

# The MORE Life Experience Model: A Theory of the Development of Personal Wisdom

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## Introduction

We all experience challenges in our lives, and probably most of us feel we have learned something from the challenges we have encountered. But why do some (few) people learn things that make them wiser over their life course – while others become (or remain) rigid, bitter, depressed, superficially content, or overly self-involved? Little theoretical and even less empirical work has directly addressed how wisdom might develop over a lifetime. In this chapter, we present a conceptual model of the development of wisdom, based on previous research and theory concerning wisdom, life-span development, growth from negative experiences, autobiographical memory, and the life story.

Although wise persons are not a homogeneous group and have highly individualized developmental trajectories, we postulate that some basic tenets are essential for the development of wisdom. The core elements of our model are four general resources that influence which life events individuals are likely to encounter, how they perceive and appraise them, how they deal with challenges, and how and to what extent they integrate and reintegrate experiences into their life story. The four resources are a sense of *mastery*, *openness*, *reflectivity*, and *emotion regulation and empathy* – in short, MORE. The MORE Life Experience Model proposes that these resources form a kind of “positive syndrome” that helps

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individuals to deal with life challenges in a way that fosters the development of wisdom. In this chapter, we first lay out the theoretical background of the MORE Life Experience Model and then discuss each resource in detail. Finally, we describe how the MORE resources influence which life experiences people encounter, how they deal with them, and how they integrate them into their life story.

To illustrate our theory, we use data from two studies on how wisdom manifests in real life. In the first study (Bluck & Glück, 2004; Glück, Bluck, Baron, & McAdams, 2005), we investigated people's autobiographical narratives of situations in which they thought they had been wise. Most people reported difficult situations such as life decisions or having to deal with an unexpected negative event. We found that most people showed evidence of having grown and learned from the experience (Bluck & Glück, 2004) and that age groups differed in what form of wisdom they reported (Glück et al., 2005). The second study is currently in progress; its goal is to provide the first empirical test of predictions from the MORE Life Experience Model. A sample of 47 wisdom nominees and 47 control participants completed measures of wisdom, predictors of wisdom, and the MORE resources and were interviewed about their most difficult life event, their best life event, and an important conflict in their past. Our main hypothesis is that wiser participants should show higher levels of the MORE resources than others both in scalar measures and in coded variables from autobiographical narratives of life experiences.

### ***Theoretical Background: The Development of Wisdom Through Life Experience***

Life experience plays an important role in the development of wisdom. This idea is supported by (a) previous wisdom theories, (b) life-span developmental views of adulthood, and (c) literature on personal growth as a result of negative experiences. Each is detailed in the following.

**The role of life experience in wisdom theories.** Life experience may be the most typical characteristic that laypeople associate with wisdom (overview in Bluck & Glück, 2005). Most laypeople believe that a broad spectrum of experience is important for the development of wisdom. There is less agreement about the role of fundamental challenges, such as facing mortality or losing significant others, for the development of wisdom, but most people also consider such experiences important (Glück & Bluck, 2011).

Wisdom researchers generally share laypeople's view that wisdom is not possible without life experience, although theoretical accounts of the ontogenesis of wisdom have yet to explicate the role of life experience in detail. Wisdom theorists tend to differ (just as laypeople do) in how much first-person experience with

difficult and challenging situations they consider necessary for the development of wisdom. Some theories, such as the Berlin wisdom model (overview in Baltes & Smith, 2008; Baltes & Staudinger, 2000) or Sternberg's balance theory (Sternberg, 1998, 2001), focus on knowledge as the core of wisdom: deep, complex, partly implicit knowledge about the fundamental or difficult issues of human life – such as decision-making, conflict resolution, or finding meaning. Note that while the Berlin wisdom model explicitly views wisdom as knowledge-based expertise, it also has a role for noncognitive psychological characteristics such as personality, values, and emotion regulation (e.g., Kunzmann & Baltes, 2003). Still, theories that suggest a complex knowledge base as the most important component of wisdom tend to assume that wisdom develops like other sorts of exceptional knowledge or expertise: through repeated experience and practice combined with high levels of motivation. Specifically, proponents of the Berlin wisdom model propose three main factors that contribute to the development of wisdom: general person attributes such as intelligence, cognitive style, and openness to experience; expertise-specific factors such as experience with life problems, availability of mentors, and motivation; and facilitative experiential contexts such as age, parenthood, work contexts, or historical period (Baltes & Staudinger, 2000).

Other authors put greater emphasis on the importance of critical experiences in one's own life for the development of wisdom. For example, Ardel (2005) argued that wisdom is fostered by crises and obstacles in people's lives that challenge their existing world views and thereby broaden their perspective (Ardelt, 2005; see also Kinnier, Tribbensee, Rose, & Vaughan, 2001; Kramer, 2000). Ardel (2004) believes that wisdom goes beyond deep and complex knowledge because it entails a process of transcendence of one's subjectivity and self-centeredness. This process leads to greater feelings of connectedness to others and the world, which she views as essential for wisdom (see also Chap. 10 by Levenson & Aldwin, this volume; Levenson, Jennings, Aldwin, & Shiraishi, 2005).

To summarize, there are two general lines of thinking about the development of wisdom. They differ in their emphasis on first-person life experience, particularly with the role of critical life challenges. The two views have been summarized (Staudinger & Glück, 2011; see also Chap. 1 by Staudinger, this volume) as concerning personal wisdom (i.e., wisdom as self-related knowledge acquired through direct personal experience) and general wisdom (i.e., wisdom as world knowledge that can also be acquired in more indirect ways). In spite of these differences, however, all wisdom theorists likely agree that wisdom is acquired incrementally over the life course and that this occurs through some level of confrontation, direct or indirect, with the fundamental themes and questions of human existence. Thus, theories of wisdom have generally had a place for the role of life experience, but the dynamic between self-resources and life experiences that causes some people to grow toward wisdom more than others has not yet been conceptualized in detail.

**General theories of life-span psychological development.** Outside the wisdom literature, arguments for life experiences as a major catalyst for the development of wisdom can be found in life-span psychological theories. These theories suggest

that moving across adulthood is likely to expose people to a variety of experiences and to entail dealing with negative events and losses (e.g., Baltes, Staudinger, & Lindenberger, 1999). Such experiences are often considered relevant for the development of wisdom. Note that while laypeople generally associate wisdom with old age (Bluck & Glück, 2005; Heckhausen, Dixon, & Baltes, 1989), the empirical evidence from wisdom research is mixed (Staudinger, 1999). There is certainly not a linear association between age and wisdom, as many people do not develop wisdom with age. Life-span theories generally assume broad heterogeneity of developmental trajectories across adulthood (Baltes et al., 1999). Given that, the absence of a direct association between wisdom and age is reconcilable with the idea that old age is a wisdom-fostering phase for those (few) people who are already “on track” toward wisdom.

One obvious argument for old age being related to higher levels of wisdom is that if life experience is cumulative, the amount of experience should be correlated with chronological age. As we will argue in the following, however, an individual’s amount of experience in itself is not a sufficient predictor of wisdom – the way individuals deal with and integrate experiences is crucial. Old age may specifically contribute to wisdom-fostering ways of dealing with experiences in some individuals: It brings new perspectives due to losses of primary control in some life domains as well as appreciation of one’s limited subjective lifetime. Such perspectives have been shown to foster emotion-regulation skills (Carstensen, Fung, & Charles, 2003), as well as self-transcendent values (Brandtstädter, Rothermund, Kranz, & Kühn, 2010). A similar notion is inherent in Erikson’s (1959, 1963) conception of wisdom as a possible optimal end stage in life-span development (i.e., integrity as opposed to despair). Thus, the higher likelihood of experiences of uncontrollability in old age (as well as other conditions that limit individuals’ subjective lifetime) may foster the development of wisdom in individuals who have sufficient levels of psychological resources to deal with such experiences constructively. Note that at the other end of the life span, in childhood, wisdom development is only emergent both because the person has encountered very few experiences and because they do not have the social or cognitive skills necessary to integrate challenging experiences. The emergence of the life story in adolescence allows for wisdom development to begin in earnest (Habermas & Bluck, 2000).

