personality maturity. Thus, the recently developed measure of self-concept maturity combines five self-concept facets. These facets are complexity of self-concept content, self-concept integration, balance of self-related affect, self-esteem, and value orientation. Each of the five facets has to show a specific value and all five have to be considered jointly in order to assess personality maturity: High complexity, medium integration, a balanced experience of positive as well as negative self-related emotions, self-transcending values and a medium level of self-esteem were defined to index personality maturity. In contrast, using the same self-concept facets, personality adjustment was indexed by the joint occurrence of medium complexity, high integration, more positive than negative self-related emotions, self-enhancing values and high self-esteem. As expected, self-concept maturity did not show age differences whereas self-concept adjustment demonstrated positive age differences (Doerner & Staudinger, 2007).

Personal Wisdom

Recently, Mickler and Staudinger (in press) conceptualized personal wisdom as a person's

deep insight and judgment into his or her own life and personality. Based on the wisdom literature as well as the literature on personality maturity (Allport, 1961; Bühler, 1968; Erikson, 1950; Freud, 1917/1993; Jung, 1933; Labouvie-Vief, 1982; Maslow, 1994; Rogers, 1961), five criteria of personal wisdom were defined. There are two *basic* criteria: deep, broad and balanced self-knowledge, and heuristics or strategies of growth and self-regulation. These are considered to be necessary but not sufficient to define personal wisdom. There are three *meta*-criteria: interrelating the self, self-relativism, and tolerance of ambiguity. These are more specific, require more complex judgmental processes and are more difficult to acquire. Based on an adapted version of the Berlin (general) wisdom paradigm (Baltes, Smith, & Staudinger, 1992), personal wisdom is measured by first using a thinking-aloud task and, subsequently, a rating procedure is applied to these response protocols (Mickler & Staudinger, 2007).

The first basic criterion of personal wisdom is rich *self-knowledge*, that is, deep insight into oneself. A self-wise person should be aware of his or her own competencies, emotions and goals and have a sense of meaning in life. The second basic criterion requires of a self-wise person to have available *heuristics* for growth and self-regulation (e.g., how to express and regulate emotions or how to develop and maintain deep social relations). Humor is an example of an important heuristic that helps one to cope with various difficult and challenging situations. *Interrelating the self*, the third criterion, refers to the ability to reflect on and have insight in the possible causes of one's behavior and/or feelings. Such causes can be age-related or situational or linked to personal characteristics. Interrelating the self also implies that there is an awareness of one's own dependency on others. The fourth criterion is called *self-relativism*. People high on self-relativism are able to evaluate themselves as well as others with a distanced view. They critically appraise their own behavior but at the same time display a basic acceptance of themselves. They also show tolerance for others' values and lifestyles—as long as they are not damaging to self or others. Finally, *tolerance of ambiguity* involves the ability to recognize and manage the uncertainties in one's own life and one's own development. It is reflected in the awareness that life is full of uncontrollable and unpredictable events, including death and illness. At the same time, tolerance for ambiguity includes the availability of strategies to manage this uncertainty through openness to experience, basic trust, and the development of flexible solutions.

In a first study, this performance measure of personal wisdom was positively correlated with other performance measures of personality maturity such as Loevinger's (1970) ego development, the measure of self-concept maturity, just presented, but also with self-report measures of personality growth, such as Ryff's personal growth and purpose in life (Mickler & Staudinger, in press). Furthermore, the measure was uncorrelated with indicators of adjustment, such as life satisfaction, and negative or positive emotions. Openness to experience emerged as an important predictor of personal wisdom. Furthermore, psychological mindedness, a construct measuring interest in thoughts and feelings of other people (Gough, 1957), was significantly correlated with personal wisdom.

When it comes to age trajectories, we have recently provided first evidence that, whereas general wisdom remains stable over the adult years and does not show normative increases (Baltes & Staudinger, 2000), age differences in personal wisdom seem to be less favorable. Overall, older adults scored lower on personal wisdom. When analyzing the data separately for the meta-criteria and the basic criteria, older adults performed lower than the young adults with regard to the meta-criteria, but older adults showed a tendency to perform better than younger adults on the two basic criteria.

