Thematic Section
Contemporary Science and Education: Progress or Regress?

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The role of education in development of wisdom

Abstract

In order to explore the potential role of education in wisdom development two independent studies were done. The main goal of the first study was focused on exploring some aspects of implicit theories of wisdom. For the purpose of this research authors have constructed *The Questionnaire on Wisdom* and applied it on a sample of 259 participants 18 to 92 years old. The second study, focused on the explicit theories, used the *Self-Assessed Wisdom Scale (SAWS;* Webster 2003; 2007) that consists of five factors: experience, emotional regulation, reminiscence/reflection, humour and openness. It was applied on a sample of 439 participants 24 to 88 years old. The role of education in wisdom development was discussed in the light of the results obtained by both implicit and explicit theories of wisdom.

Key words: wisdom, implicit and explicit theories of wisdom, education

Introduction

Interest for the concept of wisdom has traditionally been embedded to philosophy and theology, but in the last two decades it started grasping more place in the psychological literature. In psychology, focus is put mostly on defining wisdom and its components (e.g. Baltes & Staudinger, 1993; 2000; Ardelt, 2000; 2011; Baltes & Smith, 2008; Yang, 2008), on ontogeny of wisdom (e.g. Baltes, Staudinger & Lindenberger, 1999; Narvaez, Gleason & Mitchell, 2010; Choi & Landeros, 2011), and on assessment of wisdom (e.g. Ardelt, 2003; Webster, 2003). As Staudinger (2008) predicted, one of the future directions of research on wisdom will most likely include further identification of social and personality factors and life processes relevant for the ontogeny of wisdom.

Unlike philosophical or theological, wisdom as a psychological concept is strongly connected with the possibilities of its assessing in both, qualitative and quantitative approach. The qualitative approach tries to identify components of wisdom, while the quantitative aims to measure the levels of wisdom and/or its components. Psychologists agree wisdom is a multidimensional construct (e.g. Baltes & Staudinger, 2000; Webster, 2003; Yang, 2008) and whatever the constituent components might be, they operate in a holistic manner; each part is a necessary, but not sufficient element in wisdom's realisation (Webster, 2003).

Since there is no consensus on what the definition of wisdom would be, it is not surprising that there is no unique method of assessing wisdom. Existing approaches can be divided to (Aldwin, 2009): self-reporting (e.g. Ardelt, 2003; Webster, 2003), implicit theory measures (e.g. Glück, Strasser & Bluck, 2009), and demonstrated wisdom (e.g. Baltes & Staudinger, 2000). Research show that members of different cultures have systematic, though somewhat different, conceptions of wisdom, and they often employ their specific conceptions in solving everyday problems and judging others (Takahashi & Bordia, 2000; Benedikovičová & Ardelt, 2008; Walsh, 2011; Staudinger & Glück, 2011).

There is evidence for age related change in wisdom. Ardelt (2010) found that college students scored as high as older adults. However, college-educated older adults tended to score significantly higher on the reflective and affective dimensions of wisdom and the overall score than did current college students. Qualitative evidence suggests that many older adults, particularly in the top 20% of wisdom scorers, grew wiser with age by learning from life experiences. She concludes that wisdom might increase with age for individuals with the opportunity and motivation to pursue its development.

Generally, development of wisdom is a dynamic process in which cognitive, affective, and motivational resources develop interactively through the reflection of experience (Staudinger & Glück, 2011). It is not any kind of experience in itself that leads to wisdom, but rather the decision to use that experience in a reflective, action-oriented way that leads to a common good (Sternberg, 2005). Many societies today are oriented on developing cognitive skills in schoolchildren. Memory and analytical skills, as a part of intelligence, are certainly important but not sufficient for school and life success. Wisdom is at least as important or evens more. Sternberg (2001) explained several reasons why it is important to develop wisdom in school setting. First, the objective of schooling is not only to impart knowledge, but also to help students to wise use of knowledge. Second, the teaching of wise thinking has always been implicit in school curricula, so it seems reasonable to make it explicit.

The objectives of the present paper were: a) to explore the role of education in development of wisdom attributed in implicit theories' perspective; b) to explore differences in wisdom between participants of different educational background (explicit theories' perspective).

