

- Roberts, B. W., & DelVecchio, W. F. (2000). The rank-order consistency of personality from childhood to old age: A quantitative review of longitudinal studies. *Psychological Bulletin*, 126, 3-25.
- Roberts, B. W., & Helson, R. (1997). Changes in culture, changes in personality: The influence of individualism in a longitudinal study of women. *Journal of Personality and Social Psychology*, 72, 641-651.
- Ryff, C. D. (1991). Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging*, 6, 286-295.
- Ryff, C. D., & Heinicke, S. G. (1983). Subjective organization of personality in adulthood and aging. *Journal of Personality and Social Psychology*, 44, 807-816.
- Schaie, K. W. (1977-78). Toward a stage theory of adult cognitive development. *International Journal of Aging and Adult Development*, 8, 129-138.
- Settersten, R. A. (1998). Time, age, and the transition to retirement: New evidence on life-course flexibility? *International Journal of Aging and Human Development*, 47, 177-203.
- Shweder, R. A. (Ed.). (1998). *Welcome to middle age (and other cultural fictions)*. Chicago: University of Chicago Press.
- Srivastava, S., John, O. P., Gosling, S. D., & Potter, J. (2003). Development of personality in adulthood: Set like plaster or persistent change? *Journal of Personality and Social Psychology*, 84, 1041-1053.
- Staudinger, U. M., & Bluck, S. (2001). A view on midlife development from life-span theory. In M. E. Lachman (Ed.), *Handbook of midlife development* (pp. 3-39). New York, NY: Wiley.
- Stewart, A. J., Ostrove, J. M., & Helson, R. (2001). Middle-aging in women: Patterns of personality change from the 30s to the 50s. *Journal of Adult Development*, 8, 23-37.
- Stewart, A. J., & Vandewater, E. A. (1998). The course of generativity. In D. P. McAdams & E. de St. Aubin (Eds.), *Generativity and adult development: How and why we care for the next generation* (pp. 75-100). Washington, DC: American Psychological Association.
- Super, D. E. (1990). A life-span, life-space approach to career development. In D. E. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed., pp. 179-261). San Francisco: Jossey-Bass.
- Tellegen, A. (1985). Structures of mood and personality and their relevance to assessing anxiety with an emphasis on self-report. In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and the anxiety disorders* (pp. 681-706). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Thurnher, M. (1983). Turning points and developmental change: Subjective and "objective" assessments. *American Journal of Orthopsychiatry*, 53, 52-60.
- Twenge, J. M. (2001). Changes in women's assertiveness in response to status and roles: A cross-temporal meta-analysis, 1931-1993. *Journal of Personality and Social Psychology*, 81, 133-145.
- Vaillant, G. E. (1977). *Adaptation to life*. Boston: Little, Brown.
- Vandewater, E. A., Ostrove, J. M., & Stewart, A. J. (1997). Predicting women's well-being in midlife: The importance of personality development and social role involvements. *Journal of Personality and Social Psychology*, 72, 1147-1160.
- Von Franz, M. (1993). The inferior function. In M. von Franz (Ed.), *Psychotherapy* (pp. 16-145). Boston: Shambhala.
- Wethington, E. (2000). Expecting stress: Americans and the "midlife crisis." *Motivation and Emotion*, 24, 85-102.
- Willis, S. L., & Schaie, K. W. (1999). Intellectual functioning in midlife. In S. L. Willis & J. D. Reid (Eds.), *Life in the middle* (pp. 234-250). San Diego, CA: Academic Press.
- Wink, P., & Dillon, M. (2002). Spiritual development across the adult life course: Findings from a longitudinal study. *Journal of Adult Development*, 9, 79-94.
- Zucker, A. N., Ostrove, J. M., & Stewart, A. J. (2002). College-educated women's personality development in adulthood: Perceptions and age differences. *Psychology and Aging*, 17, 236-244.

## 18

## Goals as Building Blocks of Personality and Development in Adulthood

Alexandra M. Freund  
Northwestern University

Michaela Riediger  
Max Planck Institute for Human Development

Since its very conception, personality psychology has seen goals as the building blocks of personality (e.g., Allport, 1937). Personal goals are typically defined as consciously accessible cognitive representations of states an individual wants to attain or avoid in the future. They provide consistency across situations, and structure and organize behavior over time into meaningful action units. We submit that the concept of personal goals is particularly well suited for a developmental approach to personality. Integrating motivational processes into a life-span context furthers our understanding of both the direction of development and of interindividual differences in the level of functioning in various life domains. One of the basic assumptions of joining an action-theoretical perspective with a life-span perspective is that people actively shape their own development in interaction with a given physical, cultural, social, and historical context (see Little, Snyder, & Wehmeyer, chap. 4, this volume). In this chapter, we put forth the idea that goals link the person to these contexts and thus are central to—or building blocks of—personality and development in adulthood.

The chapter is organized as follows. In a first part, we discuss the notion of goals as "personality-in-context" (e.g., B. Little, 1989), and elaborate on the idea that personal goals reflect the proactive interaction between a person and his or her environment over time. In the second part, we briefly summarize *what* it is that adults of various ages typically strive to attain or avoid, and elaborate on mechanisms that may determine the content of goals at different points in the life span. In the third part, we turn to basic goal processes that specify *how* people interact with their envi-

ronment and manage resources across the life span. In this context, we delineate the central ideas of the action-theoretical specification of a general model of developmental regulation: the model of selection, optimization, and compensation (SOC; P. Baltes & M. Baltes, 1990; Freund & P. Baltes, 2000). The SOC model posits that the kind of goals a person sets and pursues develops in close interaction with his or her context. We illustrate this with an example of research investigating age-related differences in the way people formulate their goals either in terms of acquiring new or preserving existing resources. Linking personal goals to early personality theories (Kelly, 1995), we follow our life-span perspective to address the importance of intergoal relations (i.e., of conflict and facilitation among a person's goals and how intergoal relations change with age). On the basis of this overview, we conclude that the concept of personal goals is valuable for understanding "personality-in-context" across adulthood, and that it may provide a fruitful approach toward a theory that can integrate motivation, emotion, cognition, and behavior into a developmental framework.

#### GOALS AS "PERSONALITY-IN-CONTEXT"

Personal goals can be viewed as dynamic aspects reflecting the interaction of a person with his or her environment over time. Following Hooker and McAdams (2003), goals ("personal action units") and motivational processes ("self-regulatory processes") constitute one level in a multiple-levels-of-analysis model of personality—besides personality traits (i.e., nonconditional dispositions that generalize across a variety of situations and show considerable stability over time) and life stories (i.e., people's narrations of their personal past, present, and future).

Similarly, Cantor (1990) proposed that goals or life tasks characterize personality on an intermediate level, the level between "being" (i.e., personality traits, basic dispositions) and "doing" (i.e., behavioral responses in a given situation). Goals are not as broad and comprehensive as traits, although they may be influenced by them, nor are they as specific as behaviors; instead, they *regulate* behavior. Drawing attention to the fact that goals are inherently oriented to a specific content or life domain and related to time (namely, the future), B. Little (1989) called this level of personality the "personality-in-context."

Context can be broadly defined as the set of circumstances that surround a person, such as culture, historical time, family, family relations, or geographical environment. Context does not only serve as a background for the behavioral *expression* of personality, but also plays an important role in *shaping* personality. The latter is a result of the constraints and possibilities for personality development that the context provides. Cultural, social, or geographical *constraints* may on the one hand exclude certain possibilities of how a person can express his or her basic personality traits. On the other hand, however, contextual constraints fulfill an important function; they specify boundaries without which focused personality development would be impossible. The space of possible developmental trajectories would be too vast and unstructured. Moreover, context provides possibilities for personality development, such as resources, defined as actual or potential means that help in achieving one's goals (Freund & Riediger, 2001; see also Hawley, chap. 8, this volume). Contextual resources are located outside the person, that is, in the material, social, cultural, his-

torical, or biological environment (e.g., educational system). Such an understanding of context is reminiscent of the term *affordances* as introduced by Gibson (1997). Affordances denote possibilities for action resulting from the interaction between the context and the person. For possibilities to become actual *capabilities* and *competencies*, also Gibsonian terms, goals need to connect situational affordances with the more basic levels of personality reflecting traits, needs, and motives.