**Personal growth from negative experiences.** Related ideas have been presented by researchers studying concepts such as posttraumatic growth (Calhoun & Tedeschi, 2006) stress-related growth (Aldwin & Levenson, 2001; Park, Cohen, & Murch, 1996), or growth through adversity (Joseph & Linley, 2005, 2006). Even after devastating experiences, many people report subjective growth in addition to negative consequences. Typically such perceptions of growth include a greater appreciation of life, closer relationships to others, an increased sense of personal strength, recognition of new possibilities, and/or spiritual development (Tedeschi & Calhoun, 1995, 2004). Other studies have reported self-perceived increases in compassion, emotion regulation, self-understanding, honesty and reliability, and even wisdom itself (overview in Park, 2004). Thus, a number of wisdom-related variables have

been associated with experiencing negative life events, again suggesting the importance of serious consideration of life experience in any theory of the development of wisdom. Note, however, that a frequent criticism of work on growth from negative experiences is that most of these studies are based on self-reports. It is difficult to determine whether participants have “really” grown or whether their self-perceptions of growth reflect positive illusions or coping attempts (Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000; Zoellner & Maercker, 2006). Future longitudinal research that assesses resources and personal wisdom as and after individuals encounter negative experiences, measured using self- and peer-reports as well as behavioral measures, may help to disentangle actual from illusory growth.

To summarize, evidence for a central role of experience in the development of wisdom comes from the wisdom literature, from theories of life-span psychological development, and from empirical research on growth from negative experiences. Although everyone has their share of challenges across life, however, most do not develop high levels of wisdom. Gaining wisdom is not simply a matter of experiencing many or particular types of life events. Rather, people who bring certain resources to bear in facing difficult challenges are more likely to grow from such experiences (Ardelt, 2005; Kramer, 2000). The goal of the MORE Life Experience Model is to develop a specific framework for understanding why and how some people incrementally develop wisdom through dealing with life experiences, while others do not.

## **The MORE Wisdom Resources**

We argue that four resources are particularly important for the development of wisdom through life experiences. People who have a strong sense of mastery, high levels of openness, reflectivity, and emotion-regulation skills combined with empathy are more likely to (a) encounter experiences that can foster wisdom across their lives, (b) deal with life challenges in a manner that promotes wisdom, and (c) reflect on and integrate such experiences into their life story in a way that allows them to grow and learn from past experience over time. For each of the four MORE resources, we give a definition and illustrate it using quotations from life experience narratives (translated from German) of wisdom nominees in our ongoing research. The theoretical rationale for including each resource in the model is also discussed.

### ***A Sense of Mastery***

We define a sense of mastery as wise individuals’ belief that they are able to deal with life’s challenges, whatever they may be. This does not mean that they have exaggerated or illusory notions of control: They are perfectly aware of the uncontrollability of many of life’s events but do not feel helpless or victimized by the

knowledge that some things cannot be predicted or controlled. Thus, a sense of mastery, as defined here, is an inherently dialectical concept entailing active control but also the acceptance of uncontrollability and the ability to balance these two in response to what a situation requires (Ardelt, 2005; Brandtstädter, 2007; see also the paradoxical nature of wisdom as discussed in Chap. 13 by Ardel, this volume). For example, one of the wisdom nominees in our study talked about a long history of conflicts with her parents. She concluded that in those conflicts she had learned that “I cannot fight, cannot quarrel, but I’m good at holding on and staying true to myself.” Another woman said, looking back at a time where she had hurt someone badly, “I cannot make right what happened then, but I can do it right this time.” One wisdom nominee succinctly summarized mastery in her narrative by saying, “There are things in life that cannot be changed, and then you have to accept them. Sometimes you have the choice, and sometimes you just don’t.”

A related notion, manageability, is one of three key components of Aaron Antonovsky’s (1979) salutogenesis model, which was proposed as one of the first counterpoints to the focus of medical research on disease rather than health and well-being. Based on studies of how people overcome even severe life stressors, Antonovsky argued that a crucial psychological component is an intact “sense of coherence,” which comprises three components: comprehensibility (belief that there is some logic and order in why things happen), meaningfulness (a belief that life in general can be interesting, satisfactory, and worth living), and manageability, which he defines as belief that one will be able to deal with and overcome the crisis because of one’s internal and external resources.

Evidence concerning the role of a sense of mastery for the development of wisdom through life experience comes from the literature on growth from negative experiences, as well as from the literature on wisdom. First, a number of studies have shown that high self-efficacy, the (sometimes unrealistic) conviction that one can deal with just about anything, is conducive to coping with negative events (e.g., Benight & Bandura, 2004), and a mastery-oriented coping style is a key predictor of positive growth from stressful experiences (Maercker & Zoellner, 2004). While self-efficacy may be effective in coping, wisdom does not entail the naïve illusion of being in full control of whatever may happen. In fact, seeing through illusions and being aware of the inherent uncertainty in human life have been proposed as key aspects of wisdom (Baltes & Staudinger, 2000; McKee & Barber, 1999). Negative experiences can profoundly shatter people’s control illusions (Janoff-Bulman, 2004), and individuals who are able to accept such loss of control may be able to learn more as they reconstruct their world after a crisis.

## *Openness*

Wise individuals are aware of the fact that there are multiple perspectives on every phenomenon, and they are interested in learning from new perspectives and from other people. Therefore, they are less judgmental and influenced by prejudice in how they perceive others than other people are, and able to accept that others’ goals

and values can differ from their own. For example, a wisdom nominee in our current project on the life stories of wise individuals felt that her own development had been positively influenced by having a child with a severe disability (she listed this event both among the most difficult and the best experiences of her life). However, she said, “In no way do I dare to judge how other people would deal with this, with having a child with special needs.” Thus, even though she felt that she had grown from her experience, rather than viewing her own way as the optimal one, she was fully aware of the internal and external factors that may lead other people to experience this situation differently. Another participant said in talking about problems with his son, “One learns a tremendous number of things. First of all about another person’s development, then about how accepting one is able to be – seeing that a child is not one’s property but an independent human being, and accepting that his generation is just different from mine.” Both these examples show wise individuals’ motivation to see and accept others as they actually are, rather than forcing their own views upon them. Thus, openness as we define it implies high levels of tolerance for ways of life that differ from one’s own.

Evidence for the role of openness for the development of wisdom comes both from the empirical wisdom literature and from work on growth from negative experiences. The Big Five factor Openness to Experience (e.g., Costa & McCrae, 1992) is among the strongest personality predictors of wisdom-related knowledge as assessed by the Berlin wisdom paradigm (Glück & Baltes, 2006; Staudinger, Lopez, & Baltes, 1997). Of the six facets of openness measured by the NEO-PI-R (Costa & McCrae, 1992), we believe that openness to values (the willingness to re-examine one’s social, religious, and political values) and, to a lesser degree, openness to actions (the inclination to try new activities and visit new places) are closest to our understanding of openness. Openness to feelings (receptiveness to emotional states and experiences) and openness to ideas (intellectual curiosity and willingness to learn) are also highly typical of the “positive syndrome” that characterizes wisdom. Those aspects are, however, more closely related to our resources of emotion regulation and reflectivity, respectively.

