
INTELLECTUAL VERSUS WISDOM-RELATED KNOWLEDGE: THE CASE FOR A DIFFERENT KIND OF LEARNING IN THE LATER YEARS OF LIFE

Monika Ardelt

Department of Sociology,
University of Florida,
Gainesville, Florida, USA

Lifelong learning and continued education are essential for older people who want to stay involved in a rapidly changing world. However, in the later years of life, it may be even more important to acquire the timeless and universal knowledge of wisdom. Whereas intellectual knowledge enables elderly people to stay involved in worldly affairs, wisdom-related knowledge helps them to prepare for the physical and social decline of old age and ultimately their own death. Moreover, while intellectual knowledge tends to decrease with advancing age, the relationship between wisdom and aging is potentially positive, provided that cognitive deterioration does not become pathological. By illustrating the difference between intellectual and wisdom-related knowledge in the areas of goals, approach, range, acquisition, effects on the knower, and relation to aging, it is argued that wisdom rather than intellectual knowledge is crucial for aging well.

You have learned great pyramids of knowledge. But if that learning is not exercised through experience, it cannot be realized. . . . Like most people, you don't experience with your whole self. That is the difference between knowledge and wisdom.

Agnes Whistling Elk, cited in
Flight of the Seventh Moon,
Lynn V. Andrews, 1984, p. 190.

I would like to thank Andrew Achenbaum, Felix Berado, Walter Cunningham, and Cheryl Elman for their helpful comments on earlier drafts of the manuscript. A condensed version of the article was presented at the American Sociological Association Annual Meetings in Toronto, Canada, August 9-13, 1997.

Address correspondence to Monika Ardelt, University of Florida, Department of Sociology, 3219 Turlington Hall, P.O. Box 117330, Gainesville, FL 32611-7330.
E-mail: ardelt@soc.ufl.edu

There is a general consensus that lifelong learning and continued education for older persons are essential in a society that is characterized by rapid technological changes (Glendenning, 1995; Moody, 1986; O'Brien, 1992; Thornton, 1986; Willis, 1985). A case in point is computer literacy without which people cannot participate in the current "communication and information revolution" (vide Moody, 1986). Indeed, there is no reason to believe that elderly individuals are incapable of learning, even though many researchers find that fluid intelligence (e.g., reaction time and a general ability to solve abstract problems) decreases in old age (Baltes, 1993; Baltes & Staudinger, 1993; Glendenning, 1995; Moody, 1986; Shuldiner, 1992; Willis, 1985). But as longitudinal studies have shown, the potential for learning remains intact throughout the life time as long as cognitive functioning is not affected by neurophysiological diseases, such as Alzheimer's (Mason, 1974; O'Brien, 1992; Shuldiner, 1992; Thornton, 1986; Willis, 1985).

However, the broader question concerns the specific goals of old age education. One obvious goal is to enable elderly people, especially older workers, to keep up with technological and scientific advances to avoid marginalization (Glendenning, 1995; Hall & Mirvis, 1995; Jarratt & Coates, 1995; Willis, 1985). Another goal is to help elderly persons to improve the quality of their lives by teaching them self-reliance, self-sufficiency, and coping strategies in the areas of finances, physical health, and social relationships (Glendenning, 1995; Thornton, 1986; Willis, 1985). Apart from these "survival skills," however, old age education should follow a different avenue than that of childhood and adulthood education.

According to Thornton (1986), the educational goals of childhood and adulthood are mastery and competence, respectively, while the educational goal in old age should be wisdom. Education in the later years does not need to be concerned with the tasks of mastering social and problem-solving skills and acquiring the cultural knowledge to attain competency in adult roles. Hence, old age provides the opportunity to explore learning goals that people at earlier stages of the life course are often too busy to pursue, such as developing a reflective mode of thinking, contemplating the meaning of life, coming to terms with one's past as a preparation for death, and the quest for self-fulfillment and spiritual advancement (Erikson, 1963, 1982; Jarvis, 1992; Mason, 1974; Moody, 1986; Shuldiner, 1992; Thornton, 1986). However, those goals require a different kind of learning and a different kind of knowledge: wisdom rather than intellectual knowledge. Moody (1986) makes this point clear when he writes about the specific aspects of late life learning.

Acquiring more and more information is not the same thing as the cultivation of wisdom. The solution may not necessarily be to "plug in" the elderly to a new information utility. Instead of being a time to assimilate more and more information, old age may be the period of life to go in the opposite direction: to reduce the quantity and complexity of information in favor of what is deeper and more essential. Instead of encouraging elders to become more adept information junkies, we should encourage a complementary style of late life learning based on the strengths of age and experience (p. 135).

But what exactly are the differences between intellectual and wisdom-related knowledge? While contemporary theoretical and empirical research makes a clear distinction between intelligence and wisdom (e.g., Clayton, 1982; Staudinger, Smith, & Baltes, 1992), the contrast between intellectual and wisdom-related knowledge is less obvious (e.g., Baltes & Smith, 1990; Baltes, Staudinger, Maercker, & Smith, 1995; Smith & Baltes, 1990). Hence, to propose that late life education should promote wisdom rather than intellectual knowledge, first requires a clarification of the differences between these two knowledge types.

This article describes the characteristics of intellectual and wisdom-related knowledge in six domains: goals, approach, range, acquisition, effects on the knower, and relationship to aging. Based on their specific characteristics, it is argued that it is more essential for older people to acquire wisdom rather than intellectual knowledge, or in Moody's (1986) term "theoretical knowledge," if they want to age well. Whereas intellectual knowledge enables the elderly to stay involved in worldly affairs, wisdom-related knowledge helps them to prepare for physical and social decline and ultimately their own death.

