

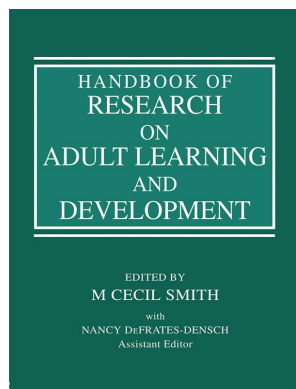
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### **Changes in Goal-Striving Across the Life Span**

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HANDBOOK OF  
RESEARCH  
ON  
ADULT LEARNING  
AND  
DEVELOPMENT

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## Changes in Goal-Striving Across the Life Span

### Do People Learn to Select More Self-Concordant Goals as They Age?

*Kennon M. Sheldon*

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This handbook as a whole addresses adult development and learning across the life span. Most of the authors on this topic will focus on *cognitive*-developmental issues, such as literacy, problem solving, expertise, and wisdom. However in this chapter, I propose to consider an important *personality*-developmental issue: namely, the question of how people learn to select the best goals for themselves—that is, the ones that will be most adaptive, personally expressive, and promoting of health and happiness. Obviously, we all focus our energies in innumerable different directions over the course of our lives. Surely, some of these choices are “wrong” for us, that is, they lead us towards dependency, frustration, and a failure to thrive. In contrast, other types of choices are likely more right for us, more “self-concordant,” leading us towards continued positive change and growth (Sheldon & Elliot, 1999; Sheldon & Houser-Marko, 2001). If this is true, then the decision process by which people continually select particular goals and intentions from among the numerous available options may be a crucial meta-cognitive skill—one with important implications for thriving and adaptation.

The primary question of this chapter is: Do people get better, over time, at this vital skill? Consistent with the emerging positive psychology perspective (Seligman & Csikszentmihalyi, 2000), my proposed answer is “yes.” Several recent studies are described, to support the personality-development proposal that self-concordance typically increases over the life span. In the latter part of the chapter, I consider several other contemporary motivationally-based theories of positive aging, including the selective optimization with compensation model (Baltes, 2003), the primary and secondary control model (Heckhausen & Schulz, 1999), and the socio-emotional selectivity model (Carstensen, 1992; Charles & Carstensen, 1999). I show that these theories both converge with, and somewhat diverge from, the self-determination theory perspective (Deci & Ryan, 1985, 2000) that grounds the current inquiry.

#### **Relevant Meta-Perspectives on Human Nature**

Again, the chapter thesis is that there is a normative trend towards more self-appropriate goal selection in older compared to younger adults—in terms of the well known folk expression, we “get better as we get older.” Of course, in many ways, people do decline as they get older—becoming less physically strong and agile, and losing cognitive acuity and flexibility (Wilson et al., 2002). Still, this does not mean that the process of personality development and maturation ceases. In fact, there are several prominent theories and theoretical paradigms that are consistent with the claim that positive personality development is normative and continues across the life span.

Perhaps most prominent is Erik Erikson’s (1963) epigenetic perspective upon lifelong personality development. According to the Eriksonian stage model, there is an inherent

drive within human nature to resolve life tasks, adapt to changing role demands, and consolidate one's identity. According to this psychosocial perspective, society continually expects more from its aging adults (at least, up to a point of decline near the end of life), as exacted by the changing role requirements they face—becoming first novices, then mentors, then leaders; first parents, then grand-parents, then great grand-parents; first learners, then disseminators, then integrators of family, organizational, and cultural wisdom. Of course, some people fail to address or resolve life-tasks and identity conflicts, thereby becoming “stuck” at a particular stage of development. Still, for most, the process of wrestling with the new tasks that each phase of life tends to bring greater maturity and integration over time. In a similar vein, Werner's orthogenetic principle (Werner, 1957) states that people develop both greater differentiation and integration over time, and Loevinger's (1997) psychosocial model assumes that people reach higher levels of ego-development as they age. Indeed, such assumptions are true of most “evolving systems” approaches to human nature, which view developmental elaboration as a near-inevitable outcome of the process of adapting to change.

Organismic and humanistic perspectives also make generally positive assumptions about human nature. Piaget's (1971) organismic perspective on development emphasized the active agency of the learner, which leads to cognitive development via the process of equilibration. According to Piaget, learning does not stop at the end of childhood; because a given person's model of the world can never be complete, cognitive development should continue throughout the life span, assuming conditions are reasonably supportive of the process. Humanistic perspectives converge upon this conclusion, with their emphasis on how people can become self-actualized (Maslow, 1971) and fully-functioning individuals (Rogers, 1961) over time. For example, Rogers said that people develop to a greater extent as they learn to contact and follow their “organismic valuing process,” an innate (though subtle) internal compass that points in health-relevant directions (Rogers, 1964; Sheldon, Arndt, & Houser-Marko, 2003). However, Rogers also agreed with the Piagetian view that development may cease if conditions are not supportive (i.e., if important others show only contingent positive regard for the person, or if the social surround is too controlling or punitive). Because of such difficulties, not everybody develops. Still, however, the organismic perspective holds that development occurs more often than not—that is, on average, there is more progression than regression within aging individuals, at least until near the end of life.