Method

Participants

In the first study 257 persons aged from 18 to 92 years took part (M = 47.50; SD = 19.03), 40.5% women and 59.5% men. The educational background shows that 55% completed high school, 28% completed college/university and 10% finished or partly completed elementary school.

In the second study 439 persons aged from 24 to 88 years took part (M = 55.83; SD = 15.45), 56.3% women and 43.7% of men. Their educational background shows that 52.1% completed high school 23.7% finished or partly completed elementary school, and 22.3% completed college/university.

Measures

Educational level was measured as the highest level of formal education participants have obtained. Elementary school refers to the obligatory education that starts at the age of 6 or 7 and lasts for 8 years. High school education, non-obligatory, starts after that and lasts for 3 or 4 years. College and university start after the high school and last for 2 years (college), or 4 and more years (university). In this case this highest level included also postgraduate education.

The Questionnaire on Wisdom (*QW*) constructed by the authors of the present research comprises 10 closed-ended questions and four open-ended questions. For the purpose of the present research only the response to one question was analysed: *In your opinion, how important is education for development of wisdom?* Participants responded on a four point scale ranging from 1 (not at all) to 4 (extremely).

The Self-Assessed Wisdom Scale (SAWS), constructed by Webster (2003; 2007), was used for measuring wisdom. The SAWS consists of five factors: experience, emotional

regulation, reminiscence/reflection, humour and openness. All factors comprise 8 items. Participants responded to 40 items with a six point scale ranging from 1 (strongly disagree) to 6 (strongly agree). Experience includes items regarding a variety of experience in interpersonal context and coping with difficult life events. Example: *I have had to make many important life decisions.* Emotional regulation refers to exposure and appropriate regulation of the spectrum of emotions, and includes acceptance of both pleasant and unpleasant ones. Example: *I am very good at reading my emotional states*. Reminiscence/Reflection includes ability to use personal past and connect with present, as well as using the personal memory for coping. Example *Reviewing my past helps gain perspective on current concerns*. Openness is composed of items that measure openness to new ideas, values and experiences, the willingness to novelty and tolerance of others. Example: *I like to read books which challenge me to think differently about issues.* Humour refers to recognition of ironies in everyday life, ability to make others feel more comfortable, and to copying strategies. Example: *I often use humour to put others at ease.*

With permission of the author, we translated SAWS to Croatian. Its structure was checked with factor analysis. Our results replicated factor solution obtained by the author, so the same score composition was kept. Cronbach's alpha for the total SAWS score was 0.89, while for the subscales it was: 0.75 for experience, 0.74 for emotional regulation, 0.84 for reminiscence/reflection, 0.82 for humour, and 0.73 for openness.

Procedure

Data were collected in a larger survey that examined explicit and implicit theories of wisdom. The SAWS and QW were administered to university students of social sciences, humanities and music, with their oral consent. A part of students then recruited additional adults from a midlife group (35 – 59 years) and older group (over 60 years) and administered the SAWS and QW. Students received nominal course credit for questionnaire administration.

Results

Wisdom and education in the light of implicit theories

Results obtained with the question *In your opinion, how important is education for development of the wisdom?* from QW, revealed a full range of offered opinions: 19.3% responded not at all; 38.2% slightly; 32.1% very much and 10.4% extremely. So, slightly more that half (57.5%) of respondents consider education unimportant for development of wisdom, while slightly less than half (42.5%) find it important. In order to explore if persons with different levels of education (elementary school, high school and college/university) differ regarding the role they attribute to education in wisdom development, 3 (levels of education) x 4 (levels of response from 1 = low to 4 = high) chi-square analysis was computed, but no significant differences were found.