DIFFERENCES BETWEEN INTELLECTUAL AND WISDOM-RELATED KNOWLEDGE

While intellectual and wisdom-related knowledge share certain characteristics, such as the search for answers to difficult life problems and a quest for truth, they are the complete opposite of each other in many areas (Assmann, 1994; Chandler & Holliday, 1990; Clayton & Birren, 1980; Csikszentmihalyi & Rathunde, 1990; Sternberg, 1990a). Table 1 summarizes the differences between intellectual and wisdom-related knowledge in six domains: goals, approach, range and acquisition of knowledge, the effects of the knowledge on the knower, and the relationship of these two types of knowledge to aging.

TABLE 1 Differences Between Intellectual Knowledge and Wisdom-Related Knowledge

Domain	Intellectual Knowledge	Type of Knowledge	Wisdom-Related Knowledge
Goals	<ul style="list-style-type: none">● quantitative: accumulation of knowledge and information● discovery of new truths● descriptive knowledge● how to do certain things● mastery of the outside world through liberation from outside forces● change of reality● striving for certainty, regularity, and predictability to plan for the future● knowing how to deal with the expected	<ul style="list-style-type: none">● qualitative: deeper understanding of salient phenomena and events● rediscovery of the <i>significance</i> of old truths● interpretative knowledge● <i>should I</i> do certain things?● mastery of the inner world through liberation from inner forces	
Approach	<ul style="list-style-type: none">● scientific● theoretical● abstract, detached● separation of form from content● distinction between subject and object● linear: final stage of formal operations● logos● impersonal	<ul style="list-style-type: none">● acceptance of reality● acceptance of uncertainty, irregularity, unpredictability, and impermanence● knowing how to deal with the unexpected and the unknown● spiritual● applied● concrete, involved● integration of form and content● synthesis of subject and object● dialectic: beyond formal operations● mythos● personal: intrapersonal and interpersonal	
Range	<ul style="list-style-type: none">● time-bound: subject to political and historical fluctuations● narrow, particularistic● limited, domain-related● fragmented, specialized, selective	<ul style="list-style-type: none">● timeless: independent of political and historical fluctuations	
Acquisition	<ul style="list-style-type: none">● intelligence/cognition● detached experience, i.e., studying books, listen to lectures, conducting experiments, objective observations	<ul style="list-style-type: none">● broad, holistic● unlimited, universal● comprehensive, integrated	<ul style="list-style-type: none">● combination of cognition and self-reflection● personal life experiences together with self-awareness, determination, and constancy to transcend subjectivity and projections

TABLE 1 *continued*

Domain	Intellectual Knowledge	Type of Knowledge	Wisdom-Related Knowledge
Effects on the knower	● manipulation and control of phenomena and events		● openness to experience including the experience of negativity, irregularity, unpredictability, contradictions, and ambiguity through the development of equanimity
	● belief that knowledge is potentially limitless		● acceptance of the limits of knowledge for human beings
	● tendency to believe in existing knowledge if it is scientifically arrived		● tendency to doubt existing beliefs, values, knowledge, and information
	● increased self-centeredness because one believes that one knows		● diminished self-centeredness because one knows that one does not know
	● pride and a feeling of superiority towards people with less intellectual knowledge		● sympathy and compassion for others
	● concerned about individualistic and particularistic issues		● concerned about collective and universal issues
Relation to aging	● negative feelings if manipulation and control fails		● satisfaction and peacefulness in spite of life's vicissitudes and uncertainties
	● reversed u-shaped pattern		● potentially positive
	● influenced by cognitive decline		● influenced by openness to experience, self-reflection, self-awareness, determination, and constancy
	● may become outdated and obsolete with time		● important at all stages of the life course

Goals

One common goal of intellectual and wisdom-related knowledge is the search for truth. However, while the major aim of intellectual knowledge is *quantitative*, i.e., the accumulation of *new* truths in form of new, primarily descriptive knowledge and information (e.g., how to surf the internet), the goal of wisdom-related knowledge is *qualitative*. It consists of a rediscovery of the significance of *old* truths (e.g., "What does it mean to me that all humans are mortal?"), a process Kekes (1983) calls the development of interpretative knowledge, which will eventually lead to a deeper understanding of salient phenomena and events (Assmann, 1994; Holliday & Chandler, 1986; Moody, 1986; Sternberg, 1990a). A deeper understanding of phenomena and events becomes especially relevant in old age when many people try to come to terms with missed opportunities in the past, unresolved issues, and declining possibilities (Moody, 1986; Shuldiner, 1992). Furthermore, while individuals at earlier stages of the life course generally do not have the time to contemplate the significance of old truths due to family and occupational obligations, the later years of life with their fewer responsibilities provide the opportunity for this endeavor (Shuldiner, 1992; Thornton, 1986).

Understanding the deeper truth of existing phenomena and events may begin a search for the right ends in life. The question is no longer "*How* should I do certain things to achieve my personal ends?" that can be answered by intellectual knowledge (e.g., "How can I get this promotion?"), but "*Should* I do certain things?" for which only wisdom-related knowledge can find an answer (e.g., "Should I spend my time helping others or improving my golf game?"). Whereas, at earlier life stages, people need intellectual knowledge to achieve their personal ends (finishing school, obtaining a professional degree, finding a job, etc.), old age allows a person the luxury to search for the right ends through the development of wisdom (Assmann, 1994; Clayton, 1982; Holliday & Chandler, 1986; Kekes, 1983).

