haven't done. However, when working and studying they may well put their more appropriate future TP hat on and work more productively.

Why is such flexibility so important? Are people with a balanced TP likely to be happier than the rest of us? Functioning within past-positive and present-hedonistic modes enhances your chances of developing happy personal relationships, which is a key factor in enhancing one's well-being, according to the findings of research with exceptionally happy people (Diener & Seligman, in press). On the other hand, a future TP is correlated with higher socio-economic status, which is moderately associated with well-being (Diener, 2000).

Despite being mainly conceived at a theoretical level, a balanced TP offers considerable potential for practical interventions in clinical and occupational psychology. The focus of time management techniques can shift from advocating generalised time-management strategies, to developing interventions based on an understanding of workers' TP profiles and TP cognitive biases that unconsciously dominate their lives. Such techniques can be useful in the prevention of occupational stress or for solving the dilemmas of work–leisure balance.

Research is currently in progress to establish a relationship between TP and the way people actually use their time, looking at whether a balanced TP is associated with a more optimal time use, higher well-being and with a higher level of satisfaction with one's own time use (Boniwell, 2002). Laughing when it's time to laugh, working when it's time to work, playing when it's time to play, listening to grandma's old stories, connecting with your friends, valuing desire and passion, and taking fuller control of your life; these should be some of the benefits of learning to achieve a balanced time perspective. They are possible keys to unlocking personal happiness and finding more meaning in life despite the relentless, indifferent movement of life's time clock. The value of a balanced time perspective is that it suggests new approaches to psychological interventions while offering yet another answer to the question 'What is a good life?'

■ Ilona Boniwell is at the Open
University. E-mail: ilona@ntlworld.com.
■ Professor Philip G. Zimbardo is at
Stanford University, California. E-mail:
zim@apa.org.

Wisdom





HE search for human excellence has been a long journey. One of the main guideposts has been the concept of wisdom (e.g. Assmann, 1994; Kekes, 1995; Lehrer *et al.*, 1996). At the core of this concept is the notion of the perfect, quasi-utopian integration of knowledge and character, of mind and virtue.

At the Berlin Max Planck Institute for Human Development, the first author and colleagues have studied ways of defining

'Wisdom-related knowledge deals with matters of utmost personal and social significance'

wisdom as a psychological construct (e.g. Baltes *et al.*, 1984; Baltes *et al.*, 2002; Baltes & Smith, 1990; Baltes & Staudinger, 2000). In this article we will discuss this conceptualisation of wisdom and summarise major findings from our research on the development, antecedents, correlates and consequences of wisdom.

Because wisdom is considered an ideal endpoint of human development, the original impetus for psychological work on this concept evolved in the context of lifespan psychology and the study of ageing (e.g. Clayton & Birren, 1980; Sternberg, 1990). The search for positive human functioning has been a hallmark in the field of developmental psychology since its inception (see Lerner, 2002). Two examples: Piaget, with his characterisation of intelligence, attempted to capture optimal cognitive development; in his theory on personality development Erikson believed that concepts such as generativity and wisdom define progress in psychological maturity during adulthood.

In our psychological conceptualisation of wisdom we have proceeded from philosophical and cultural-anthropological PAUL B. BALTES and UTE

KUNZMANN believe that wisdom is
the peak of human excellence.

conceptions of wisdom and placed these into the context of psychological theory and methods. On the most general level we have defined wisdom as expert knowledge and judgement about important, difficult and uncertain questions associated with the meaning and conduct of life. Wisdom-related knowledge deals with matters of utmost personal and social significance.

To test for wisdom we present people with difficult hypothetical situations. For example, imagine that someone gets a call from a good friend who says that he or she cannot go on anymore and wants to commit suicide. Or a 15-year-old girl wants to get married right away. What could one consider and do? These situations differ from tasks that have been developed in intelligence research in that they are poorly defined and characterised by multiple solutions. High-quality responses to these situations therefore require exceptional intellectual and social-emotional abilities.

We use a standardised procedure to collect think-aloud responses. A response to the problem of the 15-year-old girl might be: 'Well, on the surface, this seems like an easy problem. On average, marriage for 15-year-old girls is not a good thing. On the other hand, thinking about getting married is not the same as actually doing it. I guess many girls think about it without getting married in the end... There are situations where the average case doesn't fit. Perhaps special life circumstances are involved. The girl may have a terminal illness. She may not be from this country or perhaps she lives in another culture...'

Trained raters evaluate responses such as these by using five criteria that we specify as defining wisdom-related knowledge: (a) *factual* knowledge about life and lifespan development, (b) *procedural* knowledge about strategies of life development, (c) knowledge about the *context* of lives and their dynamics, (d) knowledge about *value relativism* and

March 2003 The Psychologist Vol 16 No 3

tolerance, and (e) knowledge indicative of the awareness and management of uncertainty. The assessment of wisdom-related knowledge on the basis of these criteria exhibits satisfactory reliability and validity.