### **Self-Determination Theory**

The organismic/humanistic perspective is perhaps best represented within contemporary research psychology by Deci and Ryan's self-determination theory (SDT). This theory, under development for more than thirty years (Deci, 1972, 1975; Deci & Ryan, 1985; Deci & Ryan, 2000), addresses the nature of “optimal motivation” (i.e., self-determined motivation). To be self-determined is to “endorse one's actions at the highest level of reflection. When self-determined, people experience a sense of freedom to do what is interesting, personally important and vitalizing” (Deci & Ryan, 2006). Over time, SDT has provided an elaborated account of the social-contextual and personality processes that promote self-determination in life, as well as demonstrating the many positive consequences of such motivation, via experimental, longitudinal, and applied research. I outline the theory below.

Historically, the earliest SDT research focused on intrinsic motivation, demonstrating the surprising “undermining effect” in which people sometimes lose their desire to do

formerly enjoyable behaviors after being rewarded to do those behaviors. In other words, “extrinsic” motivation can usurp intrinsic motivation (Deci, 1972, 1975), to the person’s detriment. Research in the late 1970s and early 1980s showed that people’s “cognitive evaluations” of rewards is crucial; rewards are only undermining when they are perceived to be coercive or controlling, that is, when authorities use them in a way that threatens peoples’ sense of autonomy. Thus, whereas Csikszentmihalyi’s (1997) “flow” theory focused on inadequate competence (i.e., low match between skills and task-demands) as an underminer of flow and intrinsic motivation, Deci and Ryan’s (1985) analysis suggested that inadequate autonomy (i.e., feelings of being coerced or controlled) can also undermine such positive motivational states.

Commencing in the late 1980s, SDT expanded further to acknowledge that some kinds of extrinsic motivation may be internalized into the self, and may thus feel self-determined even if they are not enjoyable. This covers many important but unpleasant duties and obligations, such as tax-paying and diaper-changing. As will be seen below, it also provides an important means for conceptualizing the nature of maturity and personality integration.

SDT specifies five basic types of motivation, which vary in their location upon a continuum of internalization (Deci & Ryan, 2000; Ryan & Connell, 1989). Figure 19.1 presents this continuum, and is worthy of some discussion. At the leftmost end of the figure is amotivation, in which the person’s behavior is non-regulated and non-intentional. Amotivation typically results when people experience continued failure and have few positive expectancies. To the right of amotivation are four forms of intentional motivation, the first three of which are considered extrinsic (i.e., contingency-focused). External extrinsic motivation exists when people act only because of the rewards they will thereby accrue or punishments they will thereby avoid. In such cases the activity typically has no self-relevance or meaning to the person. Introjected extrinsic motivation exists when people act to avoid internally-imposed recriminations and guilt. In such cases the activity has been partially internalized, so that the behavior might occur even in the absence of external contingencies. Identified extrinsic motivation exists when people act to express an important self-identification or value. According to SDT, such activities have been internalized into the self and thus are self-determined, despite being extrinsic. Finally, at the rightmost end of the figure, is intrinsic motivation, distinct from the three extrinsic motivations. Intrinsic motivation exists when people act for reasons of inherent interest and enjoyment, rather than to achieve some separable contingency. Intrinsic motivations are considered to be automatically internalized, that is, a direct expression of the evolving self (Csikszentmihalyi, 1997). Of course, more than one of these motivations can exist at the same time; behavior is multiply determined. However, many behaviors are characterized by a predominance of one type over the other types.

Considerable research has supported the proposal that the different motivations can be aligned on a continuum, and has also shown that peoples’ performance and affective tone are higher when the motivations in the right half of the Figure 19.1 continuum predominate over the motivations in the left half of the figure. These patterns have been shown to apply to a wide variety of positive outcome variables (i.e., persistence, creativity, and mood) within a wide variety of domains (i.e., medicine, sport, education) and within a wide variety of cultures (i.e., Japan, Korea, Bulgaria, and Russia, as well as in western cultures; see Deci & Ryan (2000), for a recent summary of this research).

Notably, SDT also assumes that there is an “organismic integration process” (Deci & Ryan, 1991) by which motivations are naturally internalized and integrated over time—that is, there is a tendency for goals to migrate to the right in Figure 19.1, such that the

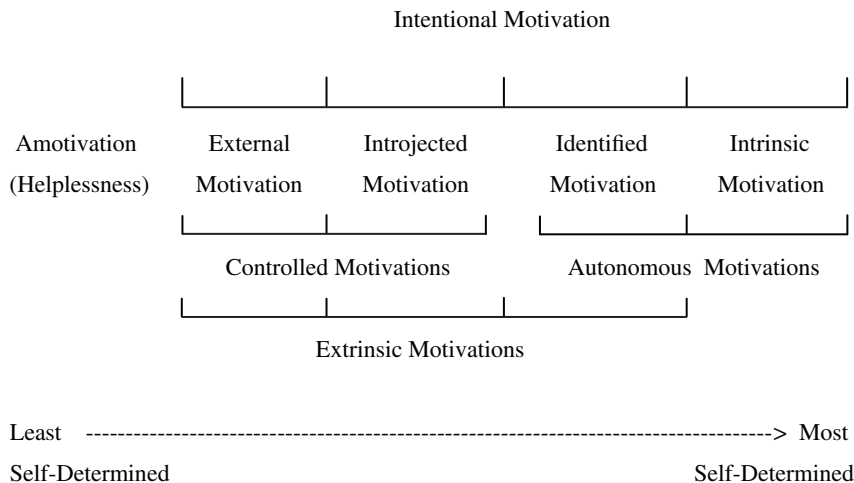


Figure 19.1 Schematic relation of the five types of motivation, according to SDT.