Webster (2003, 2007) included openness (to “alternate views, information, and potential solution strategies”; Webster, 2003, p. 15) as one of five components in his model of wisdom. Rather than viewing openness as an integral part of wisdom, however, the MORE Life Experience Model postulates that openness is a necessary precursor: It is one of the crucial resources likely to be present early on in individuals who eventually develop high levels of wisdom (cf. Ardelt, 2011). As a personality trait, openness is the most debated of the Big Five because it seems to be less stable and its structure less clear than is the case for the other four (e.g., Caspi, Roberts, & Shiner, 2005). Thus, while openness is partly an innate personality trait (McCrae et al., 2000), it is also influenced by social-environmental influences. For example, parents or schools who model openness by trying to accept a child as he or she is, and who encourage the child to take an unbiased view on other people and new experiences, may lay an important foundation for later development. Thus, both high innate levels of openness and/or openness-supporting environments across a life may help individuals to seek out wisdom-fostering

situations, embrace challenges, and gain new perspectives through life experiences – which, in the long run, may help them develop toward wisdom.

## ***Reflectivity***

On the most general level, we define reflectivity as the willingness to look at life issues in a complex way, rather than to simplify them. Wise individuals reflect deeply on experiences as they strive to see the “big picture” and identify larger themes, developmental links over time, and relations between issues. For example, in interpreting someone’s current behavior, they take situational and contextual aspects as well as developmental trajectories into account. Because of their reflective style of thinking, wise individuals are not aimed only at self-enhancement or self-protection. They are willing to question their own views, values, feelings, and behaviors.

As reflectivity implies complex thinking, it is difficult to find succinct quotations from our interviews representing it. An example of seeing a broader picture comes from one participant who noticed that she tended to react anxiously to difficulties. In thinking about this pattern, she took a broader societal perspective: “And I’ve found that fear is permanently present in our society. All unconsciously, fear is being used to manipulate people everywhere. The church, the medical system, they are all relying on people’s fear, people’s bad conscience. . . .” Another participant showed self-reflection in talking about an argument with her father that she had had in the past. Reflecting back on it, she said, “Now I think that it was just my perception at the time. He probably did appreciate me, but I didn’t appreciate myself.”

Staudinger (2001) has argued that life reflection is an important factor in the development of wisdom. She argues that life reflection is a combination of remembering (and reconstructing) experiences and a thorough explanatory and evaluative analysis, which involves emotional and motivational processes as well as cognition. Life reflection may be organized around certain themes or periods and can involve considerations of the present and future as well as the past. Staudinger argues that life reflection may lead to life insight, which act as a predecessor of general wisdom, as well as self-insight, which may precede personal wisdom. Empirical evidence for the role of reflection in the development of wisdom comes from both the wisdom literature and research on growth from negative experiences. Reflectivity emerged as a key component of wisdom in our review of lay-theory studies (Bluck & Glück, 2005). Reflection is also one of three components of wisdom in Ardelt’s (2000, 2004) model, defined as the ability and willingness to see things, including oneself, from multiple perspectives. Webster (2003, 2007) also included reflection as a component of wisdom. While we do not dispute that reflection is a necessary characteristic of wise individuals, the MORE model emphasizes that reflectivity, (i.e., the motivation to understand complex



issues, including one's own complexity) is a characteristic that individuals must develop "on the way," long before they attain high levels of wisdom.

An important distinction in the realm of posttraumatic growth is made between reflection and rumination. The latter refers to persistent, sometimes uncontrollable, "brooding" about negative experiences in the past or present (Nolen-Hoeksema & Larson, 1999). Instead, reflection is a growth-oriented effort to make meaning of what is happening or has happened in the past (Zoellner & Maercker, 2006). While rumination is a negative marker for well-being, reflection about lost possibilities after negative life events is positively related to concurrent and subsequent ego development (King & Hicks, 2007).

### *Emotion Regulation and Empathy*

The first version of the MORE Life Experience Model, which was at the basis of our current research project, proposed that emotion regulation in the classical sense (i.e., accurate perception and situation-adequate management of one's own as well as others' emotions), is necessary for the development of wisdom. We soon became aware, however, that this definition of emotion regulation does not include an important affective aspect of wisdom: Wisdom entails not only the ability to deal with others' feelings effectively, but also to reach out to others through empathetic concern (Ardelt, 2000), that is, to care about others' emotions out of a prosocial motivation to improve the lives of others. Thus, empathy was included as a second aspect of the "E" component. In the following, we first discuss perception and regulation of one's own emotions and, then, empathy-based perception and regulation of others' emotions.

*Perceiving and regulating one's own emotions.* The MORE Life Experience Model proposes that wise individuals perceive their own emotions accurately, even when they are contradictory or ambivalent, and are able to manage them as appropriate to a given situation. Specifically, wise people do not suppress negative feelings but also do not dwell extensively on them. Their aim is not to maximize a shallow kind of well-being but to achieve a fuller understanding of life by also seeing the sad and difficult sides of human existence. At the same time, they are able to limit these emotions so that they remain manageable and to enjoy the positive aspects of life.

For example, a man nominated as wise in our current research talked about the disadvantages of suppressing negative feelings: "Well, talking to others is certainly helpful, but you should not use that to get rid of your feelings. You have to see them through, live through them – even if it's painful, because it will be better later. You can deal with the issue in a better way later and look at it from a meta-level, so to speak, if you've really been through the feeling." As an example of downregulating negative emotions, another wisdom nominee said that whenever she gets angry about small things, she says to herself, "No, I will not let this make me angry. It is just not worth it." Thus, wise individuals perceive their own feelings in depth, but

they can also judge the suitability of their emotional response to a situation and up- or downregulate accordingly.

Evidence for the role of regulating one's own emotions in dealing with life challenges comes mostly from wisdom research and research on emotional development. Laypeople's implicit theories often entail a view of wise individuals as able to remain calm in the face of conflict or difficulty (Bluck & Glück, 2005). Wisdom researchers have also suggested that emotion regulation is central to wisdom (Kunzmann, 2004). As with openness and reflection, Webster's model (2003, 2007) includes emotion regulation as a component of wisdom, while we also view it as an important building block for the eventual development of wisdom (cf. Ardel, 2011).

Emotion-regulation skills generally increase across adulthood (Carstensen, Isaacowitz, & Charles, 1999; Carstensen, Pasupathi, Mayr, & Nesselrode, 2000; Kunzmann, Kupperbusch, & Levenson, 2005): This increased skill in managing one's emotions may be another reason why wisdom is often associated with old age. Young adults may sometimes be overwhelmed by strong feelings if faced with novel, distressing events (e.g., Blanchard-Fields, Mienaltowski, & Seay, 2007; Phillips, Henry, Hosie, & Milne, 2008). Note, however, the ongoing debate about whether older adults' "better" emotion regulation is actually related to the denial or suppression of negative feelings (e.g., Labouvie-Vief, Grünh, & Mouras, 2009). Coping research also suggests that emotion regulation is important for dealing with negative events (Maercker & Zoellner, 2004). Regardless of whether it is linked with chronological age, emotion regulation appears to be a critical ability in responding to life's experiences in a manner that allows one to find balance in one's own emotional life and have the capacity to reach out to others.

*Empathy-based perception and regulation of others' emotions.* Wise persons are able and motivated to "put themselves in another person's shoes." This includes the ability to perceive others' feelings and reactions clearly so as to take their perspective, as well as the ability to "regulate" others' emotions well, on the basis of a caring concern for their welfare. Thus, wisdom includes a prosocial motivation in addition to skill in emotion regulation. Wisdom does not, however, imply engaging in others' trauma or pain so that one takes it on as one's own. In fact, wise individuals are able to downregulate their own feelings so as to remain able to support others in need.