Overall, personal wisdom as one indicator of personality maturity shows stability or even slight decline with age and thus supports the assumed trajectory of personality maturity during adulthood. Clearly, however, personal wisdom cannot be considered independent of adjustment. Rather, it is most likely that there is a threshold relationship between adjustment and wisdom. In that vein, it is interesting to note that five personal-wisdom criteria show differential associations with age as well as adjustment. The basic criteria show relationships with adjustment and at the same time demonstrate slight age-related increase. The three meta criteria showed no relationship with indicators of adjustment and demonstrate slightly negative age trends.

Ego Development

One concept that has gained much prominence as an indicator of personality growth is ego development, as defined by Jane Loevinger (Loevinger, 1976, 1998). She attempted to capture character development in a stage-model following the Piagetian model of cognitive development, but with a focus on character rather than cognitive changes. Loevinger conceived the stages of ego development as a successive progression toward psychological maturity, developing along the four dimensions of impulse control, interpersonal style, conscious preoccupations, and cognitive styles (Blasi, 1998; Manners & Durkin, 2001). The model comprises eight stages (impulsive, self-protective, conformist, self-aware, conscientious, individualistic, autonomous, integrated) that are characterized by increasingly mature versions of the four dimensions mentioned earlier. The eighth stage, the integrated stage, is rarely observed in random samples (Loevinger, 1998).

Loevinger (1976) proposed that there is stability in ego development across adulthood and into old age. Accordingly, after adolescence individuals sufficiently know about the human condition and contextual demands are less prone to challenge personality functioning any longer. Furthermore, Loevinger argued that most people proactively select their environments according to their own ego level, thereby inhibiting personality growth. And, indeed, empirical results show no age differences in ego level between 25 and 80 years (Cohn, 1998; McCrae & Costa, 1980). Most adults are categorized to be in the third to fifth stage, that is, the conformist, self-aware, and conscientious stage, with the self-aware stage being the modal stage in late adolescence and adult life (Loevinger, 1997). Overall, these results support our proposal that aging and old age may not automatically bring personality growth.

Within the conceptual framework of ego development, the autonomous and the integrated stages tap into our notion of personality growth. Accordingly, people at these stages are able to cope with conflict and have an interdependent interpersonal mode; they are preoccupied by self-fulfillment and are aware of the multifaceted complexity of situations and life choices. Whereas ego levels below the third stage (i.e., conformist) are maladaptive for mastering the challenges of life, the third to fifth stages can be interpreted as indicators of what we have called personality adjustment.

In a recent study, positive correlations between ego level and psychometric indicators of personal growth such as personal wisdom were obtained (Staudinger et al., 2005). Furthermore, evidence from the Mills Study (Helson & Roberts, 1994) demonstrated that ego level was related to the “appreciation of the other’s individuality,” and the individuality of the integration and conscious development of a personal philosophy of life (Helson & Roberts, 1994), as assessed by the revised California Psychological Inventory (Gough, 1964). Thus, it seems more than meaningful to consider ego level as one operationalization of personality maturity.

Table 9.2 Summary of Process-Related Indicators/Facets of Adjustment and Personality Growth

<i>Personality Concepts</i>	<i>Facets of Adjustment</i>	<i>Facets of Growth/Maturity</i>
<i>Self-regulation: Coping</i>	Large repertoire of coping styles and compensatory strategies, coping styles applied as flexibly as possible depending on situational opportunities and constraints	Large repertoire of coping styles and compensatory strategies, at least medium amount of persistence in goal pursuit and accurate perception of reality
<i>Systemic Regulatory Processes</i>	Selective optimization with compensation (adjustment algorithm)	Selective optimization with compensation (growth algorithm)
<i>Motivation: Values and Personal Strivings</i>	Self-enhancing values (e.g. ego-centeredness, achievement, stimulation, conformity)	Self-transcendent values (universalism and benevolence), generativity
<i>Emotion Regulation</i>	Positive affect balance, high degree of life satisfaction	Affect complexity

Process-Related Markers of Personality Adjustment and Growth

Table 9.2 lists the process-related constructs that are considered in the following and shows how they contribute to our distinction between personality adjustment and personality maturity.