Addressing the contextual nature of goals, Freund (2003) distinguished two interacting levels of goal representation, namely social expectations and personal goals. Social expectations (level 1) are reflected in social norms that inform us about age-graded opportunity structures and goal-relevant resources. They define limitations for developmental trajectories in the individual life course and also indicate institutional or social opportunity structures, such as the age-dependent availability of resources (J. Heckhausen, 1999). Social expectations are also reflected in personal beliefs about the appropriate timing sequencing of goals. Setting personal goals (level 2) in accordance with social expectations may help to take advantage of available resources. Through social sanctions as well as societal approval or disapproval, social expectations serve as an orientation or standard for the development, selection, pursuit, and maintenance of personal goals (Cantor, 1994; Freund, 1997; Nurmi, 1992). In addition to consciously represented personal goals, automatized goals and (nonconscious) motives impact behavior and development.

In summary, the notion of goals as "personality-in-context" refers to the fact that a person's goals reflect the interface between a person's basic personality traits and the specific context in which he or she lives. In the remainder of this chapter, we take a developmental perspective to further elaborate on this idea. Specifically, we address two questions: *What* is it that people at various ages strive for in their goals? *And how* do goals impact behavior and development in adults of various ages?

#### ADDRESSING THE "WHAT" OF PERSONALITY: CONTENT OF GOALS ACROSS ADULTHOOD

The *content* of goals—which connect basic aspects of a personality, such as traits, with characteristics of the particular context in which this person lives—changes with age. Next, we illustrate the available empirical evidence with an example of some prototypical studies and discuss mechanisms that underlie these age-associated shifts.

#### Empirical Evidence of Age-Related Changes in the Content of Goals in Adulthood

Nurmi (1992, 1994) investigated age differences in the content of future-oriented goals (i.e., hopes, plans, and dreams about the future) and concerns (i.e., anxieties and worries about the future) in a large cross-sectional study of adults from 19 to 64 years old. Young adults reported goals related to their future *education, family/marriage* and concerns about *own self, friends, and occupation* significantly more frequently than older respondents. Middle-aged respondents frequently reported goals related to the *future of their children* and concerns about their *occupation*. Both young

and middle-aged adults also frequently mentioned *property-related goals*. In the age group of 45- to 54-year-old participants, a high percentage of *health-related goals* were reported. This percentage was even higher in the older age group (55 to 64 years old). Furthermore, older adults reported goals relating to their *retirement, leisure activities, and world-related matters* more frequently than the other age groups.

Cross and Markus (1991), in an adult sample aged 18 to 86 years old, cross-sectionally investigated conceptually very similar future expectancies, namely, people's personal images of themselves in the future, their hoped-for or feared *possible selves*. Young adults tended to report extremely positive, idealized hoped-for selves that were often related to marriage, family, or career. Their feared selves typically reflected the concern that life may be disappointing and not measuring up to their hopes and expectations. Typically, these feared selves, were rather unspecific and often extreme. Young middle-aged adults' (25 to 39 years old) hoped-for selves tended to be comparatively more moderate, qualified, concrete, and more related to the participants' current lives. Their common themes were those of settling down and consolidating personal identity. The feared selves in that age group typically reflected concerns with not attaining personally and socially desired roles and status, particularly in the life domains of occupation, marriage, and family. Late middle-aged adults (40 to 59 years old) reported fewer hoped-for selves that indicated new beginnings or dramatic changes than did younger respondents. Rather, their hoped-for selves reflected a desire for enjoyment and achievement in the roles they already inhabited. Their feared selves strongly reflected concerns with the losses and decrements accompanying aging, and with financial insecurity. A common theme in the hoped-for selves of the participants aged 60 years and older was the maintenance of current states, although hoped-for selves in that age group also reflected a desire for further improvement or growth. Their feared selves reflected concerns with aging-associated losses in physical capacity and lifestyle.

Research by Staudinger (e.g., Staudinger, Freund, Linden, & Maas, 1999) on life investment—the investment of cognitive or behavioral resources into a specific life domain—provides additional evidence for the theoretical assumptions formulated by Havighurst (1948) and Erikson (1959) on the age-dependent relative importance of different life domains. Younger adults are primarily concerned with their profession, friends, and family, whereas older adults are more and more concerned with their health, family, and life review.

Regarding the adaptivity of setting goals in accordance with age-related expectations, Harlow and Cantor (1996) showed in a large sample of older Americans that life satisfaction was associated with the participation in life tasks of late adulthood, such as community service. Active participation in social life proved to be more important for retirees' life satisfaction compared to adults who still enjoyed active involvement in work. This difference was particularly pronounced for men. Harlow and Cantor interpreted this gender-related difference as support for the importance of shifting life tasks in accordance with age-related expectations and opportunities.

Taken together, there is evidence for age-related differences in the content of adults' goals. Education, partnership, friends, and career are particularly important for younger adults. Middle-aged adults are particularly interested in the future of their children, in securing what they have already established, and in property-related matters. Health, retirement, leisure, world-related matters, and issues related

to their own aging process are salient in older adults' goals. What are the mechanisms and influences that underlie these age-associated differences in goals?

### Influences on the Content of Goals in Adulthood

Influences on the content of goals include (a) non-normative, (b) normative history-graded, and (c) normative age-graded factors (Baltes, 1987). *Non-normative influences* are events that do not happen to everyone, or that have no predictable timing. Examples are chance encounters with ideas, people, or places; serious injuries; or job transfers. These events contribute to the increasing diversity among people as they get older. Because of those non-normative influences, future-oriented aspirations and their developmental trajectories are unique for each person. *Normative history-graded influences* are closely tied to the particular historical era in which an individual lives. Most members of a cohort experience these influences. Epidemics, wars, technological advances, or conceptions of what constitutes "normal" development are examples. *Normative age-graded influences* on future-oriented aspirations correlate closely with an individual's age and are highly similar for many individuals. They may be biological (e.g., biological clock for female fertility), societal (e.g., institutionally prescribed entry and exit ages in educational system), or psychological (e.g., extent of future time perspective). Next, we discuss age-graded opportunity structures and internalized age norms as well as age-associated changes in future time perspective as prominent influences on the development of personal goals in more detail.

### The Role of Age-Graded Opportunity Structures and Age Norms for the Content of Goals in Adulthood

Modern societies have institutionalized age-related opportunities and constraints that regulate the amount of resources, support, and reinforcement a society provides for particular pursuits at particular ages. Thereby, societies provide age-dependent opportunity structures for certain life events and transitions and thus canalize future-oriented aspirations at different ages (Wrosch & Freund, 2001). Goals are much more difficult to attain if they deviate from institutionalized age-chronological constraints (e.g., the goal of starting out a new career in older versus younger adulthood). Age-graded opportunity structures for the attainment of future-oriented aspirations are not only societal, but may also be biological (e.g., childbearing).

Besides external and biological age-graded opportunity structures, internalized age-normative conceptions also fulfill an important function in the regulation of the content of people's goals. Internalized norms about the timing of life events and transitions are highly consensual within a given culture. They provide an age-graded agenda of "normal" development and influence future-oriented expectancies as guiding images of what one's life should be like at particular ages (cf. the concept of "developmental tasks," Havighurst, 1948).

J. Heckhausen (1999) in her Action-Phase Model of Developmental Regulation theoretically described the process of age-associated changes in the content of people's goals. This model is based on the idea that individuals encounter changes in the

opportunities to realize certain goals as they move through their lives. It proposes that a developmental goal becomes activated during phases of increased opportunities. If the goal is attained, the individual turns to other developmental goals. Individuals who have not yet realized the goal are assumed to become increasingly motivated to invest effort into goal attainment as opportunities decline. The model also introduces the notion of *developmental deadline* to refer to the point at which opportunities have declined so much that goal attainment becomes unlikely. According to the model, if this deadline has been passed, the goal becomes deactivated, for example, through goal disengagement or goal substitution (see Wrosch, Heckhausen, & Lachman, chap. 20, this volume, for a more extensive discussion of this model and related empirical evidence).

