THE THREE DIMENSIONAL WISDOM SCALE IN CROSS-CULTURAL CONTEXT: A COMPARISON BETWEEN AMERICAN AND SLOVAK COLLEGE STUDENTS*

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Abstract: Although present Western approaches to wisdom differ in their delimination of the very essence of wisdom, its cognitive nature is usually accentuated. We, in contrast, define wisdom as a latent variable consisting of the integration of cognitive, reflective and affective personality qualities. This conceptualization of wisdom was operationalized by the Three-Dimensional Wisdom Scale (3D-WS). The aim of this study was to examine the Slovak translation of the 3D-WS and to compare the scores of two culturally different samples of US and Slovak college students. We used Cronbach's alpha as the internal reliability indicator for the translation verification, and bivariate correlation analyses for determining the internal correlations between the separate dimensions of the wisdom scale. Differences in mean values of the separate dimensions of wisdom and the overall wisdom score between the two samples were analyzed using MANCOVA, ANOVA, and ANCOVA, while checking for gender. The internal reliability and correlation coefficients of the three dimensions of the wisdom scale confirm the inner consistency of the Slovak translation. However, analyses also show that the average scores for the cognitive and reflective dimensions of wisdom and the overall wisdom score are significantly higher in the American sample than in the Slovak sample, whereas the average score for the affective dimension is significantly higher in the Slovak sample than in the American sample. In sum, this cross-cultural explorative research suggests that the Three-Dimensional Wisdom Scale, consisting of internally consistent cognitive, reflective, and affective personality characteristics, is a promising measure to assess wisdom in the US as well as the Slovak culture. Future studies should compare the implicit wisdom theories of students in both cultures. Based on results from this study, we hypothesize that US students might place a stronger emphasis on the cognitive and reflective dimensions of wisdom and less emphasis on the affective wisdom dimension than Slovak students.

Key words: wisdom, Three-Dimensional Wisdom Scale, cross-cultural study, personality, university students

Current tendencies of the psychological comprehension of the individual aim at a more complex and systematic grasp of mental processes. It looks as if, in the context of current knowledge of cognitive processes, the concept of intelligence does not say much about the individual's behavior in difficult life situations and changing social-environmental conditions. H. Gardner's (1983) concept of different intelligence types initiated a shift to a more complex view of the individual and a slight shift from the emphasis on IQ itself. Positive psychology also significantly contrib-

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uted to the expansion of experimental and intervention psychological topics towards higher complexity and a more holistic view of the individual (e.g., Seligman, Csikszentmihalyi, 2000). The concept of wisdom, in particular, appears to be in accordance with these tendencies. Initial gathering of psychologically relevant information on wisdom was associated with prevalent beliefs and lay theories on wisdom (Bluck, Glück, 2005). Religions and philosophy were also a rich source for the delimitation of wisdom (Birren, Svensson, 2005; Osbeck, Robinson, 2005). Although implicit (lay) theories of wisdom tend to contain elements of the concepts of intelligence and/or spirituality, wisdom represents a unique construct (Brown, Greene, 2006). Within classical modern psychology, Erikson's ground-breaking work introduced wisdom as an inherent part of an integrated continual development of a mature personality and associated it with mastering the crisis of old age, integrity versus despair (Erikson, 1963; Erikson, Erikson, Kivnick, 1986). At present, researchers distinguish between implicit and explicit approaches to the study of wisdom (Sternberg, Jordan, 2005; Kováč, 2006). Explicit approaches are based on expert theories of wisdom in contrast to the implicit wisdom theories of lay people. Yet, it appears that every explicit approach develops its own wisdom theory, with some overlap but also many differences between the varied approaches. By accentuating the cognitive dimension, wisdom can be understood as a form of advanced cognitive functioning (Dittmann-Kohli, Baltes, 1990), as expert knowledge in the fundamental pragmatics of life and advanced expertise in living (Ruisel, 2005; Baltes, Staudinger, 2000), or as the art of inquiring (Arlin, 1990). On the other hand, some experts believe that wisdom is inevitably connected to personality traits. It includes value-related obligation to the common good and a balancing of intrapersonal, interpersonal and extrapersonal interests to reach a balance between the adaptation and shaping of existing environments and the selection of new environments (Sternberg, 1998).