Coping Strategies

The long research tradition in the investigation of coping strategies (e.g., emotion-focused vs. problem-focused coping) also provides support for the usefulness of our distinction between personality adjustment and growth. Coping strategies represent important sources that contribute both to adjustment and growth. In general, we argue that whether a coping strategy should be labeled adjustment- or growth-related is not primarily due to the type of strategy, such as an agentic strategy (i.e., assimilative, primary control, or problem-focused coping) or a yielding strategy (i.e., accommodative, secondary control, or emotion-focused coping). Rather, the distinction between adjustment and growth is indexed by the algorithm according to which either agentic or yielding strategies are employed. Contemporary models of coping have focused on how coping mechanisms contribute to successful development in the sense of adjustment. Overall, these models have suggested that successful development is associated with access to, and flexible selection from, a repertoire of coping styles and compensatory strategies (Baltes et al., 1998). This implies that a person who copes successfully is highly flexible in applying both agentic and yielding strategies (Brandtstädter & Greve, 1992; Heckhausen & Schulz, 1995). For example, rather than any particular form of coping, better mental health (i.e., one indicator of adjustment) is related to a greater repertoire of coping responses (Forster & Gallagher, 1986). Further, it seems that it is not only the variety of available coping styles that is adaptive but rather it is a specific selection of responses. For example, older individuals who reported selective flexibility in coping (endorsing some coping styles very strongly and others not at all) also demonstrated high levels of subjective well-being (Staudinger & Fleeson, 1996). To the best of our knowledge, flexibility in applying agentic and yielding strategies has not been empirically tested with regard to their predictive value in personality growth/maturity.

Yielding strategies have consistently been found to increase with age (Brandtstädter & Renner, 1990; Wrosch, Heckhausen, & Lachman, 2000). That is, in comparison to younger adults, older adults demonstrate an accommodative coping style in the face of adversity or failure. In this vein, it was demonstrated that people become increasingly better at adjusting to losses and negative events with age—for example, by disengaging from blocked goals (Wrosch, Scheier, Carver, & Schulz, 2003), re-scaling personal expectations to the given situation (Rothermund & Brandtstädter, 2003), or letting go of self-images that do not fit the actual self anymore (Greve & Wentura, 2003; Freund & Smith, 1999). Such actions can also be interpreted as pragmatic responses to declines in the mechanics of life (Schindler & Staudinger, 2005). All in all, empirical evidence suggests that differences in the endorsement of coping mechanisms are more a function of the type of stressful event than of age per se (McCrae, 1989).

In contrast to yielding strategies, findings with respect to the development of agentic and assimilative strategies are not completely consistent. With a few exceptions (e.g., Brandtstädter & Renner, 1990) most authors speak, for instance, of stable or even increasing primary control across adulthood (Staudinger, Freund, Linden, & Maas, 1996; Wrosch et al., 2000), including investment of resources such as effort, time, and skills to achieve a chosen goal. Furthermore, older adults seem to be more flexible in adapting their coping response to the characteristics of the situation than do younger adults (Aldwin, 1991). Conversely, younger adults are more likely to adhere to their established goals, even if these goals are no longer obtainable (Brandtstädter & Renner, 1990). Of course, this capacity for adaptation may find its limits in extreme situations, such as the challenges of advanced very old age (Baltes & Smith, 2003).

In contrast to stereotypical views of the elderly as rigid, the evidence for coping behavior points to an increase in adjustment to life's demands across adulthood. Yielding strategies and flexibility in coping strategies strongly contribute to adjustment in the face of physical vulnerability well into old age. By adjusting their coping behaviors to the controllability of specific health and social stresses, older adults can maintain both their psychological and physical health.

When it comes to pursuing the goal of personality growth rather than that of optimal adjustment, however, at least some of the yielding strategies mentioned above counteract rather than support personality growth. According to several personality theorists (Allport, 1961; Haan, 1977; Maslow, 1994), the mature personality is characterized by efforts to both see one's self and one's environment realistically and to continuously, and tenaciously pursue one's goals. According to this portrayal of the mature personality, reinterpreting a failure one-sidedly in a positive manner indicates that the person is not able to accept negative events and unpleasant truths about oneself. Coping in the sense of striving for personality growth, therefore, entails—apart from seeing the opportunities in a failure—also analyzing the mistakes, weaknesses, and circumstances that have contributed to the failure. Thus, coping behavior that takes note of failures and tries to learn from them without becoming depressed contributes to personality growth. Not necessarily does this kind of coping—on the short run—contribute to subjective well-being (i.e., personality adjustment).

