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Watson, John B.

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John Broadus Watson (1878–1958) was an American psychologist whose work greatly influenced the behaviorism movement. Behaviorism is the field of psychological study that looks at what we do rather than how we think or feel. This was far removed from the Freudian school of thought that examined the unconscious mind and that favored introspection. John B. Watson's work influenced B. F. Skinner's research on operant conditioning and also had a major influence on behavior therapy.

Early in his career, John B. Watson studied behavior using animals. He progressed to studying human behavior and began to research emotional reactions. The Little Albert experiment, which could be called one of his most famous experiments, involved his ideas that people have three emotional reactions, those of love, rage and fear. He began his Little Albert Experiment on children at Johns Hopkins University. This involved specifically one little boy called Albert. Watson used classical conditioning to create fear in the little boy by showing Albert a white rat while simultaneously creating a loud, sudden noise. This research procedure created fear in Albert by making him associate the white rat with the loud, scary noise. Watson progressed from the white rat to larger and seemingly scarier animals with the children. Archival film footage of John B. Watson himself dressed in a Santa mask with a white flowing beard shows the viewer how scared the child was as he made the connection between the fur of the animal and the beard on the mask. These findings indicate that classical conditioning had taught people to transfer the fear from the loud noise that was associated with fur to other furry or hairy things. The theory indicated that people generalize their fear

and is indicative of how people react to their environment through conditioned responses.

   Although John B. Watson was the president of the American Psychological Association in 1915, he did not have a lengthy career in academia. He left the field by 1920 and entered the world of advertising where he became a vice president in a large advertising firm. Although he was in a different field, he continued to publish some psychological works.

SEE ALSO: ▶ Entrepreneurial behavior   ▶ Positive organizational behavior

Well-Being

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Introduction

The scientific study of well-being has dramatically expanded in recent years. Although as early as 1948 the World Health Organization stated that mental health is more than the absence of mental illness, it was not until recently that psychologists began to systematically study the causes, correlates, and consequences of flourishing mental health and states of well-being. Hedonistic and eudaimonic traditions in well-being research have evolved from different philosophical and theoretical roots, yet modern day hedonistic (subjective / emotional) and eudaimonic (psychological and social) aspects of well-being appear to be closely related components of psychological functioning. Although these models have previously been presented as competing alternatives, recent theoretical and empirical work has focused on how these three theories and components of well-being complement one another and can be integrated into comprehensive models of flourishing mental health.

Hedonic Well-Being

To date, the hedonic model of well-being has been the most extensively studied. Hedonic well-being is also commonly referred to as subjective or emotional well-being or happiness. This research tradition was pioneered by Ed Diener, whose seminal review paper in 1984 on subjective well-being proposed a model of well-being focusing on an individual's cognitive and affective evaluations of his or her life. More specifically, Diener and his colleagues have defined hedonic (or subjective) well-being as the frequent experience of pleasant emotions and moods, the infrequent experience of negative emotions and moods, and high

levels of self-reported life satisfaction. This model of well-being is an extension of the philosophy of hedonism, which identified the pursuit of pleasure and avoidance of pain as the primary goals in life, and is predicated on the belief that individuals are the best judges of their happiness or well-being. Decades of research provide support for hedonic well-being as a reliable and valid conceptualization of well-being.

Eudaimonic Well-Being

The eudaimonic tradition of well-being focuses on the aspects of human functioning that promote and reflect the pursuit of meaningful life goals. Exemplifying this tradition, Carol Ryff and colleagues at the University of Wisconsin have developed a model of eudaimonic well-being that is intended to provide a holistic and theoretically grounded model of positive functioning. Specifically, Ryff and colleagues have identified six related but distinct factors that are proposed to encompass the eudaimonic idea: autonomy; environmental mastery; personal growth; positive relations with others; purpose in life; and self-acceptance. Individuals high in these aspects of well-being are independent and primarily driven by their own standards (autonomy), able to effectively identify and pursue external opportunities (environmental mastery), continually looking for opportunities to grow and develop (personal growth), engaged in mutually satisfying, warm, and trusting relationships (positive relations with others), able to identify and pursue meaningful goals (purpose in life), and have a positive attitude about both their personality and self (self-acceptance). This model is an extension of the Aristotelian philosophical tradition, which identified the pursuit of one's "daemon," or true self, as the ultimate purpose in life. Recent factor analytic research supports Ryff's model of eudaimonic well-being and the proposed theoretical distinctions between the hedonic and eudaimonic aspects of well-being.