Within the life-span literature, a number of theories and findings imply that a "recalibration" of one's future-oriented aspirations is indeed a key factor in successful adaptation to age-associated changes, particularly in old age (cf. the notions of loss-based selection, Freund, Li, & Baltes, 1999; flexible goal adjustment, Brandstädter & Wentura, 1995; or secondary control, Heckhausen & Schulz, 1995; different kinds of control strivings, Grob, T. Little, & Wanner, 1999). Such revisions of goals likely occur gradually. Simply giving up important aspirations might result in a sense of loss or failure. Consistent with this view, Wrosch, Heckhausen, and Lachman (2000) found that simply lowering one's aspirations in the face of financial or health-related stress was negatively correlated with well-being across adulthood and into old age. Only for young adults, persistence showed a positive relationship with well-being. In contrast, middle-aged and older adults profited most from positive reappraisal. Throughout the life, future-oriented aspirations must be revised in such a way that the individual can maintain a sense that their goals are yet unachieved but in principle attainable, motivating him or her to strive for their accomplishment, but at the same time to feel good about his or her current life and future prospects (Cross & Markus, 1991).

#### The Role of Future Time Perspective for the Content of Goals in Adulthood

Another important age-graded aspect underlying developmental shifts in people's goals is the extent of future time perspective. Whereas younger adults may perceive the future as being full of limitless opportunities for exploration, older adults increasingly perceive their future as limited and finite (Lang & Carstensen, 2002). The role of future time perspective for the content of expectancies is particularly well researched in the domain of social motivation (for an overview of the role of social motivation in personality development, see Lang, Reschke, & Neyer, chap. 22, this volume). Socio-Emotional Selectivity Theory (Carstensen, Isaacowitz, & Charles, 1999) proposes that the perceived future time perspective regulates the type of social goals people have. The theory distinguishes two types of goals that underlie different forms of social contact. One goal, to *acquire new knowledge and information*, is most easily attained in the interaction with novel social partners. In contrast, the goal to *regulate one's emotions* (e.g., to feel good and socially embedded) is most easily achieved with familiar and close social partners. The central proposition of the model is that, when time is perceived as largely open ended (i.e., in youn-

ger age-groups), knowledge seeking is proposed to be of primary importance for social goals. In contrast, when time is perceived as limited (i.e., in old age), present-oriented goals (e.g., emotion regulation) are most important. Because age is associated with the time perspective people have in their lives, the model proposes changing configurations of knowledge and emotion regulation goals throughout the life span. There is ample empirical evidence supporting the proposed age-associated shifts in the social goals. A number of studies show that the shifts in the content of social goals occur in response to constrained time perspectives rather than age per se (for an overview, see Carstensen et al., 1999).

To summarize, there is cross-sectional empirical evidence of a shift in the content of personal goals from a primary interest in one's future education, partnership, friends, and career in younger adulthood, to a primary interest in one's future health and aging, leisure and retirement activities, and in world-related matters in older adulthood. These age-related changes emphasize the notion that goals reflect "personality-in-context" (B. Little, 1989): Non-normative, normative history-graded, and normative age-graded influences underlie these developmental shifts. The content of future expectancies is canalized through biological and societal opportunity structures that facilitate or hinder certain pursuits at particular ages. Internalized age norms of what is normal and desirable to strive for at a given age have a similar function. Furthermore, age-associated changes in the extent of future time perspective are associated with changing priorities in people's social motivation. When time is perceived as largely open-ended, knowledge acquisition is one of the prime motives underlying social contact. When the time perspective is limited, emotion regulation takes priority.

#### FROM CONTENT TO PROCESSES

So far, we have addressed how and why the content of goals changes across adulthood. Research on this topic shows how goals develop in close interaction with the context of a person, be it age-related social norms and expectations or future-time perspective. In the next section, we will turn to more *proactive* aspects of this interaction, namely, to the question of how a person sets and pursues his or her goals.

One of the central assumptions of life-span developmental psychology is that development is a dynamic process involving the interplay of proactively creating and reacting to one's environment (Baltes, 1987; Baltes, Lindenberger, & Staudinger, 1998; Brandstädter, 1998; Lerner & Busch-Rossnagel, 1981). Thus, an adequate description of development needs to take into account that people, within the limits given by social, cultural, and biological constraints, actively shape their own environment and life course. In order to describe how this proactive interaction with the environment unfolds over time, a theory of development needs to include the notion of goal-related processes. Such processes are helpful in understanding both the *direction* and the *level* of development.

One of the basic distinctions in motivational psychology is that of goal setting and goal pursuit, which refer to the central questions of describing and explaining *what* it is that people want and *how* they go about attaining these goals (e.g., Atkinson, 1957). Heckhausen (1991) has elaborated on this distinction in his phase model of motivation, the Rubicon model. "Crossing the Rubicon," that is, committing to a goal and for-

mulating concrete action plans for pursuing that goal, separates the predecisional phase from the actional phase. The predecisional phase is characterized by a deliberative mind-set of a ranking of various potential goals according to their short- and long-term desirability and the likelihood of their attainment. In contrast, in the actional phase people no longer engage in comparing different options, but rather focus on the realization of their intentions. The likelihood of actually pursuing one's goal depends on the volitional strength, that is, on how much the person wants to achieve the goal, and on available opportunities for action. Furthermore, the more precise and concrete the formulation of opportunities for action, the more likely that a person will actually engage in goal-relevant behavior (Gollwitzer, 1999).

Another important distinction is the absence or presence of a loss for setting and pursuing goals. Taking a life-span developmental perspective, this distinction is important because the ratio of gains to losses of resources becomes less favorable with increasing age. This is primarily due to two factors (P. Baltes, 1997): (1) Fewer resources are available in old age (e.g., decline of cognitive and physical abilities); (2) The efficiency of resources decreases (e.g., cognitive intervention shows less effect in older adults; e.g., Singer, Lindenberger, & P. Baltes, 2003). Consequently, more resources need to be invested into the maintenance of functioning or into counteracting losses rather than into growth (Freund & Ebner, 2005; Heckhausen, 1997; Staudinger, Marsiske, & P. Baltes, 1995).

Taking these broad motivational and developmental distinctions into account, Freund & P. Baltes (2000; Freund et al., 1999) elaborated on a general model of developmental regulation—the model of selection, optimization, and compensation (SOC model, P. Baltes & M. Baltes, 1990)—as an action-theoretical model of goal selection and pursuit. Next, we discuss this model in more detail.

#### THE MODEL OF SELECTION, OPTIMIZATION, AND COMPENSATION (SOC)

The SOC theory postulates that selection, optimization, and compensation are general mechanisms promoting successful development, which is defined as simultaneous maximization of gains and minimization of losses. *Selection* implies focusing one's resources on a subset of potentially available options, thereby giving development its direction. It functions as a precondition for developmental specialization. *Optimization* reflects the growth aspect of development. It is defined as the acquisition, refinement, and coordinated application of resources directed at the achievement of higher functional levels. *Compensation* addresses the regulation of loss in development. It involves efforts to maintain a given level of functioning despite decline in, or loss of, previously available resources.

As a meta-model, the SOC model can be applied to a variety of domains of functioning (e.g., social, cognitive, physical) and to different levels of analysis (e.g., individual, group). Consequently, selection, optimization, and compensation are proposed to have a multitude of possible phenotypic realizations (for various applications of the SOC model see, e.g., Abraham & Hansson, 1995; B. Baltes & Dickson, 2001; M. Baltes & Carstensen, 1998; M. Baltes & Lang, 1997; Freund, in press; Freund & Baltes, 2000; Lerner, Freund, DeStafanis, & Habermas, 2001; Li, Lindenberger, Freund, & P. Baltes, 2001; Marsiske, Lang, P. Baltes, & M. Baltes,

1995). The action-theoretical conceptualization of SOC (Freund & P. Baltes, 2000; Freund et al., 1999) addresses central processes of the development of "personality-in-context" over time.