Related to the previous distinction is that the aim of intellectual knowledge is the mastery of the outside world through the liberation from outside forces (e.g., a disadvantaged family background). The ultimate goal here is to change reality according to one's wishes to achieve the desired ends (e.g., by getting a college degree and finding a high paying job) and a striving for certainty, regularity, and predictability to plan for the future (Strijbos, 1995). The objective of wisdom-related knowledge, by contrast, is to master one's inner world through the liberation from inner forces, which can be defined as one's fears, impulses, passions, and desires, and to accept reality as it is (Assmann, 1994; Gadamer, 1960; Hanna & Ottens, 1995). Thus,

the goal of wisdom-related knowledge is not to change the external world but to change the inner world of the knower. Only a person who has achieved the liberation from his or her inner forces is truly able to accept reality as it is with all its uncertainty, irregularity, unpredictability, and impermanence (Strijbos, 1995). While the former goal of conquering the world may be important at earlier stages of the life course, the latter is essential at the end of life, when it becomes increasingly difficult to manipulate reality according to one's wishes due to a decline in social significance and physical strength. In sum, while intellectual knowledge prepares one to deal with the expected, wisdom-related knowledge helps one to cope with the unexpected and the unknown (Assmann, 1994; Gadamer, 1960). This means that wisdom-related knowledge becomes most important during the last stage of life, when one is confronted with the ultimate unpredictability, impermanence, and unknown: one's own death.

Approach

In general, intellectual knowledge is obtained through a scientific, theoretical, abstract, and detached approach that separates form from content and the subject from the object of one's inquiries (Strijbos, 1995). As such, intellectual knowledge is strictly impersonal and is assumed to be independent of the knower and the concrete context. (For example, the intellectual knowledge that the physical body tends to decline with age exists independently of the knower.) The independence of the knowledge from the knower allows for an easy cultural dissemination of intellectual knowledge, for example, through written or visual material (McCarthy, 1996). The intellectual approach is primarily linear and belongs to Piaget's final stage of formal operations (Clayton, 1982; Piaget, 1970; Taranto, 1989).

In comparison, the quest for wisdom-related knowledge is spiritual (Blanchard-Fields & Norris, 1995). As documented in the ancient Western, Greek, and Eastern traditions, wisdom-related knowledge searches for answers to the meaning and purpose of life and the human situation in particular (e.g., "Why are we here, where do we come from, and where do we go?"), a topic that may become especially prevalent in old age (Blanchard-Fields & Norris, 1995; Clayton & Birren, 1980). This type of knowledge affects a person's most basic assumptions and outlook on life. Therefore, wisdom-related knowledge cannot remain theoretical, abstract, and detached but is necessarily applied, concrete, and involved (Shuldiner, 1992; Strijbos, 1995). It is used to solve concrete intrapersonal and interpersonal problems (Blanchard-Fields & Norris, 1995). The separation between subject and

object disappears because the object of one's inquiries (e.g., the meaning and purpose of life and the human situation) is ultimately the knower (the subject) him- or herself. This means that formal operational thought is not sufficient to obtain wisdom-related knowledge. A person in search of this type of knowledge needs to engage in dialectic thinking, which reaches beyond formal operational thought, to bridge the gap between subject and object and to incorporate contradictions that are a necessary part of human nature (Clayton, 1982; Csikszentmihalyi & Rathunde, 1990; Moody, 1986). This, however, does not mean that wisdom needs to depart from logical analysis and rational thought since it can be both logical and rational to allow for contradictions (Taranto, 1989).

Labouvie-Vief (1990) distinguishes between two modes of thought, *logos* and *mythos*, to highlight the difference between intellectual and wisdom-related knowledge. Logos, which belongs to intellectual knowledge, is characterized by stable systems of categorization. The inside world (the subject) is separated from the outside world (the object). By comparison, wisdom-related knowledge is connected to mythos which is described as a holistic experience: the self or the inner world merges with the object of one's thoughts, the outer world. "Thought and thinker, knower and known, are one single, indivisible unit, and it is from this bond that derives the meaning of an experience" (Labouvie-Vief, 1990, pp. 55–56).

The separation of subject and object in intellectual knowledge implies that this type of knowledge is necessarily impersonal, whereas wisdom-related knowledge is profoundly personal (Clayton, 1982). Wisdom-related knowledge is social; it refers to an involved or empathic understanding (in contrast to the detached understanding of intellectual knowledge) of intrapersonal matters (e.g., one's own fears and desires) as well as interpersonal matters of everyday life (e.g., social relationships) (Clayton, 1982; Dittmann-Kohli & Baltes, 1990; Holliday & Chandler, 1986; Kramer, 1990; Taranto, 1989). It is knowledge that can be realized only through experience (Blanchard-Fields & Norris, 1995). Hence, older people actually have an advantage in acquiring this kind of knowledge compared to younger generations (Jarvis, 1992; Kekes, 1983; Moody, 1986; Shuldiner, 1992). For example, experiencing the physical decline of the body and understanding the meaning and purpose of this process results in wisdom-related knowledge.

Range of knowledge

Intellectual knowledge is limited and restricted and subject to political and historical fluctuations (Clayton, 1982; Clayton & Birren, 1980;

McCarthy, 1996). What may be considered to be the (intellectual) truth in a specific culture at one point in time (e.g., "Women are inferior to men"), may be viewed as utterly wrong at a different time in history. Furthermore, as Max Weber (1973) pointed out, every intellectual knowledge is destined to be superseded by "superior" knowledge in the future (Assmann, 1994). For example, Newton's view of the universe was superseded by Einstein's theory of the universe. These changes in intellectual knowledge may be caused by a change in the political climate of a culture or by scientific and technological advancements. In addition, intellectual knowledge that is essential today in certain areas (e.g., how to use a mainframe computer) may be dated and obsolete tomorrow, especially in a world that produces rapid technological changes (Clayton, 1982; Moody, 1986).

Whereas intellectual knowledge is time-bound, wisdom-related knowledge is timeless and independent of scientific advancements or political and historical fluctuations because it provides universal answers to universal questions that concern the basic predicaments of the human condition (Assmann, 1994; Clayton, 1982; Clayton & Birren, 1980; Holliday & Chandler, 1986; Levenson & Crumpler, 1996). Answers that pertain to the meaning and purpose of life and the human condition are relevant for every culture independent of its specific place in history (e.g., how to deal with the vicissitudes of life, with human suffering, with injustice, how to become a better human being, etc.).