The public confrontation between two theories of wisdom lies in the very nature and definition of wisdom. The Berlin School led by P. Baltes understands wisdom as a utopian concept, representing the high point in human development. On the most general level, they define wisdom as *expert knowledge and inference of important, difficult, and ambiguous problems connected to the meaning and organization of life* (Baltes, Kunzmann, 2003). The Berlin group uses complicated and poorly defined hypothetical situations that include the problem of a difficult life situation for their empirical wisdom evaluation. The Baltes methodology evaluates recorded verbalized thinking processes of subjects with regard to strict criteria of *advanced cognitive functioning, expert systems of knowledge*, and *expert knowledge in life planning and organization* (Baltes, Kunzmann, 2003).

We believe, however, that wisdom cannot be limited to the intellectual or cognitive domain but encompasses the whole person. Hence, our model includes cognitive as well as non-cognitive personality dimensions and defines *wisdom as a latent variable that combines cognitive, reflective, and affective personality characteristics* (Ardelt, 2003, 2004). However difficult or even impossible it may be to evaluate wisdom directly through a standard questionnaire, it is possible to assess the cognitive, reflective, and affective indicators of the latent variable wisdom. The model was

derived from a previous empirical study on implicit theories of wisdom by V.P. Clayton and J.E. Birren (1980) and incorporates elements of both the western and eastern approaches to wisdom. Based on the operationalization of the three dimensions of wisdom, the Three-Dimensional Wisdom Scale (3D-WS) was developed and tested (Ardelt, 2003). It consists of 39 items, of which 14 belong to the cognitive dimension, 12 to the reflective dimension, and 13 to the affective dimension. The scale seems to be a valid and reliable instrument to assess the cognitive, reflective, and affective personality characteristics of wisdom.

The *cognitive domain* includes the ability to understand life and the deeper meaning of phenomena and events, particularly with regard to intra- and interpersonal issues. Moreover, it includes the awareness of the positive as well as negative aspects of human nature, the inherent limits of knowledge, and of life's unpredictability and uncertainties. To obtain a deeper understanding of events and phenomena, it is necessary to view them from many different perspectives, which represents the *reflective dimension* of wisdom. Training of this multi-perspective view requires self-examination and self-awareness, which is likely to result in greater self-insight and a reduction in subjectivity, projection, and self-centeredness. Decreases in self-centeredness and a better understanding of the positive and negative aspects of human nature, in turn, are likely to increase sympathetic and compassionate love for others, which characterizes the *affective dimension* of wisdom. The cognitive, reflective, and affective dimensions of wisdom are not mutually independent of each other, but each dimension defines a unique aspect of the multi-dimensional concept of wisdom.

PROBLEM

The goal of the present explorative study was to verify the translation of the 3D-WS from English into Slovak and to compare the wisdom scores of college students from two different cultures, the United States and Slovakia, in order to analyze and describe potentially existing differences. We hypothesized that the 3D-WS could be used to measure wisdom among both US and Slovak college students. That is, we expected that the internal reliability of the three dimensions of wisdom would be relatively high and that the three indicators of wisdom would correlate significantly with each other. We also examined the differences in the cognitive, reflective, and affective wisdom scores between US and Slovak college students, although we had no prior hypothesis what those differences might be.

METHOD

US Sample

At the beginning of the fall semesters of 2005 and 2006 and the spring semesters of 2006 and 2007, students in 20 undergraduate upper-division classes in sociology, psychology, religion, health science, and mental health counseling were invited to take part in a survey on attitudes, behavior, and general well-being. Students received one extra credit point (above the maximum of 100 total points) for taking part in the anonymous voluntary survey. Survey participation was determined through informed consent forms, which were collected independently of the answer sheets. Answers were recorded on a scantron sheet, which limited the answer categories to five options.

