Invited Paper

OLDER BUT NOT WISER? THE RELATIONSHIP BETWEEN AGE AND WISDOM

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This article reviews the literature on the relationship between wisdom and aging. It opens with a discussion of different approaches to defining what wisdom is. Philosophical, implicit-theoretical, and explicit-theoretical approaches are considered. The article continues with a consideration of the main perspectives on the relationship between wisdom and aging. Then the article discusses implicit-theories data relevant to the development of wisdom. Next, it considers explicit-theories data relevant to this development. Finally, it draws conclusions. Individual differences in and situational variables relevant to the development of wisdom may overwhelm any trends represented by gross group averages.

I am 55. By one account, I am on the threshold of entering a golden age of wisdom unlike any I've known before. By a second account, I am becoming wiser, but slowly and incrementally; I am, on this account, building upon the life experiences I have had earlier that have bestowed upon me a steadily increasing supply of wisdom, one that is likely to increase until my last days. By a third account, I am increasingly rapidly losing whatever wisdom I may have gained in my life. And by a fourth account, I lost whatever wisdom I may have had long ago.

As a parent, teacher, and mentor to younger scholars, I—and the younger people who depend on me for advice—have a considerable stake in which of these accounts is correct. The accounts range from suggesting that junior people should now come running to me for advice, to suggesting that they should now start running away just as fast as they can. Would that I had the wisdom to know for sure which account was correct. As it is, I only can present the

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evidence, offer my appraisal, and then let the reader, and the young people who depend on me, decide.

The thesis of this article is that there is no one trajectory of wisdom with age. In other words, age is not, in and of itself, a variable that is valid for indexing the development of wisdom. Age in itself always has been an "empty" independent variable. Rather, age is a proxy for other things, such as personal growth (Ryff, 1989; Staudinger et al., 2003; Staudinger, Dörner, & Mickler, in press), openness to experience (Kramer, 2000), or ability to learn from experience (Sternberg et al., 2000). In the case of wisdom, it has been, in large part, a proxy for experience. But experience does not create wisdom. Rather, one's ability to profit from and utilize one's experience in a reflective and directed way is what determines how wisdom develops. Thus, using age as an independent variable can distract us from understanding the cognitive and other mechanisms involved in the development and decline of wisdom.

What Is Wisdom?

Different approaches have been taking to figuring out what wisdom is. Consider, in turn, philosophical, implicit-theoretical, and explicit-theoretical approaches to the nature of wisdom.

Philosophical Approaches

Philosophical approaches have been reviewed by Robinson (1990; see also Robinson, 1989, with regard to the Aristotelian approach in particular; Kupperman, in press; Labouvie-Vief, 1990; Osbeck & Robinson, in press; for further reviews). Robinson (1989; Osbeck & Robinson, in press) notes that the study of wisdom has a history that long antedates psychological study, with the Platonic dialogues offering the first intensive Western analysis of the concept of wisdom. Robinson points out that, in these dialogues, there are three different senses of wisdom: wisdom as (a) *sophia*, which is found in those who seek a contemplative life in search of truth; (b) *phronesis*, which is the kind of practical wisdom shown by statesmen and legislators; and (c) *episteme*, which is found in those who understand things from a scientific point of view.

Aristotle distinguished between *phronesis*, the kind of practical wisdom mentioned above, and *theoretikes*, or theoretical knowledge devoted to truth. Robinson notes that, according to Aristotle, a wise individual knows more than the material, efficient, or formal causes behind events. This individual also knows the final cause, or that for the sake of which the other kinds of causes apply.

Other philosophical conceptions of wisdom have followed up on the early Greek ones. Of course, it is not possible to review all of these conceptions here. But as an example, an early Christian view emphasized the importance

of a life lived in pursuit of divine and absolute truth. To this day, most religions aim for wisdom through an understanding not just of the material world, but also of the spiritual world and its relationship to the material world. Not all religions search for absolute truth, however. In some matters, it is not clear any such truth exists.

Implicit-Theoretical Approaches

Implicit-theoretical approaches to wisdom have in common the search for an understanding of people's folk conceptions of what wisdom is. Thus, the goal is not to provide a "psychologically true" account of wisdom, but rather an account that is true with respect to people's beliefs, whether these beliefs are right or wrong. I divide the discussion into two sections, one on results from North America and Europe, the other on results from elsewhere.

Data Primarily from North America and Europe. Holliday and Chandler (1986a, 1986b) used an implicit-theories approach to understanding wisdom. Approximately 500 participants were studied across a series of experiments. The investigators were interested in determining whether the concept of wisdom could be understood as a prototype (Rosch, 1975), or central concept. Principal-components analysis of one of their studies revealed five underlying factors: exceptional understanding, judgment and communication skills, general competence, interpersonal skills, and social unobtrusiveness.