In addition, wisdom-related knowledge is not restricted to a specific domain but penetrates all aspects of life, including one's private, family, and public life (Assmann, 1994; Labouvie-Vief, 1980, 1990; Strijbos, 1995). This type of knowledge is broad, holistic, unlimited, universal, and comprehensive (Chandler & Holliday, 1990; Csikszentmihalyi & Rathunde, 1990; Labouvie-Vief, 1990; Strijbos, 1995). This means that the wisdom of older people cannot become outdated. The universality and timelessness of wisdom-related knowledge is exemplified by Jesus of Nazareth's answer to the accusers of the adulteress ("May those of you who are without sins throw the first stone.") and King Solomon's reply to the two women who both claimed to be the mother of the same infant. These answers are as powerful today as they were in a distant past because they address universal issues of human emotions and behavior, such as the tendency to find fault in others but to be blind to one's own imperfections, feelings of envy and greed, and the protective instincts of a mother.

By contrast, intellectual knowledge is mainly concerned with individual parts rather than the whole, because it is assumed that reality is too complex to be understood completely. We might be able to comprehend a narrow part of reality by focusing our attention on a

limited number of variables but the whole escapes us (Chandler & Holliday, 1990; Strijbos, 1995). Intellectual knowledge is only valid *ceteris paribus*, i.e., it is knowledge that is only valid for a certain domain, time, and place. We can speculate about the generalizability of our findings, but we cannot prove them. Hence, intellectual knowledge remains narrow, limited, fragmented, specialized, and selective (Csikszentmihalyi & Rathunde, 1990; Labouvie-Vief, 1990).

Acquisition of knowledge

The acquisition of intellectual knowledge is strongly related to one's cognitive abilities. Hence, younger people will find it easier to obtain intellectual knowledge than older persons because fluid intelligence tends to decline during the later years of life (Baltes, 1993; Baltes & Staudinger, 1993; Glendenning, 1995; Moody, 1986; Willis, 1985). However, intelligence is no guarantee of wisdom (Clayton, 1982; Coles, 1995; Hanna & Ottens, 1995). A combination of cognition and self-reflection is necessary for wisdom-related knowledge to emerge (Blanchard-Fields & Norris, 1995; Taranto, 1989).

As mentioned earlier, one goal of wisdom-related knowledge is the liberation from inside forces such as one's fears, jealousies, hostilities, and desires. A necessary prerequisite for this task is an openness to and an acknowledgement of all kinds of external and internal experiences which can be achieved through self-reflection, self-awareness, determination, and constancy (Achenbaum & Orwoll, 1991; Csikszentmihalyi & Rathunde, 1990; Gadamer, 1960; Hanna & Ottens, 1995; Jarvis, 1992; Kekes, 1983; Kramer, 1990; Moody, 1986; Taranto, 1989). Openness to experience is an important prerequisite for the perception of reality. People who refuse to acknowledge the reality of unpleasant and negative experiences (e.g., the finitude of life) cannot grasp the meaning of wisdom-related knowledge. Self-reflection and self-awareness mean that one is able to observe one's own behavior and one's interactions with others objectively, taking different perspectives into account (Blanchard-Fields & Norris, 1995; Clayton, 1982; Dittmann-Kohli & Baltes, 1990; Sternberg, 1990b). It is then possible to transcend one's subjectivity and projections and to dissolve inner obstacles. The process of self-reflection ultimately results in a reduction of self-centeredness and in a more correct perception of reality, including one's own behavior (Blanchard-Fields & Norris, 1995). However, it is highly unlikely that a person will always manage to overcome his or her projections successfully. Determination and constancy are necessary to endure setbacks and personal failure and to continue in one's

quest for wisdom despite the sometimes overwhelming difficulty of the task (Kekes, 1983).

A person, however, first needs to develop a certain degree of equanimity to be able to remain open to all kinds of experiences, including the experience of negativity, irregularity, unpredictability, contradictions, and ambiguity (Achenbaum & Orwoll, 1991; Blanchard-Fields & Norris, 1995; Hanna & Ottens, 1995). Methods to obtain a balanced mind may vary, depending on the spiritual preferences of an individual, and include such practices as prayer, meditation, stress-reduction techniques, and so forth. It is more likely that people will have the time and the interest to engage in these activities at later rather than earlier stages of the life course after they are relieved from major responsibilities, such as raising a family and earning a living (Thornton, 1986).

Whereas wisdom-related knowledge cannot be taught directly but can only be obtained through personal involvement and a willingness to be transformed in the process (Achenbaum & Orwoll, 1991; Assmann, 1994; Hanna & Ottens, 1995; Jarvis, 1992; Moody, 1986), intellectual knowledge can be gained through more detached procedures, such as studying books, listening to lectures, conducting experiments, or objective observations (Csikszentmihalyi & Rathunde, 1990; Kekes, 1983; Taranto, 1989). Rather than developing equanimity for all kinds of experiences, a main method for the acquisition of intellectual knowledge is the manipulation and control of phenomena and events. Irregularities, ambiguities, and the unpredictability of events are not viewed as a part of life but are considered irritating disturbances and indicators of a lack of knowledge that may disappear through the acquisition of more or more accurate knowledge (Arlin, 1990; Meacham, 1990; Sternberg, 1990a).

By contrast, the task of late life learning, according to Moody (1986) does not consist in the acquisition of more intellectual or theoretical knowledge but precisely in the transformative process that accompanies the development of wisdom.