A total of 477 students completed the survey. However, we limited the cross-cultural comparison of the data to the 339 US students between the ages of 18 and 21, because we did not know the exact ages of the students in the age category of "22 and above" and only two Slovak students were older than 21. The majority of the 339 students were women (75.2%) and the mean and median age was 20.

Slovak Sample

In Slovakia, university students of sociology from three different faculties of universities in Bratislava and Trnava were asked to participate in the US-Slovak cross-cultural study. The lecturers were willing to offer us the time necessary for students to fill out the questionnaire after we gave a small lecture about the 3D-WS and the theory behind this scale in the fall semester of 2006. A total of 212 students between the ages of 18 and 21 completed the questionnaires. As in the US sample, the majority of the students were female (87.3%), and the mean and median age was 20.

Measures

Wisdom was measured by the Three-Dimensional Wisdom Scale (3D-WS), a self-administered instrument for use in standardized surveys. To develop the scale, 132 potential wisdom items (primarily from existing scales that appeared to assess the cognitive, reflective, or affective dimensions of wisdom) were initially selected and administered to 180 members of close-knit social groups of older adults between the ages of 52 and 87 years (Ardelt, 2003). The final version of the 3D-WS contains 39 items, 14 items for the cognitive wisdom dimension, 12 items for the reflective wisdom dimension, and 13 items for the affective wisdom dimension.

The questionnaire items evaluating the *cognitive dimension* assess the ability and willingness to understand events and phenomena in detail, awareness of the positive and negative aspects of human nature and of life's ambiguity and uncertainty, and the ability to make important decisions despite the unpredictability and uncertainty of life (e.g., "Ignorance is bliss;" "People are either good or bad;" "I am hesitant about making important decisions after thinking about them;" - all items that were retained in this dimension show the absence rather than the presence of cognitive wisdom characteristics). Items for the *reflective dimension* assess the ability to transcend subjectivity and projection of one's motives and needs by observing phenomena and events from different perspectives and to avoid blaming others or external circumstances for one's current situation. (e.g., "When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information;" "When I'm upset at someone, I usually try to 'put myself in his or her shoes' for a while;" "I always try to look at all sides of a problem."). Finally, items for the *affective dimension* assess the presence of positive, caring, and nurturing emotions and behavior and the absence of indifferent and negative emotions and behavior toward others (e.g., "I can be comfortable with all kinds of people;" "Sometimes I feel a real compassion for everyone;" "If I see people in need, I try to help them one way or another."). All items were measured on one of two 5-point Likert-type scales, ranging either from 1 (strongly agree) through 5 (strongly disagree) or from 1 (definitely true of myself) through 5 (not true of myself). All items that assess the absence of cognitive, reflec-

tive, and affective wisdom characteristics were reversed. Subsequently, the arithmetic mean of the items for each wisdom dimension was individually computed. An overall wisdom score can be obtained by calculating the arithmetic mean of the three dimensions of wisdom. Wisdom can also be treated as a latent variable with the cognitive, reflective, and affective dimensions of wisdom as its effect indicators.

Analyses showed that the 3D-WS can be considered a sufficiently valid and reliable instrument to measure the cognitive, reflective, and affective dimensions of wisdom (Ardelt, 2003). In the sample of 180 older adults, the 3D-WS, assessed as a latent variable, was significantly and directly associated with general well-being, mastery, purpose in life, and subjective health and reversely correlated with depressive symptoms, feelings of economic pressure, death avoidance, and fear of death as initially predicted (predictive validity). Respondents who were nominated as wise by other study participants from their close-knit social groups tended to score higher on the 3D-WS than respondents who were not nominated as wise (convergent validity). Yet, the 3D-WS was unrelated to participants' finances, marital and retirement status, gender, race, and a social desirability index (discriminant validity). Moreover, the 3D-WS was relatively stable across time with factor loadings of the 3D-WS at the beginning of the study not being statistically different from the factor loadings of the 3D-WS ten months later (test-retest reliability).