Sternberg (1985, 1990) has reported a series of studies investigating implicit theories of wisdom. In one study, 200 professors each of art, business, philosophy, and physics were asked to rate the characteristicness of each of the behaviors obtained in a prestudy from the corresponding population with respect to the professors' ideal conception of each of an ideally wise, intelligent, or creative individual in their occupation. Laypersons were also asked to provide these ratings but for a hypothetical ideal individual without regard to occupation. Correlations were computed across the three ratings. In each group except philosophy, the highest correlation was between wisdom and intelligence; in philosophy, the highest correlation was between intelligence and creativity. The correlations between wisdom and intelligence ratings ranged from .42 to .78 with a median of .68. For all groups, the lowest correlation was between wisdom and creativity. Correlations between wisdom and creativity ratings ranged from -.24 to .48 with a median of .27. The only negative correlation (-.24) was for ratings of professors of business.

In a second study, 40 college students were asked to sort three sets of 40 behaviors each into as many or as few piles as they wished. The 40 behaviors in each set were the top-rated wisdom, intelligence, and creativity behaviors from the previous study. The sortings then each were subjected to nonmetric multidimensional scaling. For wisdom, six components emerged: *reasoning ability*, *sagacity*, *learning from ideas and environment*, *judgment*, *expeditious use of information*, and *perspicacity*.

Examples of behaviors showing high loadings under each of these six components were "has the unique ability to look at a problem or situation and solve it," "has good problem-solving ability," and "has a logical mind" for *reasoning ability*; "displays concern for others," "considers advice," and "understands people through dealing with a variety of people" for *sagacity*; "attaches importance to ideas," "is perceptive," and "learns from other people's mistakes" for *learning from ideas and environment*; "acts within own physical and intellectual limitations," "is sensible," and "has good judgment at all times" for *judgment*; "is experienced," "seeks out information, especially details," "has age, maturity, or long experience" for *expeditious use of information*; and "has intuition," "can offer solutions that are on the side of right and truth," "is able to see through things—read between the lines" for *perspicacity*.

In this same study, components for intelligence were *practical problem-solving ability*, *verbal ability*, *intellectual balance and integration*, *goal orientation and attainment*, *contextual intelligence*, and *fluid thought*. Components for creativity were *nonentrenchment*, *integration and intellectuality*, *aesthetic taste and imagination*, *decisional skill and flexibility*, *perspicacity*, *drive for accomplishment and recognition*, *inquisitiveness*, and *intuition*.

In a third study, 50 adults were asked to rate descriptions of hypothetical individuals for intelligence, creativity, and wisdom. Correlations were computed between pairs of ratings of the hypothetical individuals' levels of the three traits. Correlations between the ratings were .94 for wisdom and intelligence, .62 for wisdom and creativity, and .69 for intelligence and creativity, again suggesting that wisdom and intelligence are highly correlated in people's implicit theories.

Montgomery, Barber, and McKee (2002) asked six older people to characterize wisdom in their lives. Six attributes emerged from their study. These attributes were giving guidance, having knowledge, having experience, having moral principles, and engaging in compassionate relationships. In a related study, Sowarka (1989) found that narratives of wise people emphasized their ability to solve problems through the use of novel and efficacious strategies.

Data Primarily from Asia. Yang (2001) studied wisdom among 616 Taiwanese Chinese people. She found four factors of wisdom: competencies and knowledge, benevolence and compassion, openness and profundity, and modesty and unobtrusiveness. Similar factors were obtained by Takayama (2002) in a study of implicit theories of wisdom among Japanese men and women of widely varying ages. The four factors that emerged were knowledge and education, understanding and judgment, sociability and interpersonal relationships, and an introspective attitude.

Takahashi and Bordia (2000) compared implicit theories of wisdom in American, Australian, Indian, and Japanese participants. They found identical factors for American and Australian groups. For them, the adjective *wise* was

semantically most similar to *experienced* and *knowledgeable.* It was least similar to *discreet.* The ideal self, among this group, was characterized as knowledgeable and wise. In contrast, being aged and discreet were seen as quite undesirable. The Indian and Japanese adults, in contrast, viewed *wise* as semantically closest to *discreet,* followed by *aged* and *experienced.* The Japanese saw being wise and discreet as most desirable, and being knowledgeable was seen as much less desirable. In all four cultural groups, being wise was seen as extremely desirable, but being aged was seen as being extremely undesirable. So none of the groups of young people wanted to be old!

Explicit-Theoretical Approaches

Explicit theories are constructions of (supposedly) expert theorists and researchers rather than of laypeople. In the study of wisdom, most explicit-theoretical approaches are based on constructs from the psychology of human development.

Some Definitions. Some scholars define wisdom in ways that suggest it is a property of increasing maturity. Birren and Fisher (1990), for example, defined it as "the integration of the affective, conative, and cognitive aspects of human abilities in response to life's tasks and problems. Wisdom is a balance between the opposing valences of intense emotion and detachment, action and inaction, and knowledge and doubts. *It tends to increase with experience and therefore age but is not exclusively found in old age*" (Birren & Fisher, 1990: 326; italics added). In many views, some degree of age is, at best, a necessary but not sufficient condition for the development of wisdom.