motives underlying then become more internalized. Consider a 4-year-old child who is being asked to share a toy with her friend. For most children of this age, there is not much internalization of the value of sharing, so when the child shares it is only because her mother makes her (external motivation). Hopefully a positive socialization process occurs, so that by the age of 8 the child shares spontaneously, even if mother is not there to make her do it. Still, she might only do it to avoid feeling like a bad girl (introjected motivation). But, hopefully, by the age of 14, the child has internalized this important value so that she does it willingly, without resistance or resentment (identified or even integrated motivation). Eventually, sharing might even become an intrinsic motivation, as the girl learns to take pleasure in giving to others and seeing their pleasure. Again, SDT assumes that such internalization processes take place automatically, assuming that conditions are supportive of them. However, there have been surprisingly few tests of this idea within a life-span context (but see Chandler & Connell, 1987, who showed that older children have more internalized motivation for cleaning up their rooms, i.e., “because I want to know where my stuff is,” compared to younger children, i.e., “because my mother makes me”).

### **Self-Determination Theory Applied to Personal Goals**

Recently, Sheldon and colleagues have applied the motivation continuum concept in a new way by studying peoples' *self-generated personal goals* (Emmons, 1999; Little, 1993). Past SDT research has focused primarily on variations in domain-specific motivation, i.e., variations in people's reasons for going to school, church, work, or to the gym. Such work has often pinpointed problematic social-contextual features of such domains, i.e., the controllingness (versus autonomy-supportiveness) of important others within the domain. However, Sheldon (2002) has argued that adopting a personal goal focus moves researchers beyond particular life-domains, providing a new means of considering personality as a whole. Furthermore, applying SDT to personal goals affords new means of considering the nature of personality integration and maturity (Sheldon & Kasser, 1995).



In order to illustrate the importance of the shift to a personal goals approach, it is necessary to briefly discuss such approaches. Idiographic personal goal assessments, as developed by Klinger, Little, Emmons and others in the late 1970s and 1980s, usually begin with a blank piece of paper. Participants are asked to think about what they are typically trying to do in life, or what they will be trying to do in the near future, and write down the goals that come to mind. Goal assessment thus shares some characteristics with projective testing (Emmons & McAdams, 1991), which similarly supplies no explicit guidance for responding. In fact, goal assessment is a lot like life itself, in which we must continually make choices about what to do and what not to do, “filling in the blanks,” as it were, as best we can. A further positive feature of goal constructs is that, because of their idiographic nature, self-generated goals are likely to have special meaning and significance for participants, providing a direct window into the unique features of their personalities.

Importantly, this does not mean that people cannot be compared using personal goal methodologies. A particularly attractive feature of idiographic personal goal assessment is that once elicited, personal goals can serve as stems for a wide variety of nomothetic comparisons. For example, participants can be asked to rate many aspects of their listed goals, such as their importance, their commitment to them, their expectancy concerning them, and their perceived difficulty. Aggregated across the listed goals, such ratings can provide reliable quantitative measures of various characteristics of a person’s motivational and behavioral systems.

Sheldon and colleagues have used this potential by asking participants to rate why they are pursuing each of their listed personal goals, in terms of the reasons specified by the SDT continuum. This research has revealed that people often feel quite controlled and non-self-determined in their goal pursuits, despite the fact that the assessment gives them complete freedom to write down whatever they want; in other words, “Not all personal goals are personal” (Sheldon & Elliot, 1998, 1999). These results also illustrate that the state of feeling controlled can be a global personality characteristic, as well as a characteristic specific to particular domains or areas of life (Deci & Ryan, 1991, 2000).

Sheldon has also argued that, in the case of idiographic personal goal statements, rated self-determination has a somewhat different meaning than that usually ascribed to it; here, these ratings index the extent to which one’s listed self-generated personal initiatives express one’s underlying values, interests, and identifications, more so than expressing social pressures or partially digested introjects. Sheldon thus called the construct “self-concordance.” Self-concordance is defined conceptually as the degree to which one’s self-chosen initiatives match and represent one’s developing interests and core values. Thus, self-concordance is thought to represent a state of congruence between one’s self-generated goals and deeper, growth-relevant aspect of one’s personality.

Initial research with this construct showed that pursuing self-concordant goals is concurrently associated with a wide variety of positive characteristics, including greater positive mood, life-satisfaction, openness, empathy, autonomy-orientation, creativity, and role-integration (Sheldon, 1995; Sheldon & Kasser, 1995). Later research evaluated the longitudinal effects of self-concordance upon short-term goal pursuit, showing that self-concordance predicts greater goal-effort and attainment over time (Sheldon & Elliot, 1998) and that it also moderates the effects of goal-attainment upon changes in psychological well-being (Sheldon & Elliot, 1999; Sheldon & Kasser, 1998). In other words, people tend to do better in their self-concordant goals, and independently of this fact, they tend to benefit more when self-concordant goals are achieved.

Selecting self-concordant goals can doubtless be a very complex and daunting task.