#### Action-Theoretical Conceptualization of SOC

In the action-theoretical conceptualization of SOC, *selection* refers to the development, selection, and commitment to goals. It has been repeatedly shown in research on judgment and decision making (e.g., Tversky & Kahnemann, 1981) as well as in the motivational literature (e.g., Emmons, 1996; Higgins, 1997) that it is important to distinguish between a gain focus and a loss focus when investigating goal-related processes. Impending or actual losses seem to affect people stronger than gains (Hobfoll, 1998). The goal literature has also shown that the pursuit of avoidance rather than approach goals is detrimental for both well-being and actual attainment of goals (e.g., Coats, Janoff-Bulman, & Alpert, 1996; Elliot & Church, 1997). This fundamental distinction between a gain focus and a loss focus is captured in the SOC-model by distinguishing between two modes of selection, elective and loss-based selection. *Elective selection*—the delineation of goals to advance the match of a person's needs and motives with the given or attainable resources and opportunity structures—aims at higher levels of functioning. In contrast, *loss-based selection* occurs as a response to losses in previously available goal-relevant means. It involves focusing and redirecting resources when other means for the maintenance of positive functioning and/or substitution of a loss are either not available or would be invested at the expense of other, more promising goals. Prototypical examples are changes in goals or the goal system, such as reconstructing one's goal hierarchy, focusing on the most important goal(s), adapting standards, or searching for new goals (cf. assimilative coping, Brandtstädter & Wentura, 1995; compensatory secondary control, Heckhausen, 1999; shifts in different control strivings and goal importance, Grob et al., 1999). The SOC model posits that loss-based selection is an important process of successful development in general and of successful aging in particular, because older adulthood is a time in life when losses tend to outweigh gains.

Selection promotes positive development in a number of ways. For instance, to hold and feel committed to goals contributes to a feeling that one's life has a purpose and meaning (e.g., Klinger, 1977; B. Little, 1989). In addition, goals organize behavior into action sequences. They reduce the complexity of any given situation by guiding attention and behavior. In other words, goals can also be seen as chronically available decision rules ("implemental mind-set"; Gollwitzer, 1999), for directing attention (which of the numerous stimuli or information of a given situation are goal relevant?) and behavior (which of the many behavioral options in this situation are goal relevant?). In this sense, then, goals facilitate efficient interactions with the environment. Instead of deliberating about all of the possible alternatives they face in any given situation, people scan their environment for possibilities to pursue their goals. Goals do not necessarily need to be conscious in order to function as guides for attention and behavior. According to the auto-motive model by Bargh and Gollwitzer (1994), the repeated activation of a goal in a certain situation leads to an association between the respective goal and situational cues. Such situational features can then automatically trigger a goal and activate goal-relevant actions.

The actual implementation of goal-relevant actions (the "actional phase," Heckhausen, 1991) involves processes that in the SOC model are subsumed under the notion of optimization and compensation. *Optimization* involves the acquisition, application, and refinement of goal-relevant means in order to achieve desired outcomes in selected domains. Which means are best suited for achieving one's goals vary according to the specific goal domain (e.g., academic versus social domain), personal characteristics (e.g., gender), and the sociocultural context (e.g., institutional support systems). On the most general level, some sort of monitoring between the actual state and the desired state (goal) needs to take place (Carver & Scheier, 1999). This continuous monitoring, which might occur outside of conscious awareness (Wegner, 1992), allows for a constant adaptation of goal-related action. Progress toward the goal indicates that continuation of investment of the selected goal-relevant means is worthwhile, whereas no progress or even a greater distance from the goal indicates that other means might be better suited for achieving the respective goal (Boesch, 1991). Another example of a general process related to optimization is the ability to delay immediate gratification for the sake of a more long-term payoff (e.g., Mischel, Cantor, & Feldman, 1996). Long-term goals often require investing resources with no immediate gain (e.g., studying for good SAT scores instead of partying). Not giving in to temptations offering short-term gratifications is thus a precondition for persistently pursuing a goal over an extended period of time. The importance of the ability to delay gratification for positive functioning is also underscored by a finding reported by Mischel et al. (1996) showing that impulse control (delay of gratification) in children predicts academic performance about a decade later. Another general process of optimization is practice. As has been shown in the expertise literature, deliberate practice is a key factor for acquiring new skills and reaching peak performance (Ericsson, 1996). Repeated practice leads to the refinement of skill components, to their integration and automatization. As a result, goal pursuit becomes less resource demanding, so that free resources can be devoted to other goal-related means. Although the role of practice might be most obvious in domains with a clear achievement aspect, such as academic achievement, sports, or music (Ericsson, 1996), practice may also be important for domains with less clearly defined skills and criteria.

*Compensation* refers to processes aimed at maintaining functioning in the face of the losses with which people are inevitably confronted during their lives, and particularly in old age. Whereas loss-based selection refers to restructuring one's goals, compensation implies the maintenance of goals by using alternative means. Typical instances of compensation are the substitution of previously available goal-relevant means by acquiring new or activating unused internal or external resources (Carstensen, Hanson, & Freund, 1995; Bäckman & Dixon, 1992). From a life-span developmental perspective, the maintenance of functioning is as important for successful developmental regulation as achieving high levels of functioning. This is the case because development can be characterized as comprising both gains and losses throughout the entire life span (P. Baltes, 1997; Labouvie-Vief, 1981). With increasing age, the ratio of gains to losses becomes less positive (e.g., P. Baltes & Smith, 2003). This implies that with age, there is an increasing need to invest more and more resources into maintenance and resilience of functioning rather than into growth processes (P. Baltes, 1997; Staudinger et al., 1995). Compensation can thus

be considered as a central process of developmental regulation. In summary, the action-theoretical conceptualization of the SOC model proposes that people actively and successfully shape their own development by setting and pursuing personal goals, even in the face of the loss of previously available goal-relevant resources. In the following section, we briefly review some empirical evidence of the adaptiveness of elective and loss-based selection, optimization, and compensation.

### Individual Differences in Selection, Optimization, and Compensation

There is converging empirical evidence concerning the role of selection, optimization, and compensation for well-being. A number of studies found (e.g., Freund & P. Baltes, 1998, 2002; Wiese, Freund, and P. Baltes, 2000) that adults ranging in age from early to old and very old adulthood who report engaging in selection, optimization, and compensation also report higher well-being (e.g., frequency of experiencing positive emotions, having a purpose in life, life satisfaction). The pattern of correlations is stable across adulthood into old and very old age. In a longitudinal study focusing on younger adults, Wiese, Freund, and P. Baltes (2002) found that young adults reporting frequent use of SOC-related behaviors scored higher on multiple subjective indicators of well-being, positive emotions, as well as on subjective indicators of developmental success in the life domains of partnership and profession. Similarly, Wiese and Freund (2001) found that young adults who set priorities in one life domain over another (here: work and family) feel less conflicted about their goals, and are more satisfied with their lives in general and with their development in the prioritized life domain. These findings are consistent with those reported in studies of dual-career development (B. Baltes & Heydens-Gahier, 2003).

Cross-sectional evidence indicates that self-reported frequency in the use of SOC shows age-related differences across adulthood with a peak in middle adulthood (Freund & P. Baltes, 2002). In old age, use of SOC-related behaviors is less prevalent. Only elective selection continues to be prominent. Probably due to the decrease in resources, older adults continue to be pressured for high selectivity and have fewer resources at their disposal that they can invest into goal-pursuit (optimization and compensation). Optimization and compensation are effortful and therefore presumably become more and more taxing with age until they exceed the individual, social, and technical reserve capacities available to individuals in old age. This is especially relevant when people suffer from severe illnesses or enter very old age, the so-called Fourth Age (P. Baltes & Smith, 2003). As findings from the Berlin Aging study show, however, the decrease in self-reported use of SOC does not imply a decrease in the adaptivity of the SOC-processes—even in very old age, SOC is related to higher levels of subjective well-being (Freund & P. Baltes, 1998).