Our research programme involved many variations including inquiry into the effects of age, gender and professional specialisation on wisdom-related knowledge. We also studied adults (public figures) who were nominated by an expert panel as being wise - independently of our own definition of wisdom. The nominees scored higher on our wisdom tasks than comparison groups of similarly aged and educated adults. This finding was important as it demonstrated that our conception of wisdom had ecological validity. Finally, in another line of research, we explored ways of optimising adults' wisdom-related performance by teaching them certain mnemonic techniques or by providing the opportunity for social discourse and the use of 'inner voices' (Staudinger & Baltes, 1996). What were our major findings?

Findings

First, and true to the spirit of wisdom as representing excellence of utopian quality, high levels of wisdom-related knowledge are rare. Many adults are on the way towards wisdom, but very few people approach a high level of wisdom-related knowledge as we measure it.

Second, the period of late adolescence and early adulthood is the primary age window for wisdom-related knowledge to emerge. In the older-than-young-adulthood samples we observed no further changes of the average level of wisdom beyond the level achieved in early adulthood. Furthermore, our findings suggest that the ages of life have their own wisdom-knowledge specialities. When the content of wisdom tasks is age-matched, people show higher levels of performance (for a review see Staudinger, 1999).

Third, for wisdom-related knowledge and judgement to develop further, either beyond the level achieved in early adulthood or in one's own course of lifespan development, factors other than age become critical. It takes a complex coalition of enhancing factors from a variety of domains: psychological, social, professional and historical. If such a coalition is present, some individuals continue a developmental trajectory towards higher levels of wisdom-related knowledge. As a consequence, older adults are, perhaps disproportionately, among the top performers in such knowledge. A high level of wisdom-related knowledge, then, appears to be more prevalent in older adults, although simply getting older is not a sufficient condition.

Fourth, during adulthood the most powerful predictors of wisdom-related knowledge are not cognitive factors such as intelligence. *Higher predictive value is offered by personality-related factors*, such as openness to experience, generativity, creativity, or a judicial cognitive style (i.e. a preference for comparing, evaluating and judging information). In addition, specific life experiences (e.g. being trained and practising in a field concerned with

difficult life problems), having wisdomenhancing mentors, or having been exposed to certain idiographic events or societal conditions, and a sense of mastery of these experiences, all contribute to higher levels of wisdom-related knowledge.

Fifth, our intervention work showed that people possess larger amounts of wisdom-related knowledge than is evident in our standard assessment procedure. For instance, people express a markedly higher level of wisdom-related knowledge if guided by memory cueing or internal dialogues with significant others.

In sum, the acquisition of high levels of wisdom, beyond an average level of wisdom-related knowledge available to many, seems to be dependent on a coalition of ontogenetic factors that, in combination, enhance the development of wisdom. Wisdom as studied by us is not a primarily cognitive phenomenon. Rather, our analyses suggest that wisdom involves cognitive, emotional and motivational characteristics, and is a variant neither of intelligence nor of personality dimensions that can be assessed with psychometric tests. None of the many constructs that we considered in our studies explains more than a small share of the reliable variance in wisdom-related knowledge.

Wisdom, emotion and values

The important role of emotions and values in the acquisition and expression of wisdom has been further substantiated by more recent work (Kunzmann & Baltes, in press). People higher in wisdom-related knowledge evince a more complex and

References

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, NJ: Lawrence Erlbaum.

Baltes, P.B. & Baltes, M.M. (1990).

Psychological perspectives on successful aging: The model of selective optimization with compensation. In P.B. Baltes & M.M. Baltes (Eds.) Successful aging: Perspectives from the behavioral sciences (pp.1–34). New York:

Cambridge University Press.

Baltes, P.B., Dittmann-Kohli, F. & Dixon, R.A. (1984). New perspectives on the development of intelligence in adulthood: Toward a dual-process conception and a model of selective optimization with compensation. In P.B. Baltes & O.G.Brim Jr (Eds.) Life-span development and behavior (Vol. 6, pp.33–76). New York: Academic Press. Baltes, P.B. & Freund, A.M. (in press). The intermarriage of wisdom and selective optimization with compensation (SOC): Two meta-heuristics guiding the conduct of life. In C.L.M. Keyes (Ed.) Flourishing: The positive person and the good life. Washington, DC: American Psychological Association.

Baltes, P.B., Glück, J. & Kunzmann, U. (2002). Wisdom: Its structure and function in successful lifespan development. In C.R. Snyder & S.J. Lopez (Eds.) Handbook of positive psychology (pp.327–350). New York: Oxford University Press.

Baltes, P.B. & Smith, J. (1990). The psychology of wisdom and its ontogenesis. In R.J. Sternberg (Ed.) Wisdom: Its nature, origins, and development (pp.87–120). New York: Cambridge University Press.

Baltes, P.B. & Staudinger, U.M. (Eds.) (1996). Interactive minds: Life-span perspectives on the social foundation of cognition. New York: Cambridge University Press. Baltes, P.B. & Staudinger, U.M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, *55*, 122–136.