First, in order to pick the “right” goals for oneself, one must often be able to resist social pressures, from both peers and well-meaning authorities, which might prompt one to pursue personally inappropriate goals. Example pressures include one’s parents’ insistence that one attend law school, despite one’s talents and interests in a different field; one’s boyfriend’s urgings for sex, despite one’s values and commitments to the contrary; and, especially relevant to aging, one’s daughter’s admonitions to move to a nursing home, despite one’s belief that it is not yet time. In addition, one must sometimes be able to ignore cultural messages, advertising, and conditioning that might orient one in problematic directions, i.e., towards excessive materialism, popularity, and appearance concerns (Kasser, 2002). Not only must one be able to resist problematic goals, one must also be able to figure out which goals are actually “right” for one’s self. Thus, Sheldon (2002) has argued that selecting self-concordant goals requires the self-perceptual ability to correctly intuit one’s own deeper needs, strengths, dispositions, and talents, so that one’s conscious goals can reflect and represent these deeper aspects of personality. It involves not being “a stranger to oneself” (Wilson, 2000).

### ***A Broader Perspective on Personality***

What are these deeper aspects? At this point, it is worth pausing to consider a broader view of personality, in order to better explicate the claim that self-concordant goals reflect a state in which one’s goals better represent one’s deeper personality. Sheldon (2004) introduced a multi-level model of personality which considered four basic aspects of personality: universal foundations (at level 1), traits and dispositions (at level 2), goals and intentions (at level 3), and self and self-narratives (at level 4; see Figure 19.2). This proposal was built upon the earlier proposals of McAdams (1995, 1996, 1998), who suggested that traits, goals, and selves form three distinct “tiers” of personality, none of which are reducible to the others. Sheldon argued for the additional inclusion of a universal foundations level of analysis, because this allows consideration of evolved (or species-typical) human nature—i.e., the psychological needs and personality processes that all humans share beneath their manifest differences.

Sheldon (2004) reviewed evidence showing that goal self-concordance may be a particularly important determinant of an “optimal human being,” because the goals and intentions level of personality provides a vital proactive means for people to take self-beneficial action. Goals (at the third level of personality) provide the targets for behavior,

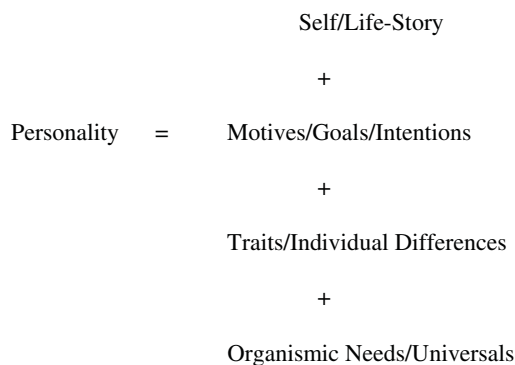


Figure 19.2 Four levels of organization within personality and personality theory.

and ideally, these targets will be ones that allow people to meet their innate psychological needs (at the first level of personality), express their inherited and acquired traits and dispositions (at the second level of personality), and positively develop their identity and life-story (at the fourth level of personality). In contrast, a person who invests energy in pursuing goals that do not correctly represent these other aspects of their personality may waste considerable time and effort. Of course, pursuing non-concordant goals may itself lead people in eventually concordant directions, or teach people important new life-lessons; thus, I do not mean to say that people should *only* pursue goals they personally value and find interest in. However, the existing data suggest that, on average, they will be better off when they do so.

### Empirical Support for the Lifelong Development Proposal

The previous discussion sets the stage for a return to the chapter thesis that people improve in their ability to select self-concordant goals as they grow older, and more generally, continue to develop their personalities as they age. Although this life-span idea is implied by SDT's assumptions concerning peoples' inherent tendency to internalize their own motivations over time, the proposition has received very few tests to date. In the section below, I will review the recent published personal goal data that supports this contention.

Sheldon and Kasser (2001) employed two different theoretical perspectives upon personality development and maturity to test the hypothesis of positive motivational change over time. Community participants of widely varying ages were asked to list ten characteristic "personal strivings" (Emmons, 1989, 1999) and to rate why they were pursuing them, in terms of the motivations specified by SDT. This allowed us to test a first hypothesis, that chronological age is correlated with greater self-concordance (computed, as in the past, by summing the intrinsic and identified ratings and subtracting the external and introjected ratings; data were not collected on "amotivation").

In addition, Eriksonian psychosocial theory, already discussed, was employed (Erikson, 1963). Participants' goals were later content-coded in terms of the different life-tasks specified by Erikson's theory. Again, Erikson said that there are different tasks that we face in our lives, depending on our place in the life span, each of which builds on the successful resolution of the task before. In late adolescence we face the "identity" life-task: we have to develop a solid sense of ourselves as a person, persisting over time. Next is the "intimacy" task; we must learn how to relate that identity to other identities, i.e., to connect authentically with other adults. As we approach middle-age, we become more concerned with the next generation and with the thriving of cultural institutions (the "generativity" task). Finally, in the last part of the life span we encounter the task of bringing it all together, to make final meaning of our mortality and the pattern of our lives (the "ego-integrity" task). Based on Erikson's assumption that the latter two themes reflect greater maturity and successful development, we hypothesized that chronological age should be positively associated with the number of generativity and ego-integrity strivings listed by participants, and negatively associated with the number of identity and intimacy strivings.

