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Students' Wisdom Related Knowledge as Expertise

Abstract

Wisdom, as a form of cognitive functioning, includes different types of knowledge and values, and it seems that increasing the knowledge about the world and different experiences may facilitate their development. School system usually pays more attention to accumulation of knowledge, but little related to wisdom. In this study wisdom related-knowledge was explored in a sample of 63 university students. Two judges independently evaluated all the obtained responses regarding four life-situation problems (suicide, family, life planning and career) with five wisdom-related criteria. Results showed that in different life-situations students employed various criteria of wisdom to different extent: the most employed wisdom criterion was factual knowledge, followed by the procedural knowledge and lifespan contextualism, while value relativism and recognition of uncertainty occurred rarely.

Keywords: wisdom criteria, life-situation problems, students

Introduction

Wisdom represents both the pinnacle of human development and a part of the rough-and-tumble of life that helps a person reach common good for him- or herself and others (Bassett, 2011). Wisdom can be viewed as a form of high-level functioning in the cognitive domain. Some theorists have described wisdom as an extension of Piagetian stages of intelligence (Piaget, 1972) that might be a stage beyond formal operations, because wise individuals are those who can think reflectively or dialectically (Riegel, 1973; Kitchener & Brenner, 1990). For other authors wisdom is conceptualised, not in terms of problem solving, but rather in terms of finding a problem that should be solved (Arlin, 1990). Although wisdom is related to other psychological constructs, in particular to knowledge, to analytical, creative and practical intelligence, it is not identical to any of them (Sternberg, 2001).

The main areas of psychological research in wisdom have been mainly oriented to providing concepts, definitions and structure of wisdom, its measurement, understanding of its development, exploring its plasticity, and investigating of wisdom in life context (Staudinger & Glück, 2011). This paper tackles the last topic.

It seems that enhancing of the knowledge acquisition about the world, as well as encouraging openness to new experience, can be helpful to develop wisdom in adolescence (Staudinger & Pasupathi, 2003). There is proof that wisdom-related knowledge has tendency to increase from adolescence through young adulthood and then it remains relatively stable (Pasupathi, Staudinger & Baltes, 2001). In order to enhance wisdom, researchers have proposed various activities. For example, in a course entitled "Wisdom as Skill", Trowbridge (2007) engaged participants in three activities: (1) firstly they learned about wisdom by reading literature; (2) then they strove to develop wisdom through practicing empathy, openness, and fairness; and finally (3) they practiced wisdom in real-life situations. Sternberg, Rezintskaya and Jarvin (2007) have proposed wisdom related instructions for middle schools to help

students think how everything they learn may be used for better or worse ends. Glück and Baltes (2006) conducted a study to enhance wisdom of adult participants by using short-term interviews, and concluded that combination of crystallised intelligence (defined as the ability to use knowledge), life experience, self-regulation and openness could increase wisdom. However, the efficiency of proposed activities are questionable because, as Ardelt says (2004), intelligent people may give a highly wise response to a fictitious life problem, but act much less wisely in a similar situation in their own life. Accepting of diversity of beliefs can be promoted by encouraging of postformal thinking because it alleviates setbreaking, tolerance to contradictions, and attempts at synthesis (Chang & Chiou, 2014).

The approach to exploring wisdom proposed in this paper is based on the five-criteria model developed by Baltes and Smith in the Berlin Wisdom Paradigm (e. g. Staudinger & Baltes, 1996). They analysed participants' answers on life-management problems and concluded that wiser answers reflect more (1) factual and (2) procedural knowledge, more (3) knowledge about context of life, more (4) relativism of values and goals, as well as more (5) recognition of unpredictability of life. The first two criteria are considered as basic, and the last three as meta-level criteria of wisdom.

The main objectives of the present research were: a) to explore the existence of similarities in wisdom through evaluation of different life-problems; and b) to reveal the structure of university students' wisdom-related knowledge as expertise.

The first objective was related to the hypothesis (H_1): students will score higher in situations they can easier identify with. The second objective was related to two hypotheses: (H_2): the meta-level criteria, which draw on later-developing capacities, will be less present than the basic criteria; and (H_3): students will not employ the same wisdom criteria in each life-problem situation because of their various capacities to handle certain and uncertain topics.