Taranto (1989) offered another view of wisdom, based on a thorough review of the literature. She defined wisdom as the recognition and response of the individual to human limitation. A related view is that of McKee and Barber (1999), who defined wisdom as seeing through illusion. Brugman (2000) defined it as expertise in uncertainty. On this view, wisdom involves cognitive, affective, and behavioral components. Brugman believes that wisdom goes hand in hand with increasing doubt and uncertainty regarding the comprehensibility of reality.

Ardelt (2000a, 2000b) has proposed a somewhat more complex view. She has defined wisdom as involving three components: (a) the cognitive ability to see truth or reality as it actually is; (b) reflectivity, in becoming aware of and transcending one's subjectivity and projections; and (c) empathy and compassion for others. Kant, in the *Critique of Pure Reason,* took a different view, stating that people could not see truth or reality as it actually is, but only as it is filtered by their senses.

The Berlin Program of Research. The most extensive program of research has been that conducted by Baltes and his colleagues. For example, Baltes and Smith (1987, 1990) gave adult participants life-management problems, such as "A fourteen-year-old girl is pregnant. What should she, what should

one, consider and do?" and "A fifteen-year-old girl wants to marry soon. What should she, what should one, consider and do?" Baltes and Smith tested a five-component model on participants' protocols in answering these and other questions, based on a notion of wisdom as expert knowledge about fundamental life matters (Smith & Baltes, 1990) or of wisdom as good judgment and advice in important but uncertain matters of life (Baltes & Staudinger, 1993). Wisdom is reflected in these five components: (a) rich factual knowledge (general and specific knowledge about the conditions of life and its variations), (b) rich procedural knowledge (general and specific knowledge about strategies of judgment and advice concerning matters of life), (c) life span contextualism (knowledge about the contexts of life and their temporal [developmental] relationships), (d) relativism (knowledge about differences in values, goals, and priorities), and (e) uncertainty (knowledge about the relative indeterminacy and unpredictability of life and ways to manage).

Three kinds of factors—general person factors, expertise-specific factors, and facilitative experiential contexts—are proposed to facilitate wise judgments. These factors are used in life planning, life management, and life review. An expert answer should reflect more of these components, whereas a novice answer should reflect fewer of them. The data collected to date generally have been supportive of the model.

Over time, Baltes and his colleagues (e.g., Baltes, Smith, & Staudinger, 1992; Baltes & Staudinger, 1993) have collected a wide range of data showing the empirical utility of the proposed theoretical and measurement approaches to wisdom. For example, Staudinger, Lopez, and Baltes (1997) found that measures of intelligence and personality as well as their interface overlap with but are non-identical to measures of wisdom in terms of constructs measured. Staudinger, Smith, and Baltes (1992) showed that human-services professionals outperformed a control group on wisdom-related tasks. In a further set of studies, Staudinger and Baltes (1996) found that performance settings that were ecologically relevant to the lives of their participants and that provided for actual or "virtual" interaction of minds increased wisdom-related performance substantially.

The Yale Program of Research. Sternberg (1990) also proposed an explicit theory, suggesting that the development of wisdom can be traced to six antecedent components: (a) knowledge, including an understanding of its presuppositions and meaning as well as its limitations; (b) processes, including an understanding of what problems should be solved automatically and what problems should not be so solved; (c) a judicial thinking style, characterized by the desire to judge and evaluate things in an in-depth way; (d) personality, including tolerance of ambiguity and of the role of obstacles in life; (e) motivation, especially the motivation to understand what is known and what it means; and (f) environmental context, involving an appreciation of the contextual factors in the environment that lead to various kinds of thoughts and actions.

Whereas that theory (Sternberg, 1990) specified a set of *antecedents* of wisdom, the balance theory I propose here specifies the *processes* (balancing of interests and of responses to environmental contexts) in relation to the *goal* of wisdom (achievement of a common good). This theory is incorporated into the balance theory as specifying antecedent sources of developmental and individual differences, as discussed later.

According to the balance theory, wisdom is the application of intelligence, creativity, and knowledge as mediated by values toward the achievement of a common good through a balance among (a) intrapersonal, (b) interpersonal, and (c) extrapersonal interests, over the (a) short- and (b) long-terms, in order to achieve a balance among (a) adaptation to existing environments, (b) shaping of existing environments, and (c) selection of new environments (Sternberg, 1998, 2000, 2001, 2003; Sternberg & Lubart, 2001).