We also hypothesized that chronological age would be associated with subjective well-being (SWB; Diener, 1994), replicating a number of emerging findings suggesting that age is modestly associated with at least some measures of well-being—in particular, increasing life-satisfaction and decreasing negative affect (Argyle, 1999). Finding evidence for the age-to-SWB hypothesis in the current data would provide another type

of support for the “getting older, getting better” idea. Another hypothesis was that our goal-based measures of personality development (i.e., rated self-concordance and coded generativity/integrity goals) would be associated with SWB. The association of self-determination and well-being is a well documented finding in prior SDT research and also in prior research employing the goal self-concordance measure (Sheldon, 2002). Also, Erikson’s theory implies that pursuit of later-stage life-tasks is associated with SWB, as those oriented towards generativity and ego-integrity have succeeded in establishing their identities and in connecting with other identities, and are now concerned with meaning-making and cultural contribution. Assuming that the latter two hypotheses received support, we also intended to examine whether greater self-concordance or more advanced life-task pursuit mediates the association between chronological age and SWB. Are older people happier *because* they are more mature?

Participants were 108 adults from Columbia, Missouri, ranging from age 18 to 82, who were called at random and offered two free movie tickets if they participated. Consenters completed a questionnaire in which they first rated their general SWB, then listed their typical personal strivings, then rated those strivings. Supporting our first hypothesis, age was positively and significantly correlated with the aggregate striving self-concordance measure. Turning to the Eriksonian categories, three out of four predictions were supported: older people listed fewer identity strivings, and more generativity strivings and ego integrity strivings, on average. The fact that the correlation between age and intimacy striving was non-significant suggests that striving for intimacy is salient across the life span—it may be that everyone, not just young adults, needs intimacy (Baumeister & Leary, 1995; Deci & Ryan, 2000).

Turning to our third hypothesis, we also found that chronological age was associated with aggregate SWB, providing further support for the idea that increasing age may bring psychological benefits. Fourth, as predicted, self-concordance, generativity strivings, and ego-integrity strivings were positively associated with SWB, whereas identity strivings were negatively associated with SWB. Again, however, intimacy striving was an exception to our hypotheses—although Erikson’s theory suggests that intimacy striving is representative of less maturity and thus should be negatively associated with well-being, intimacy striving was instead positively associated with well-being in these data. Although Erikson’s stage theory has difficulty explaining this finding, because it presumes that intimacy-concerns are something one grows out of, SDT can explain it because it proposes that humans have a basic need for relatedness that persists across the life span (Deci & Ryan, 2000).

To test the mediational possibility, we created an aggregate goal maturity measure by adding the self-concordance measure, the generativity measure, and the ego-integrity measure, and subtracting the identity measure (the four measures that were associated with SWB as hypothesized). A regression analysis showed that the association of age with SWB fell from .24 to .09 when aggregate maturity was included in the model. Thus, supporting our fifth hypothesis, our measures of maturity could account for most of the fact that older people were also happier people.

Sheldon, Houser-Marko, and Kasser (2006) replicated this basic pattern of results using a somewhat different approach. Instead of employing a cross sectional sample of different ages, they instead obtained a matched sample of college students and their parents. These two groups are similar on many factors, including family income, genetics, hometown, history, and interests. Thus, one can conduct a powerful test by directly comparing a child to his or her parent, to see how they differ. The parents ranged from 38 to 70 in age.

We evaluated the same hypotheses as in the earlier study. However, we tested them in three different ways. First, we examined the current scores for the parents compared to the current scores for their children. Do parents seem happier and more self-concordant now, compared to their child now? Second, we asked parents to think back to what they were like when they were their child's age, and compared parent's scores then to parent's scores now. Do parents report feeling happier and more self-concordant now, compared to when they were their child's age? Although such data may be subject to retrospective biases, we reasoned that if the patterns converged with the other methods, such concerns would be somewhat mitigated. Third, we compared younger parents to older parents, using correlational analyses. This third approach, which focuses on age variations within the parent sample alone, is similar to that used in the first study discussed above (Sheldon & Kasser, 2001).

Participants completed a questionnaire in class and gave us permission to mail a similar questionnaire to their parents. Within the questionnaire, all participants first completed measures of current SWB, then listed their current personal strivings, and rated why they are pursuing those strivings. Parents then rated their SWB when they were their child's age, then listed and rated the strivings they remember pursuing at their child's age.

The data showed that both mothers and fathers reported greater well-being than their child. Mothers were more self-concordant in their goals than their children. Fathers were in the predicted direction on self-concordance, but the difference was not significant. Still, this way of testing our hypotheses yielded fairly good support. A similar pattern of findings resulted in the comparison of parents now to parents then, the one exception being that fathers did not report having higher SWB now, compared to when they were their child's age. However, again, the mean was in the predicted direction, and thus our hypotheses were mostly supported. Finally, we turned to the parent sample alone and correlated parental age with contemporary parental SWB and parental self-concordance. Again, we found good support: maternal age correlated significantly with maternal SWB and maternal self-concordance, and paternal age correlated significantly with paternal well-being and paternal self-concordance. Thus, the older participants in the parent sample were both happier at present than were younger participants, and more self-concordant in their current goals. Finally, we examined the mediational question using the parental datasets. For mothers, we could account for more than half the relation between age and well-being using the self-concordance measure, and for fathers, we could account for about half.

Sheldon, Kasser, Houser-Marko, Jones, and Turban (2005) again tested the "getting older, getting better" hypothesis, using a somewhat different approach. Rather than focusing on personal goals, in this study they focused on social duties. Thus, the question became, "why do people perform the social duties of paying taxes, tipping service people, and voting?" instead of "why do people pursue their goals?" Again, according to Erikson's psychosocial theory, people naturally take on more social-role responsibility as they age. Logically, this should include the doing of important but sometimes unpleasant social duties.