In summary, there is empirical evidence supporting the main assumption of the SOC model. Selecting goals and investing into their pursuit and maintenance when faced with losses appear to be important processes in managing resources across adulthood. In the following sections, we elaborate in more detail on age-related differences in two aspects of the selection and pursuit of personal goals—goal focus (i.e., focus on gains versus losses) and intergoal relations (i.e., mutual facilitation and interference among goals).

### GOAL-FOCUS IN ADULTHOOD

From a motivational perspective, compensation (i.e., the pursuit goals that focus on the *avoidance* of a loss) might have less positive consequences than optimization (i.e., the pursuit of approach goals). A number of studies with young adult participants (e.g., Coats et al., 1996; Elliot, & Church, 1997; Emmons, 1996) have shown that trying to achieve gains/growth is associated with a higher degree of self-efficacy and leads to more positive emotions and a sense of well-being whereas trying to avoid losses/decline is related to more negative emotions and distress.

The relative importance of focusing on gains/growth and on maintenance/avoidance of loss, however, might change across adulthood because the importance of attaining new resources might be more vital for younger than for older adults. Based on assumptions of evolutionary psychology, resources might be of particular importance in younger adulthood, as resources are essential for one's own survival and the survival of one's future offspring (see also Hawley, chap. 8, this volume, for an evolutionary approach to resources and personality). In addition, accumulation of resources is believed to enhance one's sexual attractiveness because it serves as an indicator of good genetic material to potential mates (Buss, 1999). Resource gain should be particularly motivating in younger adults because, from this evolutionary perspective, they are in a life stage when their primary motive is to reproduce. For middle-aged adults who have to care and provide for their offspring, the acquisition and the maintenance of resources should also be very important.

In older adults, however, who are increasingly confronted with losses in resources, the motivation to maintain one's resources and thereby to avoid losses should become more important (Freund & P. Baltes, 2000; J. Heckhausen, 1999; Staudinger et al., 1995). In addition, because of declining efficiency of resources in older age, the pursuit of new goals focusing on gains/growth might be too resource intense for older adults. In contrast to maintaining goals, pursuing new goals requires additional means and strategies for goal-pursuit, which, in themselves, require resources. Thus, it might be more adaptive for the management of resources in old age to focus on the maintenance of functioning and on avoidance of losses rather than on the acquisition of new gains. Given that losses become more pervasive and normative in old age, avoiding losses might, psychologically, take on more of the meaning of gains. Therefore, the negative effects of loss orientation that has been documented for younger adults might not be present in old adulthood (see Freund & Ebner, 2005, for a more detailed discussion of the dynamics of gains and losses across adulthood with respect to goals).

There is some empirical evidence supporting the assumption that goal-focus changes across adulthood. Younger adults' goals are more oriented toward gains whereas older adults show a stronger orientation toward maintenance and avoidance of losses (Freund & Ebner, 2005; Heckhausen, 1997; Ogilvie, Rose, & Heppen, 2001). For instance, Ogilvie et al. (2001) showed that personal projects reflecting an orientation toward acquiring future positive outcomes declined across adulthood, although they are reported most often as a reason for goal involvement in all age groups. Goals of older adults more often reflected an orientation toward the maintenance of a given level of functioning than did the goals of adolescents or middle-aged adults. Contrary to expectations, however, there were no systematic age-related dif-

ferences in the goal focus on compensation (here: curing an existing negative condition or preventing a negative outcome). Similarly, Freund and Ebner (2005) summarized a series of studies providing evidence that younger adults rated their personal goals primarily as oriented toward growth, whereas older adults' goals were equally oriented toward maintenance and loss prevention.

Regarding the differential adaptiveness of goal focus, there are a number of studies showing that for younger adults, a loss-avoidance focus is negatively related to subjective well-being (e.g., Coats et al., 1996; Elliot & Sheldon, 1997; Emmons, 1996). As expected, in older adulthood, however, a stronger goal focus on maintenance and loss avoidance was related to higher well-being (Ebner & Freund, 2003). In addition, younger adults appear to be more motivated to achieve higher levels of performance than to maintain performance when working on a task. In contrast, older adults are more persistent when working on overcoming losses than when striving to improve their performance (Freund, in press). This line of research shows the importance of taking a developmental perspective when conceptualizing the interaction of a person with his or her environment. As resources change, the processes of their management change as well. In the next section, we take a closer look at the question of how younger and older adults manage to pursue multiple goals in the face of limited resources.

### INTERRELATIONS AMONG PERSONAL GOALS

Typically, people have multiple goals. For example, a person might have the goals to be an excellent student, to enjoy life, to spend more time with the family, and to exercise regularly. Such multiple goals are not necessarily independent. Exercising regularly and enjoying life might facilitate each other, as exercising might help one to relax and open up to the enjoyable sides of life. Being an excellent student and spending more time with family, on the other hand, might interfere with each other, as both goals draw on the same limited resource of time. In other words, multiple personal goals may influence each other in positive (facilitative) or negative (interfering) ways.

The importance of consistency among conceptions about oneself and the world, among which conceptions we place personal goals, has been stressed by personality theories since Kelly (1955; see also Lecky, 1969). According to these cognitive approaches to personality, only a consistent system of cognitive conceptions can fulfill the function of organizing experiences and guiding actions. As pointed out by Emmons (1989), this is also true for personal goals. Conflicting goals might lead to contradictory behavioral implications and tension within the person. One might experience this as stressful, hindering the positive experiences typically associated with successful goal pursuit. In contrast, goals that facilitate each other also facilitate engagement in goal pursuit, with two or more goals providing the same guides for actions (Riediger & Freund, 2005). Research on intergoal relations has typically investigated samples of college students. It has shown that interference among personal goals is a prevalent phenomenon in younger adulthood (e.g., Emmons & King, 1988; Palys & B. Little, 1983; Sheldon & Kasser, 1995). Riediger, Freund, and P. Baltes (2005) conducted two cross-sectional studies comparing the extent of intergoal facilitation and interference reported by younger and older adults. These

studies show that goals of older adults tend to be organized into a more integrated structure than goals of younger adults. Older participants in both studies reported more mutual facilitation among their goals (due to instrumental intergoal relations and overlapping goal attainment strategies) and in one study also less intergoal interference (due to resource limitations and incompatible goal attainment strategies) than younger participants. In both studies, the observed age-group differences in intergoal relations were robust when controlling for various other person and goal characteristics (e.g., social desirability, personality traits). In these and an additional diary study, older adults were more engaged in the accomplishment of their goals than were the younger adults. As expected, this higher goal involvement of the older adults could be accounted for by the more highly integrated intergoal relations in that age group. Interestingly, goal conflict was unrelated to goal involvement but predicted lower emotional well-being.

Which processes underlie the observed age-group differences in intergoal relations? Life-span developmental psychology offers three interrelated theoretical explanations. First, the finding of more mutually facilitative personal goals in older as compared to younger adults is in line with developmental theories that emphasize the potential of continuing psychological growth in adulthood, characterized by an increased integration and differentiation of various aspects of the individual (Erikson, 1959; Labouvie-Vief & Blanchard-Fields, 1982; Werner, 1967). The improved ability to commit oneself to goals that are organized into a facilitative structure may reflect a higher life-management competence in older adulthood. As pointed out previously, the shifting dynamic of resource gains and losses make resource limitations increasingly salient in older adulthood (P. Baltes, 1997). One adaptive strategy for managing increasingly limited resources is to invest resources into harmonious rather than conflicting goals.