What kinds of considerations might be included under each of the three kinds of interests? Intrapersonal interests might include the desire to enhance one's popularity or prestige, to make more money, to learn more, to increase one's spiritual well-being, to increase one's power, and so forth. Interpersonal interests might be quite similar, except as they apply to other people rather than oneself. Extrapersonal interests might include contributing to the welfare of one's school, helping one's community, contributing to the well-being of one's country, or serving God, and so forth. Different people balance these interests in different ways. At one extreme, a malevolent dictator might emphasize his or her own personal power and wealth; at the other extreme, a saint might emphasize only serving others and God.

What constitutes appropriate balancing of interests, an appropriate response to the environment, and even the common good, all hinge on values. Values, therefore, are an integral part of wise thinking. The question arises as to "whose values"? Although different major religions and other widely accepted systems of values may differ in details, they seem to have in common certain universal values, such as respect for human life, honesty, sincerity, fairness, and enabling people to fulfill their potential. Of course, not every government or society has subscribed to such values. Hitler's Germany and Stalin's Russia blatantly did not, and most societies today only subscribe to them in some degree but not fully.

On this view, people may be smart but not wise. People who are smart but not wise exhibit one or more of the following fallacies in thinking: (a) egocentrism—thinking that the whole world revolves around them; (b) omniscience—thinking they know everything; (c) omnipotence—thinking they can do whatever they want; and (d) invulnerability—thinking they can get away with anything; (e) unrealistic optimism (Sternberg, 2002, in press).

Postformal-Operational Programs of Research. Some theorists have viewed wisdom in terms of postformal-operational thinking, thereby viewing wisdom as extending beyond the Piagetian stages of intelligence (Piaget, 1972). Wisdom thus might be a stage of thought beyond Piagetian formal operations.

For example, some authors have argued that wise individuals are those who can think reflectively or dialectically, in the latter case with the individuals' realizing that truth is not always absolute but rather evolves in an historical context of theses, antitheses, and syntheses (e.g., Basseches, 1984a, 1984b; Kitchener, 1983, 1986; Kitchener & Brenner, 1990; Kitchener & Kitchener, 1981; Labouvie-Vief, 1980, 1982, 1990; Pascual-Leone, 1990; Riegel, 1973). Consider a very brief review of some specific dialectical approaches.

Kitchener and Brenner (1990) suggested that wisdom requires a synthesis of knowledge from opposing points of view. Similarly, Labouvie-Vief (1990) has emphasized the importance of a smooth and balanced dialogue between logical forms of processing and more subjective forms of processing. Pascual-Leone (1990) has argued for the importance of the dialectical integration of all aspects of a person's affect, cognition, conation (motivation), and life experience. Similarly, Orwoll and Perlmutter (1990) have emphasized the importance to wisdom of an integration of cognition with affect. Kramer (1990) has suggested the importance of the integration of relativistic and dialectical modes of thinking, affect, and reflection. And Birren and Fisher (1990), putting together a number of views of wisdom, have suggested as well the importance of the integration of cognitive, conative, and affective aspects of human abilities.

Other theorists have suggested the importance of knowing the limits of one's own extant knowledge and of then trying to go beyond it. For example, Meacham (1990) has suggested that an important aspect of wisdom is an awareness of one's own fallibility and the knowledge of what one does and does not know. Kitchener and Brenner (1990) have also emphasized the importance of knowing the limitations of one's own knowledge. Arlin (1990) has linked wisdom to problem finding, the first step of which is the recognition that how one currently defines a problem may be inadequate. Arlin views problem finding as a possible stage of post-formal operational thinking. Such a view is not necessarily inconsistent with the view of dialectical thinking as such a post-formal-operational stage. Dialectical thinking and problem finding could represent distinct post-formal-operational stages, or two manifestations of the same post-formal-operational stage.

Although most developmental approaches to wisdom are ontogenetic, Csikszentmihalyi and Rathunde (1990) have taken a philogenetic or evolutionary approach, arguing that constructs such as wisdom must have been selected for over time, at least in a cultural sense. In other words, wise ideas should survive better over time than unwise ideas in a culture. The theorists define wisdom as having three basic dimensions of meaning: (a) that of a cognitive process, or a particular way of obtaining and processing information; (b) that of a virtue, or socially valued pattern of behavior; and (c) that of a good, or a personally desirable state or condition.

Generalized Views of the Relationship between Wisdom and Age

There are five generalized views of the relationship of wisdom to age.

The first is what might be called the "received" view. It is the view with which many of us grow up. According to this view, wisdom develops in old age. Although old age may bring with it physical decline, it also brings with it a sort of spiritual awakening or reawakening that enables one to become wise.

A second view is what might be called the "fluid intelligence" view. This view has been advocated by Paul Baltes and his colleagues, among others (e.g., Baltes & Staudinger, 2000). This view tracks wisdom with fluid intelligence, so that wisdom is believed to show roughly the same pattern of incline and decline as fluid intelligence, or the ability to think flexibly in novel ways (Horn & Cattell, 1966). According to this theory, wisdom increases until early adulthood, and then levels off for a period of time. It then starts to decline in middle middle age or late middle age. At best, one may hold on to it in substantial measure until early old age (see Jordan, in press; McAdams & de St. Aubin, 1992).