We tested the same hypotheses as before: that chronological age would correlate with a feeling of self-determination in performing unpleasant social duties, that age would be associated with SWB, that self-determination would be associated with SWB, and that self-determination might mediate the age to SWB effect. Ranging from ages 20 to 82, 160 community adults were recruited in doctor's offices or retirement homes, in exchange for being entered into a lottery for a free dinner for two. Participants first rated their SWB then rated why they perform the social duties of voting, paying taxes,

and tipping service people (when they perform these duties), again in terms of external, introjected, identified, and intrinsic motivation. We computed an aggregate SWB score for each participant and also computed self-determination scores for each participant, not only for each duty separately, but also aggregated across the three duties.

In this study, chronological age was associated with felt self-concordance aggregated across the three duties. Age was also separately correlated with the motivation for each duty; older people reported voting, paying taxes, and tipping for more self-determined reasons than younger people. Self-determined motivation was associated with SWB, consistent with the earlier studies and supporting our second hypothesis. However, in these data there was no association of chronological age with well-being, perhaps because many of the oldest participants were sampled in retirement homes, which can be depressing places. Because of this, we could not again test the hypothesis that self-determination mediates the link between age and well-being. But from our perspective, the most important thing was to again show that people feel more self-determined as they become older—in this sense, at least, people seem to consistently “get better” as they age.

A fourth study, also reported in Sheldon et al. (2005), addressed an important potential criticism of the earlier studies—namely, that they all employed samples from the United States. Would the results generalize to persons in other nations or cultures? This question is of particular significance because cross-cultural psychologists have recently challenged self-determination theory’s claims that self-determination is a basic human need that is universally associated with SWB (Markus, Kitayama, & Heiman, 1996). We reasoned that finding an association between self-determined duty-enactment and SWB in a non-Western culture would lend further cross-cultural support for SDT’s universalist claims (see Deci & Ryan, 2000; Sheldon et al., 2004, and Sheldon, 2004, for recent summaries of the evidence supporting the SDT position). Also, we reasoned that finding an association between chronological age and self-determination in such a culture would further support the organismic perspective’s optimistic assumptions concerning positive personality development in humans.

This study was conducted in Singapore, considered a collectivist culture. The three assessed duties were modified to fit that context: “helping distant relatives,” “obeying authorities (such as teachers, parents, and bosses),” and “staying informed about political issues.” Two hundred and thirteen participants ranging in age from 18 to 101 completed the English-language survey. First, they rated their SWB and then they rated their reasons for performing the social duties, using the same measures as before. An aggregate self-determination measure was again computed by averaging across the three duties.

Once again, chronological age was significantly correlated with aggregate self-determination, supporting Deci and Ryan’s (2000) claim that the personality developmental processes posited by SDT should occur within every cultural setting. In addition, self-determination was significantly correlated with SWB, supporting Deci and Ryan’s (2000) claim that self-determination is a universal psychological need. Once again, chronological age was not associated with SWB, and thus the mediational hypothesis could not be tested. Still, our two most important hypotheses were again supported in this study.

### **Other Relevant Gerontological Goal Research**

In the first part of the chapter, an optimistic perspective was sketched upon the question of whether positive personality development is normative across the life span. Based on SDT and organismic, psychosocial, and evolving systems perspectives, I argued that humans have an innate tendency to internalize their own motivations, becoming more



integrated, autonomous, and self-determined over time. This SDT hypothesis has been little tested in life-span research, instead being evaluated primarily in short-term and domain-specific contexts. Several recent goal studies employing the self-concordance construct were discussed that evaluated the hypothesis in a long-term, more global context. Although these studies were only cross-sectional, they offered consistent support for the idea that in this way, at least, people continue to “get better” (i.e., develop) as they grow older. Although older people may experience many new problems and difficulties, at least they no longer waste their energy pursuing goals that they do not believe in. This seems to be quite important for maintaining, and even improving, their well-being.

How do these conclusions concur with other recent theories and findings in the life-span developmental literature? Interestingly, in the last two decades life-span researchers have given increasing attention to motivation, action, and goal-striving (Brandtstadter & Rothermund, 2002; Heckhausen, 2003), echoing the more general trend towards such constructs in the literature that was described earlier in this chapter. These theorists assume that understanding changes in motivation and intentionality over the life span may be the key to understanding the aging process. As will be shown below, action theorists focus primarily on goal performance, and related constructs such as efficacy, efficiency, felt control, and felt competence, based on an argument that successful goal pursuit may be the most important criterion of successful aging (Baltes & Carstensen, 2003).

A number of motivationally-relevant developmental perspectives have originated from the Max Planck group in Germany. This research proceeds under the general rubric of “selective optimization with compensation” (SOC; Baltes & Baltes, 1990; Freund, Li, & Baltes, 1999). According to this view, adjustment in later life involves adapting successfully to loss, in particular the loss of social and cognitive resources. As peoples’ action skills and resources narrow, they must learn to *select* goals that better reflect the new realities, then to *optimize* their pursuit of those goals within increasing constraints, by *compensating* for their deficiencies as necessary. For example, an aging athlete must learn to select scaled-down age-appropriate goals, realizing that she can no longer compete at the top level. She must learn to optimize her training so that endurance is maximized and injuries do not occur. Also, she must learn to compensate for increasing deficits such as a slowed reaction time or reduced dexterity. Successful aging means achieving gains that at least partially (if not wholly) counterbalance these losses.