Sociologist Corey Keyes of Emory University has argued that the failure to consider the importance of an individual's social condition and relationship reflects an intrapersonal bias in psychological research and has developed a model of social well-being that draws upon classical sociology. Whereas Ryff's model of psychological well-being focuses on primarily private phenomena that reflect the challenges encountered by adults in their private lives, Keyes' model of social well-being focuses on primarily public phenomena that reflect whether individuals are flourishing in their social lives. Specifically, social well-being consists of five factors that represent the extent to which individuals are overcoming social challenges and are functioning well in their social world. The five factors include social acceptance, social actualization, social coherence, social contribution and social integration. Individuals high in these aspects of well-being are comfortable with and have favorable views of others (social acceptance), believe that other individuals and the institutions of society are helping them reach their full potential (social actualization), perceive order and meaning in their relationships and society

(social coherence), believe themselves to be a valuable and appreciated member of society (social contribution), and feel as if they are united with and supported by other members of their community (social integration). Social well-being is therefore an extension of the eudaimonic tradition of well-being from the intrapersonal focus of Ryff's model to the interpersonal realm. Recent factor analytic research using nationally representative samples of American adults supported Keyes' theory of well-being, as well as the distinctions between the components of social well-being and the components of hedonic and eudaimonic well-being.

Integrated Models of Well-Being

Researchers studying well-being have recently begun to explore the potential for integrating the theories and components of hedonic, psychological, and social well-being into a comprehensive model of flourishing mental health. The potential for integrating these three models was first proposed and empirically examined by Corey Keyes. More recently, we have used confirmatory factor analysis to examine the latent structure of well-being in large samples of American adults. This empirical work provided support for the theoretical models of hedonic, psychological, and social well-being as distinct latent constructs, and demonstrated that these three models and the fourteen factors of well-being could be successfully integrated into a hierarchical structure of well-being. This integrated model of well-being maintains the theoretical distinctions of well-being, while simultaneously demonstrating that these models and components are strongly related to one another.

Categorical Models of Well-Being

In addition to exploring the various dimensions of well-being, researchers have recently begun to examine the utility of categorical models of well-being that distinguish between different levels of positive mental health. Two categorical models of well-being have been developed in recent years and found to have preliminary empirical support. The first was developed by Barbara Fredrickson and colleagues and focuses on the ratio of positive to negative emotions that individuals experience. Fredrickson's research indicates that a ratio of more than three positive emotions for each negative emotion is indicative of flourishing mental health, and therefore that these affect ratios can be used to diagnose levels of well-being. The second categorical model of well-being was developed by Corey Keyes. This model distinguishes between flourishing, moderate, and languishing levels of mental health based upon levels of the fourteen factors of well-being that comprise the hedonic, eudaimonic, and social theories of well-being. Although more research examining both of these models is needed, these theories provide promising methods to distinguish between the presence or absence of mental health

in a manner similar to how the DSM-IV distinguishes between the presence or absence of mental illness.

Predicting Well-Being

One question that is often raised about well-being is to what extent do higher levels of well-being simply reflect life circumstances such as age or income. Surprisingly, these factors appear to determine only a modest amount of individuals' levels of well-being. A recent review paper by Lyubomirsky and colleagues indicated that demographic variables and life circumstances determine roughly 10 percent of the variance in individual levels of hedonic well-being. This review paper also reviewed research from twin studies, and concluded that roughly half of the variance in hedonic well-being can be explained by genetic factors. Fortunately, the remaining 40 percent of the variance in individuals' levels of well-being appears to be dependent on intentional activities, and is therefore subject to change. Psychological factors that appear to be particularly important in promoting adaptive intentional activities include hope, curiosity, optimism, and gratitude.