A third view is what might be called the "crystallized intelligence" view. This view holds that wisdom tracks like crystallized intelligence (Horn & Cattell, 1966; Schaie, 1996). According to this view, wisdom begins to increase relatively early in life and then continues to increase until old age, perhaps until ten or so years before one's death, when disease processes might impair its continued growth (see Jordan, in press; Sternberg, 1998). According to this view, then, the development of wisdom increases well into the later years. There is some empirical evidence from longitudinal work to support this point of view (Hartman, 2000; Wink & Helson, 1997).

A fourth view is that wisdom tracks *both* fluid and crystallized intelligence (Birren & Svensson, in press). This makes its pattern of development more complex than that of either kind of intelligence individually. According to this view, intelligence will increase until somewhere in the middle or later part of the adult life span, but then, as fluid abilities start to decline, the increase in crystallized abilities will not be enough to offset the decline in wisdom. So there will be decline somewhat earlier than the crystallized view alone would predict.

A fifth view is that wisdom actually declines monotonically with age (Meacham, 1990), starting early in life. There appears to be relatively little empirical evidence for this view, intriguing though it may be. However, there is empirical evidence that wisdom declines in very old age, say, for people, on average, over 75 (Baltes & Staudinger, 2000). Such decline appears to be related to declines in physical health.

The last point of view, that taken here, is that individual differences in the development of wisdom are so large that averages probably tell us little about how wisdom develops. It is not any kind of experience (i.e., crystallized intelligence) in itself that leads to wisdom, but rather the decision to use that experience in a reflective, action-oriented way that leads to a common good.

Implicit Theories

What Are the Implicit Theories of Wisdom Applying to People of Different Ages?

Implicit theories of wisdom are people's conceptions of what wisdom is and how it develops. An excellent recent review of implicit theories of wisdom can be found in Bluck and Glück (in press).

Carl Jung (1964) suggested that people have an archetype for wisdom that expresses itself in dreams. Regardless of the people's age, the archetype associates wisdom with age. He believed that women dream of a superior female figure, such as a priestess, sorceress, Earth mother, or goddess or nature of love. Men dream of a masculine initiator, a wise old man, a spirit of nature, or something similar (Jung, 1964; see also Birren & Svensson, in press). So, for Jung, wisdom was clearly associated with maturity, if not old age.

Heckhausen, Dixon, and Baltes (1989) studied beliefs about the development of wisdom in adulthood. Participants were asked to rate characteristics, including "wise," in terms of the extent to which they believed each characteristic increased during adulthood. In a second study, participants were asked to rate the desirability of changes over life. In general, participants associated increasing age with undesirable changes. There were to exceptions to this trend, however: "dignified" and "wise." Both were viewed as increasing with age and as being desirable. Wisdom was believed to begin to increase around age 55, and to continue to increase except, perhaps, toward the very end of life.

Another way to study wisdom is to ask participants to nominate wise people. Paulhus et al. (2002) asked undergraduates to list the wisest people they could think of. The 15 top nominees were, in descending order, Gandhi, Confucius, Jesus Christ, Martin Luther King, Jr., Socrates, Mother Teresa, Solomon, Buddha, the Pope, Oprah Winfrey, Winston Churchill, the Dalai Lama, Ann Landers, Nelson Mandela, and Queen Elizabeth. One might expect that part of being listed would be a matter of one's fame. The authors also asked participants to list the most famous people they could think of. The only overlaps with regard to the top 15 were for Jesus Christ and Nelson Mandela. Most of the people listed are spiritual leaders in some sense, and most, but certainly not all, became famous for their wisdom in their latter years.

In a related study, Perlmutter et al. (1988) examined people's conceptions of the relationship of wisdom to age. They found that 78% of the participants related wisdom to age. People nominated as wise in this study were, for the most part, over 50 years of age. Interestingly, perhaps, ages of nominees increased with ages of participants, suggesting that people of different ages drew on different cohorts. In another study, Jason et al. (2001) reported that people nominated as wise had an average age of 60, a result similar to that found by Baltes et al. (1995).

In a study by Knight and Parr (1999), participants were asked to judge the wisdom of people who were young, middle-aged, or old. Older individuals were generally rated as wiser than those of middle age or of younger age. Stange, Kunzmann, and Baltes (2003) also found that older participants were rated as wiser. But age was not the only factor related to wisdom. Listening behavior and good advice were also related to levels of wisdom. However, Hira and Faulkender (1997) found that gender also matters. Curiously, older men and younger women were judged to be significantly wiser than younger men and older women.

What Are the Implicit Theories of Wisdom Held by People of Different Ages?