For the present study, the 3D-WS was translated into Slovak. The method's translation accuracy was supported by a reverse translation. However, during the translation's verification, minor language nuances were discovered through a component analysis of the individual items. One affective wisdom dimension item, "I am annoyed by unhappy people who just feel sorry for themselves", was translated into Slovak as *"Znepokojujú ma nešťastní ľudia, ktorí ľutujú samých seba"*. After considering the translation's reliability, we decided to eliminate this item from the scale for the purpose of this study, which means that in this study, the affective wisdom dimension contains only 12 rather than 13 items as in the original scale development. The reverse translation disclosed a different cultural and contextual connotation of the expressions "annoyed" and "byť znepokojený". The connotation of "byť znepokojený" probably is not negative enough, although the dictionary standard translates "annoyed" as "mrzutý , rozmrzelý, znepokojený" (Multilingual Dictionary www.slovnik.cz). It is possible that the negative colorings of the meaning "otravuje ma" might change the results. For further use of the scale we intend to use the Slovak form *"Som otrávený z nešťastných ľudí, ktorí ľutujú samých seba."*

Internal reliability of the cognitive, reflective, and affective dimensions of wisdom was assessed for the US and Slovak samples separately, using Cronbach's alpha. Bivariate correlation analyses were conducted to analyze the associations between the three dimensions in both cultures. MANCOVA, ANOVA, and ANCOVA analyses were performed to compare the group means of the three dimensions of wisdom and the overall average wisdom score in the US and Slovak samples, checking for the effects of gender.

RESULTS

The internal reliability of the cognitive, reflective, and affective dimension of wisdom was .68, .73, and .65, respectively, for

the US sample and .70, .73, and .63, respectively, for the Slovak sample. The internal reliability of the scales can be considered adequate, given the relatively broad scope of the three wisdom dimensions. The correlations between the three dimensions of wisdom were all significant ($p < .001$) and ranged from .37 between the reflective and affective dimensions of wisdom in the Slovak sample to .48 between the reflective and affective dimensions of wisdom in the US sample (see Table 1). Cronbach's alpha for the composite wisdom scale, consisting of the average of the three wisdom dimensions (rather than the average of all 39 individual items), was .71 for the US sample and .66 for the Slovak sample. Although alpha was somewhat lower in the Slovak sample than in the US sample due to lower correlations in the Slovak sample between the cognitive and reflective wisdom dimensions and the affective and reflective wisdom dimensions, an alpha-value of .66 for a scale that consists of only three components can be considered satisfactory.

Because the proportion of female students was significantly higher in the Slovak sample ($M = .87$, $SD = .33$) than in the US sample ($M = .75$, $SD = .43$, $t = 3.67$, $p < .001$) and women had significantly higher average scores on the affective wisdom dimension ($M = 3.68$, $SD = .41$) than men ($M = 3.46$, $SD = .46$, $t = 4.90$, $p < .001$), a one-way multivariate analysis of covariance (MANCOVA) was conducted to analyze whether the scores for the cognitive, reflective, and affective dimensions of wisdom differed between the US and Slovak samples after checking for the effect of gender.

The main effect for the US and Slovak samples was significant (Wilk's Lambda = .87, $F(3,546) = 26.97$, $p < .001$, multivariate partial $\eta^2 = .129$). Gender had a significant effect on the combined dimensions of wisdom (Wilk's Lambda = .95, $F(3,546) = 9.72$, $p < .001$, multivariate partial $\eta^2 = .051$). Follow-up univariate ANOVA analyses indicated that there were significant differences between the US and the Slovak samples for the cognitive wisdom dimension ($F(1,548) = 26.15$, $p < .001$, partial $\eta^2 = .046$), the reflective wisdom dimension ($F(1,548) = 29.85$, $p < .001$, partial $\eta^2 = .052$), and the affective wisdom dimension, $F(1,548) = 4.38$, $p = .037$, partial $\eta^2 = .008$). Gender only had a significant effect on the affective wisdom dimension ($F(1,548) = 20.75$, $p < .001$, partial $\eta^2 = .036$).