In the light of these considerations, distinguishing two types of personality development—that is, personality adjustment and growth—adds a new argument to the long-standing controversy of whether regressive coping strategies or mature mechanisms increase with age. Pfeiffer (1977) suggested that, with increasing age, regressive tendencies increase. In contrast, Vaillant (1977), in line with developmental and lay theories of personality, reported an age-related increase in “mature” coping mechanisms. It seems

that differentiating between personality adjustment and personality growth might solve some of the inconsistencies in this debate. In the face of difficulties, yielding strategies contribute to the maintenance or recovery of our subjective well-being and thereby index personality adjustment. Thus, the age-related increase in yielding strategies is another piece of evidence that shows that, as we age, we display a higher level of adjustment.

Systemic Regulatory Processes

In the following, we discuss an even more general self-regulating mechanism which, according to lifespan psychology, is assumed to be the most effective in promoting positive (personality) development. This mechanism is *selective optimization with compensation* (SOC; Baltes & Baltes, 1990). It is argued that the coordinated use of strategies such as selection, optimization, and compensation can (a) increase one's resources in the sense of developmental enhancement, (b) help maintain functioning in the face of life's challenges, and (c) help regulate impending losses in resources. Applying our distinction between personality adjustment and maturity, it is again not the three strategies per se that are prone to support personality adjustment or growth. Rather, it is the algorithm according to which the three processes are applied and the goals which are pursued when using the three mechanisms. A thought experiment may be helpful to clarify what we mean by algorithm: Selective goal investment right after difficulties in goal attainment have occurred may contribute to maintaining well-being and, thereby, further personality adjustment. At the same time, opportunities to push ahead personal limits may be missed, and thereby limit the potential to facilitate personality growth.

The following definitions of the SOC components are taken from Freund and Baltes (1999). The primary focus of selection is to give direction to behavior, that is, to shape the development and allocation of resources in a non-random manner, especially because resources are limited to begin with. Elective selection of goals (ES) occurs when goal selection is guided primarily by preference or social norms, and not imposed by a loss in resources across time. For instance, consider when a student decides to study biology rather than chemistry. Loss-based selection (LS) occurs when the individual is pressured to change his or her goals (or goal hierarchy) by the loss of some internal (e.g., physical strength) or external resource (e.g., money). For instance, deciding against the usual vacation plans due to financial constraints, or deciding to discontinue an activity in a sports club because of health constraints. Optimization (O) refers to the acquisition, refinement, and use of means to achieve goals. General categories of optimization include persistence, practice, learning of new skills, modeling of successful others, as well as the scheduling of time and energy. Compensation (C) concern the acquisition and use of alternative means to maintain a given desired level of functioning in the face of actual or anticipated decreases in resources.

Initial self-report and observational studies lend support to the assumption that individuals show higher levels of personality adjustment, both short-term and long-term, when they engage in selection, optimization, and compensation (Baltes et al., 2006). One example is the management of the family-career interface. Both cross-sectionally and longitudinally, partners who reported higher use of SOC-related behaviors obtained higher levels of well-being (Baltes & Heydens-Gahir, 2003; Wiese, Freund, & Baltes, 2002). Similar findings were obtained with regard to the challenges faced by college students (Wiese & Schmitz, 2002). As another example, older people suffering from osteoarthritis successfully managed their illness by use of behaviors that are consistent with selection, optimization, and compensation (Gignac, Cott, & Badley, 2002). Again,

as in the case of coping strategies, there is no evidence that points to the relationship between SOC and measures of personality growth.

Across adulthood and into old age, cross-sectional data have demonstrated age-related increases of optimization and compensation from young to middle adulthood and a decrease in later adulthood (Freund & Baltes, 2002). The authors interpret this finding as a sign that the use of SOC strategies itself is effortful and that, due to age-related losses in resources, older adults might be constrained in the employment of these strategies. However, it may also be the case that, due to increased selectivity, less and less compensation is actually necessary (Freund & Baltes, 1998; Freund & Baltes, 2002). At the same time, despite such declines in the frequency of self-reported optimization and compensation, the elderly do continue to use these strategies, and if they do so, they display higher levels of well-being (Baltes & Lang, 1997; Freund & Baltes, 1998). There were no age differences in loss-based selection. There was an increase in the endorsement of elective selection from young to middle and from middle to later adulthood. According to Freund & Baltes (2002), this result points to the fact that young adults experience a high need to explore the different pathways of life. By middle and especially later adulthood, however, pathways of life are more or less set and subsequently pursued (Baltes & Baltes, 1990).