One wisdom nominee in our project showed that she was able to take her father's perspective in describing a conflict: "I guess he probably felt that he was losing his daughter. I think he couldn't really handle the idea that I am a different person than he thought I was. Probably he was also feeling I rejected him somehow. I can imagine that." Another participant showed empathetic concern for humankind at large rather than for a specific person, saying that she sometimes felt "compassion for that whole complex system of judging and dismissing one another that goes on between people, and how they cannot get themselves out of that."

The wisdom literature supports the idea that empathy and prosocial orientations are central characteristics of wisdom. Concern for others is an important component of wisdom in lay theories (Bluck & Glück, 2005). Commonly cited public wisdom

figures are often people who showed empathetic responsiveness that effected positive change in the world (e.g., Gandhi, Martin Luther King, Mother Teresa; Paulhus, Wehr, Harms, & Strasser, 2002). Thus, many laypeople view wisdom as related to caring for the common good, extending one’s empathetic concern beyond one’s own close friends and family. Sternberg’s (1998) balance theory of (general) wisdom argued that aiming for the common good in complex problem situations is the main factor that distinguishes wisdom from practical intelligence (which might be used for maximization of one party’s profits). In the personal-wisdom tradition, Ardel (2000, 2003) proposed compassionate love for others as the core of the affective component of her wisdom model. From a developmental perspective, empathy has been suggested as a factor in prosocial moral development (e.g., Hoffman, 2000, 2001): Individuals who have higher levels of empathy as children are more likely to develop benevolent and altruistic value orientations in adulthood. Notably, skillful emotion regulation motivated toward empathy is necessary for effectively helping or providing advice to others in crisis, another typical quality of wise individuals (most people react suboptimally to those struggling with negative events; Lehman et al., 1993; Neimeyer, 2004).

### ***Dynamic Interaction: The MORE Resources and Life Experience Across the Life Span***

In theorizing about the development of wisdom, it is important to take a dynamic perspective (Brugman, 2006; Joseph & Linley, 2005, 2006; Kramer, 2000; Linley, 2003). We do not see the four resources as stable personality characteristics that people do or do not bring with them when they encounter fundamental life challenges. Rather, we suggest that they co-develop with each other and with wisdom, in an interactive way, over the life span. For example, regulating one’s emotions during a life challenge, being open to others’ views, and reflecting upon one’s role and actions afterward may help people to develop even better emotion-regulation skills and a higher sense of mastery, which then help them deal better with new difficulties. Importantly, resources also shape the experiences that individuals seek out, and having these experiences, in turn, further fosters the resources (Roberts, Robins, Trzesniewski, & Caspi, 2003). Thus, predispositions and experiences interact dynamically in the life-span development of wisdom (Baltes & Staudinger, 2000).

It is unlikely that there is a specific point in life at which an individual “achieves” wisdom. Wise people would probably say that the development of wisdom never ends and that the ideal of an absolutely wise person is not useful for psychological research. The manifestation of one’s wisdom is always a function of a person’s current developmental level and the situational context – some situations make it relatively easy for people to display wisdom whereas other contexts are not supportive or encouraging of wise behavior (Bluck, 2007). Thus, there is a

“state” aspect to the construct of wisdom, implying that all (or most) individuals are able to display wisdom in some situations (Bluck & Glück, 2004; Glück et al., 2005). Over time, repeated experience with challenges that require wisdom leads to more generalized wisdom in those individuals who have the resources to learn from such experiences. Eventually, they are able to show wisdom even in very challenging situations.

An important question that arises from our model is whether people can also lose wisdom, especially in old age where some researchers have suggested that losses in fluid intelligence may limit the capacity for complex processing of emotional and social information (Labouvie-Vief, Diehl, Jain, & Zhang, 2007; Labouvie-Vief & Medler, 2002). We can only offer some speculations about this question here, but we tend to think that regression from high to low levels of wisdom is unlikely because the self-reinforcing “positive resource syndrome” that wise people have developed over a long time may have become largely automatized rather than complex and cognitively effortful. In extreme cases such as severe trauma or advanced dementia, however, it is certainly possible for people to lose their wisdom.

## **Life Experiences and the Development of Wisdom**

The MORE resources influence the dynamic between life experiences and the development of wisdom on three levels: what challenges individuals encounter and how they experience them, how they deal with those challenges, and how they learn from these challenging events as they integrate them into their life story over time. Each level is discussed here.

### ***Fundamental Life Experiences May Foster Wisdom***

Our basic assumption is that certain life experiences can serve as catalysts, fostering wisdom in those individuals who are high in the MORE resources. We propose that the main characteristic of these experiences is that they constitute *fundamental life challenges*, that is, they provoke a major change in individuals’ world views and priorities. As proposed by Ardel (2004) and Kramer (2000), such experiences can lead people to see not only that their own previous view was inaccurate but perhaps also that holding any narrow view may be limiting. This allows them to broaden their perspective.

We do not propose, however, that only highly negative events can cause growth. Adopting a broad definition of “trauma,” Tedeschi and Calhoun (1995, 2004) argued that events that massively shatter people’s previous world views and force them to rethink their priorities have the strongest potential to foster growth in some individuals (in addition to their negative consequences). This shattering of world

views, however, is not necessarily characteristic only of severely negative events. Positive challenges such as the birth of one's first child or moving to a different culture may also change world views profoundly (Aldwin & Levenson, 2004). As mentioned before, several wisdom nominees in our current project listed the same events among their "best" and among their "most difficult" experiences. We propose that the development of wisdom is fostered through experiencing (negative or positive) fundamental changes that push individuals to grow by challenging them to reorganize their assumptions about life and priorities (Nolen-Hoeksema & Larson, 1999).

From this perspective, the MORE resources are relevant in two ways: they affect which experiences people actively seek out as well as how they perceive and appraise events that happen to them through no fault of their own. First, individuals higher in the MORE resources are more likely to seek out certain types of experiences. Due to their openness and trust in their own mastery, they may be less fearful of new experiences and changes than others. They may be more willing to travel and live in foreign cultures, engage in activities that may end in crisis or loss, meet a variety of people, learn about new ideas, and seek change in their life if internal or external circumstances require it. Thus, these individuals are more likely to encounter experiences that may in turn foster the development of wisdom. As an example for how openness can create new experiences, a wisdom nominee in our current study was in a difficult financial situation when she happened to see a job advertisement in her daughter's nursery school. She immediately talked to the headmaster and got the position, even though she had never worked in this field before. This gave her life, in turn, a whole new direction.

In addition to seeking out experiences, however, things happen to all of us that we in no way sought to encounter, including difficult conflicts, accidents, illness, or the death of close others. Wise individuals may differ from others in the way they perceive and appraise these events. Even a serious conflict (e.g., an unwanted divorce) may feel less devastating if one has the empathy, openness, and reflective ability to at least understand the other person's perspective. In the longer run, reflecting on one's own role and retrospectively understanding how the problem came about also allow a more positive appraisal of the event as a learning experience. In a similar vein, caregiving or bereavement can be dealt with better if a person has emotion-regulation skills, the ability to reflect and make meaning, and the openness to seek social support (Ainsworth, Bluck, & Glück, *in press*). Thus, the MORE resources may shape both what experiences people voluntarily encounter in the course of their lives and how they perceive and appraise negative and difficult experiences that happen to them. An example comes from our autobiographical wisdom narratives (Glück et al., 2005): An elderly participant actively decided to bring his wife, who had terminal cancer, home from the hospital to die in peace. Although it presented a huge emotional and practical burden, he later viewed this experience as the wisest in his life.