Method

Participants

Four life-problems were presented to 63 university students of social sciences, humanities and music, with their oral consent. Students' age ranged from 19 to 28 years (M = 20.14; SD = 1.39). 70.8% of them were female and 29.2% male.

Measures and procedure

In this paper the focus was primarily put on searching for manifestations of wisdom in individuals by asking them to respond to four life-managing problems (Baltes, Glück & Kunzmann, 2002):

1. *The suicide problem:* Someone receives a telephone call from a good friend who says that he/ she cannot continue his/her life and has decided to commit suicide.

2. *The family problem:* A 14-years-old girl wants to move out from the family home.

3. *The life planning problem:* Due to factory closure, a mechanic loses his job. He has two little children, and the wife has a well-paid job. He can move to another town to find a job or he can take full responsibility for children and the household.

4. *The career problem:* A woman has devoted herself to raising family, not to pursuing a career. One day she meets an old friend who did the opposite, with success. The encounter has provoked the woman to reflect about her decisions.

Each situation was accompanied with two essay-type questions that students answered in writing: 1) What would you take into consideration if you were asked for the advice in this situation? 2) What would you advice?

In order to obtain quantified scores, two judges, trained and calibrated in applying the criteria, independently evaluated participants' protocols against the five wisdom-related criteria on a 7-points scale (from 1 = *not present at all* to 7 = *very present*). As reported by Baltes and Staudinger (2000), the reliability of this rating method is very satisfactory.

Criteria used to operationalise wisdom as expertise in the fundamental pragmatics of life are (Baltes & Staudinger, 2000):

1. *Factual knowledge,* that refers to general and specific knowledge about the conditions of life and its variations, knowing facts, data, and diverse information;

2. *Procedural knowledge,* that implies general and specific knowledge about strategies, assessments and advice concerning matters of life;

3. *Relativism of values and life priorities,* that comprises knowledge about differences in values, goals, and priorities;

4. *Recognition and management of uncertainty,* that reflects knowledge about the relative indeterminacy and unpredictability of life and ways to manage; and

5. *Lifespan contextualism that* includes knowledge about the context of life and its temporal or developmental relationships.

Results

For each of 63 participants total results were computed as a sum of two judgments on five criteria for each of four problems (63 x 2 x 5 x 4), generating 2520 evaluations.

Wisdom in different life problems

For each of four life problems scores could range from 40 to 280. In this study students scored from 44 to 146, with the average of 97.27 (SD = 20.51) on a normal distribution.

In order to explore the existence of similarities in wisdom through evaluation of different life-problems, students' responses were compared for the four situations. Scores could range from 10 to 70. However, students reached from 10 to 39 (the suicide problem), from 11 to 40 (the career problem), from 11 to 41 (the life planning problem), and from 12 to 45 (the family problem). All the distributions of results were normal. One way repeated measures ANOVA (Wilks' Lambda = 0.69, F (3,60) = 9.03, $p < 0.01$) and the post hoc paired samples test showed that students scored significantly higher in the family problem (M = 26.29, SD = 7.62) and the suicide problem (M = 25.54, SD = 7.05) compared to the career problem (M = 21.67, SD = 6.12). The average score for the family planning problem (M = 23.78, SD = 6.87) did not differ significantly from any other average score.

Structure of wisdom

In order to reveal the structure of wisdom-related knowledge as expertise, students' responses were compared against the five wisdom criteria. Although scores could range from 8 to 56, students achieved from 8 to 27 (recognition of uncertainty), from 8 to 35 (relativism), from 8 to 41 (factual knowledge), from 9 to 33 (procedural knowledge) and from 9 to 36 (lifespan contextualism). The average values were 14.49 (SD = 4.22) for recognition of uncertainty, 18.44 (SD = 4.96) for relativism, 19.06 (SD = 5.87) for lifespan contextualism, 21.38 (SD = 5.20) for procedural knowledge and 23.89 (SD = 7.67) for factual knowledge. All the distributions of results were normal. One-way repeated measures ANOVA (Wilks' Lambda = 0.23, F (4,59) = 49.20, $p < 0.01$) and the paired samples test showed that all average scores significantly differed between themselves, except lifespan contextualism with two criteria: procedural knowledge and relativism.