This pattern of results bears some relevance with regard to our tenet that personality growth does not occur normatively with age. The normatively observed pattern of SOC employment (i.e., increased selection, decreased compensation and optimization) supports personality adjustment. In order for personality growth to emerge, the SOC strategies need to be orchestrated differently and in terms of a different goal, that is, the promotion of personality growth rather than the maintenance or recovery of subjective well-being (Staudinger, 1999). In the same vein, the normatively observed goal selection taking place in adulthood later on constrains the possible range of new and challenging experiences (a necessary ingredient of continued growth). Thus, a lot of selection during adulthood and old age will most likely constrain personality growth. Besides the pattern of SOC employment, however, it is also crucial to consider which overarching goal is pursued by using the three strategies. Is the overarching goal to maintain and/or regain well-being (personality adjustment), or is the goal to advance one's insight and understanding of the self and the world (personality maturity)?

Values and Personal Strivings

Indicators of personality adjustment and growth can also be found in the area of motivational functioning—in particular when it comes to values and personal strivings. Values, defined as cognitive representations of desirable, abstract goals that motivate actions (Rokeach, 1973; Schwartz, 1992), as well as the degree to which they are realized by an individual, have been described as important antecedents of adjustment (Sagiv & Schwartz, 2000). Furthermore, specific types of values have been described by almost all personality theorists as part and parcel of personality maturity. Examples include Rogers' (1961) notion of organismically based values, Fromm's (1947) concept of "being" value orientation, and Kasser and Ryan's (1996) notion of intrinsic values. The values we pursue determine the social goals and the means that are ethically appropriate to achieve these goals (Achenbaum & Orwoll, 1991; Allport, 1961; Orwoll & Perlmutter, 1990). Therefore, values may or may not direct complex and integrated cognition in a mature direction. As Noam (1998) pointed out, even though persons might "be capable of developing complex understanding of themselves and others," they can "use their insights in the service of self-alienation, self-hate, and contempt for others" (p. 289).

According to Schwartz (1992), values can be distinguished according to whether they are self-transcending or self-enhancing. Self-enhancement reflects a self-serving and self-gratifying attitude, as indicated by hedonism, achievement and power. Self-transcending values reflect both universalism (i.e., preference for social justice and tolerance, and appreciation of beauty and nature) and benevolence (i.e., preference for the welfare of others with whom one has personal contact). In the following, we argue that self-enhancing values are concomitant of adjustment, whereas self-transcendent values are a pivotal marker for personality growth.

A study examining the associations between value priorities and well-being found that those with high levels of affective well-being are more likely to adhere to values related to achievement, self-direction, stimulation, tradition, conformity and security (Sagiv & Schwartz, 2000). Furthermore, studies contrasting happy with unhappy people have shown that one of the main differences is their hedonic orientation. People who are happy frequently name it as a conscious goal to enjoy their lives, seek positive experiences, and look for stimulation and sensual pleasure (Diener & Fujita, 1995; Lyubomirsky, 2001; Sheldon, Ryan, Deci, & Kasser, 2004). At the time, it was found that a focus on financial success, physical appearance, and social recognition was correlated with lower levels of well-being. However, aspirations concerning physical health, the community, and self-acceptance were positively related with well-being (Chan & Joseph, 2000; Schmuck, Kasser, & Ryan, 2000; Sheldon & Kasser, 2001; Sheldon et al., 2004). Thus, it seems that both self-enhancing and ego-centered goals as well as goals pursuing sustainable and self-transcending issues, such as health and social relations (instead of elusive values like money and beauty), are associated with higher levels of subjective well-being. This pattern of results reflects the fact that adjustment and growth are not independent but related.

Furthermore, there is consensus in theories of personality growth, such as in Maslow, Allport, Erikson, or Heath that it is a motivational orientation towards self-transcendence and generativity or—in Heaths' (1968) words—“allocentrism” that characterizes personality maturity (see also Doerner, 2006). Empirical evidence for this notion comes from studies on personal as well as general wisdom. Kunzmann and Baltes (2003) demonstrated that general wisdom-related performance is positively associated with other-related values (i.e., values relating to the well-being of friends, societal engagement) and such self-related values that are oriented toward self-actualization and insight into life in general. Simultaneously, general wisdom was uncorrelated to values revolving around a pleasurable life. Furthermore, using Schwartz's value scale (1992), Mickler and Staudinger (in press) found that personal wisdom was positively correlated with universalistic and benevolent values; simultaneously, personal wisdom was uncorrelated to adaptive motives such as power, achievement and hedonism.