## ***Dealing with Fundamental Changes***

Life challenges are part of virtually everyone's life, but not all people grow from them, and only very few people develop high levels of wisdom. In line with other authors (Joseph & Linley, 2005; Kramer, 2000), the MORE Life Experience Model posits that certain ways of dealing with and reflecting on fundamental experiences are crucial for transforming life experiences into wisdom. For example, Ardeli (2005) interviewed three high-wisdom and three low-wisdom participants about the most pleasant and unpleasant events in their lives and how they had coped with the unpleasant ones. While the types and numbers of events were comparable, the wise individuals reported more active coping and subsequent reflection, which helped them to grow and feel mastery of the negative events. The low-wisdom individuals described themselves as helpless and passive in the face of hardship and reported no learning.

The MORE resources influence how people deal with life challenges when they occur. Depending on the type of challenge, different resources may be of particular importance. For example, in a difficult conflict, openness and empathy may help an individual to see the other person's perspective, reflectivity and emotion-regulation skills may prevent them from acting too impulsively, and a sense of mastery may give them the confidence to be assertive where necessary. In coping with a serious illness, reflection and emotion regulation are important in dealing with anxiety and stress, and a sense of mastery may help individuals to cope actively with the situation and see it as an opportunity for growth in addition to a threat. Openness may help them adapt to a new situation and perhaps seek support from others, and empathy may be helpful in dealing with their loved ones.

Again, an example comes from our autobiographical-wisdom study (Glück et al., 2005): A participant talked about seeing her husband in hospital after he was in a car accident. He was severely injured and looked terrible. However, she did not let him see how she was feeling: "I told myself, I can cry later – at this time the priority is to care about how he feels." Thus, empathy with her husband and reflection caused her to effectively downregulate her current emotions to respond adequately in that particular situation. A participant in our current study described her general strategy of taking a reflective perspective in difficult situations: "And only then can I see where the situation is actually escalating – how much I am a part of that whole. As soon as I take myself out of it, I react in a totally different way because then I have become an observer. As long as I am the spinning top, permanently rotating, I can't see anything. So I've learned that the main thing is just to step out."

## ***The Integration of Fundamental Changes in Life Stories***

In addition to having experienced certain types of events, and having dealt well with fundamental life challenges at the time they occurred or in the immediate aftermath,

the MORE Life Experience Model proposes that wise individuals differ from others in their long-term retrospective view of events, that is, in how they reflect back on events over a lifetime and integrate them into their life story. How individuals integrate the events of their lives into a life story is a fundamental aspect of identity beginning in adolescence (Habermas & Bluck, 2000) and continuing throughout adulthood (McAdams, 2006). The life story, as represented in the life story schema (Bluck & Habermas, 2001), is argued to be the largest unit of personality in a recent comprehensive personality theory (Hooker & McAdams, 2003).

One way to think of this is that persons with greater wisdom continue to reflect on their memories of personal events so as to guide and direct them long after the events are over (Pillemer, 1998): They use the past directly to plan and make goals for the future (Bluck, 2003). They are more likely to engage in *autobiographical reasoning* (Bluck & Habermas, 2001; Singer & Bluck, 2001) so as to make sense of remembered events from their current vantage point in the life span. Autobiographical reasoning is a process of self-reflective thinking or talking about the personal past that involves forming links between elements of one's life and self in an attempt to relate one's personal past and present (Bluck & Levine, 1998). This updating of the life story in the light of one's constantly unfolding experience may be adaptive both emotionally and in terms of building more comprehensive models of how the world works (Levine, Lench, & Safer, 2009). Freeman (2010) has convincingly argued that many of life's important events can only be understood and learned from in hindsight. His thesis holds that it is often only in retrospect that one has sufficient information and perspective to meaningfully see how and why events unfolded as they did. But many people do not take advantage of the power of hindsight. We believe that people high in the MORE resources are more likely to engage not only in autobiographical recall but autobiographical reasoning that allows an event's meaning to be malleable and thereby continually reinterpreted as relevant to their current lives.

These ideas are consistent with classical views of human development, particularly those of theorists who focused on life-span or adult development. For example, Erikson (1959) postulated that individuals need to reflect back on their lives, accepting positive but also challenging and negative events in order to create wisdom and integrity. Butler (1963) proposed the life review as an integrative process in which individuals look back over their lives and evaluate the life lived. Although he suggested that this may be more common when facing death or loss, he recognized the life review as a process that could be engaged in at any time in life, particularly during periods of transition. MORE resources such as openness and reflection may foster people's willingness and level of engagement in conducting small life reviews as they move through life and confront normative and nonnormative changes and transitions.

Traditionally, the life review was considered as something largely engaged in by older persons and possibly in preparation for death. More current theoretical notions of the life review have moved away from its clinical roots to include reference to social-cognitive processes, particularly a dynamic, malleable memory system through which life's events are recalled and to some extent reconfigured in the light of current knowledge and life circumstances (Bluck & Levine, 1998).

There is an integrated, bidirectional, relation between the self and autobiographical memory: One can revisit and reinterpret life's events without also losing the basic correspondence between the reality of lived events and how they are remembered and interpreted in the present (e.g., correspondence vs. coherence, Conway, Singer, & Tagini, 2004). That is, it can be argued that in reconstructing memories and reflecting on our lives, we do not lose or erode the truth of what "actually happened" (e.g., the classic cognitive notion of memory fading over time and becoming less reliable) but in fact may be more likely to find the truth (Freeman, 2010). That is, if we accept a malleable autobiographical memory system, this allows individuals to gain insights and learn life lessons (i.e., develop wisdom) from events as they look back at and reconstruct them a month, a year, or ten years later.

Individuals high in the MORE resources may also be particularly adept at reflecting on negative events, as needed, in order to integrate them into their lives, because they also have the emotion-regulation skills to avoid having their life center on, or be defined by, a negative event (Berntsen & Rubin, 2006; Glück, 2011). Reexamining both the positive and negative events of life may be useful in continually updating one's life story, but processing negative events can present a challenge to well-being. Although there is no research specifically on how wise individuals reflect on negative or traumatic events, related literatures do suggest that there are ways of processing difficult life events that are more likely to result in personal growth. For example, as Pals and McAdams (2004) have argued, "post-traumatic growth may be best understood as a process of constructing a narrative understanding of how the self has been positively transformed by the traumatic event and then integrating this transformed sense of self into the identity-defining life story" (p. 65). In a similar vein, Neimeyer (2004) argues that meaning-making through creation of an event narrative and its integration into one's long-term "self-narrative" is a crucial component of posttraumatic growth. Studies of narratives about traumatic events suggest that growth after such events is related to two aspects of autobiographical processing. Individuals who (1) acknowledged and examined the deeply disequilibrating impact of the event on the self and (2) were able to construct a positive resolution (including an account of how the self was positively transformed through the experience) were most likely to show growth (King, Scollon, Ramsey, & Williams, 2000; Pals, 2006). Individuals high in reflectivity may be better able to contextualize past negative events in terms of their larger significance for their life.

Little research examines wise persons' personal growth explicitly, but the available evidence supports the idea that greater wisdom is related to a stronger ability to transform negative events into growth experiences. In Ardelt's (2005) study, wise persons were able to see positive consequences by retrospectively examining even severely negative events. In an Austrian survey (Glück, 2005), participants who viewed themselves as wise reported positive long-term consequences of originally negative life events more often than others. In addition, when individuals were asked to provide retrospective autobiographical narratives of times in their lives when they were wise, a significant majority talked about initially negative events being transformed into positive outcomes over time (Bluck & Glück, 2004; Glück et al., 2005).



