

Combining Excellence and Ethics: Implications for Moral Education for the Gifted

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In this article the current empirical research on morality and giftedness is reviewed with an emphasis on moral sensitivity. The component of moral judgment has been the most studied aspect in morality. Although high-ability students have been shown to be superior in moral judgment when compared to average-ability students, morality includes other components as well, such as sensitivity, motivation, and character. Furthermore, the critics of Kohlbergian research argue that moral reasoning does not necessarily lead to moral behavior. The gifted students might be able to give “correct” responses in the Defining Issues Test (DIT) test but their actual moral behavior cannot be predicted based on these test results. Hence, the limits of interpretation of these findings need to be acknowledged. The component of moral sensitivity is introduced with case studies regarding Finnish gifted students and Finnish Academic Olympians. The beliefs and values in academic work ethics of the Finnish Academic Olympians are discussed to give examples of how ethics can be combined with excellence in science. Some implications for the moral education of gifted students are suggested based on the research findings.

Keywords: Academic Olympians, academic work ethics, ethics, excellence, moral development, morality and giftedness, moral sensitivity

In this article the current empirical research on morality and giftedness is reviewed with an emphasis on moral judgment and moral sensitivity. Darcia Narvaez (2001) has operationalized moral sensitivity to include seven sets of skills that operate on a more general level: (a) reading and expressing emotions, (b) taking the perspectives of others, (c) caring by connecting to others, (d) working with interpersonal and group differences, (e) preventing social bias, (f) generating interpretations and options, and (g) identifying the consequences of actions and options. In science and academic work researchers need skills in both moral judgment and sensitivity.

Skills in moral judgment and especially in moral sensitivity are necessary in combining excellence with ethics. High-ability students have been shown to be superior in moral judgment when compared to average-ability students. However, high academic ability does not always predict high moral judgment (Narvaez, 1993). Moreover, morality includes other components as well, such as sensitivity,

motivation, and character. In this article the component of moral sensitivity is introduced with case studies regarding Finnish gifted students and Finnish Academic Olympians. The beliefs and values in academic work ethics of the Olympians are introduced and discussed. All these studies and cases are reflected in the holistic education framework for helping educators to nurture both excellence and ethics in gifted education. Some implications for the moral education of gifted students are suggested based on the research findings.

RESEARCH ON MORALITY AND GIFTEDNESS

Research on Moral Judgment

According to Bebeau, Rest, and Narvaez (1999), morality is built upon four basic component processes. These processes include moral sensitivity, moral judgment, moral motivation, and moral character. The components of moral sensitivity, moral motivation, and moral character have been less studied than the components of moral judgment (Tirri, 2008).

Most of the studies in the area of morality have based their theory on the cognitive–developmental theory of Lawrence Kohlberg (e.g., 1969). The Defining Issues Test (DIT)

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developed by James Rest (1986) is a well-documented measure of moral judgment that has been used all over the world. The index most frequently used is the *P score*, which reflects the principled reasoning (Stages 5 and 6 in Kohlberg's theory) of a person. Kohlberg's procedures have been criticized for lack of diversity in the moral dilemmas that have been used in the interviews (Yussen, 1977). The hypothetical dilemmas can also be seen as being too abstract and removed from the daily experiences of most people (Straughan, 1975). Recognition of these aspects of hypothetical dilemmas has led educational researchers to study real-life moral problems identified by people (Walker, de Vries, & Trevethan, 1987). The research conducted in this area shows that adolescents formulate dilemmas that are very different from the hypothetical dilemmas used by Kohlberg and his colleagues to assess moral reasoning (Binfet, 1995; Yussen). Most of the dilemmas formulated by Kohlberg focus on issues of ownership, public welfare, and life-and-death. In Yussen's study, the moral dilemma themes formulated by adolescents focused most frequently on interpersonal relations. Colangelo (1982) and Tirri (1996) found the same tendency with gifted adolescents.