Clayton (1976), who was one of the first investigators to study wisdom empirically, examined conceptions of wisdom in people of different ages. She found that the concept of wisdom becomes more differentiated with age. There was no relationship between a participant's own age and his or her perception of his or her own level of wisdom.

In her work, Clayton (1975, 1976, 1982; Clayton & Birren, 1980) multidimensionally scaled ratings of pairs of words potentially related to wisdom for three samples of adults differing in age (younger, middle-aged, older). In her earliest study (Clayton, 1975), the terms that were scaled were ones such as *experienced, pragmatic, understanding*, and *knowledgeable.* In each study, participants were asked to rate similarities between all possible pairs of words. The main similarity in the results for the age cohorts for which the scalings were done was the elicitation of two consistent dimensions of wisdom, which Clayton referred to as an affective dimension and a reflective dimension. There was also a suggestion of a dimension relating to age. The greatest difference among the age cohorts was that mental representations of wisdom seemed to become more differentiated (i.e., to increase in dimensionality) with increases in the ages of the participants.

Clayton and Birren also found that the stimuli "aged" and "experienced" were located at a greater distance in the multidimensional space from "wise" in the older participants than in the younger participants. In other words, older participants were less likely to accept the idea that wisdom necessarily comes with old age than were younger participants. Moreover, Perlmutter et al. (1988) did not find that, with age, people's self-ratings of wisdom increased. In the Clayton and Birren study, for the older group, "understanding" and empathetic" were located closer to "wise" than they were for younger groups, suggesting somewhat different conceptions of wisdom with age.

Glück and her colleagues (2003) found age differences in implicit theories of wisdom. Describing life situations in which they had shown wisdom, adolescents most often spoke situations in which they had provided empathy and support. Young adults most often spoke of situations in which they demonstrated self-determination and assertion. Older adults most often spoke of situations in which they demonstrated knowledge and flexibility.

Explicit Theories

When Does Wisdom First Develop?

According to some accounts, Prince Siddhartha Gautama was born in India in 563 BC. After living a privileged life, he left his home at age 29 to seek spiritual enlightenment (Birren & Svensson, in press; Dyer, 1998). After becoming enlightened, he became known as the "Buddha." For the Buddha, the marked beginning on his journey toward wisdom thus began just short of the fourth decade of his life.

Not everyone becomes as revered as Prince Siddhartha did. But the story has a familiar ring. The tale, oft-repeated since early times, is of someone growing up and leading an unenlightened life, and then realizing it is time to change. The person studies or does whatever it takes to change, and then discovers spiritual or some other form of wisdom.

In psychology, Henry Murray, who was to become famous as the Harvard psychology professor who formulated the Thematic Apperception Test (TAT) as well as a theory of personality based upon motivational needs, grew up of a very highly privileged family in New York City (Robinson, 1992). According to Robinson (1992), in his early life, he distinguished himself mostly for his amiability and his skill in fitting into the upper class milieu of Groton and then Harvard. He made captain of the crew team, but was less than successful at it. A rather mediocre academic record as an undergraduate was no impediment during those times to admission to the best medical programs, and he was accepted both at Harvard and Columbia. Wanting to be near to his family and the privilege associated with them, he chose Columbia. And there, in medical school, he underwent a transformation that was to change his life. He became seriously interested in medical and later psychological research, and became a leading contributor to the burgeoning field of psychology. At just a tad earlier than the age at which Siddhartha underwent his transformation, Henry Murray underwent his own transformation.

Erik Erikson (1950), a premier psychological theorist, believed that wisdom is associated with age, but he marked the development of wisdom as the result of success in dealing with his eighth and last stage of psychosocial development, "ego integrity versus despair." He was not stating that wisdom could not begin to develop earlier, but rather that it was in the final stage of life development that one through the natural course of things either successfully met a life challenge and became wise, or one failed to meet the challenge, and did not. In effect, dealing with the certain and imminent prospect of one's own death leads either to integrity or despair.

Following up on the Eriksonian tradition, Takahashi and Overton (in press) have argued that wisdom is a relatively late-emerging form of understanding that integrates cognitive and affective elements. They believe it emerges dia-

lectically from earlier analytic and synthetic skills, but that it integrates these skills into a broader framework.

Earlier, several dialectical theories of wisdom were discussed under the umbrella of neo-Piagetianism. These theories view wisdom as first developing in the post-formal-operational years—that is, after 11 or 12 (e.g., Labouvie-Vief, 1990; Riegel, 1973). These theories usually have traced the development of wisdom most distinctly to the college years, or early adulthood—roughly 18 to 24 years. Thus, they view wisdom as starting quite a bit earlier than the "received" view of wisdom commencing in old age.