The MORE Life Experience Model proposes, therefore, that wiser individuals may differ from others in how they construct and tell their life stories, and particularly how they frame diverse and negative events within their lives. The four MORE wisdom resources (mastery, openness, reflection, and emotion regulation) are not only relevant while processing life's events in situ but also in how individuals recall and reflect on their lives as they construct and reconstruct their life story over time.

Reflectivity is particularly central to the life-story integration of life events and life challenges. Much of the deep knowledge base that is at the core of wisdom is likely to have resulted from wise individuals reflecting on and deriving lessons from life experience. When describing wisdom experiences in their lives, people are often able to encapsulate what they have learned from the event in terms of changes to their view of themselves or their view of the world and how things operate in the world (Bluck & Glück, 2004). The development of maturity is positively associated with interpreting memories of challenging events as having caused new insights (Bauer, McAdams, & Sakaeda, 2005) and with reflection that helps one to identify unreachable goals (King & Hicks, 2007). Reflection, defined as a conscious effort to understand what is happening in one's life and to make meaning of it, is an important predictor of longer-term growth from negative experiences (Zoellner & Maercker, 2006). Openness is related to both the self and the directive functions of autobiographical memory (Bluck, 2009), that is, using memories to understand one's self and direct one's decisions and actions (Rasmussen & Berntsen, 2010). It is also linked both to deep examination of the negative impact of an event on one's self and one's life and to the ability to perceive a positive resolution (Pals & McAdams, 2004). It is highly plausible that a general sense of mastery and good emotion-regulation skills are resources that allow individuals to reflect on and repeatedly reexamine life events, even negative events, without feeling that they will be overwhelmed by them (i.e., maladaptive rumination).

While a sense of mastery and emotion-regulation ability can affect how one engages in reviewing past events, they may also be seen as outcomes of autobiographical reasoning about life's events and challenges. Integrating difficult life events into an acceptable life story both requires and fosters mastery and regulation skills: Newfound abilities allow one to deal even more successfully with life's future challenges. Thus, when the MORE resources converge optimally in an individual, they interact to help them develop wisdom more fully through an evolving life story.

One example from our earlier study (Glück et al., 2005) comes from the woman mentioned earlier who had to cope with her husband's accident. Retrospectively, she described how the motto "I can cry later" became a general strategy that she used in new situations when she wanted to be strong as others needed her support. Another example comes from our current study, in which a participant said, "Now I am 70, and all in all I look back at my life feeling satisfied. The events in my life were quite challenging, and sometimes I was up all night thinking about something. But now when I look back, I think it had to be like that, this is my way, and all these experiences shaped my life, and I needed them to come to where I am now and see things from a different perspective." Thus, he was able to reinterpret challenges as experiences that had helped him to grow and develop.

**Table 1** Summary of the MORE life experience wisdom model

Resources	Encountering life challenges	Dealing with challenges	Life-story integration
Mastery	Wise individuals trust in their ability to handle any challenge. Therefore, they experience more self-induced challenges and are not avoidant and afraid of negative events.	Wise individuals trust in their ability to deal with an ongoing challenge. They deal with challenges actively or adapt to them, depending on the demands of the situation.	Wise individuals have developed a “story of mastery” reflecting how they earned through experience that they can handle challenges appropriately.
Openness	Wise individuals are interested in new experiences and perspectives. They view life changes as positive opportunities for learning.	Even in difficult situations, wise individuals are interested in multiple perspectives. They are willing to seek others’ views and to try out new approaches.	Wise individuals are open to changing the narrative of their own development based on new experiences or others’ perspectives.
Reflectivity	Wise individuals do not categorize experiences as “good” or “bad.” They take a broader picture in encountering events and are tolerant of ambiguity.	Wise individuals are able to take a step back to understand the context and history of a situation. They critically reflect on their own role and past and present behavior.	Wise individuals reflect frequently on past experiences to find new meaning and direction and to interpret current events in terms of past experience.
Emotion regulation/empathy	Wise individuals perceive their own and others’ emotions accurately. They are concerned about the well-being of others, which may put them into the role of “helpers” or “leaders”.	Wise individuals are able to regulate their emotions as a situation requires. They neither suppress nor avoid negative emotions. They are also able to effectively support others in difficulty or distress.	Wise individuals can retrospectively understand and integrate emotions. They are accepting of reinterpretations of experiences even if they are not self-enhancing.

### Conclusions: Toward a Dynamic Model of the Interaction of Resources and Life Experiences in the Development of Wisdom

To briefly summarize, the MORE Life Experience Model postulates that (at least) four resources are crucial to the development of wisdom over time because they influence (a) what life challenges individuals encounter and how they appraise them, (b) how they deal with life challenges, and (c) how they retrospectively integrate and reintegrate them into their life story. These four resources are a sense

of mastery, openness, reflectivity, and emotion regulation/empathy. If present at high levels in an individual, the resources reinforce each other over time, forming a kind of “positive syndrome” that helps people deal with challenges in their own and others’ lives. Such individuals are likely to develop high levels of wisdom over the course of their lives. Table 1 shows how the four resources influence the three levels of experiencing life challenges.

We emphasize that at this point the MORE Life Experience Model is, itself, under development. We are currently conducting the first study to test its predictions, and while the evidence looks promising, we are refining our own model as we apply it to real data. While we have a sufficient sense of mastery to believe that the model is empirically testable, we are well aware of uncontrollable factors in “proving” ideas related to a construct as complex as wisdom. We plan to remain open to modifications and additions to the model that come from the data and from our colleagues: Additional resources may need to be added based on future findings. We are constantly trying to reflect critically on our insights and blindnesses in thinking about wisdom, and finally, we hope to effectively regulate our emotions when negative feedback about the model comes our way and to show empathy with students learning, sometimes painfully, to content code the MORE resources.

Ultimately, we need to begin a longitudinal survey to gain a deeper understanding of the developmental dynamics between the MORE resources and life experiences. We believe, however, that the current conceptual model is an important step, moving developmental theories of wisdom toward a set of testable hypotheses. The MORE Life Experience Model is offered here as a conceptual framework that encourages a developmental focus in the growing body of wisdom research. If we understand better why and how wisdom develops, we may eventually find ways of making the wider world a little wiser.

**Acknowledgement** 1. The research reported in this chapter was funded by grants from the Austrian Research Fund FWF (P21011, “The development and manifestation of wisdom”) and from the John Templeton Foundation through the University of Chicago’s Defining Wisdom Project. 2. We are grateful to Lara Dorner, Susanne König, Katja Naschenweng, and Uwe Redzanowski for their great ideas and creativity and for their hard work in data collection and project administration.

## References

- Ainsworth, S. A., Bluck, S., & Glück, J. (in press). Experiencing wisdom across the lifespan. In N. M. Seel (Ed.), *Encyclopedia of the sciences of learning*. Heidelberg, Germany: Springer.
- Aldwin, C. M., & Levenson, M. R. (2001). Stress, coping, and health at mid-life: A developmental perspective. In M. E. Lachman (Ed.), *The handbook of midlife development* (pp. 118–124). New York: Wiley.
- Aldwin, C. M., & Levenson, M. R. (2004). Posttraumatic growth: A developmental perspective. *Psychological Inquiry*, 15, 19–22.
- Antonovsky, A. (1979). *Health, stress, and coping: New perspectives on mental and physical well-being*. San Francisco: Jossey-Bass.