Andreani and Pagnin (1993) provided a comprehensive review of the literature in their article. According to these authors, the gifted students are presumed to have a privileged position in the maturation of moral thinking because of their precocious intellectual growth. Terman's (1925) sample of gifted children showed superior maturity in moral development in choosing socially constructive activities and in rating misbehavior.

In the 1980s, Karnes and Brown (1981) made an initial investigation on moral development and the gifted using Rest's DIT. Their sample included 233 gifted students (9–15 years in age) who were selected for a gifted program. The results of the DIT were compared to the students' results in a test that measured their intellectual ability (WISC-R; Wechsler, 1949). The empirical results of the study showed a positive correlation between the two tests. According to researchers, intellectually gifted children appear to reach a relatively high stage of moral reasoning earlier than their chronological peers (Karnes & Brown).

Other studies of moral judgment using DIT scores have shown that gifted adolescents scored higher than their peers as a group (Janos & Robinson, 1985; Narvaez, 1993; Tan-Willman & Gutteridge, 1981). However, the data with high-achieving adolescents have indicated that the relationship between apparent academic talent and moral judgment scores is more complex. According to Narvaez's study, high academic competence is necessary for an unusually high *P* score, but it does not necessarily predict it. The high achievers can have average to high moral judgment scores, whereas low achievers cannot be high scorers in moral judgment (Narvaez).

Ikonen-Varila (2000) reported DIT principled scores of Finnish ninth graders ($N = 1631$), and according to her

the proportion of principled moral reasoning was 22.6%. Ikonen-Varila committed herself on the connection between academic competence and moral reasoning, when *P* scores in her study were classified according to the academic competence (viz., average success in school varying from 4 to 10). It was perceived that when the average school success was under 7, the DIT mean score was 15.4, and when the average school success varied between 7 and 9, the DIT score was 24.2. Finally, Ikonen-Varila found that those who succeeded best in school (average success over 9) reached average *P* score 29.7. Ikonen-Varila concluded that because cognitive factors regulate moral reasoning (which is essentially rational) in childhood and adolescence, it is not astonishing that success in school is the main background factor explaining moral reasoning. Her results supported the connection between giftedness and moral reasoning: the more gifted, the more capable of principled moral reasoning (Räsänen, Tirri, & Nokelainen, 2006).

Tirri and Pehkonen (2002) explored the moral reasoning and scientific argumentation of Finnish adolescents who are gifted in science. These 16 girls and 15 boys (14–15 years of age) participated in a gifted program at the University of Helsinki. There were three research instruments. Raven's (1983) Standard Progressive Matrix (SPM) was used to provide a test for comparing students' capacities for observation and clear thinking. The moral reasoning was measured by DIT. The students were also asked to write essays on scientific moral dilemmas, and finally the researchers interviewed the students. The results show that the average DIT *P* score was 41 representing the average score for a heterogeneous group of 18-year-olds. Scores ranged from 7 to 78, which means high variance ($SD = 15.8$); some students really represented postconventional moral reasoning, some not at all. An interesting finding was that the correlation between DIT and SPM was near zero (Tirri & Pehkonen).

In a recent Finnish study with 51 academically gifted ninth-grade students, their DIT tests were compared with those of average-ability students of the same age ($n = 77$; Räsänen et al., 2006). The researchers reported very large standard deviations. When studying the moral reasoning of gifted students with DIT, Narvaez (1993) got parallel results. The more gifted the students in question, the larger the standard deviation. Narvaez also noticed that academic competence is a necessary but not sufficient condition for principled thinking. The results of Finnish studies refer to the same issue.

Research on Moral Sensitivity

Morality includes other components besides moral judgment as measured by DIT scores. Real-life moral dilemmas also require moral sensitivity and moral motivation (Narvaez, 1993). Before an individual can make responsible moral judgments, he or she needs to identify real-life

moral dilemmas in different contexts. A broad conception of morality requires more than just skill in abstract reasoning. Affective and social factors play a vital role in moral conduct. The few empirical studies available have contradictory results on the relationships between general intelligence, social competence, and altruism (Abrams, 1985). Earlier studies on deviant behavior and crime among the gifted have also shown that there is no necessary relationship between morality and intelligence (Brooks, 1985; Gath, Tennent, & Pidduck, 1970). Furthermore, earlier studies show that there are qualitative differences in the moral reasoning of gifted adolescents (Tirri & Pehkonen, 2002).