Clayton, V.P. & Birren, J.E. (1980). The development of wisdom across the life span: A re-examination 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.

Freund, A.M. & Baltes, P.B. (2002). Lifemanagement strategies of selection, optimization, and compensation: Measurement by self-report and construct validity. *Journal of Personality* and Social Psychology, 82, 642–662. Kekes, J. (1995). *Moral wisdom and good lives*

Ithaca, NY: Cornell University Press.
Kunzmann, U. & Baltes, P.B. (in press).
Wisdom-related knowledge: Affective,
motivational, and interpersonal

correlates. Personality and Social Psychology Bulletin.

Lehrer, K., Lum, B.J., Slichta, B.A. & Smith, N.D. (Eds.) (1996). Knowledge, teaching and wisdom. Dordrecht: Kluwer.

Lerner, R.M. (2002). Concepts and theories of human development. Mahwah, NJ: Lawrence Erlbaum.

Myers, D. (2000). The American paradox: Spiritual hunger in an age of plenty. New Haven, CT:Yale University Press.

Staudinger, U.M. (1999). Older and wiser? Integrating results on the relationship between age and wisdom-related performance. International Journal of Behavioral Development, 23, 641–664.

Staudinger, U.M. & Baltes, P.B. (1996). Interactive minds: A facilitative setting for wisdom-related performance? Journal of Personality and Social Psychology, 71, 746–762.

Sternberg, R.J. (Ed.) (1990). Wisdom: Its nature, origins, and development. New York: Cambridge University Press.

132

modulated profile of emotions. For instance, they show a lesser preference for values whose primary focus is on one's own happiness. Rather, they show a preference for values that consider the welfare of others and report engaging themselves in the interest of others, including strategies of negotiation in conflict resolution.

More recently we have also begun to link wisdom-related knowledge to behavioural expressions of developmental regulation, such as the selection and pursuit of personal goals (Baltes & Freund, in press). Does wisdom-related knowledge play a role in lifespan development and its regulation? The model of successful development 'selective optimisation with compensation' (SOC) posits that the orchestration of three regulatory processes produces successful development: selection of goals, optimisation of goal-relevant means and compensation of lost means by substitute means (Baltes & Baltes, 1990; Freund & Baltes, 2002).

In our conception, wisdom and SOC operate together in the following way. On the basis of wisdom, people can define and select those goals and means that are socially acceptable and desirable in human development. For instance, the spectrum of wisdom-related goals requires that these goals are oriented towards the personal and the common good and that the means used in goal attainment do not violate the resources and rights of others. The life management strategy of SOC, on the other hand, is value-neutral. Without evaluating the moral and ethical dimension of the behaviour involved, SOC specifies the conditions by which advances and success in any domain of human efficacy and performance are possible. In terms of the use of SOC, a mafia boss can be as effective as Mother Theresa. Therefore, wisdom and SOC need to be intertwined.

In our view, wisdom is a topic that holds much promise as psychologists turn their attention to positivity and excellence in human behaviour. Considering the intricate problems of our lives in a society often driven by individualistic and materialistic motives (e.g. Myers, 2000), wisdom points to another set of avenues for satisfaction and happiness. Its very foundation lies in the orchestration of mind and virtue towards the personal and public good.

■ Professor Paul B. Baltes and Dr Ute Kunzmann are at the Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin. E-mail: sekbaltes@mpib-berlin.mpg.de.

Making disability into a resource





Antonella Delle Fave and Fausto Massimini suggest a way to promote autonomy and social integration.

HE European Community declared 2003 the Year of Disabled Citizens, emphasising the need for policies focused on people's own perspective. Information on how disabled people experience their lives, social relations and daily activities and situations is essential to centre intervention programmes on individual resources rather than on social expectations. Quality of life depends not only on health conditions but also on personality and style

'Physical impairments...can help individuals discover new opportunities for optimal experience'

of interaction with the environment. Sick people frequently report positive consequences of illness, such as improved relationships, positive personality changes, and even a better quality of life (Albrecht & Devlieger, 1999; Sodergren & Hyland, 2000). In this article we investigate the positive experiences disabled people report in daily life and their potential in fostering personal growth and social integration.

The revised International Classification of Functioning, Disability and Health (World Health Organization, 2001) conceptualises disablement as an interaction between individual and environmental features comprising three dimensions: impairment of biological or psychological structures or functions; activity limitations; and participation restrictions (consequences of impairment that limit or prevent the fulfilment of expected social roles).

Environmental factors, such as cultural norms and economic conditions, can hinder or help the social integration of disabled people. In turn, individuals actively engage with their environment. Day by day they invest their attention in a subset of activities, relationships and values that they select from the cultural context. This lifelong process, known as psychological selection (Csikszentmihalyi & Massimini, 1985), is based on the quality of experience reported in daily activities (Massimini & Delle Fave, 2000). In particular, people prefer to carry out and cultivate activities associated with optimal experience (Csikszentmihalyi, 2000). This state of consciousness is characterised by the perception of high environmental

The Psychologist Vol 16 No 3