A one-way univariate analysis of covariance (ANCOVA) was used to examine whether the overall wisdom score, assessed as the average of the three wisdom dimensions, varied between the US and Slovak samples after checking for gender. The main effect for the two countries was again significant ($F(1,548) = 14.29$, $p < .001$, partial $\eta^2 = .025$), although the effect of

Table 1. Bivariate Correlations (Pearson's r) between the three dimensions of wisdom

	(1)	(2)	(3)
(1) Cognitive wisdom dimension	1	.38	.43
(2) Reflective wisdom dimension	.43	1	.37
(3) Affective wisdom dimension	.44	.48	1

Note: Slovak sample above the diagonal (n = 212); US sample below the diagonal (n = 339)

gender was only significant at the trend level ($F(1,548) = 3.14$, $p = .077$, partial $\eta^2 = .006$), with women having slightly higher overall wisdom scores, on average, than men.

The adjusted and unadjusted means for the US and Slovak samples are shown in Table 2. American students scored significantly higher than Slovak students on the cognitive and reflective dimensions of wisdom and the overall wisdom score, whereas Slovak students scored significantly higher than US students on the affective wisdom dimension, even after checking for the effect of gender.

DISCUSSION

As hypothesized, the 3D-WS can be used to measure the cognitive, reflective, and affective dimensions of wisdom among both US and Slovak students, based on adequate internal reliabilities of the three dimensions and the significant and relatively high bivariate correlations between the individual wisdom dimensions. However, our primary goal in this cross-cultural study was to examine the differences between the US and Slovak data sets and to describe the differences. In this section we discuss possible reasons for those differences.

The definition of wisdom as a combination of strong cognitive, reflective, and affective personality characteristics represents an ideal type of wisdom that rarely exists in real life. As operationalized and measured by the 3D-WS, wisdom is considered a continuum that ranges between a low and a high level of wisdom. It then becomes possible to evaluate to what extent an individual approaches this ideal. The reflective dimension, which requires a transcendence of one's subjectivity and projections, is considered essential for a strengthening of the cognitive and affective dimensions (Ardelt, 2003). Yet, all three dimensions are necessary to measure the latent construct of wisdom (Ardelt, 2004). Each dimension describes a different aspect of wisdom.

Our results show that in the context of a different culture (from the US, which was used to develop the scale) the dimensions acquire a slightly different prominence in relation to wisdom as a latent variable. Although the scale is internally consistent, and wisdom measured by this method forms a consistent unit in both the US and Slovak cultures, our results suggest that different aspects of wisdom might be most prominent in different cultures. Among US college students, the cognitive dimension received the highest average score, where-

Table 2. Adjusted and unadjusted group means of the three dimensions of wisdom for US and Slovak students; MANCOVA and ANCOVA analyses

	US Students (n = 339)			Slovak Students (n = 212)		
Wisdom dimensions	Adjusted M	Unadjusted M	SD	Adjusted M	Unadjusted M	SD
Cognitive dimension	3.692	3.692	.445	3.489	3.489	.449
Reflective dimension	3.649	3.649	.471	3.422	3.421	.469
Affective dimension	3.608	3.598	.449	3.685	3.700	.382
Overall wisdom score	3.649	3.646	.362	3.532	3.537	.334

as among Slovak students the emotional, affective dimension of wisdom was endorsed most, on average.

The significantly higher score of the cognitive wisdom dimension in the US student sample compared with the Slovak student sample illustrates the desire to know the truth, particularly as it relates to interpersonal and intrapersonal matters, and the ability to make important decisions despite one's knowledge of the unpredictability and uncertainty of life. That suggests that culture and community environment have a significant influence on its development. Environment and sociocultural factors help us to shape, form, and transform the method of acquiring and filtering information. They adjust the prism through which we see the world.