One can *have* theoretical knowledge without any corresponding transformation of one's personal being. But one cannot "have" wisdom without *being* wise. [...] the abundance of information and the obsolescence of knowledge should remove from us the persistent illusion that the key is to be found in piling up more information, skills, or experience. If, finally, we want life to be understandable, the path lies in an altogether different direction. That discovery itself is the beginning of wisdom. [emphasis in the original] (p. 142)

Effects on the knower

Reflective thinking helps a wise person to realize that the truth is too complex to be known in its entirety. As Socrates once said "I know that I don't know." Hence, the development of wisdom is accompanied by an acceptance of the limits of knowledge for human beings (Kekes, 1983; Sternberg, 1990a). Through self-awareness and reflective thinking wise people become aware that there are more ways to look at phenomena and events than they can possibly realize. They know that our human senses can merely approach the truth behind phenomena but are too limited in nature to unveil the ultimate truth. Hence, they have a tendency to doubt existing beliefs, values, knowledge, and information because they may not be necessarily correct and a deeper more extensive truth may lie beyond them (Meacham, 1990).

Intellectual knowledge, by contrast, seduces the knower to believe in its truth as long as it is "objective" knowledge, i.e., knowledge that is scientifically arrived (Meacham, 1990). This knowledge is assumed to be potentially limitless in scope. Concerns about the truth and the limits of existing knowledge do not question intellectual knowledge *per se* but the methods, means, and instruments through which this knowledge was gained.

A person who believes that he or she knows is likely to increase his or her self-centeredness and develop a feeling of pride and superiority towards people with less intellectual knowledge. To know that one does not know, on the other hand, is likely to diminish one's self-centeredness and make one more humble (Csikszentmihalyi & Rathunde, 1990). Reflective thinking, the transcendence of one's negativities and projections, and a reduced self-centeredness, in turn, tend to increase a person's empathy, sympathy, and compassion for others (Achenbaum & Orwoll, 1991; Holliday & Chandler, 1986; Kramer, 1990; Orwoll & Achenbaum, 1993). As a result, wise people are more concerned about collective and universal issues than about their individual well-being (Clayton, 1982; Sternberg, 1990b).

Intellectual knowledge, by contrast, is most often used to satisfy individualistic and particularistic goals. If manipulation and control of the outside world fail to yield the desired results, feelings of disappointment, anger, depression or all of these, often arise. Wisdom-related knowledge, however, helps one to remain content and peaceful in spite of life's vicissitudes and uncertainties because it enables one to accept the possibilities and limitations of life, including physical decline and death (Birren & Fisher, 1990; Kekes, 1983; Sternberg, 1990a; Taranto, 1989, 1992). For example, wise older people tend to be satisfied with their lives, independent of the objective circumstances they encounter (Ardelt, 1997).

Relationship to aging

The acquisition of both intellectual and wisdom-related knowledge takes time and, hence, is likely to increase with age. But while intellectual knowledge might eventually decline with advancing age the relationship between age and wisdom-related knowledge is potentially positive throughout the lifetime (Baltes, 1993; Kekes, 1983; Kramer, 1990; Taranto, 1989).

Declining cognitive abilities, such as memory loss, may be one reason why intellectual knowledge decreases in old age. Older individuals process new information less efficiently than younger persons, which may explain why older people have more difficulties in memorizing and recalling this information later (MacKay & Burke, 1990; Poon, 1985; Smith, 1996; Stine & Wingfield, 1990). However, even the existing "crystallized" (Cattell, 1971; Horn, 1970) stock of intellectual knowledge may decline with advancing age (Baltes, Staudinger, Maercker, & Smith, 1995; Moody, 1986). Because intellectual knowledge is time-bound and affected by political and historical fluctuations as well as scientific progress, knowledge that seemed to be valid and true at an earlier point in a person's life may be outdated and obsolete during the later years of life (Clayton, 1982; Clayton & Birren, 1980; Weber, 1973). If a person is not willing or cannot keep up with the newest developments in intellectual knowledge or a "paradigm shift," his or her stock of culturally shared intellectual knowledge will actually diminish in old age (Kuhn, 1970; Moody, 1986).

Wisdom-related knowledge is obtained through personal life experiences, self-reflection, self-awareness, and the transcendence of one's subjectivity and projections. Hence, the acquisition of wisdom-related knowledge takes time. However, time is only a necessary but not a sufficient condition for the development of wisdom. Openness to all kinds of experiences, self-reflection, self-awareness, determination, and constancy are also required for wisdom to emerge (Jarvis, 1992; Kekes, 1983; Kramer, 1990). Therefore, it is not surprising that only very few individuals—even among the older population—have reached a high state of wisdom (Baltes, 1993; Blanchard-Fields & Norris, 1995; Dittmann-Kohli & Baltes, 1990; Sternberg, 1990b).

Neither openness to experience, nor self-reflection, self-awareness, determination, or constancy need to decline with advancing age. They are aspects of an individual's personality rather than related to biological aging. But the longer one practices these qualities, the more successful one will be to transcend one's subjectivity and projections. This is why growing old is a necessary but not a sufficient condition for the emergence of wisdom (Moody, 1986). As Kekes remarks (1983,

p. 286), "one can be old and foolish, but a wise man is likely to be old, simply because such growth takes time."

Because wisdom-related knowledge is timeless and universal its significance does not become dated and obsolete with time (Clayton, 1982; Clayton & Birren, 1980). Although the intellectual knowledge of wise elders may lag behind that of younger generations (Moody, 1986), they are a good source of advice for younger people, particularly in the areas of intra- or interpersonal matters and in cases of uncertainty (Blanchard-Fields & Norris, 1995; Clayton, 1982; Kekes, 1983; Orwoll & Achenbaum, 1993; Sternberg, 1990b).