Several variants of this general perspective has been proposed and researched. For example, Brandtstadter (1999) pointed to the surprising finding that peoples’ sense of control remains largely unchanged over the life span. He proposed that there are three basic types of processes which interact to determine peoples’ sense of control, which might together explain why older people do not feel less control: Assimilation, accommodation, and immunization. Assimilative processes involve modifying how one pursues a goal, in the face of problems and difficulties; accommodative processes involve changing one’s goals, when assimilation becomes too difficult; and immunizing processes involve utilizing biases and defenses, in order to avoid recognizing one’s (objectively) reduced control. Via the latter two processes in particular, aging people can mount successful rear guard maneuvers (as it were), avoiding feelings of helplessness despite their diminishing capacities.

Relatedly, Heckhausen and Schulz (1999) emphasized two types of control: primary and secondary. Primary control is about pursuing success directly, whereas secondary control is about minimizing the costs of failure. In this model, aging people come to rely to a greater extent upon secondary control as they experience losses in primary control. The SOC perspective and the primary/secondary control perspectives may also

be integrated; for example, in a conceptual  $2 \times 2$ , Heckhausen and Schulz (1999) delineated both selective and compensatory modes of both primary and secondary control. Once again, however, the general presumption is that as time passes, older persons are shifted inevitably towards more compromised modes of functioning—in this case, towards secondary compensation (i.e., compensating for losses in one's ability to control losses; Heckhausen & Schulz, 1999).

This again points out the most characteristic feature of the European developmental-systems approaches, namely, their focus on competence, control, performance, efficiency, and the like. Although this is indeed a very important set of issues to address, there are other important issues as well, such as those addressed by SDT—namely, peoples' ability to feel a sense of self-determination, identification, and self-expression despite social and intra-personal pressures that might distract them from what is most satisfying or best representative of their personalities. As discussed in the first part of this chapter regarding the intrinsic motivation undermining effect, SDT has long made a distinction between autonomy and competence needs, emphasizing that, although correlated, they can also diverge from each other. For example, one may feel quite competent while also feeling non-autonomous (i.e., a high-performing medical student who desperately wants to be doing something else), or quite autonomous while feeling very incompetent (i.e., a dedicated athlete struggling to master a brand new sport). In the SDT view, the happiest and best-adjusted people are those who feel both competent *and* autonomous at the same time (Sheldon, Ryan, & Reis, 1996).

Based on this reasoning, I propose that the SDT perspective may provide a new way of conceptualizing compensation—although older people may have less energy and resources to devote to their strivings, they may compensate by narrowing their strivings so that unimportant strivings are discarded. Indeed, since felt self-concordance predicts goal effort and achievement (Sheldon & Elliot, 1998, 1999), the observed correlation of age with self-concordance may help to account for the fact that aging people do not experience losses in competence and control (Brandtstadter, 1999). In addition, the SDT perspective may provide a new way of conceptualizing selection; older people may pick not just “easier” goals that they can better attain, but also, goals that better represent who they are and what matters to them. Via more self-attuned goal-selection, older people may gain access to internal resources that younger people do not have.

Another way in which the SDT and action-theory perspectives may diverge is in their consideration of the normative change issue. Again, SDT's organismic approach implies an age-graded trend towards greater motivational internalization over time, a trend which apparently results in more self-concordant motivation in older people compared to younger people. In contrast, the action theory perspective does not presume any normative trends, except perhaps the inescapable trend towards declining cognitive resources that must be counter-acted. Instead, action theories assume that the ratio of gains to losses varies across people, such that some people manage to compensate better than others. Still, given action theory's emphasis on compensation, it appears that if there is a normative trend from this perspective, it is more likely in the negative direction.

It is probably correct that performance is bound to suffer as a person ages, even with the best compensation; again, however, this is not the only important issue. Because it focuses on felt psychological freedom rather than objective performance, SDT provides a plausible way in which people may be said to continue to develop over the life span, even as their basic capacities diminish. Again, although aging people may not be as effective and efficient as they used to be, this may not be so important if they have managed to focus their energies on what is really important to them.



A final way in which the SDT and SOC approaches differ is that SOC theories do not really address personality and psychosocial factors. Attention is primarily focused upon action itself, and the compensatory changes in action-selection and action-enactment that occur over the life span. In contrast, SDT addresses both personality factors (namely, self-concordance and trait autonomy) and social-contextual factors (namely, authority autonomy-support) that impact outcomes. Also, action theories do not typically make assumptions regarding what types of contextual and social factors are most beneficial, beyond saying that factors that support competent performance are desirable. In contrast, SDT emphasizes that factors supporting autonomy and self-determination are also conducive to adaptation and development.

Carstensen's socio-emotional selectivity (SES; Carstensen, 1992; Charles & Carstensen, 1999) theory provides another account of the motivational changes that occur with aging, an account that addresses both personality and psychosocial issues. Carstensen and colleagues hoped to explain the objective fact that older people have diminished social networks and reduced amounts of social contact. Although some perspectives have assumed that this trend is maladaptive and problematic, SES asserts that it is intentionally guided and adaptive. Older people attend, to a greater degree, to their emotional responses and meanings, perhaps because they realize that "time is getting too short" to waste on the superficial. As a result, they discard casual or unsatisfying relationships, instead focusing their energy upon a more select group of intimates and confidantes, who can contribute to the further development of their long-going self-narratives and life-stories. In this way, older people better meet their own changing needs, maintaining or even expanding the quality of their social lives, despite a reduced quantity of social life.