Intergoal facilitation could also be a possible expression of selection. In addition to holding fewer goals, the selection of goals pertaining to the same life domains and, thereby, converging in higher order goals, should help focus one's limited resources on a subset of highly important life domains (Riediger & Freund, in press). Similar goals might be more mutually facilitative because they can be pursued simultaneously more easily, whereas more dissimilar goals might be susceptible to mutual interference because their pursuit is more resource intensive.

A third perspective derived from life-span theory is that individuals might experience more choice in goal selection as they age. Specifically, in older adulthood, social expectations are less clear and roles less explicitly defined, regulating goal selection and pursuit to a lesser degree than in younger age groups (e.g., Freund et al., 1999; Wrosch & Freund, 2001). Older adults have in principle a larger freedom in deciding which goals to pursue and which one to abandon. Consequently, it might be easier for them to elect goals that are mutually enhancing.

In summary, there is cross-sectional empirical evidence that older adults tend to select more harmonious (i.e., more mutually facilitative, less interfering) personal goals than do younger adults. This appears to be among the protective factors contributing to the maintenance of high levels of goal involvement despite increasingly salient resource limitations in older adulthood. The question of which psychological mechanisms underlie these age-group differences remains open to future research.

### SUMMARY

In this chapter, we mapped out an approach to personality that views motivational processes at the heart of what B. Little (1989) called "personality-in-context." This approach, according to the personality model of McAdams (1990, 1996), is located at an intermediate level of analyzing personality, between personality traits and personal identity or life stories. We proposed that personal goals represent the dynamic aspects of personality reflecting and shaping the interaction of a person with his or her environment over time (see also Cantor, 1990). Taking a life-span developmental view of personality, we argued that personal goals are a fruitful concept for understanding how behavior is organized over time and across situations, and that goal-related processes are important for describing and understanding both the direction and the level of adult development. We elaborated on this argument by discussing developmental shifts in the content of personal goals throughout adulthood (i.e., the "what" of "personality-in-context") and in the manifestation and adaptiveness of goal-directed processes through which people proactively influence and shape their own development (i.e., the "how" of "personality-in-context").

On the basis of the SOC model (P. Baltes & M. Baltes, 1990), three basic processes of managing internal and external resources can be distinguished: selection, optimization, and compensation. Developing and committing to personal goals (selection) provides the constraints that are essential for development. Moreover, selection addresses the fact that (internal and external) resources are limited throughout the life span. Committing to a subset of possible alternative options allows the concentration of resources and thereby enhances the likelihood of achieving higher levels of functioning as well as of accessing new resources. The process of selection is closely linked to the "what" of personality, that is, what kinds of situations a person seeks out and what a person typically tries to do (Emmons, 1989; B. Little, 1989). Studies on the content of personal goals show that adults set goals in areas that are in accordance with age-related social expectations, which might signal the availability of resources for a given age group (Cantor, 1994; Freund, 2003; J. Heckhausen, 1999).

The question of the level of functioning in a given life domain depends on the investment of resources in the service of achieving (optimization) or maintaining one's goals despite goal-relevant losses (compensation). Trying to achieve new outcomes or growth as compared to trying to maintain something in the face of loss or decline, although both important throughout adulthood, shift in their relative importance dependent on the availability of resources. Whereas optimization goals appear to play a more important role in young adulthood, maintenance or avoidance of loss goals become more prevalent and more adaptive in old adulthood, a phase in life when resources decline and their use becomes less effective (Freund & Ebner, 2005).

For a long time, personality theories have stressed the importance of consistency. According to Kelly (1955), individuals are motivated to create a system of conceptions about themselves and the world. This system has the function of organizing the otherwise chaotic experiences, and thereby allowing for meaningful actions (see also Lecky, 1969). Only a system of consistent conceptions that leads to clear predictions of means-ends relations and prescriptions for actions can fulfill this function. This is also true for personal goals (Emmons, 1989; Riediger & Freund, 2005): If a person's goals conflict with one another, they might lead to the dilemma that, whatever one



does for one of one's goals, it is, for at least one of one's other goals, the wrong thing. People experience this as stressful and it hampers positive experiences typically associated with successful goal pursuit. In contrast, goals that facilitate each other also facilitate engagement in goal pursuit, with two or more goals providing the same guides for actions. There is first empirical evidence that older adults have more integrated (particularly more mutually facilitative) goals than do younger adults. This appears to be among the protective factors that contribute to the maintenance of high levels of goal involvement despite increasingly salient resource limitations in older adulthood.

Taken together, then, there is some empirical evidence supporting the theoretical claim that personal goals are important for understanding a person's interaction with his or her environment. In our view, this warrants the conclusion that personal goals are the central building blocks of a theory of "personality-in-context."

#### OUTLOOK: WHERE CAN THE RESEARCH GO FROM HERE?

We believe that the central future potential of the developmental perspective on personality outlined in this chapter is that it allows the bringing together of motivation, emotion, and cognition in a life-span context. The potential integration of these typically separate fields of psychology is clearly not yet realized. Originating in the "new look" movement (Bruner & Postman, 1947), social cognitive approaches to motivation help our understanding of how motivational states influence perception and cognition (Higgins & Sorrentino, 1990). Most goal theories link motivational processes to emotions, arguing that the attainment of goals (or failure thereof) leads to emotional reactions by which the very pursuit of goals might be motivated (Martin & Tesser, 1996), that emotions signal success or failure of the process of goal pursuit (e.g., Carver & Scheier, 1999), or that specific emotions are related to motivational states (e.g., Higgins, 1997). There is a large literature linking goals to behavior (e.g., Locke & Latham, 2002). Recently, Bargh (e.g., Bargh & Gollwitzer, 1994) has proposed an auto-motive model arguing for an automatic link between situational stimuli that activate goals that, in turn, automatically trigger certain goal-relevant behaviors. All of these approaches are very important for understanding certain aspects of motivation. They do not, however, situate the person into a context that changes over time and are typically not well integrated with another.

We therefore conclude that a theory of "personality in context" that integrates motivation, emotion, cognition, and behavior into a developmental framework would benefit psychology as a whole. It would provide the relatively fragmented bodies of research and theory currently dominating psychology with a meaningful overarching framework toward which to work.