There is a rich research tradition concerning the development of self-enhancing versus self-transcending values across the life span. However, there is not very much evidence on age differences in values that tap our differentiation between self-enhancing versus self-transcending values. Age-related differences in values have been primarily demonstrated, on the one hand, in terms of value stability and increasing conservatism and, on the other hand, in terms of changes in the relative importance of instrumental as compared to teleological values (Glenn, 1980; Pennebaker & Stone, 2003; Ryff & Baltes, 1976). In a recent study using the Schwartz value scale, it was demonstrated that older participants (aged 60–80 years) reported a higher degree of self-transcending values as compared to young participants (aged 20–40 years) (Doerner & Staudinger, 2007). As predicted, on the benevolence as well as the universalism scale, older partici-

pants exhibited a higher mean score than young participants. This finding is in line with the results reported by Kunzmann and Baltes (2003). In this study, it was also shown that hedonistic values showed negative age differences. Such findings are somewhat at odds with the result that universalism is strongly associated with openness (at least in young adults; Roccas, Sagiv, Schwartz, & Knafo, 2002), and openness, as we know, decreases with age. However, this seeming contradiction may be related to differences in the age ranges under consideration or with the kind of universal value under consideration.

These first empirical results suggest that older people in general might adhere more strongly to values that represent self-transcendence as compared to younger people. According to our definition of personality growth, this result suggests that the motivational facet of personality growth, that is, self-transcendence, might show a normative increase in old age. Age trends in self-transcending values parallel findings on generative strivings (McAdams, de St. Aubin, & Logan, 1993; Midlarsky & Kahana, 1994; Sheldon & Kasser, 2001). However, since value orientations are highly susceptible to cultural influences, the effect possibly is not only driven by age, but also by cohort membership. As a consequence, it seems important to replicate these results in a longitudinal design or with regard to different cohorts (Bauer & McAdams, 2004; Sheldon, 2005).

Emotion Regulation

Dimensions of subjective well-being—positive affect, negative affect, and life satisfaction—are traditionally used as the central indices of adjustment in psychological research. In such research, life satisfaction is often equated with adjustment (Diener & Suh, 1998). And, indeed, there is considerable empirical evidence that positive affect plays an extremely important role in adaptation. Isen (1999; Isen, Daubman, & Nowicki, 1987) suggested that moderate positive affect promotes problem solving as well as perseverance and success in decision making. Across the life span, positive affect is described as fostering the integration of experience and promotes “growth” as well as the restoration of social, cognitive and physical resources (Fredrickson, 2000, 2001). Negative affect, even though it promotes realistic, analytic thinking, exhausts energy and debilitates adaptive coping with uncontrollable events (e.g., Cole, Michel, & Teti, 1994). Negative affect is also often regarded as an indicator of neuroticism and (lack of) mental health. Thus, negative emotions may be described as constraining personality adjustment.

Emotion Regulation and Personality Adjustment. When it comes to affective developmental across the adult life span, the ability to maintain high levels of subjective well-being (i.e., maintaining or achieving adjustment)—despite multiple losses at least into “young” old age—is a core finding indicative of the resilience of the aging self (Staudinger et al., 1995). With a few exceptions, findings unequivocally suggest a higher level of overall negative affect in young adults as compared to successive age groups. The negative age trend levels off in early old age (Carstensen, Pasupathi, Mayr, & Nesselroade, 2000; Gross, Carstensen, Tsai, Skorpen, & Hsu, 1997; Mroczek & Kolarz, 1998). Findings on the development of positive affect, however, have been rather mixed. Previous studies have found either decline, stability, or even increase in overall positive affect. Recently, we have argued that these inconsistencies can be partially resolved by differentiating between high and low arousal states of positive affect. In line with this assumption, we found that older participants showed a higher level of positive, low arousal affect (e.g., serene). Simultaneously, older participants did not significantly differ from the two

younger age groups in positive, high arousal affect (e.g., excited) (Kessler & Staudinger, 2007). However, it also seems that, in very old age, the potential of adjustment decreases due to the tremendous increase in losses and negative events. In this vein, in a sample of participants between the ages of 74 and 103 years, Smith and Baltes (1997) found increasingly negative affective states with age. Furthermore, a longitudinal study over a period of 22 years indicated that life satisfaction peaked at 65 and declined in the seventh decade (Mroczek & Spiro, 2005). Overall, this developmental pattern of emotions is indicative of an increase in personality adjustment from earlier phases of adulthood to “young” old age and a decline in very old age.