Two way repeated measures ANOVA revealed that criteria and life problems interacted (Wilks' Lambda = 0.35, F (12,51) = 8.08, $p < 0.01$): in the life planning problem all five wisdom criteria had the most similar values, while in the family problem and in the suicide problem wisdom criteria showed the largest span.

Discussion

Wisdom in different life problems

In wisdom related knowledge students achieved, on average, 40 per cent of the possible scores, which is similar to previous findings (e.g. Glück et al., 2013). When specific life problem situations were analysed, students manifested different levels of wisdom in each of them. They obtained highest results in the family and the suicide problem situation, followed by the family planning and the career problem. It supports the first hypothesis that predicted students' similar and higher scores in situations where they could easier identify with the characters closer to their age. It is consistent with the findings in tasks of moral reasoning (Blanchard-Fields, Hertzog & Horhota, 2012). Students could easier understand the situation of a young girl wanting to leave home (highest score), and answers reveal that some of them have experienced a similar dilemma. They scored lower in the family planning and career dilemma. Such situations usually happen later, in adulthood, so students lack personal experience. High ranking result of the suicide problem can probably be explained by more life threatening implications compared to a situation of losing a job (while the spouse still has one) or reflecting over a family *vs.* career dilemma. Average wisdom scores in this sample are not high probably because wisdom, measured with these tasks, very likely follows a crystallised intelligence path, so people at this age still have not reached their peak (Pasupathi et al., 2001; Ardelt, 2010).

Structure of wisdom

When the structure of performed wisdom in life situations was analysed, it became clear that students employed various wisdom criteria to different extent. They performed highest on factual knowledge followed by procedural knowledge

and lifespan contextualism, while relativism and recognition of uncertainty ranked lowest, confirming the second hypothesis.

University students in this sample reflect their dominant life experience in their answers. Their dominant life experience consists mostly of their formal education that puts more emphasis on factual and procedural knowledge (e.g. Buljubašić-Kuzmanović, 2006), and far less on lifespan contextualism, relativism or recognition of uncertainty. There are findings that confirm improvement from late adolescence to adulthood of processes that allow persons to resist interference from their own perspective (Dumontheil, Apperly & Blakemore, 2010) which are relevant for the meta-level wisdom criteria.

A further analysis reveals that in the life planning problem all five wisdom criteria converge the most, while in the family and the suicide problem they diverge in the widest span. Obviously, in different life situations students employed various wisdom criteria, which confirms the third hypothesis. The life planning situation includes more variables that can be perceived as external (closing of the factory, no job opportunities), unlike in other situations, where dilemmas can be perceived more as results of personal choices (life/suicide, family/career, leaving the home/staying). So in the cases where more external factors were mentioned, students gave more place to relativism, lifespan contextualism and recognition of uncertainty, and less to factual and procedural knowledge. Maybe they expected that such situations might happen to them, while currently they lacked personal experience with them. In situations where personal choices looked dominant (suicide, family and career problems), students expressed accusations (e.g. *He/she is selfish*. *He/she is a coward*.) three times more than in the family planning problem. Such finding can be explained with strong emotional reaction in which evaluation of alternative factors influencing the outcome is inhibited and blame attributions occur (Blanchard-Fields et al., 2012).

Two limitations of the study should be mentioned. Expressed wisdom in fictitious life problems does not equal to wisdom acting in a personal life problem (Ardelt, 2004). Then the order of the four life problem situations did not vary, and the first two situations scored highest. Maybe students put more effort in them and then got tired, so in further research it should be controlled.

Conclusion

In different life situations university students employed various wisdom criteria to different extent. The most employed was factual knowledge followed by procedural knowledge and life contextualism, while relativism and recognition of uncertainty occurred rarely. The college years are considered as a very good and sensitive period for raising awareness among students about their potential, and for enhancing their habits and attitudes that can be taken further to adulthood (Narvaez, 2013). However, increase in competence and knowledge cannot immediately be transformed (and considered) as an increase in wisdom.

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