According to Bebeau et al. (1999), moral sensitivity

is the awareness of how our actions affect other people. It involves being aware of the different possible lines of action and how each line of action could affect the parties involved (including oneself). Moral sensitivity involves imaginatively constructing possible scenarios (often from limited cues and partial information), knowing cause-consequent chains of events in the real world, and having empathy and role-taking skills. Moral sensitivity is necessary to become aware that a moral issue is involved in a situation. (p. 22)

To respond to a situation in a *moral way*, a person must be able to perceive and interpret events in a ways that lead to *ethical action*. The person must be sensitive to situational cues and must be able to visualize various alternative actions in response to that situation. A morally sensitive person draws on many aspects skills, techniques, and components of interpersonal sensitivity. These include taking the perspective of others (role taking), cultivating empathy for a sense of connection to others, and interpreting a situation based on imagining what might happen and who might be affected. Moral sensitivity is closely related to a new suggested intelligence type, *social intelligence*, which can be defined as the ability to get along well with others and get them to cooperate with you (Albrecht, 2006; Goleman, 2006).

A recent study (Tirri & Nokelainen, 2007) examined the ethical sensitivity self-evaluations of two Finnish urban schools seventh- to ninth-grade students ($n = 249$) with the Ethical Sensitivity Scale Questionnaire (ESSQ) that was operationalized based on the theory by Narvaez (2001). According to the results, female students estimated their ethical skills higher than their male peers. This tendency was explained by the nature of items, which mostly measure caring ethics with emotional and social intelligence. In earlier Finnish studies, both sixth- and ninth-grade girls were shown to be more care-oriented in their moral orientation than their same-age male peers, who were clearly justice oriented (Tirri, 2003).

Academically gifted students estimated their ethical skills higher than average ability students (Tirri & Nokelainen, 2007). This finding supported other researchers' notions that

gifted students hold a privileged position in the maturation of moral thinking because of their precocious intellectual growth (Andreani & Pagnin, 1993; Karnes & Brown, 1981; Terman, 1925).

In a study on moral reasoning and scientific argumentation of Finnish adolescents who are gifted in science (Tirri & Pehkonen, 2002), attention to their moral sensitivity was also paid. In the qualitative essays and interviews the students were asked to identify moral dilemmas in science and to provide solutions to them. The findings show that the students identify different aspects relevant to discussing the same moral dilemma. Furthermore, the principles and values used in solving the dilemma reveal qualitative differences in students' moral sensitivity. Students' arguments and justifications for doing archeological research in graves were analyzed with the help of technical terminology developed by Toulmin (1958). All the students reached the conclusion that research in graves is morally justified. However, those students who gained the highest scores in the DIT reflected on the dilemma with different justifications and values than the students who attained only average scores. Furthermore, girls and boys differed qualitatively from each other in their argumentation process (Tirri & Pehkonen).

Two illustrative cases that reflected some general trends in the argumentation pattern of the whole group studied were presented (Tirri & Pehkonen, 2002). Tina is a good example of a gifted girl whose argumentation is logical and elegant and who provides theoretical and ethical backings for her arguments. Furthermore, she demonstrates emotional and spiritual sensitivity in her reflection on moral dilemmas in science. Tina's argumentation for the disadvantages of archeological research in graves is based on her moral sensitivity in respecting other people's feelings and values. She does not limit her arguments to rational and scientific evidence only. Tina considers the sacred nature of the grave and understands the religious concept of holiness. The backings she uses are based on ethical values of respecting things that are considered holy by some people. Tina demonstrates very good judgment in her reflection on the advantages of archeological studies as well. She admits that sometimes the graves have to be studied. However, the reasons need to be valid and the grave must be old enough. For the final conclusion, Tina states that we should negotiate contracts and laws on how to conduct archeological studies in graves. Compared to the whole group of gifted students, Tina's argumentation is outstanding, including critical thinking, logic, and moral sensitivity. Her final conclusion provides some concrete but not naïve ways to approach this dilemma. It is no surprise that Tina ranked at the highest level of postconventional moral reasoning in the DIT.