Benefits of Well-Being

In addition to examining important predictors of well-being, researchers have recently begun to explore the benefits of high levels of well-being. In particular, the Midlife Development in the United States (MIDUS) studies have provided an unprecedented amount of information about the psychological and social functioning of American adults. The results of the first MIDUS survey demonstrated that Americans who report having flourishing mental health miss fewer days of work, are less likely to suffer from a diagnosable mental illness, report more intimate relationships, have fewer chronic physical diseases, have less trouble sleeping, and generally have better psychosocial functioning than individuals who report moderate or low levels of mental health. A particularly noteworthy finding is that well-being and mental illness appear to be independent risk factors for the development of cardiovascular disease. Recent review papers have also demonstrated that various aspects of well-being have robust effects on important life outcomes. The most comprehensive of these reviews was conducted by Sonja Lyubomirsky, Laura King, and Ed Diener. This review demonstrated across a variety of important life domains (e.g., work, family, friendships, and health) that individuals who report higher levels of happiness or well-being report improved outcomes in each of the life domains. Together the MIDUS data and the Lyubomirsky et al., review provide promising evidence that, beyond feeling good, high levels of well-being promote positive outcomes in a variety of domains.

Future Directions

Although the scientific study of well-being has made great progress in recent years, there are many areas in which additional research is needed. First, additional research is needed to determine the validity of the hedonic, eudaimonic, social, and integrated models of well-being. These models have been supported by promising empirical work to date, but it is likely that the future research will lead to additional theoretical refinements that could help us to better articulate the latent nature of well-being. Second, these models of well-being need to be studied in more diverse samples to clarify how ethnicity, gender, age, socioeconomic status and other demographic variables influence the various aspects of well-being. Finally, perhaps the most important area of future research will be longitudinal research that could help us better understand if and when lasting gains in well-being can be achieved. Historically, well-being researchers have often concluded that individuals are stuck on a "hedonic treadmill" that inevitably causes us to revert to a primarily genetically determined level of well-being. More recently, Lyubomirsky and colleagues have challenged this theory and suggested that as much as 40 percent of individual levels of well-being can be determined by intentional activities. Unfortunately, existing empirical research has not adequately examined this hypothesis and the potential for change. Future research examining individual trajectories and pathways to well-being could therefore help us to better understand how to promote and protect well-being.

SEE ALSO: ▶ Happiness   ▶ Global well-being   ▶ Carol Ryff

Well-Being Therapy

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Well-being therapy (WBT) is a new psychotherapeutic strategy with the aim of enhancing psychological well-being. It was originally applied and validated in the residual phase of mood and anxiety disorders but its efficacy has also been extended to the prevention of relapse in recurrent depression; to the loss of anti-depressant efficacy during maintenance pharmacotherapy in recurrent depression; and recently to the treatment of posttraumatic stress disorder and of generalized anxiety disorder. Well-being therapy is based on Ryff's multi-dimensional model of psychological well-being, encompassing six dimensions: autonomy; personal growth; environmental mastery; purpose in life; positive relations; and self-acceptance. This model was selected on the basis of its easy applicability to clinical populations; in fact it can be used to describe specific

impairments of patients with affective disorders and calls for behavioral and psychological modifications in order to reach optimal human functioning. The goal of WBT is to improve the patients' levels of psychological well-being according to these six dimensions.

Structure of Well-Being Therapy

Well-being therapy is a short-term psychotherapeutic strategy, that extends over 8 sessions, which may take place every week or every other week. The duration of each session is usually in the range of 30 to 50 minutes. It is a technique which emphasizes self-observation, with the use of a structured diary, and interaction between patient and therapist. In the initial phase (sessions 1 to 2) the therapist asks the patient to record in the diary the circumstances surrounding the episodes of well-being, rated on a 0–100 scale, with 0 being absence of well-being and 100 the most intense well-being that could be experienced. Then the patient is encouraged to identify thoughts and beliefs leading to premature interruption of well-being, and is instructed to reinterpret those thoughts viewed from an observer's standpoint (*cognitive restructuring*). The technique is aimed at changing beliefs and attitudes detrimental to well-being, stimulating personal growth, and reinforcing well-being-promoting behavior. In the final sessions, the therapist can use these reinterpretations to increase a sense of well being in any of the 6 areas which might be impaired. WBT includes:

- *cognitive restructuring*: change from negative to positive any thoughts which interrupt periods of feeling well;
- scheduling of *pleasant activities*: negotiate with patients enjoyable activities they will carry out each day, e.g., go for a walk, listen to music;
- *graded tasks*: e.g., to improve positive relations, encourage a patient to phone a friend, invite that friend out for dinner, spend further time with that friend, etc.;
- *assertiveness training*;
- *problem solving* to improve patients' autonomy and environmental mastery, e.g., help patient deal with everyday activities; ask for a promotion at work etc.; and
- increasing optimism and positive thinking.

WBT shares techniques and therapeutic ingredients similar to those of standard cognitive-behavioral therapy. It thus may be conceptualized as a specific strategy within the broad spectrum of self-therapies. However, the main point of distinction of WBT is the focus: It is not the abatement of distress (as in cognitive-behavioral therapy), but the enhancement of psychological well-being and the promotion of optimal human functioning.

Further Applications of WBT

WBT could play an important role in *preventive interventions*, for example with children or adolescents. Improving their levels of psychological well-being could be crucial in the development of their personality and could provide protection against future adversity and against health-risk behavior (e.g., smoking, alcohol or drug abuse, etc.). In a recent study WBT has been modified into a psychoeducational program performed in school with students. The results of this intervention showed that WBT was effective in improving psychological well-being and in decreasing distress.

WBT could play an important role in *psychosomatic medicine*, where increasing psychological well-being may counteract the feelings of demoralization and loss which are part of chronic disease and thus improve the individual coping.

WBT could also have an important role for the treatment of severe psychological disturbances such as obsessive-compulsive disorder (OCD) and posttraumatic stress disorder (PTSD). Clinical observation suggests that anxiety-provoking thoughts (typical of OCD) may often be preceded by feelings of well-being, suggesting that these patients may have a low threshold for well-being-related anxiety. Case reports show the potential of WBT in the treatment of OCD. Another case report documents the suitability of WBT in the treatment of PTSD, without using debriefing or other ways of dealing with the central traumatic event.

Further lines of research in the next few years could disclose new applications of WBT under the positive psychology umbrella. Engendering the positive and not just alleviating the negative may lead to more enduring results in treatment of mood and anxiety disorders.

SEE ALSO: ▶ Positive psychotherapy ▶ Positive therapy
▶ Quality of life therapy ▶ Well-being

Werner, Emmy

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Emmy E. Werner (1929–) is a developmental psychologist whose research has focused on *resilience*, which she defined as a person's ability to recover from a traumatic event(s) and go on to live a happy, healthy life. She is currently professor emeritus at the University of California at Davis. She received her PhD in 1955 from the University of Nebraska. Dr Werner's groundbreaking longitudinal study examined the lives of Hawaiians born on the island of Kauai in 1955. The research revealed that people can bounce back or be resilient if they had the following components: a healthy body; emotional support; psychological stability; and intelligence. In

this longitudinal study Dr Werner followed the participants, who were the entire birth cohort, all of the people born on this island in one year. Her study was very important in that it was one of the first longitudinal studies that examined such a large group of people. Her most significant finding was that many of the children she followed from birth through to adulthood exhibited signs of resilience despite having had significant challenges throughout their life. Dr Werner identified a number of protective factors in the lives of these people who exhibited resilience which helped them cope when faced with stressful events and helped them balance the many risk factors they faced. These participants exhibited signs of resilience and the use of protective factors at critical periods in their life and throughout their development.

Dr Werner has won numerous awards for her work including the Recipient of the Society of Human Development Award for Distinguished Career Contributions to the Scientific Study of Life Span Development in 2005 along with being the Recipient of Distinguished Scientific Contributions to Child Development Award from the Society of Research in Child Development in 1999. In addition Dr Werner has won awards from both Harvard University and Radcliffe College as they recognized the importance of her landmark study of the children on Kauai. Dr Werner's work today includes the study of risk and resilience across the lifespan and studying children in historical context.