- Ardelt, M. (2000). Intellectual versus wisdom-related knowledge: The case for a different kind of learning in the later years of life. *Educational Gerontology*, *26*, 771–789.
- Ardelt, M. (2003). Development and empirical assessment of a three-dimensional wisdom scale. *Research on Aging*, *25*, 275–324.
- Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, *47*, 257–285.
- Ardelt, M. (2005). How wise people cope with crises and obstacles in life. *ReVision*, *28*, 7–19.
- Ardelt, M. (2011). The measurement of wisdom: A commentary on Taylor, Bates, and Webster's comparison of the SAWS and 3D-WS. *Experimental Aging Research*, *37*, 241–255.
- Baltes, P. B., & Smith, J. (2008). The fascination of wisdom: Its nature, ontogeny, and function. *Perspectives on Psychological Science*, *3*, 56–64.
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue towards excellence. *American Psychologist*, *55*, 122–136.
- Baltes, P. B., Staudinger, U. M., & Lindenberger, U. (1999). Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology*, *50*, 471–507.
- Bauer, J. J., McAdams, D. P., & Sakaeda, A. (2005). Interpreting the good life: Growth memories in the lives of mature, happy people. *Journal of Personality and Social Psychology*, *88*, 203–217.
- Benight, C. C., & Bandura, A. (2004). Social cognitive theory of posttraumatic recovery: The role of perceived self-efficacy. *Behaviour Research and Therapy*, *42*, 1129–1148.
- Berntsen, D., & Rubin, D. C. (2006). The centrality of events scale: A measure of integrating a trauma into one's identity and its relation to post-traumatic stress disorder symptoms. *Behavioral Research Therapy*, *44*, 219–231.
- Blanchard-Fields, F., Mienaltowski, A., & Seay, R. B. (2007). Age differences in everyday problem-solving effectiveness: Older adults select more effective strategies for interpersonal problems. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *62*, P61–P64.
- Bluck, S. (2003). Autobiographical memory: Exploring its functions in everyday life. *Memory*, *11*, 113–123.
- Bluck, S. (2007). *Is it clever to be wise?* Paper presented in the symposium, Wisdom: What is it? At the Gerontological Society of America meetings, San Francisco, CA.
- Bluck, S. (2009). Baddeley revisited: The functional approach to autobiographical memory. *Applied Cognitive Psychology*, *23*, 1050–1058.
- Bluck, S., & Glück, J. (2004). Making things better and learning a lesson: Experiencing wisdom across the life span. *Journal of Personality*, *72*, 543–572.
- Bluck, S., & Glück, J. (2005). From the inside out: People's implicit theories of wisdom. In R. J. Sternberg & J. Jordan (Eds.), *A handbook of wisdom: Psychological perspectives* (pp. 84–109). Cambridge, UK: Cambridge University Press.
- Bluck, S., & Habermas, T. (2001). The life story schema. *Motivation and Emotion*, *24*, 121–147.
- Bluck, S., & Levine, L. J. (1998). Reminiscence as autobiographical memory: A catalyst for reminiscence theory development. *Ageing and Society*, *18*, 185–208.
- Brandtstädter, J. (2007). *Das flexible Selbst. Selbstentwicklung zwischen Zielbindung und Ablösung.* [The flexible self: Self-development between goal attachment and detachment.] Heidelberg, Germany: Elsevier/Spektrum Akademischer Verlag.
- Brandtstädter, J., Rothermund, K., Kranz, D., & Kühn, W. (2010). Final decentrations: Personal goals, rationality perspectives, and the awareness of life's finitude. *European Psychologist*, *15*, 152–163.
- Brugman, G. (2006). Wisdom and aging. In J. E. Birren, K. W. Schaie, & R. P. Abeles (Eds.), *Handbook of the psychology of aging* (6th ed., pp. 445–476). San Diego, CA: Academic.
- Butler, R. N. (1963). The life review: An interpretation of reminiscence in old age. *Psychiatry, Journal for the Study of Inter-personal Processes*, *26*, 65–76.
- Calhoun, L. G., & Tedeschi, R. G. (Eds.). (2006). *Handbook of posttraumatic growth: Research & practice.* Mahwah, NJ: Erlbaum.

- Carstensen, L. L., Fung, H. H., & Charles, S. T. (2003). Socioemotional Selectivity Theory and the regulation of emotion in the second half of life. *Motivation and Emotion*, 27, 103–123.
- Carstensen, L. L., Isaacowitz, D. M., & Charles, S. T. (1999). Taking time seriously: A theory of socioemotional selectivity. *American Psychologist*, 54, 165–181.
- Carstensen, L. L., Pasupathi, M., Mayr, U., & Nesselroade, J. R. (2000). Emotional experience in everyday life across the adult life span. *Journal of Personality & Social Psychology*, 79, 644–655.
- Caspi, A., Roberts, B. W., & Shiner, R. (2005). Personality development. *Annual Review of Psychology*, 56, 453–484, 44.
- Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social Cognition*, 22, 491–529.
- Costa, P. T., Jr., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological Assessment*, 4, 5–13.
- Erikson, E. H. (1959). Identity and the life cycle. *Psychological Issues*, 1, 1–173.
- Erikson, E. H. (1963). *Childhood and society*. New York: Norton.
- Freeman, M. (2010). *Hindsight: The promise and peril of looking backward*. Oxford, UK: Oxford University Press.
- Glück, J. (2005). Untersuchung zum autobiographischen Gedächtnis. [Investigation of autobiographical memory.] In G. Weber, J. Glück, L. Schäfer, K. Wehinger, C. Heiss, & S. Sassenrath, *ESAW – Europäische Studie zum Wohlbefinden im Alter: Hauptergebnisse unter besonderer Berücksichtigung der Situation in Österreich* (pp. 81–95). Vienna, Austria: WUV.
- Glück, J. (2011). “There is no bitterness when she looks back:” Wisdom as a developmental opposite of embitterment? In M. Linden & A. Maercker (Eds.), *Embitterment: Societal, psychological, and clinical perspectives* (pp. 70–82). Vienna, Austria/New York: Springer.
- Glück, J., & Baltes, P. B. (2006). Using the concept of wisdom to enhance the expression of wisdom knowledge: Not the philosopher’s dream, but differential effects of developmental preparedness. *Psychology and Aging*, 21, 679–690.
- Glück, J., & Bluck, S. (2011). Laypeople’s conceptions of wisdom and its development: Cognitive and integrative views. *Journals of Gerontology: Psychological Sciences*, 66B, 321–324.
- Glück, J., Bluck, S., Baron, J., & McAdams, D. (2005). The wisdom of experience: Autobiographical narratives across adulthood. *International Journal of Behavioral Development*, 29, 197–208.
- Habermas, T., & Bluck, S. (2000). Getting a life: The emergence of the life story in adolescence. *Psychological Bulletin*, 126, 748–769.
- Heckhausen, J., Dixon, R., & Baltes, P. (1989). Gains and losses in development throughout adulthood as perceived by different adult age groups. *Developmental Psychology*, 25, 109–121.
- Hoffman, M. L. (2000). *Empathy and moral development: Implications for caring and justice*. New York: Cambridge University Press.
- Hoffman, M. L. (2001). A comprehensive theory of prosocial moral development. In D. Stipek & A. Bohart (Eds.), *Constructive and destructive behavior* (pp. 61–86). Washington, DC: American Psychological Association.
- Hooker, K. S., & McAdams, D. P. (2003). Personality reconsidered: A new agenda for aging research. *Journals of Gerontology: Psychological Sciences*, 58B, P296–P304.
- Janoff-Bulman, R. (2004). Posttraumatic growth: Three explanatory models. *Psychological Inquiry*, 15, 30–34.
- Joseph, S., & Linley, P. A. (2005). Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology*, 9, 262–280.
- Joseph, S., & Linley, P. A. (2006). Growth following adversity: Theoretical perspectives and implications for clinical practice. *Clinical Psychology Review*, 26, 1041–1053.
- King, L. A., & Hicks, J. A. (2007). Whatever happened to ‘What might have been’? Regrets, happiness, and maturity. *American Psychologist*, 62, 625–636.