Alex's argumentation for the advantages of archeological research in graves was typical of the whole group of gifted students. The majority of the arguments students used to justify conduct in science were based on utilitarian ethics.

The new knowledge in science was identified as the leading value that brings the greatest benefit to people. However, in most cases the students acknowledged the need to provide some exceptions to this rule. Even in science, the researchers should pay attention to the feelings of those people who are affected by the research. In the study, archeological research in graves was advocated, with the exception of those graves that are so new that the relatives of the dead could still be alive. Alex's argumentation for the disadvantages of archeological research in graves was not typical of the whole group of gifted students. His strong identification with the scientists led him to consider scientific moral dilemmas only from the scientist's point of view. This emphasis made him neglect the relatives and other people who may have different values concerning studies in graves. Alex's score in the DIT was below average compared to the whole group of gifted students. Compared to his almost perfect score in the Raven test, Tirri and Pehkonen (2002) claim that his general intellectual ability is more developed than his moral reasoning. The qualitative study of his argumentation may reveal in part the reasons for his only average score in the DIT. Alex's thinking lacks universal principles in his reflection on the disadvantages of doing research in graves. He considers the dilemma only from his own partial standpoint. However, the ability to use universal moral judgments by an impartial moral agent is considered to be the most mature moral reasoning, according to Kohlberg's procedures (Strike, 1999).

The results of the study reveal that there are qualitative differences in the moral reasoning of gifted adolescents. A high intellectual ability does not predict mature moral judgment. Furthermore, responsible moral judgments for the moral dilemmas in science require moral motivation and moral sensitivity. Teachers and educators should nurture the moral growth of future scientists by exploring and discussing the ethical aspects of doing scientific studies. The argumentation model presented in the article can serve as a pedagogical tool for teachers in reflection on moral dilemmas in science with their students (Tirri & Pehkonen, 2002).

THE BELIEFS AND VALUES OF FINNISH OLYMPIANS

In a study on adult gifted females, including Academic Olympians, the importance of beliefs and values in their lives was found (Tirri, 2002; Tirri & Koro-Ljungberg, 2002). In another study including Olympians, the beliefs and values of Finnish successful scientists ($N = 16$) that guide their academic work were identified (Koro-Ljungberg & Tirri). In both studies interviews were conducted in which the professional and personal lives of these individuals were discussed, as well as themes related to their choices of career, job, spouse, lifestyle, friends, and hobbies. All the Olympians in

the study worked in academic research environments (Tirri, 2001). One of the aims was to reveal the contextual and situational nature of academic work ethic. Before this study, other researchers have acknowledged the situational and contextual essence of Kohlberg's (1969) and Gilligan's (1982) moral orientations. Strike (1999) has argued that justice and caring aim at different moral goods. According to Noddings (1999), the ethical orientations of justice and care might also apply to the different domains. In some contexts, justice and care might work together to produce a genuinely moral solution, and on other occasions they might conflict with one another.

When placing ethical orientations of justice and care in the context of scientific work, it is often assumed that scholars need to acknowledge both forms of ethics in order to produce good science and build a just and caring society through their work. In academia, some general rules to evaluate research findings and accomplishments of the members needs to be established. Every scholar wants to be treated fairly and have equal opportunities to publish his or her work and compete for academic rankings. In addition to equal rights, a good scientific community must acknowledge individual differences and build a sense of belonging among its members (Koro-Ljungberg & Tirri, 2002).