Recently, it has been speculated about the regulatory processes that underlie the high levels of positive emotions in old age. One line of research has argued that affect regulation may improve as people age due to learning and practice (Lawton, 1996). In other words, through years of practice we learn to regulate our affective responses and thus, in old age, we report to be better able to deal with and to control emotions than younger people. And indeed, older people report a “higher” ability to control their emotions and to maintain a neutral emotional state (Gross, Carstensen, Pasupathi et al., 1997; Lawton, Kleban, & Dean, 1993). Others have argued that older individuals might be better able to cope in anticipation of emotion-laden situations (Gross, 1998; Gross, Carstensen, Tsai et al., 1997; Magai, 2001) due to an increase in the richness and effectiveness of available emotion schemas. Recently, we have shown that there is an age-related advantage in the regulation of affect which in turns shows a strong association with age-related differences in affective patterns. Specifically, the efficiency of affect regulation in the face of difficulties and/or threatening situations emerged as a central mediator in the age-affect relationship (Kessler & Staudinger, 2007).

In the same context, Socioemotional Selectivity Theory argues that high levels of emotional well-being in old age are not primarily a result of regulatory practice, but rather a result of perceived time left in life (Carstensen, 1991; Carstensen, Isaacowitz, & Charles, 1999). In fact, these two explanations of age-related affective differences (i.e., practice vs. time perspective) may complement each other rather than be mutually exclusive. As people move through adulthood, due to the social-cognitive construal of time, they shift their motivational orientation away from information search towards emotion regulation. Accordingly, as people age, they gear their lives, especially their social lives, toward maximizing positive and minimizing negative affect. In contrast, young people see the future as being largely open. Therefore, they are more focused on the acquisition of new knowledge. In support of this assumption, studies on attention and memory for positive/negative stimuli have found three things. First, during initial attention, older adults seem to avoid negative information (Mather & Carstensen, 2003), unless this information is threatening or extremely aversive (Mather & Knight, 2006). Second, older adults remember a lower proportion of negative stimuli than younger adults do (Charles, Mather, & Carstensen, 2003). Third, there is a positivity effects in older adults’ autobiographical memories (e.g., Kennedy, Mather, & Carstensen, 2004). This so-called positivity bias in attention and memory was consequently cited as the regulatory mechanisms underlying emotional adjustment.

Emotion Regulation and Personality Growth. Applying our notion of personality growth to markers of emotional functioning, affective complexity (defined as a high degree of affective differentiation and the co-existence of positive and negative emotions) can be regarded as an indicator of personality growth. Growth theorists have described affective complexity as a central prerequisite of the capacity to view the self in an open

and tolerant fashion (e.g., Loevinger, 1976). The few studies that so far have investigated developmental trajectories in affective complexity used two different approaches, one building on the covariation of self-reported positive and negative emotions (e.g., Carstensen et al., 2000; Larsen & Cutler, 1996; Ong & Bergeman, 2004), the other building on the complexity of adults' self-statements in self-narratives (Labouvie-Vief, DeVoe, & Bulka, 1989).