SES theory appears to be consistent with the SDT and self-concordance approach that was described in this chapter. First, SES theory finds that older people attend to a greater extent to their own emotional responses and meanings, and attend to a lesser extent to the social norms and niceties that might lead to superficial relationships. This is conceptually similar our findings that age correlates with self-concordance, since self-concordance refers to the state of pursuing goals that reflect one's interests and identifications rather than goals felt to originate in social pressures and introjects. In terms of the multi-level model of personality presented in Figure 19.2, SES theory implies that as people age, their social goals (at level 3 of personality) become more self-concordant and thus better represent their psychological needs (at level 1 of personality), their dispositional and emotional traits (at level 2 of personality), and their evolving life-story (at level 4 of personality). In particular, their social goals may better reflect their emotional traits and dispositions.

A second point of convergence between SDT and SES concerns the normative change issue. Like SDT, SES theory assumes that people can do more than simply partially compensate for their ever-increasing deficiencies; they might actually become happier (i.e., gains can exceed losses), as a result of attending to internal meanings more so than potentially alienating social forces. In other words, SES theory also provides a way of predicting the normative positive changes in psychological well-being that are often observed in aging samples, whereas simple action theories do not.

### ***Considering SDT, SOC, and SES Theories Together***

Each of these three theoretical perspectives provides means of predicting positive (or at least less negative) aging. How, if at all, might they be combined? To offer some preliminary speculations on this issue, let us consider several potential causal models. In one

class of models, let us propose that chronological age (representing both the aging process and cumulative experience) positively predicts SOC, SES, and self-concordance. In other words, as people age, they engage to a greater extent in selective optimization with compensation, and become more socio-emotionally selective, and learn to select more self-concordant goals; these may be parallel positive outcomes that have no causal relations or priorities with respect to each other. In another class of models, let us propose that age predicts self-concordance, which then predicts SES and SOC. As in some of the earlier life-span data summarized above, in which attained self-concordance mediated the relation of chronological age to well-being (Sheldon & Kasser, 2001; Sheldon, Houser-Marko, & Kasser, 2006), and consistent with findings that self-concordance is associated with greater quantity and quality of effort (Sheldon & Elliot, 1998, 1999), aging people may first select more self-concordant goals, which in turn leads to greater adjustment (i.e., more SOC and SES). In a third class of models, let us propose that self-concordance is the outcome of SOC and SES, and that SOC and SES mediate the effects of age upon self-concordance. In this view, by learning to favor close social relationships and to better select, optimize, and compensate in their goals, older people are enabled to choose goals that better represent their true values and interests. Finally, in yet a fourth class of models, positive motivational changes might moderate the age effects. For example, age might only predict SES or SOC if the older person is also a more self-concordant person; in this case, in which the older person's goals better represent his/her interests and values, then he/she may evidence more developmentally-appropriate SOC and SES.

Unfortunately, the data do not yet exist to choose between these models, and in any case, the theories (and their associated constructs) may be too abstract and global, or too difficult to measure, to be confidently located in models such as these. Nevertheless, the effort may be worth it, to begin to provide a process understanding of the interplay of positive coping styles, psychosocial personality development, and psychological well-being in the aging process.

## Conclusion and Future Research Directions

To summarize, in this chapter I have reviewed recent evidence that personality continues to develop throughout the life span—more often than not. Although peoples' capacities and competencies are almost bound to decline as they age, these trends may be counteracted by a tendency to select more self-concordant goals (i.e., to feel more ownership of their personal initiatives). This conclusion is consistent with organismic and humanistic perspectives on human nature, and is also consistent with traditional psychosocial theories such as Erikson's stage theory and Loevinger's theory of ego-development. Furthermore, it is consistent with SES theory (Carstensen, 1992), which assumes that aging people pay greater attention to internal information and emotions as they construct their social lives. Although it is not inconsistent with SOC theory, the current view addresses issues that SOC theory has not considered, perhaps providing new means of conceptualizing positive selection, optimization, and compensation in the later life span.

Still, much further research needs to be conducted. For example, longitudinal studies of motivational changes through the life span are needed, to extend Sheldon and colleague's recent cross-sectional findings. Do felt inner freedom and appropriate goal-selection really improve over the decades, or might the observed effects instead reflect mere cohort or period effects? In addition, we need to better rule out the possibility of retrospective biases, in both cross-sectional and longitudinal studies. In claiming greater self-concordance, how can we be sure that older persons are not exaggerating?

Brandtstadter's conception of "immunization processes," in which aging people use defensive and biased processing to deny what is happening to them (Brandtstadter, 1999), suggests that this could be the case. Also, recent studies of the bias to think that one is better now than one was in the past (Wilson & Ross, 2001) further suggest that the greater well-being and self-concordance reported by older people may be illusory. Research using peer-reports of the constructs, or implicit measures of the constructs, is needed to rule out such possibilities. Finally, research is needed to try to connect and combine the SDT, SES, and SOC constructs, as in the speculations above, to provide the most comprehensive models of positive aging.

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