To summarize, while intellectual and wisdom-related knowledge have in common some basic characteristics, such as the search for truth, they are the complete opposite in a variety of areas (Assmann, 1994), most notably the ones discussed above. These differences are highlighted in old age when intellectual knowledge is likely to decline whereas wisdom-related knowledge may still continue to grow depending on one's self-awareness, determination, constancy, and openness to experience, including the experience of one's own dying (Bianchi, 1994; Erikson, 1982; Erikson, Erikson, & Kivnick, 1986; Mason, 1974; McGann, 1996; Thomas, 1991).

CONCLUSION

Matilda Riley (1988; Riley & Riley, 1989) describes a "structural lag" in Western cultures that results from age segregation and a simultaneous increase in longevity. According to Riley, Western societies are characterized by a steady rise in the number of people who live far beyond retirement with their health and cognitive functioning intact but without any corresponding social roles and meaningful tasks. Although the retirement years are supposed to be a time to pursue one's own interests, free from major obligations to family and society, in reality many retirees are plagued by feelings of boredom and obsolescence (e.g., Schrank & Waring, 1989). Several solutions to this problem have been suggested, among them flexible and phased retirement that allows employees to gradually reduce their working hours and voluntary or paid postretirement part-time work (Riley & Riley, 1989; Schrank & Waring, 1989). While this strategy may be useful in many cases, it is not always feasible or even desirable, particularly for people in low-wage, labor-intensive, or repetitive jobs.

The alternative strategy that is proposed here is to adopt a life course model that resembles models of ancient Eastern traditions, such as Hinduism. In Hinduism, the last and fourth stage of life (after religious studies, marriage, and retirement) is exclusively reserved for

the pursuit of spiritual realization and wisdom (Thursby, 1992). In Western societies, by contrast, older people often feel obsolete. The intellectual knowledge they possess is no longer considered to be of value in a rapidly changing world (Glendenning, 1995; Jarvis, 1992). However, wisdom-related knowledge does not become outdated because its meaning transcends time as well as space. It is practical knowledge of how to live a good life (Kekes, 1983; Moody, 1986). In fact, the younger members of society have always sought the sage advice of wise elders, and wise counsel may become even more important in times of rapid societal changes. The reason why older people are generally not revered for their wisdom may be less because we do not value the quality of wisdom than because wisdom is relatively rare among the elderly (Baltes, 1993; Dittmann-Kohli & Baltes, 1990; Sternberg, 1990b).

Of course, wisdom-related knowledge is not only important in old age but valuable at all stages of the life course (Mason, 1974). However, the immediate tasks of childhood and adulthood require the acquisition of intellectual knowledge and make the development of wisdom difficult during the earlier years of life. Old age, by contrast, frees the individual from social and familial obligations and makes the acquisition of wisdom-related knowledge more important than that of intellectual knowledge. In fact, if we change our present view of the life course so that old age is not merely considered a time of social and physical decline but one of new opportunities and potentials, we realize that older individuals have the unique privilege of concentrating on the development of wisdom (Thornton, 1986).

Unfortunately, many of the programs that are currently offered under the heading of "continuing" education or "lifelong learning" primarily promote the acquisition of intellectual rather than wisdom-related knowledge, although there are some notable exceptions (Moody, 1986; Thornton, 1986). Moody (1986, pp. 142–145) makes several suggestions for successful older adult education programs. Two of his suggestions are especially relevant for the promotion of wisdom-related knowledge.

First, old age education should offer people the opportunity for autobiography work and life review to make sense of their lives and to come to terms with the past. According to Erikson (1963, 1982), the psychosocial task of the last stage of life is to solve the crises of integrity versus despair whose successful resolution will lead to wisdom. One possible way to achieve integrity of one's life and to avoid despair over missed opportunities and false life decisions in the past is through a guided life-review. Through this process, older people are likely to become more reflective, which will help them to overcome

their subjectivity and projections and reduce their self-centeredness. A reduced self-centeredness, in turn, will make it easier to accept the truth of one's present and past life and to develop sympathy and compassion for others. This combination of reflective, cognitive, and affective qualities can be considered one of the basic characterizations of wisdom (Ardelt, 1997; Clayton & Birren, 1980; Manheimer, 1992). Hence, a guided life-review in old age results not in an overemphasis of the past but in a more satisfying and rewarding present.

Second, the study of liberal arts and the humanities appears to be especially valuable during the later years of life which may explain the success of such programs as Elderhostel, the University of the Third Age, and the National Counsel on the Aging's "Discovery Through the Humanities" series (Shuldiner, 1992). Elderhostel, the University of the Third Age, and the Discovery series stimulate both the acquisition of intellectual and wisdom-related knowledge. Through the attendance of these programs older students gain new information and learn critical thinking but also report personal development, an increased appreciation of others, other cultures, history, and of the self, and an expansion of their self-concept (Brady, 1987; Brady & Fowler, 1988; Long & Zoller-Hodges, 1995; Pierce, 1993; Shuldiner, 1992). Overall, these programs help older people to place their own lives in the larger frame of the human culture.

REFERENCES

- Achenbaum, A. W., & Orwoll, L. (1991). Becoming wise: A psycho-gerontological interpretation of the Book of Job. *International Journal of Aging and Human Development*, 32, 21–39.
- Ardelt, M. (1997). Wisdom and life satisfaction in old age. *Journal of Gerontology: Psychological Sciences*, 52B, P15–P27.
- Arlin, P. K. (1990). Wisdom: The art of problem finding. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 230–243). Cambridge, U.K.: Cambridge University Press.
- Assmann, A. (1994). Wholesome knowledge: Concepts of wisdom in a historical and cross-cultural perspective. In D. L. Featherman, R. M. Lerner, & M. Perlmutter (Eds.), *Life-span development and behavior* (Vol. 12, pp. 187–224). Hillsdale, N.J.: Lawrence Erlbaum.
- Baltes, P. B. (1993). The aging mind: Potential and limits. *The Gerontologist*, 33, 580–594.
- Baltes, P. B., & Smith, J. (1990). Towards a psychology of wisdom and its ontogenesis. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 87–120). Cambridge, U.K.: Cambridge University Press.
- Baltes, P. B., & Staudinger, U. M. (1993). The search for a psychology of wisdom. *Current Directions in Psychological Science*, 2, 75–80.
- Baltes, P. B., Staudinger, U. M., Maercker, A., & Smith, J. (1995). People nominated as wise: A comparative study of wisdom-related knowledge. *Psychology and Aging*, 10, 155–166.