Wisdom and education in the light of explicit theories

In order to explore differences in wisdom based on the educational background, one-way ANOVA on total SAWS scores was computed. The analysis showed no significant differences ($F_{2, 436} = 1.07$; p = n.s.) among persons with different levels of education (elementary school, high school and college/university). Then a set of ANOVA's was computed for every SAWS factor, and it revealed significant differences in three of five wisdom factors. Participants with high school and college/university education reported to be significantly more reflective ($F_{2, 436} = 4.25$; $p < .01$*)*, opened ($F_{2, 436} = 4.15$; $p < .01$*)* and humoristic ($F_{2, 436} = 15.15$; $p < .001$*)* than those with elementary school, while no significant

differences were found among three groups in experience and emotional regulation. All differences between groups were tested with Student-Newman-Keuls test.

Discussion

Previous exploratory and confirmatory factor analyses indicated the viability of a five-factor model (Webster, 2003; 2007). This was confirmed in this research, although the SAWS was translated into a different language (from English to Croatian) and applied on a sample with different cultural background. Also the Cronbach alpha was highly similar (0.89 in the Croatian and 0.90 in the Canadian sample). Results of the current study increase the confidence in reliability and validity of the SAWS as an important measure of wisdom. Assessments conducted on Canadian (Webster, 2003) and Australian sample (Taylor et al, 2011) together with the present Croatian sample provide evidence of the cross-cultural relevance of the SAWS.

Wisdom and education

The main goal of this research was to explore individual differences in wisdom based on formal education. When exploring the lay-theories regarding this topic, results remain bipolar, as slightly more than half participants consider education unimportant for wisdom development, and slightly less half find it important. Similarly, results obtained by the explicit view are incongruent. Total SAWS score, as a general measure of wisdom, does not show differences among people with different formal education. The reason is probably the dominant orientation of the existing educational system towards knowledge acquisition, and less to its implementation in life situations. However, analyses that take into consideration the multidimensional nature of wisdom reveal that persons with high school and college/university education score higher than persons with elementary school on reminiscence/reflection, openness and humour, while no significant differences are found in experience and emotional regulation. It is likely that higher education encourages more reflective thinking and openness to new ideas, values and experiences, as well as the willingness to novelty, recognition of ironies in everyday life, and copying strategies because of a diversity of curricula, compared to elementary school curriculum. On the other hand, it is also possible that more reflective, open and humoristic persons pursue highest education. Previous research identified social factors as strongly connected with gaining of life experience which is considered crucial for becoming wise(r). In this context, education, as one of social factors, represents a potential contributor in wisdom development.

Teaching wisdom

As Yang (2011) notes, wisdom tends to emerge in at least two real-life contexts: in the developmental context, where it deals with life decisions and management; and in the situational context, where it is employed in everyday situations of solving problems or crisis. Both types of context are important for wisdom development. Education increases people's knowledge, and potentially helps them solve life problems, but educators can do more to help people in this area. There are a number of ways to improve wisdom by helping learners: to reflect on the relationship between learning and life; to integrate conflict ideas; to apply learned to real life situations and many others.

In the light of conclusions made by Baltes et al (1999) that the kind of knowledge and judgment typical of wisdom appears in early adulthood, and those reported by Baltes and Staudinger (2000) that the major period of gaining wisdom-related knowledge is the age from 15 to 25 years, it seems logically to support the introduction of programmes relevant for the development of wisdom in the school curriculum. Development of wisdom is important

because it improves the quality of life, it is a vehicle for attaining life satisfaction and happiness, and it introduces values into important judgments.

Finally, some limitations of the present study can be considered. The use of self-reports in measurement of wisdom can be problematic if we assume that wisdom includes a high level of self-criticism. As pointed by Glück (2010), individuals with low wisdom but high self-esteem may describe themselves as much wiser than the wise individuals would do. Regarding the developmental trajectory of wisdom, longitudinal research would probably be a more appropriate choice to obtain response on this issue.

Conclusion

Results of the present research have not unanimously confirmed the importance of education in wisdom development, either from the implicit, or from the explicit theories' perspective. The reason is probably the dominant orientation of the existing educational system towards knowledge acquisition, and less to its implementation. The change of the direction at every educational level would very likely contribute to a better connection of formal education and wisdom. Introducing of programmes that develop wisdom is one of the methods. Existing programmes, procedures and principles to follow in teaching for wisdom (like those of Sternberg, Jarvin & Grigorenko, 2009) are good but still underused.

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