Cultural influence on cognition is manifested on three basic levels - qualitative, quantitative, and the development of cognitive operations and their organization (Mishra, 2001). The historical-political differences in the development of both countries could be one of the reasons for the differences in the cognitive dimension between the US and Slovak data sets. Though it is true that our sample consists of students between the ages of 18 and 21 years and that the Slovak students experienced the totalitarian regime only in their early childhood, the Slovak society is nevertheless still influenced by four decades of living under a totalitarian regime. In comparison with their US counterparts during this time, Slovak individuals had incomparably fewer stimuli and fewer possibilities to choose from a variety of alternatives. Also, the thinking process towards dichotomization was supported and rewarded. Within the totalitarian regime, the delicate differentiation of stimuli was impermissible (Konopásek, 1999). In comparison with countries with free access to information, Slovak individuals had fewer opportunities to cultivate the cognitive differentiation of cultural, social, technical, and welfare stimuli to stimulate sensitive critical thinking in those fields. This might explain the reason for differences in the scoring of American and Slovak students in the cognitive and reflective dimensions of wisdom. Furthermore, those cultural differences might also influence the qualitative and quantitative character of cognition and the development of cognitive operations and their organization.

The affective wisdom dimension includes a reduced focus on oneself, the expression of compassionate and sympathetic love for others, positive behavior toward others, and the absence of indifferent or negative emotions and behavior toward others. The quality and intensity of experienced emotions tends to be influenced by the concept understanding of events and circumstances. The extent of personal involvement and the depth of understanding of the consequences of one's actions might lead to different emotional reactions (Ratner, 2000). In respect of the feelings of sympathy and compassion (the affective dimension of the 3D-WS), one source of a positive emotional reaction is the extent to which individuals understand the event and the potential consequences for the individuals involved in the situation. In addition, the quality of emotions tends to be influenced by character traits, past experiences, and the activation of associations.

Similarly, the reflective wisdom dimension (the ability and willingness to see phenomena and events from multiple perspectives) strengthens the affective wisdom dimension through a deeper multi-sided understanding of the situation, the context, and the individuals involved, because the quality of emotions depends in

part on the thorough comprehension of phenomena and events. A different concept understanding of the situation can lead to a different emotional reaction (Ratner, 2000). The rise of an emotional reaction is significantly influenced by our viewpoint of the situation and its analysis, which is connected to our personal history, past experiences, and cultural background. The cultural context can exert a significant impact on our "field of view". For example, the Australian Aboriginal tribe Pintupi distinguishes up to 15 kinds of fear (Russel, 1991), for which our and many other cultures lack an equivalent expression. Furthermore, feelings of shame might have been evoked by completely different stimuli (e.g., related to faith and religiosity) in past historical-cultural contexts than in the context of modern culture. The cultural context also influences the intensity and quality of emotions. Hence, the cultural-contextual setting is an important defining element for the quality of emotions based on adjusting the field of view, personal, community, and cultural preferences, and past experiences and associations.

The quality of experienced emotions is also influenced by the degree of linguistic differentiations of emotional nuances in specific cultures. Although the "package" of basic biologically-driven emotions, such as anger, fear, sadness, disgust, surprise, curiosity, acceptance, and joy (Ekman, 1999; Geetz, 1973), is preserved in all cultures, the specific processes can be comprehended only in a specific cultural and environmental context. Because the affective wisdom dimension does not consist of basic emotions, it is essential to take the cultural context into account.

For both US and Slovak students, a higher occurrence of positive emotions toward others might mean that those students better comprehend the consequences and effects for individuals involved in an event. Yet, US students scored significantly higher on the reflective wisdom dimension than Slovak students. It appears that Slovak students tend to express more positive emotions and behavior toward others, although they might be less aware than US students of the consequences and effects for the individuals involved. This suggests that Slovak students might engage in less reflective thinking but, nevertheless, exhibit more positive emotions and behavior toward others than their US counterparts.

Regarding gender differences in expressing emotions, our research confirmed the general assumption about a higher emotional engagement of women, similar to a previous comparison of American-European cultures, which found more warmth in women and higher assertiveness in men (McCrae, Terraciano, 2005). The reasons for those differences might partly be due to early socialization in American-European cultures that encourages girls more than boys to cherish social and relational values. Our sample primarily consists of social science and humanities students with a greater percentage of female than male students. Although the proportion of female students was significantly higher in the Slovak sample than in the US sample, after adjusting for the higher percentage of female students in the Slovak sample, Slovak students still tended to score significantly higher on the affective wisdom dimension than US students. Furthermore, because both samples were recruited from social science and humanities students, the possibility that the differences between the two samples are due to different interests and general goals of the students (in comparison with students in business or engineering, for example) is relatively low.