- Bianchi, E. C. (1994). *Elder wisdom. Crafting your own elderhood*. New York: Crossroad.
- Birren, J. E., & Fisher, L. M. (1990). The elements of wisdom: Overview and integration. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 371–332). Cambridge, U.K.: Cambridge University Press.
- Blanchard-Fields, F., & Norris, L. (1995). The development of wisdom. In M. A. Kimble, S. H. McFadden, J. W. Ellor, & J. J. Seeber (Eds.), *Aging, spirituality, and religion. A handbook* (pp. 102–118). Minneapolis, MN: Fortress Press.
- Brady, E. M. (1987). Patterns of learning among the active elderly: The case for Elderhostel. *Activities, Adaptation and Aging*, 9, 69–77.
- Brady, E. M., & Fowler, M. L. (1988). Participation motives and learning outcomes among older learners. *Educational Gerontology*, 14, 45–56.
- Cattell, R. B. (1971). *Abilities: Their structure, growth, and action*. Boston, MA: Houghton Mifflin.
- Chandler, M. J., & Holliday, S. (1990). Wisdom in a postapocalyptic age. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 121–141). Cambridge, U.K.: Cambridge University Press.
- Clayton, V. (1982). Wisdom and intelligence: The nature and function of knowledge in the later years. *International Journal of Aging and Development*, 15, 315–323.
- Clayton, V. P., & Birren, J. E. (1980). The Development of wisdom across the life-span: A reexamination of an ancient topic. In P. B. Baltes & O. G. Brim, Jr. (Eds.), *Life-span development and behavior* (Vol. 3, pp. 103–135). New York: Academic Press.
- Coles, R. (1995, September 22). The disparity between intellect and character. *The Chronicle of Higher Education*, 42, A68.
- Csikszentmihalyi, M., & Rathunde, K. (1990). The psychology of wisdom: An evolutionary interpretation. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 25–51). Cambridge, U.K.: Cambridge University Press.
- Dittmann-Kohli, F., & Baltes, P. B. (1990). Toward a neofunctionalist conception of adult intellectual development: Wisdom as a prototypical case of intellectual growth. In C. N. Alexander & E. J. Langer (Eds.), *Higher stages of human development. Perspectives on adult growth* (pp. 54–78). New York: Oxford University Press.
- Erikson, E. H. (1963). *Childhood and society*. New York: Norton.
- Erikson, E. H. (1982). *The life cycle completed. A review*. New York: Norton.
- Erikson, E. H., Erikson, J. M., & Kivnick, H. Q. (1986). *Vital involvement in old age: The experience of old age in our time*. New York: Norton.
- Gadamer, H.-G. (1960). *Wahrheit und methode. Grundzüge einer philosophischen hermeneutik*. Tübingen: J.C.B. Mohr.
- Glendenning, F. (1995). Education for older adults: Lifelong learning, empowerment, and social change. In J. F. Nussbaum & J. Coupland (Eds.), *The handbook of communication and aging research* (pp. 467–498). Mahwah, NJ: Lawrence Erlbaum Associates.
- Hall, D. T., & Mirvis, P. H. (1995). The new career contract: Developing the whole person at midlife and beyond. *Journal of Vocational Behavior*, 47, 269–298.
- Hanna, F. J., & Ottens, A. J. (1995). The role of wisdom in psychotherapy. *Journal of Psychotherapy Integration*, 5, 195–219.
- Holliday, S. G., & Chandler, M. J. (1986). *Wisdom: Explorations in adult competence*. New York: Karger.
- Horn, J. L. (1970). Organization of data on life-span development of human abilities. In L. R. Goulet & P. B. Baltes (Eds.), *Life-span developmental psychology: Research and theory* (pp. 423–466). New York: Academic Press.
- Jarratt, J., & Coates, J. F. (1995). Employee development and job creation: Trends, problems, opportunities. In M. London (Ed.), *Employees, careers, and job creation*:

- Developing growth-oriented human resource strategies and programs* (pp. 1–25). San Francisco, CA: Jossey-Bass.
- Jarvis, P. (1992). *Paradoxes of learning: On becoming an individual in society*. San Francisco, CA: Jossey-Bass.
- Kekes, J. (1983). Wisdom. *American Philosophical Quarterly*, 20, 277–286.
- Kramer, D. A. (1990). Conceptualizing wisdom: The primacy of affect-cognition relations. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 279–313). Cambridge, U.K.: Cambridge University Press.
- Kuhn, T. S. (1970). *The structure of scientific revolutions* (2nd enlarged ed.). Chicago: University of Chicago Press.
- Labouvie-Vief, G. (1980). Adaptive dimension of adult cognition. In N. Datan and N. Lohmann (Eds.), *Transitions of aging*. New York: Academic Press.
- Labouvie-Vief, G. (1990). Wisdom as integrated thought: Historical and developmental perspectives. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 52–83). Cambridge, U.K.: Cambridge University Press.
- Levenson, M. R., & Crumpler, C. A. (1996). Three models of adult development. *Human Development*, 39, 135–149.
- Long, H. B., & Zoller-Hodges, D. (1995). Outcomes of Elderhostel participation. *Educational Gerontology*, 21, 113–127.
- MacKay, D. G., & Burke, D. M. (1990). Cognition and aging: A theory of new learning and the use of old connections. In T. M. Hess (Ed.), *Aging and cognition: Knowledge organization and utilization* (pp. 213–263). Amsterdam: Elsevier Science Publishers.
- Manheimer, R. J. (1992). Wisdom and method: Philosophical contributions to gerontology. In T. R. Cole, D. D. Van Tassel, & R. Kastenbaum (Eds.), *Handbook of the humanities and aging* (pp. 426–440). New York: Springer.
- Mason, W. D. (1974). Aging and lifelong learning. *Journal of Research and Development in Education*, 7, 68–76.
- McCarthy, E. D. (1996). *Knowledge as culture*. New York: Routledge.
- McGann, P. J. (1996). Morris S. Schwartz (1916–1995). *Newsletter of the Social Psychological Section of the American Sociological Association, Summer*, 4.
- Meacham, J. A. (1990). The loss of wisdom. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 181–211). Cambridge, U.K.: Cambridge University Press.
- Moody, H. R. (1986). Late life learning in the information society. In D. A. Peterson, J. E. Thornton, & J. E. Birren (Eds.), *Education and aging* (pp. 122–148). Englewood Cliffs, N.J.: Prentice-Hall.
- O'Brien, S. J. (1992). The Educational affinities of old age and youth. *International Journal of Lifelong Education*, 11, 115–124.
- Orwoll, L., & Achenbaum, W. A. (1993). Gender and the development of wisdom. *Human Development*, 36, 274–296.
- Piaget, J. (1970). Piaget's Theory. In P. H. Mussen (Ed.), *Carmichael's Manual of Child Psychology* (3rd ed., Vol. I, pp. 703–732). New York: John Wiley & Sons.
- Pierce, D. (1993). "Edu-tourism" and immersion in American Indian culture: American Indian Elderhostel programs in the Southwest. *Winds of Change*, 8, 62–65.
- Poon, L. W. (1985). Differences in human memory with aging: Nature, causes, and clinical implications. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (2nd ed., pp. 427–462). New York: Von Nostrand Reinhold.
- Riley, M. W. (1988). On the significance of age in sociology. In M. W. Riley, B. J. Huber, & B. B. Hess (Eds.), *Social change and the life course* (Vol. 1, *Social Structures and Human Lives*, pp. 24–45). Newbury Park, CA: Sage.
- Riley, M. W., & Riley, J. W. (1989). The lives of older people and changing social roles. *The Annals. The Quality of Aging: Strategies for Intervention*, 503, 14–28.

- Schrank, H. T., & Waring, J. M. (1989). Older workers: Ambivalence and interventions. *The Annals. The Quality of Aging: Strategies for Intervention*, 503, 113–126.
- Shuldiner, D. (1992). The Older Student of Humanities: The Seeker and the Source. In T. R. Cole, D. D. Van Tassel, & R. Kastenbaum (Eds.), *Handbook of the humanities and aging* (pp. 441–457). New York: Springer.
- Smith, A. D. (1996). Memory. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (4th ed.). San Diego, CA: Academic Press.
- Smith, J., & Baltes, P. B. (1990). Wisdom-related knowledge: Age/cohort differences in response to life-planning problems. *Developmental Psychology*, 26, 494–505.
- Staudinger, U. M., Smith, J., & Baltes, P. B. (1992). Wisdom-related knowledge in a life review task: Age differences and the role of professional specialization. *Psychology and Aging*, 7, 271–281.
- Sternberg, R. J. (1990a). Wisdom and its relations to intelligence and creativity. In R. J. Sternberg (Ed.), *Wisdom: Its nature, origins, and development* (pp. 142–159). Cambridge, U.K.: Cambridge University Press.
- Sternberg, R. J. (Ed.). (1990b). *Wisdom: Its nature, origins, and development*. Cambridge, U.K.: Cambridge University Press.
- Stine, E. A. L., & Wingfield, A. (1990). The assessment of qualitative age differences in discourse processing. In T. M. Hess (Ed.), *Aging and cognition: Knowledge organization and utilization* (pp. 33–92). Amsterdam: Elsevier Science Publishers.
- Strijbos, S. (1995). How can systems thinking help us in bridging the gap between science and wisdom. *Systems Practice*, 8, 361–376.
- Taranto, M. A. (1989). Facts of wisdom: A theoretical synthesis. *International Journal of Aging and Human Development*, 29, 1–21.
- Taranto, M. A. (1992). *Formative memories in search of wisdom*. Symposium Presentation at the 32nd Annual Meeting of the New England Psychological Association, November 7, 1997, Fairfield University, Fairfield, Conn.
- Thomas, L. E. (1991). Dialogues with three religious renunciates and reflections on wisdom and maturity. *International Journal of Aging and Human Development*, 32, 211–227.
- Thornton, J. E. (1986). Life span learning and education. A conceptual progression in the life course. In D. A. Peterson, J. E. Thornton, & J. E. Birren (Eds.), *Education and aging* (pp. 62–92). Englewood Cliffs, N.J.: Prentice-Hall.
- Thursby, G. R. (1992). Islamic, Hindu, and Buddhist conceptions of aging. In T. R. Cole, D. D. Van Tassel, & R. Kastenbaum (Eds.), *Handbook of the humanities and aging* (pp. 175–196). New York: Springer.
- Weber, M. (1973). *Soziologie. Universalgeschichtliche Analysen. Politik* (5th revised ed.). Stuttgart: Alfred Kröner Verlag.
- Willis, S. L. (1985). Towards an educational psychology of the older adult learner: Intellectual and cognitive bases. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging* (2nd ed., pp. 818–847). New York: Von Nostrand Reinhold.