A similar view is taken by Richardson and Pasupathi (in press; see also Pasupathi, Staudinger, & Baltes, 2001), who argue that critical building blocks of wisdom are gained during adolescence and early adulthood. Indeed, the building blocks of wisdom may be laid down even earlier than adolescence (Csikszentmihalyi & Nakamura, in press). First, the cognitive abilities needed for wisdom initially develop around adolescence, such as self-reflective thinking and breadth of knowledge. Second, adolescents form an imaginary audience that allows them to step outside themselves and to see others as the others see them (Lapsley & Murphy, 1985), although perhaps with more self-preoccupation than would be experienced by those others. Third, adolescents become more cognizant of the meanings of their own autobiographical experiences. When adults are asked to remember events from earlier in their lives, there is a *reminiscence bump* with respect to events of adolescence and very early adulthood (Rubin & Schulkind, 1997). The events of these periods are formative, and provide a basis for the development of wisdom.

Another model, the Berlin model, also discussed earlier (see also Kunzmann & Baltes, in press), views wisdom as requiring a great deal of knowledge, contextualism, and value relativism and tolerance. This view, too, views the development of wisdom as starting earlier than late adulthood.

What Is the Trajectory of Wisdom throughout the Adult Lifespan?

Brugman (2000) reviewed six empirical studies that addressed the question of what trajectory wisdom takes with age. He concluded that wisdom does not, on average, increase in later life. Indeed, he concluded that "one needs to be old and wise to see that wisdom does not come with age" (p. 115). Staudinger (1999) has made a similar claim, namely, that wisdom shows no growth between 20 and 75 years of age. Similarly, others have claimed that whereas adolescents show increases in wisdom development (see also Anderson, 1998; Paspupathi et al., 2001), adults after the age of 24 rarely do.

In the Berlin model, the development of wisdom plateaus, for most people, toward the end of the college years—in the early 20s. Age is not seen as key in this model (Staudinger, Maciel, Smith, & Baltes, 1998). Rather, other factors, such as social intelligence, openness to experience, and exposure to posi-

tive role models are the important variables, and age is, at best, a proxy variable for other things.

Labouvie-Vief and her colleagues (1989) have suggested that emotional control and emotional understanding—what Mayer, Salovey, and Caruso (2000) refer to as emotional intelligence—increase with age. Middle-aged and older adults express their emotional states in more sophistical language than do younger people and are less likely to have difficulty in regulating their emotions (see also Blanchard-Fields, 1986; Carstensen, 1995; Takahashi & Overton, in press).

Kramer et al. (1992) have argued that older adults outperform younger ones in wisdom-related tasks. Hui and Yee (1994) studied middle-aged (mean 45 years) and older adults (mean 70 years) in both American and Japanese communities. They found that older adults generally performed better on wisdom measures, regardless of gender or cultural background. These findings thus suggest that wisdom increases in the later years.

Birren and Svensson (in press) consider the possibility that the lessening respect for the elderly and lessening ascription of wisdom to the elderly in Western society may have a basis in reality. In current times, the world is changing very rapidly, both in terms of technology and social/cultural customs. The rate of change perhaps was slower in other times and may still be slower in other places. In times in which the world in which one grows old is pretty much the same as the world in which one first became old, the wisdom one accumulated throughout one's life span might put one at a considerable advantage over others. But in a time of rapid change, one's wisdom may become out of date, applying to a world that no longer exists. So it may be that in rapidly changing societies, the experience of the elderly actually is worth less, and hence they are valued less (Csikszentmihalyi & Nakamura, in press).

Work in the Berlin paradigm suggests that the development of wisdom levels off around the age of 24 or even as early as 20 (Smith & Baltes, 1990; Smith, Staudinger, & Baltes, 1994; Staudinger, Smith, & Baltes, 1992). But older adults are as likely as younger ones to reach the highest scores in the groups that have been tested with regard to wise thinking (Smith & Baltes, 1990). So although the mean may not increase over the adult life span, the maxima may (Baltes et al., 1995; Baltes & Staudinger, 2000). Older clinical psychologists score higher than younger people in fields other than clinical psychology on wisdom-related measures, but no higher than younger clinical psychologists on such measures (Smith & Baltes, 1990; Smith et al., 1994).

Staudinger, Smith, and Baltes (1992) showed that older adults performed as well on such tasks as did younger adults, and that older adults did better on such tasks if there was a match between their age and the age of the fictitious characters about whom they made judgments. Baltes et al. (1995) found that older individuals nominated for their wisdom performed as well as did clinical psychologists on wisdom-related tasks. They also showed that up to the age of 80, older adults performed as well on such tasks as did younger adults.

The type of task may also affect wisdom-related performance. In life-planning tasks, but not life-review tasks, dealing with a problem relevant to one's own age provides no advantage in dealing with problems in a wise way (Baltes et al., 1995; Smith & Baltes, 1990; Smith et al., 1994). Life review may improve simply because one has had, in one's later years, more years to review and put into perspective. Individual differences also play a role. Pasupathi and Staudinger (2001) found that for adults who performed at above-median levels on a task of moral reasoning, age was positively associated with wisdom. But there was no relation for individuals at below-median levels of moral reasoning.