In a cross-cultural comparison of American and European social-psychological studies, R. Thibodeau (1995) discovered that European social-psychological studies tend to focus significantly more on social issues, whereas American social-psychological studies tend to emphasize the individual. This is a reflection of a more general focus of those two cultures and of the global psychological setting and virtual "filter" through which individuals from specific cultures see the world around them. Our findings support the conclusion that in comparison with students in the US, Slovak students (as a part of a European culture) tend to focus more on "social" values than on competitiveness and an individual's effort and need to excel. American culture is individualistic and competitive (Jahoda, Krewer, 1997), and the competitive environment is perceived as a challenge rather than a disturbing obstacle on the road to a contented life. Those cultural factors might have long-term consequences for the development of cognitive processes and the method of cognitive information gathering and processing as one of the basic dimensions of wisdom.

CONCLUSION

This cross-cultural explorative research indicates that in both US and Slovak cultures, the 3D-WS, consisting of internally reliable cognitive, reflective and affective personality characteristics, is a promising measure to operationalize and assess wisdom. However, for US students, the cognitive and reflective wisdom dimensions appear to be more prominent and the affective wisdom dimension seems less prominent than for Slovak students. Hence, future studies might examine the implicit wisdom theories of students in both cultures. Based on results from this study, we hypothesize that American students would place a stronger emphasis on the cognitive and reflective dimensions of wisdom and less emphasis on the affective wisdom dimension. We would expect the exact opposite for Slovak students.

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REFERENCES

ARDELT, M., 2003, Empirical assessment of Three Dimensional Wisdom Scale. Research on Ageing, 25, 3, 275-324.

ARDELT, M., 2004, Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. Human Development, 47, 257-285.

ARLIN, P.K., 1990, Wisdom: The art of problem finding. In: R.J. Sternberg (Ed.), Wisdom: Its nature, origins, and development. Cambridge: Cambridge University Press, 230-243.

BALTES, P.B., KUNZMANN, U., 2003, Wisdom. The Psychologist, 16, 3, 131-133.

BALTES, P.B., STAUDINGER, U.M., 2000, Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. American Psychologist, 55, 122-136.

BIRREN, J.E., SVENSSON, C.M., 2005, Wisdom in history. In: R.J. Sternberg, J. Jordan (Eds.), A handbook of wisdom. Psychological perspectives. New York: Cambridge University Press, 3-31.

BLUCK, S., GLÜCK, J., 2005, From the inside out: People's implicit theories of wisdom. In: R.J. Sternberg, J. Jordan (Eds.), A handbook of wisdom. Psychological perspectives. New York: Cambridge University Press, 84-109.

BROWN, S.C., GREENE, J.A., 2006, The Wisdom Development Scale: Translating the conceptual to the concrete. Journal of College Student Development, 47, 1-19.

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. New York: Academic Press, 103-135.

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. New York: Oxford University Press, 54-78.

EKMAN, P., 1999, Basic emotions. In: T. Dalgleish, M., Power (Eds.), Handbook of cognition and emotion. Sussesx, UK: John Wiley & Sons, Ltd.

ERIKSON, E.H., 1963, Childhood and society. 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.

GARDNER, H., 1983, Frames of mind: The theory of multiple intelligences. New York, Basic Books.

GEETZ, C., 1973, The interpretation of cultures. New York: Basic Books.

JAHODA, G., KREWER, B., 1997, History of cross-cultural and cultural psychology. In: J.W. Berry, Y.H. Poortinga, J. Pandey (Eds.), Handbook of cross-cultural psychology: Vol. 1. Theory and method (2nd ed.). Boston, MA: Allyn & Bacon, 1-42.

KONOPÁSEK, Z., 1999, Otevřená minulost: Autobiografická sociologie státního socialismu. Praha: Karolinum.