#### REFERENCES

- Abraham, J. S., & Hansson, R. O. (1995). Successful aging at work: An applied study of selection, organization, optimization, and compensation through impression management. *Journal of Gerontology-Series B-Psychological and Social Sciences*, 2, 94.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt.
- Atkinson, J. W. (1957). Motivational determinants of risk-taking behavior. *Psychological Review*, 64, 359-372.
- Bäckman, L., & Dixon, R. A. (1992). Psychological compensation: A theoretical framework. *Psychological Bulletin*, 112, 1-25.
- Baltes, B. B., & Dickson, M. W. (2001). Using life-span models in industrial/organizational psychology: The theory of selective optimization with compensation. *Applied Developmental Science*, 5, 51-61.
- Baltes, B. B., & Heydens-Gahir, H. A. (2003). Reduction of work-family conflict through the use of selection. *Journal of Applied Psychology*, 1005-1018.
- Baltes, M. M., & Carstensen, L. L. (1998). Social psychological theories and their applications to aging: From individual to collective selective optimization with compensation. In V. L. Bengtson & K. W. Schaie (Eds.), *Handbook of theories of aging*. New York: Springer.
- Baltes, M. M., & Lang, F. R. (1997). Everyday Functioning and Successful Aging: The Impact of Resources. *Psychology and Aging*, 12, 433-443.
- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23, 611-626.
- Baltes, P. B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist*, 52, 366-380.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging. Perspectives from the behavioral sciences* (pp. 1-34). New York: Cambridge University Press.
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1998). Life-span theory in developmental psychology. In R. M. Lerner (Ed.), *Handbook of child psychology. Vol. 1: Theoretical models of human development* (5th ed., pp. 1029-1143). New York: Wiley.
- Baltes, P. B., & Smith, J. (2003). New frontiers in the future of aging: From successful aging of the young old to the dilemmas of the fourth age. *Gerontology*, 49, 123-135.
- Bangerter, A., Grob, A., & Krings, F. (2001). Personal goals at age 25 in three generations of the twentieth century: Young adulthood in historical context. *Swiss Journal of Psychology*, 60, 59-64.
- Bargh, J. A., & Gollwitzer, P. M. (1994). Environmental control of goal-directed action: Automatic and strategic contingencies between situations and behavior. *Nebraska Symposium on Motivation*, 41, 71-124.
- Boesch, E. E. (1991). *Symbolic action theory and cultural psychology*. Heidelberg: Springer.
- Brandstädter, J. (1998). Action theory in developmental psychology. In R. M. Lerner (Ed.), *Handbook of child psychology: Vol. 1. Theoretical models of human development* (pp. 807-866). New York: Wiley.
- Brandstädter, J., & Wentura, D. (1995). Adjustment to shifting possibility frontiers in later life: Complementary adaptive modes. In R. A. Dixon & L. Bäckman (Eds.), *Compensating for psychological deficits and declines: Managing losses and promoting gains* (pp. 83-106). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Bruner, J. S., & Goodman, C. C. (1947). Value and need as organizing factors in perception. *Journal of Abnormal Social Psychology*, 42, 33-44.
- Bruner, J. S., & Postman, L. (1947). Emotional selectivity in perception and reaction. *Journal of Personality*, 16, 69-77.
- Buss, D. M. (1999). *Evolutionary psychology: The new science of the mind*. Boston: Allyn & Bacon.
- Cantor, N. (1990). From thought to behavior: "Having" and "doing" in the study of personality and cognition. *American Psychologist*, 45, 735-750.
- Cantor, N. (1994). Life task problem solving: Situational affordances and personal needs. *Personality and Social Psychology Bulletin*, 20, 235-243.
- Carstensen, L. L., Hanson, K. A., & Freund, A. M. (1995). Selection and compensation in adulthood. In R. A. Dixon & L. Bäckman (Eds.), *Compensating for psychological deficits and declines: Managing losses and promoting gains* (pp. 107-126). Mahwah, NJ: Lawrence Erlbaum Associates.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54, 165-181.

- Carver, C. S., & Scheier, M. F. (1999). Themes and issues in the self-regulation of behavior. In R. S. Wyer, Jr. (Ed.), *Perspectives on behavioral self-regulation* (pp. 1-105). Mahwah, NJ: Lawrence Erlbaum Associates.
- Coats, E. J., Janoff-Bulman, R., & Alpert, N. (1996). Approach versus avoidance goals: Differences in self-evaluation and well-being. *Personality and Social Psychology Bulletin*, 22, 1057-1067.
- Cross, S., & Markus, H. (1991). Possible selves across the life span. *Human Development*, 34, 230-255.
- Ebner, N., & Freund, A. M. (2003, August). *Win or don't lose: On the differences in personal goal forms in early and late adulthood*. Poster presented at the 111th meeting of the American Psychological Association, Toronto, Canada.
- Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance motivation. *Journal of Personality and Social Psychology*, 72, 218-232.
- Emmons, R. A. (1989). Exploring the relationship between motives and traits: The case of narcissism. In D. M. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions* (pp. 32-44). New York: Springer.
- Emmons, R. A. (1996). Striving and feeling: Personal goals and subjective well-being. In P. M. Gollwitzer & J. A. Bargh (Eds.), *The psychology of action: Linking cognition and motivation to behavior* (pp. 313-337). New York: Guilford.
- Emmons, R. A., & King, L. A. (1988). Conflict among personal strivings: Immediate and long-term implications for psychological and physical well-being. *Journal of Personality and Social Psychology*, 54, 1040-1048.
- Ericsson, K. A. (1996). *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues*, 1, 1-171.
- Freund, A. M. (1997). Individuating age-salience: A psychological perspective on the salience of age in the life course. *Human Development*, 40, 287-292.
- Freund, A. M. (2003). Die Rolle von Zielen für die Entwicklung [The role of goals for development]. *Psychologische Rundschau*, 54, 233-242.
- Freund, A. M. (in press). Differential motivational consequences of goal-focus in younger and older adults. *Psychology and Aging*.
- Freund, A. M., & Baltes, P. B. (1998). Selection, optimization, and compensation as strategies of life-management: Correlations with subjective indicators of successful aging. *Psychology and Aging*, 13, 531-543.
- Freund, A. M., & Baltes, P. B. (2000). The orchestration of selection, optimization, and compensation: An action-theoretical conceptualization of a theory of developmental regulation. In W. J. Perrig & A. Grob (Eds.), *Control of human behavior, mental processes and consciousness* (pp. 35-58). Mahwah, NJ: Lawrence Erlbaum Associates.
- Freund, A. M., & Baltes, P. B. (2002). Life-management strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality and Social Psychology*, 82, 642-662.
- Freund, A. M., & Ebner, N. C. (2005). The aging self: Shifting from promoting gains and balancing losses. In W. Greve, D. Wentura, & K. Rothermund (Eds.), *The adaptive self: Personal continuity and intentional self-development* (pp. 185-202). Ashland, OH: Hogrefe & Huber Publishers.
- Freund, A. M., Li, K. Z. H., & Baltes, P. B. (1999). Successful development and aging: The role of selection, optimization, and compensation. In J. Brandstädter & R. M. Lerner (Eds.), *Action and self-development: Theory and research through the life span* (pp. 401-434). Thousand Oaks, CA: Sage.
- Freund, A. M., & Riediger, M. (2001). What I have and what I do—the role of resource loss and gain throughout life. *Applied Psychology*, 50, 370-380.
- Gibson, E. J. (1997). Discovering the affordances of surfaces of support. *Monographs of the Society for Research in Child Development*, 62, 159-162.
- Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, 54, 493-503.

- Grob, A., Little, T. D., & Wanner, B. (1999). Control judgments across the life span. *International Journal of Behavioral Development*, 23, 833-854.
- Harlow, R. E., & Cantor, N. (1996). Still participating after all these years: A study of life task participation in later life. *Journal of Personality & Social Psychology*, 71, 1235-1249.
- Havighurst, R. J. (1948). *Developmental tasks and education*. New York: David McKay.
- Heckhausen, H. (1991). *Motivation and action*. Berlin, Germany: Springer.
- Heckhausen, J. (1997). Developmental regulation across adulthood: Primary and secondary control of age-related changes. *Developmental Psychology*, 33, 176-187.
- Heckhausen, J. (Ed.). (1999). *Developmental regulation in adulthood: Age-normative and sociostructural constraints as adaptive challenges*. New York: Cambridge University Press.
- Heckhausen, J., & Schulz, R. (1995). A life-span theory of control. *Psychological Review*, 102, 284-304.
- Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, 52, 1280-1300.
- Higgins, E. T., & Sorrentino, R. M. (Eds.). (1990). *Handbook of motivation and cognition: Foundations of social behavior*, Vol. 2. New York: Guilford.
- Hobfoll, S. E. (1998). *Stress, culture, and community: The psychology and philosophy of stress*. New York: Plenum.
- Hooker, K., & McAdams, D. P. (2003). Personality and adult development: Looking beyond the OCEAN. *Journals of Gerontology Series B-Psychological Sciences & Social Sciences*, 58, P311-P312.
- Kelly, G. A. (1955). *The psychology of personal constructs* (Vol. 1). New York: Norton.
- Klinger, E. (1977). *Meaning and void: Inner experience and the incentives in people's lives*. Minneapolis: University of Minnesota Press.
- Labouvie-Vief, G. (1981). Proactive and reactive aspects of constructivism: Growth and aging in life-span perspective. In R. M. Lerner & N. A. Busch-Rossnagel (Eds.), *Individuals as producers of their development* (pp. 197-230). New York: Academic Press.
- Labouvie-Vief, G., & Blanchard-Fields, F. (1982). Cognitive ageing and Psychological Growth. *Ageing and Society*, 2, 183-209.
- Lang, F. R., & Carstensen, L. L. (2002). Time counts: Future time perspective, goals, and social relationships. *Psychology and Aging*, 17, 125-139.
- Lecky, P. (1969). *Self consistency*. Garden City, NY: Doubleday.
- Lerner, R. M., & Busch-Rossnagel, N. A. (1981). Individuals as producers of their development: Conceptual and empirical bases. In R. M. Lerner & N. A. Busch-Rossnagel (Eds.), *Individuals as producers of their development: A life-span perspective* (pp. 1-36). New York: Academic Press.
- Lerner, R. M., Freund, A. M., DeStefanis, I., & Habermas, T. (2001). Understanding developmental regulation in adolescence: The use of the selection, optimization, and compensation model. *Human Development*, 44, 29-50.
- Li, K. Z. H., Lindenberger, U., Freund, A. M., & Baltes, P. B. (2001). Walking while memorizing: Age-related differences in compensatory behavior. *Psychological Science*, 12, 230-237.
- Little, B. R. (1989). Personal projects analysis: Trivial pursuits, magnificent obsessions and the search for coherence. In D. M. Buss & N. Cantor (Eds.), *Personality psychology: Recent trends and emerging directions* (pp. 15-31). New York: Springer.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57, 705-717.
- Marsiske, M., Lang, F. R., Baltes, P. B., & Baltes, M. M. (1995). Selective optimization with compensation: Life-span perspectives on successful human development. In R. A. Dixon & L. Bäckman (Eds.), *Compensating for psychological deficits and declines: Managing losses and promoting gains* (pp. 35-79). Mahwah, NJ: Lawrence Erlbaum Associates.
- Martin, L. L., & Tesser, A. (Eds.). (1996). *Striving and feeling: Interactions among goals, affect, and self-regulation*. Mahwah, NJ: Lawrence Erlbaum Associates.
- McAdams, D. P. (1996). Personality, modernity, and the storied self: A contemporary framework for studying persons. *Psychological Inquiry*, 7, 295-321.
- Mischel, W., Cantor, N., & Feldman, S. (1996). Principles of self-regulation: The nature of will-power and self-control. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 329-360). New York: Guilford.