Within the first approach, affective complexity is based on the self-reported frequency of emotions using an event-sampling method. Affective complexity is defined by (1) the number of dimensions characterizing a person's intraindividual emotional experience, and by (2) the average intraindividual correlation between positive and negative affect within a (short) sample period of time. A higher number of dimensions is interpreted as a high degree of differentiation between different kinds of discrete emotions. A high intraindividual correlation between positive and negative affect on the same occasion is interpreted as a high degree of "poignancy." In a recent study by Carstensen et al. (2000), it was found that affective complexity increases with age. More dimensions were required to reflect the structure of older as compared to younger participants' emotions. Furthermore, although the average correlation between positive and negative affect within a sampled moment was negative at all ages, the negative correlation was increasingly smaller at older ages. Interpreting these results as indicative of higher levels of complexity, however, might be problematic as the results do not provide information on the temporal order of positive and negative emotions. Specifically, these results do not necessarily indicate that an individual *concurrently* experiences different and even opposing emotions. This, however, is the central aspect to the common understanding of affective complexity. Rather, it could also be that there is a dynamic interplay between positive and negative emotions with older people using positive emotions more often to "undo" negative emotions. Supportive of this interpretation is the finding that, in the same study as well as in another study by Ong and Bergeman (2004), affective complexity was negatively associated with negative affect, neuroticism and daily stress. These empirical results suggest that the affective complexity measure, as used by this line of research, might be an indicator of personality adjustment (rather than maturity) which seems to increase as people age.

A second line of research on affective complexity might more directly tap our notion of personality growth and that of other growth theorists: Labouvie-Vief builds on the conceptual complexity, openness and multivalence of adults' self-representations. She found that in self-descriptions, older people have representations of the self that are characterized, among others, by a low degree of blendings of emotions and high levels of repression (Labouvie-Vief et al., 1995; Labouvie-Vief & Medler, 2002). These results suggest that emotion-regulation resources in older people seem to be oriented less towards personality growth and more towards to optimizing well-being, that is, personality adjustment.

Conclusion

In contrast to the assumption that "personality is set like plaster" (Costa & McCrae, 1994), the present chapter has first of all provided ample evidence for one of the central assumptions of lifespan psychology, namely, that there is dynamic and continued personality change throughout the adult life span (Baltes, Reese, & Lipsitt, 1980; Erikson, 1963). The chapter has also demonstrated that personality development as much as cognitive development is a multidimensional phenomenon. Overall, we have shown that it is

theoretically as well as empirically useful to integrate such changes under the heading of two types of personality change across adulthood, that is, personality adjustment and personality maturity (Staudinger, 2005; Staudinger & Kunzmann, 2005).

Our integrative overview of empirical results on personality-related measures indicates that there appear to be normative gains in personality adjustment and a flattening of the personality-growth trajectory during adulthood. At the same time, the age-related increase in self-transcendent values and generative strivings might be regarded as preliminary evidence that the normative stability in personality growth is primarily due to the cognitive and the emotional facets of personality growth rather than the motivational facet.

Clearly, personality adjustment and maturity are not independent. Rather, a certain level of personality adjustment is a necessary precondition for the pursuit of personality growth. However, we argue that when it comes to optimizing personality adjustment the possibility of also making progress on the growth trajectory is excluded. More systematic and longitudinal research is needed in order to buttress such theoretical considerations about the ontogenetic orchestration of personality adjustment and growth.

From what we have argued so far, it might appear as if the observed stability in personality maturity is a “natural law” and thereby fixed. Rather, we would like to argue that gains in personality maturity are possible, but that it takes a very special constellation of personal and contextual factors. When it comes to personal factors, a certain level of trait-related openness to new experience and internal control is necessary to achieve more complex forms of personality maturity—as expressed in personal wisdom. Simultaneously, continued access to environmental contexts that allow for and ask for unexpected and challenging experience is necessary. Muehlig-Versen and Staudinger (2007) recently found, in a quasi-experimental longitudinal study, that older people who participated in a special volunteering program that included a specific volunteering training and who reported above median internal control beliefs, showed higher levels of personal growth and openness compared to baseline assessment three months earlier and to a control group of volunteers who had not participated in the training. For personal growth, this increase remained stable one year later; for openness, the increase continued one year later.

However, even though under such facilitative conditions it seems that personality growth is possible in old age, the perception of life’s finitude may constitute a built-in constraint to personality growth. It has been suggested that one important way to overcome this “natural” barrier to personality growth is to pass on life experience to members of the young generation and thereby experience something like “symbolic immortality” (Kotre, 1984). We have recently conducted an experimental study that provided some support for this assumption. We found that intergenerational settings that were supportive of the generativity theme increased affective complexity (i.e., personality maturity) in older adults (Kessler & Staudinger, 2007).

In the future, it will be necessary to explore the (ontogenetic) relationship between these two forms of positive development in more detail to better understand the relationship between successfully adjusting to the given cultural (and biological) context and growing beyond.

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