KOVÁČ, D., 2006, O múdrom (hlúpom) konaní. In: I. Ruisel (Eds.), Múdrosť-inteligencia-osobnosť. Bratislava: Ústav Experimentálnej Psychológie SAV, 34-39.

McCRAE, R.R., TERRACIANO, A., 2005, 78 members of the personality profiles of cultures project [1]. Universal features of personality traits from the observer's perspective: Data from 50 cultures. Journal of Personality and Social Psychology, 88, 3, 547-561.

MISHRA, R.C., 2001, Cognition and cognitive development. In: J.W. Berry, P.R. Dasen, Handbook of cross-cultural psychology, Vol. 2: Basic processes and human development, 2nd ed., Boston, MA: Allyn & Bacon, 143-175.

OSBECK, L.M., ROBINSON, D.N., 2005, Philosophical theories of wisdom. In: R.J. Sternberg, J. Jordan (Eds.), A handbook of wisdom. Psychological perspectives. New York: Cambridge University Press, 61-83.

RATNER, C., 2000, A Cultural-psychological analysis of emotions. Culture and Psychology, 6, 5-39.

RUISEL, I., 2005, Múdrosť v zrkadle vekov. Bratislava: Pegas.

SELIGMAN, M.E.P., CSIKSZENTMIHALYI, M., 2000, Positive psychology: An introduction. American Psychologist, 55, 5-14.

STERNBERG, R.J., 1998, A balance theory of wisdom. Review of General Psychology, 2, 347-365.

STERNBERG, R.J., JORDAN, J. (Eds.), 2005, A handbook of wisdom: Psychological perspectives. New York: Cambridge University Press.

THIBODEAU, R., 1995, Cross-cultural comparisons of European and North-American social psychology: Implications for a social constructionist epistemology. http://http-server.carleton.ca/~rthibode/culture.html

TROJDIMENZIONÁLNA ŠKÁLA MÚDROSTI V KROSKULTURÁLNOM KONTEXTE: Porovnanie amerických a slovenských študentov

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Súhrn: Aktuálne prístupy k múdrosti sa líšia vo vymedzení samotnej podstaty múdrosti; zdôrazňovaná býva jej kognitívna podstata, avšak my používame prístup, v ktorom múdrosť predstavuje - s akcentovaním osobnosti - latentnú premennú osobnostných dimenzií, a to kognitívnej, reflektívnej a afektívnej. Operacionalizáciou bola vytvorená Trojdimenzionálna škála múdrosti (3D-WS). Cieľom tejto štúdie je overiť slovenský preklad 3D-WS a porovnať skóre dvoch kultúrne odlišných súborov amerických a slovenských vysokoškolských študentov. Na overenie prekladu škály sme použili Cronbachovu alphu ako ukazovateľ internej reliability; interné korelácie medzi jednotlivými dimenziami škály sme zisťovali pomocou bivariačnej korelačnej analýzy. Rozdiely priemerov jednotlivých dimenzií múdrosti medzi dvoma súbormi (americkým a slovenským) sme zisťovali pomocou štatistických postupov MANCOVA a ANOVA a ANCOVA na kontrolu premennej gender. Interná reliabilita a korelačné koeficienty jednotlivých dimenzií prekladu škály potvrdzujú vnútornú konzistentnosť slovenského prekladu škály.

Zistilo sa, že americký súbor signifikantne vyššie skóruje v kognitívnej a reflektívnej dimenzii múdrosti, naopak, súbor slovenský v dimenzii afektívnej. Kroskulturálny exploratívny výskum demonštroval, že v americkej ako aj v slovenskej kultúre možno použiť Trojdimenzionálnu škálu múdrosti na ohodnotenie múdrosti ako latentnej premennej vnútorne konzistentných kognitívnych, reflektívnych a afektívnych osobnostných charakteristík. V nadväznosti na výsledky štúdie sa chystáme preskúmať implicitné teórie múdrosti študentov oboch kultúr. Na základe výsledkov tejto štúdie predpokladáme, že americkí študenti budú klásť väčší dôraz na kognitívnu a reflektívnu dimenziu múdrosti a menší na dimenziu afektívnu v porovnaní so slovenskými študentmi.