- Nurmi, J. E. (1992). Age differences in adult life goals, concerns, and their temporal extension: A life course approach to future-oriented motivation. *International Journal of Behavioral Development*, 15, 487-508.
- Nurmi, J. E. (1994). The development of future-orientation in a life-span context. In Z. Zaleski (Ed.), *Psychology of future orientation* (pp. 63-74). Lublin, Poland: Towarzystwo Naukowe KUL.
- Ogilvie, D. M., Rose, K. M., & Heppen, J. B. (2001). A comparison of personal project motives in three age groups. *Basic and Applied Social Psychology*, 23, 207-215.
- Palys, T. S., & Little, B. R. (1983). Perceived life satisfaction and the organization of personal project systems. *Journal of Personality and Social Psychology*, 44, 1221-1230.
- Riediger, M. (2001). On the dynamic relations among multiple goals: Intergoal conflict and intergoal facilitation in younger and older adulthood. Retrieved December 14, 2001, from <http://darwin.inf.fu-berlin.de/2001/266/>
- Riediger, M., & Freund, A. M. (2004). Interference and facilitation among personal goals: Differential association with subjective well-being and persistent goal pursuit. *Personality and Social Psychology Bulletin*, 30, 1511-1523.
- Riediger, M., & Freund, A. M. (in press). Focusing and restricting: Aspects of motivational selectivity in adulthood. *Psychology and Aging*.
- Riediger, M., Freund, A. M., & Baltes, P. B. (2005). Managing life through personal goals—Intergoal facilitation and intensity of goal pursuit in younger and older adults. *Journal of Gerontology: Psychological Sciences*, 60B, P84-P91.
- Sheldon, K. M., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *Journal of Personality and Social Psychology*, 68, 531-543.
- Singer, T., Lindenberger, U., & Baltes, P. B. (2003). Plasticity of memory for new learning in very old age: A story of major loss? *Psychology and Aging*, 18, 306-317.
- Staudinger, U. M., Freund, A. M., Linden, M., & Maas, I. (1999). Self, personality, and life regulation: Facets of psychological resilience in old age. In P. B. Baltes & K. U. Mayer (Eds.), *The Berlin Aging Study: Aging from 70 to 100* (pp. 302-328). New York: Cambridge University Press.
- Staudinger, U. M., Marsiske, M., & Baltes, P. B. (1995). Resilience and reserve capacity in later adulthood: Potentials and limits of development across the life span. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology* (Vol. 2: Risk, disorder, and adaptation, pp. 801-847). New York: Wiley.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211, 453-458.
- Wegner, D. M. (1992). You can't always think what you want: Problems in the suppression of unwanted thoughts. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 193-225). San Diego, CA: Academic.
- Werner, H. (1967). The concept of development from a comparative and organismic point of view. In D. B. Harris (Ed.), *The concept of development* (pp. 125-148). Minneapolis: University of Minnesota Press.
- Wiese, B. S., & Freund, A. M. (2001). Zum Einfluss persönlicher Prioritätensetzungen auf Maße der Stimuluspräferenz: [The influence of setting personal priorities on the magnitude of stimulus preference: Initial empirical findings]. *Zeitschrift für Experimentelle Psychologie*, 48, 57-73.
- Wiese, B. S., Freund, A. M., & Baltes, P. B. (2000). Selection, optimization, and compensation: An action-related approach to work and partnership. *Journal of Vocational Behavior*, 57, 273-300.
- Wiese, B. S., Freund, A. M., & Baltes, P. B. (2002). Subjective career success and emotional well-being: Longitudinal predictive power of selection, optimization, and compensation. *Journal of Vocational Behavior*, 60, 321-335.
- Wrosch, C., & Freund, A. M. (2001). Self-regulation of normative and non-normative developmental challenges. *Human Development*, 44, 264-283.
- Wrosch, C., Heckhausen, J., & Lachman, M. E. (2000). Primary and secondary control strategies for managing health and financial stress across adulthood. *Psychology and Aging*, 15, 387-399.

## 19

Development of Self-Representations  
in Adulthood

Manfred Diehl  
University of Florida

Theory and research about humans' understanding of their own person and the resulting conceptions of the self have been an integral part of scientific psychology for a long time (James, 1890/1981). Building on the early work by James (1890/1981), the last two decades have seen a renewed interest and a plethora of theoretical (Brandstädter & Greve, 1994; Markus & Wurf, 1987) and empirical contributions to self-concept research in almost all branches of psychology (Baumeister, 1998; Damon & Hart, 1988; Harter, 1999; Leary & Tangney, 2003; Robins, Norem, & Cheek, 1999). Even trait theorists have incorporated the notion of the self-concept into their theoretical models (McCrae & Costa, 1996) and have acknowledged that individuals' cognitive-affective views of themselves are an important part of personality and essential for the understanding of human behavior (McCrae & Costa, 2003).

Although James (1890/1981) already presented a detailed theoretical view of the self, empirical research treated the *self-concept*—the Me-self, the self as object, the self as known—for a long time as a unidimensional and static entity (see Wylie, 1974). The last two decades, however, have seen a return to many of James' original notions and have extended theory and research in important ways (Campbell, Assanand, & DiPaula, 2000; Markus & Wurf, 1987). Thus, current theory and research conceptualize the human self-concept as a multidimensional, contextualized, and dynamic cognitive structure with important self-regulatory functions (Baumeister, 1998; Brandstädter & Greve, 1994; Higgins, 1996; Markus & Wurf, 1987). This conceptualization implies that individuals' self-concept is seen as a *cognitive schema* that contains knowledge about traits, values, and beliefs, episodic and semantic memories, and is involved when self-relevant information is processed (Campbell et al., 1996). From a life-span developmental perspective, several theorists (Brandstädter & Greve, 1994; Markus & Herzog, 1991) have pointed out that the self-concept gives individuals a sense of continuity and permanence, allows them to distinguish themselves and their developmental history from others, and