- King, L. A., Scollon, C. K., Ramsey, C., & Williams, T. (2000). Stories of life transition: Subjective well-being and ego development in parents of children with Down Syndrome. *Journal of Research in Personality, 34*, 509–536.
- Kinnier, R. T., Tribensee, N. E., Rose, C. A., & Vaughan, S. M. (2001). In the final analysis: More wisdom from people who have faced death. *Journal of Counseling & Development, 79*, 171–177.
- Kramer, D. A. (2000). Wisdom as a classical source of human strength: Conceptualization and empirical inquiry. *Journal of Social and Clinical Psychology, 19*, 83–101.
- Kunzmann, U. (2004). Approaches to a good life: The emotional-motivational side to wisdom. In P. A. Linley & S. Joseph (Eds.), *Positive Psychology in Practice* (pp. 504–517). Hoboken, NJ: Wiley.
- Kunzmann, U., & Baltes, P. B. (2003). Wisdom-related knowledge: Affective, motivational, and interpersonal correlates. *Personality and Social Psychology Bulletin, 29*, 1104–1119.
- Kunzmann, U., Kupperbusch, C. S., & Levenson, R. W. (2005). Behavioral inhibition and amplification during emotional arousal: A comparison of two age groups. *Psychology & Aging, 20*, 144–159.
- Labouvie-Vief, G., Diehl, M., Jain, E., & Zhang, F. (2007). Six-year change in affect optimization and affect complexity across the adult life span: A further examination. *Psychology & Aging, 22*, 738–751.
- Labouvie-Vief, G., Grünh, D., & Mouras, H. (2009). Dynamic emotion-cognition interactions in adult development: Arousal, stress, and the processing of affect. In H. B. Bosworth & C. Hertzog (Eds.), *Aging and cognition: Research methodologies and empirical advances* (pp. 181–196). Washington, DC: American Psychological Association.
- Labouvie-Vief, G., & Medler, M. (2002). Affect optimization and affect complexity: Modes and styles of regulation in adulthood. *Psychology & Aging, 17*, 571–588.
- Lehman, D. R., Davis, C. G., Delongis, A., Wortman, C. B., Bluck, S., Mandel, D. R., & Ellard, J. (1993). Positive and negative life changes following bereavement and their relations to adjustment. *Journal of Social and Clinical Psychology, 12*, 90–112.
- Levenson, R., Jennings, P. A., Aldwin, C., & Shiraishi, R. W. (2005). Self-transcendence, conceptualization and measurement. *International Journal of Aging & Human Development, 60*, 127–143.
- Levine, L. J., Lench, H. C., & Safer, M. A. (2009). Functions of remembering and misremembering emotion. *Applied Cognitive Psychology, 23*, 1050–1058.
- Linley, P. A. (2003). Positive adaptation to trauma: Wisdom as both process and outcome. *Journal of Traumatic Stress, 16*, 601–610.
- Maercker, A., & Zoellner, T. (2004). The Janus face of self-perceived growth: Toward a two-component model of posttraumatic growth. *Psychological Inquiry, 15*, 41–48.
- McAdams, D. P. (2006). *The person: A new introduction to personality psychology* (4th ed.). New York: Wiley.
- McCrae, R. R., Costa, P. T., Ostendorf, F., Angleitner, A., Hřebíčková, M., Avia, M. D., Sanz, J., Sánchez-Bernardos, M. L., Kusdil, M. E., Woodfield, R., Saunders, P. R., & Smith, P. B. (2000). Nature over nurture: Temperament, personality, and life span development. *Journal of Personality and Social Psychology, 78*, 173–186.
- McKee, P., & Barber, C. (1999). On defining wisdom. *International Journal of Human Development, 49*, 149–164.
- Neimeyer, R. A. (2004). Fostering posttraumatic growth: A narrative elaboration. *Psychological Inquiry, 15*, 53–59.
- Nolen-Hoeksema, S., & Larson, J. (1999). *Coping with loss*. Mahwah, NJ: Erlbaum.
- Pals, J. L. (2006). Narrative identity processing of difficult life experiences: Pathways of personality development and positive self-transformation in adulthood. *Journal of Personality, 74*, 1079–1110.
- Pals, J. L., & McAdams, D. P. (2004). The transformed self: A narrative understanding of posttraumatic growth. *Psychological Inquiry, 15*, 65–69.

- Park, C. L. (2004). The notion of growth following stressful life experiences: Problems and prospects. *Psychological Inquiry, 15*, 69–76.
- Park, C. L., Cohen, L. H., & Murch, R. (1996). Assessment and prediction of stress-related growth. *Journal of Personality, 64*, 71–105.
- Paulhus, D. L., Wehr, P., Harms, P. D., & Strasser, D. I. (2002). Use of exemplar surveys to reveal implicit types of intelligence. *Personality and Social Psychology Bulletin, 28*, 1051–1062.
- Phillips, L. H., Henry, J. D., Hosie, J. A., & Milne, A. B. (2008). Effective regulation of the experience and expression of affect in old age. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 63*, P138–P145.
- Pillemer, D. B. (1998). *Momentous events, vivid memories*. Cambridge, MA: Harvard University Press.
- Rasmussen, A., & Berntsen, D. (2010). Personality traits and autobiographical memory: Openness is positively related to the experience and usage of recollections. *Memory, 18*, 774–786.
- Roberts, B. W., Robins, R. W., Trzesniewski, K., & Caspi, A. (2003). Personality trait development in adulthood. In J. Mortimer & M. Shanahan (Eds.), *Handbook of the Life Course* (pp. 579–598). New York: Kluwer.
- Singer, J. A., & Bluck, S. (2001). New perspectives on autobiographical memory: The integration of narrative processing and autobiographical reasoning. Special issue of *Review of General Psychology* (Guest Editors: J. A. Singer, & S. Bluck), 5, 91–99.
- Staudinger, U. M. (1999). Older and wiser? Integrating results on the relationship between age and wisdom-related performance. *International Journal of Behavioral Development, 23*, 641–664.
- Staudinger, U. M. (2001). Life reflection: A social-cognitive analysis of life review. *Review of General Psychology, 5*, 148–160.
- Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research: Commonalities and differences in a growing field. *Annual Review of Psychology, 62*, 215–241.
- Staudinger, U. M., Lopez, D., & Baltes, P. B. (1997). The psychometric location of wisdom-related performance: Intelligence, personality, and more? *Personality and Social Psychology Bulletin, 23*, 1200–1214.
- Sternberg, R. J. (1998). A balance theory of wisdom. *Review of General Psychology, 2*, 347–365.
- Sternberg, R. J. (2001). Why schools should teach for wisdom: The balance theory of wisdom in educational settings. *Educational Psychologist, 36*, 227–245.
- Taylor, S. E., Kemeny, M. E., Reed, G. M., Bower, J. E., & Gruenewald, T. M. (2000). Psychological resources, positive illusions, and health. *American Psychologist, 55*, 99–109.
- Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma & transformation: Growing in the aftermath of suffering*. Thousand Oaks, CA: Sage.
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry, 15*, 1–18.
- Webster, J. D. (2003). An exploratory analysis of a self-assessed wisdom scale. *Journal of Adult Development, 10*, 13–22.
- Webster, J. D. (2007). Measuring the character strength of wisdom. *International Journal of Aging & Human Development, 65*, 163–183.
- Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology: A critical review and introduction of a two component model. *Clinical Psychology Review, 26*, 626–653.