As mentioned earlier, work in the Berlin paradigm has found that interaction with other people—what the investigators refer to as *interactive minds*—improves wisdom-related thinking (Staudinger & Baltes, 1996). Because older people often become increasingly isolated as a function of the design of our society, their ability to think wisely may decrease not just as a function of decreases in skills, but of decreases in ability to interact with others (Jordan, in press).

Is Wisdom Beneficial?

There is evidence that wisdom does lead to higher degrees of subjective well-being (SWB) in older adults, holding constant other variables (Ardelt, 1997). Similarly, Takahashi and Overton (in press) have suggested that wisdom brings an internal sense of reward by helping people better to appreciate the subjective meaning in their lives. Hui and Yee (1994) found that wisdom and life satisfaction are positively correlated in older adults. Although older adults experienced losses, these losses helped them better appreciate what they had and gave them new insights into their lives and what they meant This in turn increased their satisfaction with their lives.

A different view is that of Baltes (1997). Baltes has proposed that wise people may experience what he refers to as *constructive melancholy.* People who are wise, on this view, see the sadness as well as the joy in the complex events of life. For example, shortly before this article was written, there was a catastrophic tsunami that cost over 150,000 people their lives. The wise person, seeing the harm that was done and the steps that could have been taken to prevent this level of harm, realizes how truly sad the event was, not only because it happened, but because many of the deaths could have been prevented had governments had the safety of their citizens as a higher priority.

The view of Baltes and his colleagues is also different from that of traditional thinkers, such as Erikson (1959), who believe that wisdom involves some degree of emotional distance and detachment. The traditional psychoanalytical view of the therapist, for example, emphasizes the importance of keeping one's emotional distance from the patients one advises, lest one get caught up in their problems and thereby become unable to help the patients

overcome this problem. In the Berlin view, wisdom inheres not in detachment, but in sympathizing and empathizing with fellow human beings in the crises that beset them (Kunzmann & Baltes, in press). Hence, wisdom may bring with it at least as much sadness as joy. People who do good work and apply their wisdom to it may see that others, in contrast, use their intelligence for less positive ends, which may lead to sadness (Solomon, Marshall, & Gardner, in press).

Another factor that may work against wisdom leading to happiness is the presence of negative stereotypes about aging (e.g., Levy et al. 2002). To the extent that people have negative stereotypes, they may find sadness in thinking about their own age-related status, and hence feel the sadness invoked by these stereotypes joining whatever sadness the wisdom of aging may bring. Actual decreases in physical health may also lead to such sadness (Jordan, in press). The result can be that wisdom becomes concomitant with sadness, as one realizes that one's situation and that of one's friends is objectively declining. Physical health, negative stereotypes, the burdens of dealing with decreased buying power—all can work against one to produce an existential angst one has never sought.

Conclusions

What can be concluded from this review?

First, there is far from any universally accepted view of the relationship of wisdom to age. Views on this relationship are all over the place, ranging from wisdom decreasing with age, to increasing with age, to remaining largely stable with age, at least after a certain threshold (such as the early 20s or so).

Second, empirical data also reveal contradictory results. There seems to a consensus that wisdom drops off in later old age at the point that mental health declines. Beyond that, results have been varied. So the data do not conclusively support any single position.

Third, there are almost certainly widespread individual differences in the trajectory of wisdom. These individual differences may account for at least part of the differences in results that have been obtained. These differences mirror differences that have been shown in the development of fluid and crystallized abilities. Moreover, people differ in personality attributes that are relevant for the development of wisdom, such as openness to experience and reflectivity. So there probably is no one trajectory that applies to everyone.

Fourth, much seems to depend on the circumstances in which people live. People who are isolated, deprived of meaningful interactions with others, or isolated from developing their knowledge-based skills may be at risk for failing to develop wisdom. Probably, at least some of the control of the development of wisdom lies in situational rather than personal variables.

Fifth, differences in results may depend in part upon the ways in which wisdom is operationalized. The ways in which wisdom has been measured

differ widely, including both typical-performance and maximal-performance measures. To understand how wisdom develops, one must understand how measurement operations affect the data.

In the end, the data seem consistent with a picture of the ability of the individual to continue to develop wisdom until the latter days in which health problems impair thinking. But whether wisdom actually will develop depends not so much on age as upon cognitive variables, personality variables, and life experiences. Most important, the person has to utilize life experience in a way that is consistent with the development of wisdom. There is a joke about how many psychologists it takes to change a light bulb. The answer is it doesn't matter, so long as the light bulb wants to change. Similarly, people must want to develop their wisdom-related skills in order for them actually to develop, and then must adopt the attitudes toward life—openness to experience, reflectivity upon experience, and willingness to profit from experience—that will enable this development to occur.

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Notes

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