SEE ALSO: ▶ Resilience ▶ Social support

Wisdom

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Different approaches have been taking to understanding wisdom. Wisdom has been called by different names, including, in addition to wisdom, "good work," and working for the "common good." There are three major approaches to understanding the nature of wisdom: philosophical, implicit-theoretical, and explicit-theoretical approaches. They largely have in common three attributes. First, they regard wisdom as a melding of cognitive, affective, and motivational aspects of the individual's functioning. Second, they emphasize the use of skills for some kind of positive common good. Third, they view wisdom as occurring in thought and deed, not only in thought. Wisdom is at least as much about what one does as it is about what one thinks or feels. Wisdom is a critical construct in positive psychology because it is, in the end, the use of one's repertoire of skills and dispositions for a positive common good.

Philosophical Approaches

Philosophical approaches have been reviewed by Robinson, who noted that the study of wisdom has a history that long predates psychological study, with the Platonic dialogues offering the first intensive Western analysis of the concept of wisdom. Robinson pointed 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 two kinds of wisdom: *phronesis*, the kind of practical wisdom mentioned above, and *theoretikes*, or theoretical knowledge devoted to truth. Robinson noted 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 approaches. For 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. Implicit theories have been comprehensively reviewed by Bluck and Glück.

Holliday and Chandler 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, 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 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 how characteristic were 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.

Yang 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 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 compared implicit theories of wisdom in 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!

Montgomery, Barber, and McKee 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 found that narratives of wise people emphasized their ability to solve problems through the use of novel and efficacious strategies.

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 scholars define wisdom in ways that suggest it is a property of increasing maturity. Birren and Fisher, for example, defined wisdom as "the integration of the affective, motivational, and cognitive aspects of human abilities in response to life's tasks and problems" (1990, p. 326). This definition reflects not only psychological approaches to wisdom, but historical approaches as well. 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). In many views, some degree of age is, at best, a necessary but not sufficient condition for the development of wisdom.

Taranto 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, who defined wisdom as seeing through illusion. Brugman 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 has proposed a somewhat more complex view. She has defined wisdom as involving three components: the cognitive ability to see truth or reality as it actually is; reflectivity, in becoming aware of and transcending one's subjectivity and projections; and 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 most extensive program of research has been that conducted by the late Paul Baltes and his colleagues. For example, Baltes and Smith gave adult participants life-management problems, such as "A fourteen-year-old girls 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 or of wisdom as good judgment and advice in important but uncertain matters of life. Wisdom is reflected in these five components: *rich factual knowledge* (general and specific knowledge about the conditions of life and its variations); *rich procedural knowledge* (general and specific knowledge about strategies of judgment and advice concerning matters of life); *lifespan contextualism* (knowledge about the contexts of life and their temporal [developmental] relationships); *relativism* (knowledge about differences in values, goals, and priorities); and *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 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 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 showed that human-services professionals outperformed a control group on wisdom-related tasks. In a further set of studies, Staudinger and Baltes 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.

Sternberg also proposed an explicit theory, suggesting that the development of wisdom can be traced to six antecedent components: 1) knowledge, including an understanding of its presuppositions and meaning as well as its limitations; 2) processes, including an understanding of what problems should be solved

automatically and what problems should not be so solved; 3) a judicial thinking style, characterized by the desire to judge and evaluate things in an in-depth way; 4) personality, including tolerance of ambiguity and of the role of obstacles in life; 5) motivation, especially the motivation to understand what is known and what it means; and 6) environmental context, involving an appreciation of the contextual factors in the environment that lead to various kinds of thoughts and actions.

Whereas that theory specified a set of *antecedents* of wisdom, the balance theory proposed by Sternberg specified 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 intrapersonal, interpersonal, and extrapersonal interests, over the short and long terms, in order to achieve a balance among adaptation to existing environments, shaping of existing environments, and selection of new environments.

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: *egocentrism* – thinking that the whole world revolves around them; *omniscience* – thinking they know everything; *omnipotence* – thinking they can do whatever they want; *invulnerability* – thinking they can get away with anything; and *unrealistic optimism*.