In the study by Koro-Ljungberg and Tirri (2002), it was argued that in the context of academia justice and care do not rule separate spheres, nor does one dominate the other. Scientists' narratives revealed that various ethical orientations sometimes work together and sometimes conflict with one another, as suggested by Strike (1999). Furthermore, the authors found that ethical orientations of care and justice were insufficient to explain the essence of moral orientations among the scientists studied. Therefore, they proposed that the conceptualizations and understandings of scientists' work ethics must go beyond justice and care-oriented reasoning. Instead, ethical analyses and moral perceptions should create new horizons and give inner meanings to both scientists themselves and to their communities. Based on the ethical analyses, the concepts of ethics of justice, care, and empowerment as possible value systems guiding researchers' work ethics were introduced. After the discovery of the theoretical misfit between the data and Kohlberg's (1969) and Gilligan's (1982) models, as well as following the lack of emphasis within empowering self as a source of moral arguments and actions, a concept of *ethic of empowerment* to describe values and beliefs connected to the moral practices of enabling situated selves were developed. Ethics of empowerment describes values and beliefs related to academic motivation, self-image, and academic work culture. It was practiced through multiple conflicting subjectivities, which allowed scientists to follow their internal voices, to change and reevaluate their ethical assumptions, values, and beliefs related to their personal and professional lives (Koro-Ljungberg & Tirri).

COMBINING EXCELLENCE WITH ETHICS

In this article I have given a review of the research on morality and giftedness. Based on my review I have shown that high intellectual ability does not predict mature moral judgment. Furthermore, responsible moral judgments for the moral dilemmas in science require moral motivation and moral sensitivity. Moreover, we revealed the contextual and situational nature of academic work that calls for ethics of justice, care, and empowerment.

Combining excellence with ethics relates to ethical models developed in the academy, such as Pekka Himanen's (2001) theoretical approach to the Hacker ethic. In his work, Himanen introduced a new kind of ethic, the *hacker work ethic*, that has replaced the dominance of the Protestant work ethic with a passionate attitude and relationship to one's work. With the word *hackers* he referred to people who did their work because of intrinsic interest, excitement, and joy, whereas the Protestant work ethic emphasized work as a duty and a calling. The Academic Olympians resemble the hackers with their strong inner drive to excel (Tirri & Campbell, 2002).

Hackers wanted to realize their passion together with others, and they wanted to create something valuable for the community and be recognized for that by their peers. A passionate attitude toward work, a desire to learn more about subjects and phenomena, was an attitude found not only among computer hackers in Himanen's study but also among Academic Olympians. Himanen (2001) identified the monastery as the historical precursor to the Protestant ethics. For the hacker work ethic, the academy was the precursor. Historically, the academy has always defended a person's freedom to organize his or her work schedule. Hackers did not organize their lives in terms of routine and continuously optimized workdays but in terms of a dynamic flow between creative work and life's other passions. Scientists working within the academy were occasionally free to organize their days according to a flow between creative work and other passions, but equally as often, scientists were committed to rigid schedules, time lines, and assigned tasks (Koro-Ljungberg & Tirri, 2002).

According to Himanen (2001), the hacker work ethic consisted of "melding passion with freedom" (p. 140). For the hackers, recognition within a community that shares their passion was more important and more deeply satisfying than money, just as it was for scholars in the academy. However, this recognition was no substitute for passion—it had to come as a result of passionate action, of the creation of something socially valuable to this creative community. A hacker who lived according to the hacker ethic on all three of these levels—work, money, ethic—gained the highest respect in his/her community (Himanen).

Teachers and educators should nurture the moral growth of future scientists by exploring and discussing the ethical aspects of doing scientific studies. Academic work ethic is a specific domain that needs to be discussed with the future

scientists. The case studies of Academic Olympians and their critical incidents, beliefs, and values can function as empowering narratives of the different ways to combine excellence and ethics in gifted education. Future scientists need ethical expertise that includes skills in ethical sensitivity, ethical judgment, ethical motivation, and ethical action. Holistic education supports the development of the whole person, rather than merely the cognitive domain. This kind of education acknowledges the importance of social and affective domains in students' development, including their moral concerns.

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