Some theorists have viewed wisdom in terms of post-formal-operational thinking, thereby viewing wisdom as extending beyond the Piagetian stages of intelligence. 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. Consider a very brief review of some specific dialectical approaches.

Kitchener and Brenner suggested that wisdom requires a synthesis of knowledge from opposing points of view. Similarly, Labouvie-Vief has emphasized the importance of a smooth and balanced dialogue between logical forms of processing and more subjective forms of processing. Pascual-Leone 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 have emphasized the importance to wisdom of an integration of cognition with affect. Kramer has suggested the importance of the integration of relativistic and dialectical modes of thinking, affect, and reflection. And Birren and Fisher, putting together a number of views of wisdom, have suggested as well the importance of the integration of cognitive, motivational, 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 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 have also emphasized the importance of knowing the limitations of one's own knowledge. Arlin 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 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: that of a cognitive process, or a particular way of obtaining and processing information; that of a virtue, or socially valued pattern of behavior; and that of a good, or a personally desirable state or condition.

Future research is needed especially on how we can teach children to think wisely and how theories of wisdom can be applied in important everyday life decisions, at the personal as well as the professional level. Many leaders are knowledgeable and even intelligent, but not wise. Schools might take greater responsibility for

ensuring the leaders they prepare will be in a position to make decisions that reflect not only immediate concerns, but the long-term common good.

SEE ALSO: ▶ Character strengths (VIA)   ▶ Civic responsibility and virtues   ▶ Moral judgment   ▶ Strengths perspective (positive psychology)   ▶ Virtues

Reference

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Wrzesniewski, Amy

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Amy Wrzesniewski is a great exemplar of positive psychology. Amy was part of the first generation in her family to get a college degree. She is now an associate professor at Yale University and is one of the leading figures in the study of work from a positive psychology perspective. She has contributed to our understanding of how work, the major waking activity of human beings, can be a meaningful and positive experience.

Amy began psychological research with Paul Rozin in her sophomore year of college. This led to a three-year collaboration that generated five different published papers, on four different topics. Amy showed an incredible aptitude to study productive topics, and to mobilize the world to assist in her research. Her crowning achievement as an undergraduate was her honors thesis, on a topic that she formulated to reflect her already deep interest in the nature of work. The thesis was sponsored by three faculty members (Clark McCauley, Barry Schwartz, and Rozin), and was a major advance in understanding work: It demonstrated that individuals' conceptions of their own work (their work orientations) could be easily classified into one of jobs, careers, and callings. It also showed that even in the same jobs, done within the same organizations, work could be framed as a job, career, or calling by different individuals. This important finding became the launching pad for what is likely to become a distinguished career in the study of work.

Her dissertation work, conducted at the University of Michigan in Organizational Psychology, tested how individuals' work orientations affect how unemployed workers search for jobs and how these search behaviors affect their rates of reemployment. Her findings demonstrated that work orientation shapes both the reemployment goals and outcomes found during a period of unemployment

in different ways; while job-oriented job seekers look to replace an income stream, the career-oriented aim to advance in their standing in the new job, while the calling-oriented seek to find meaningful work above all else. Her dissertation is part of a high-impact stream of work on how individuals construct meaning at work. Her unique focus has been on individuals as active crafters of their jobs and the results that follow. She has studied hospital cleaners and how they craft their work as a calling and, in the process, provide competent caring for patients and patients' families. Amy has also helped researchers understand the interpersonal bases of work meaning. She has developed a model of work meaning that is based on a process of interpersonal sensemaking. With this work she is effectively tying together ideas of interactional dynamics, sensemaking, meaning and identity. She is bringing this work to life in several empirical studies of new job incumbents, telecommuters and hospital cleaners. Amy has been a major bridge-builder between positive psychology and the more organizationally-focused positive organizational scholarship. As a pioneer and bridge-builder, her work will have lasting impact on how positive psychology builds new insights into the difference that work makes in peoples' lives.

SEE ALSO: ▶ Calling ▶ Career development ▶ Employee engagement ▶ Job satisfaction ▶ Positive organizational behavior ▶ Positive organizational scholarship