

# Does care reasoning make a difference? Relations between care, justice and dispositional empathy

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The aim of this study was to investigate relationships between care and justice reasoning, dispositional empathy variables and meta-ethical thinking among 128 students from a university of applied sciences. The measures were Skoe's Ethic of Care Interview, the Defining Issues Test, Davis's Interpersonal Reactivity Index and Meta-Ethical Questionnaire. The results showed that levels of care reasoning were positively related to the post-conventional schema and negatively related to the personal interest schema in justice reasoning. Age, meta-ethical thinking, the post-conventional schema and perspective taking predicted care reasoning. Sympathy was positively related to both modes of moral reasoning among men and predicted their care reasoning. The results point out common elements for care and justice reasoning, underscore the importance of perspective taking for moral reasoning and indicate that the relationship between affective-based empathy and moral reasoning is gender-specific and far more complex than previous theories suggest.

## Introduction

Almost 30 years ago, Carol Gilligan (1982) presented a famous claim that there are two sex-related moralities, the morality of justice, centred on conflicting claims and individual rights, more typical for men, and morality of care, centred on responsibilities in relationships, more typical for women. 'The ethic of justice' is focused on maintaining fairness, equity and obligation through application of moral principles, norms and rules, whereas 'the ethic of care' is focused on maintaining relationships through responding to needs of others and avoiding hurt. A large body of research has validated that both moralities are used in solving moral conflicts (see Jaffee & Hyde, 2000). The most important predictor of the morality usage is, however, type of moral conflict, rather than gender. Moral conflicts involving concerns about others' welfare tend to invoke care-based judgements among both genders (Wark & Krebs 1996, 1997; Jaffee & Hyde, 2000; Juujärvi, 2005).

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To date, the morality of care has mostly been conceptualised as an alternative orientation for justice, with its specific way to perceive and construe moral issues (Lyons, 1983; Jaffee & Hyde, 2000). This has obscured another conceptualisation made by Gilligan: the morality of care as a developmental sequence. According to Gilligan, the morality of care would constitute a developmental path that entails three main levels of care with two transitional ones. In brief, the levels are as follows: (1) exclusive self-concern; (1.5) questioning self-concern as a sole moral criterion; (2) exclusive other-oriented concern; (2.5) questioning other-oriented concern a sole moral criterion; and (3) the balanced concern for both self and others. Essential for the development of care is growing understanding of responsibilities in the context of more differentiated dynamics between self and other (see Methods section). Based on Gilligan's stages, Eva Skoe (1993) constructed and validated a developmental measure of care-based moral reasoning, the Ethic of Care Interview (ECI). Studies with cross-sectional data (see Skoe, 1998) and two longitudinal studies (Pratt *et al.*, 2004; Juujärvi, 2006a) have supported the proposed developmental sequence. Juujärvi (2006a) found that care and justice reasoning (measured by the Moral Judgement Interview) were parallel in terms of internal consistency and small number of regressed cases. With regard to the controversial issue of sex differences, they have not been found among young academic adults in North America (see Skoe, 1998) or North-Europe (Skoe & von der Lippe, 2002; Juujärvi, 2006a). However, a difference favouring women has been found in a middle-aged Canadian sample (Skoe *et al.*, 1996) and in a Canadian early adolescent sample (Skoe & Gooden, 1993), indicating that if sex differences exist, they seem to be bound with cultural factors. With regard to developmental indices, care development has been found to be related to identity and ego development in particular (Skoe & Diessner, 1994; Skoe & von der Lippe, 2002).

Even though previous research has pointed out that care development can be seen as a moral aspect of identity development, it also means gradually developing reasoning capacities when solving moral conflicts. The aim of this study was to further investigate relations between care reasoning and justice reasoning, as well as reflective thinking and empathy-related constructs that are all seen as important elements of care-based morality in previous theory-building. The current sample consisted of young adults representing North-European culture.

### Care versus justice development

In the beginning of the care–justice debate, it was argued that justice development also covers care-based morality, because considerations of care, relationship and interpersonal trust are represented at each developmental stage in the scoring scheme of the Moral Judgement Interview, the original measure of Kohlberg's theory of moral development (Colby & Damon, 1983). To date, it has been widely admitted that the Kohlbergian framework does not cover all important aspects of moral reasoning, especially those relevant to close relationships. In particular, so called neo-Kohlbergians have specified that Kohlberg's theory of moral development concerns issues of macro-morality rather than issues of micro-morality: people's co-operation

within formal structures of society, institutions and laws, rather than personal relationships in everyday life (Rest *et al.*, 1999). Both modes of development nevertheless concern interpersonal morality. Care development deals with growing understanding of the dynamics of personal relationships, whereas justice development describes how relationships are understood as a part of the widening perspective that extends beyond interpersonal relations to the society- and prior-to-society levels.

According to the neo-Kohlbergian approach, justice development is best described by the concept of schemas, that is, organised structures of knowledge on particular domains of life and the self, rather than stages. People interpret moral issues through the schemas that give their reasoning certain consistency (Rest *et al.*, 1999). In brief, justice development (as measured by the Defining Issues Test) includes three successive schemas. The personal interest schema concerns one's own personal interest and the welfare of significant others. The cogniser learns to exchange brief co-operation with known others. The maintaining norms schema includes wider societal perspective and considerations of how to establish cooperation for society in general, through a uniform application of norms and laws across all individuals, including significant others as well as strangers. The post-conventional schema means thinking about a fair society more broadly: the cogniser is able to recognise that societal laws and norms might be partial therefore could be changed. Post-conventional thinking tries to advocate sharable moral ideals which are open to scrutiny and negotiation, as well as full reciprocity and equity across all groups within society (Narvaez & Bock, 2002).

Despite the different viewpoints, both care and justice development describe progress from initial self-oriented concern towards concern for others and thus may share certain elements of ego development, such as cognitive style, impulse control and character development (see Skoe & von der Lippe, 2002). From the conceptual perspective, especially, care Level 1.5 and the personal interest schema seem to coincide with each other, because both are characterised by short-term efforts to behave unselfishly towards others. In line with this, Skoe and Lippe (2002) reported a correlation of .21 for the ECI and the Defining Issues Test, a recognition measure for justice reasoning (see Methods section). The correlations for the ECI and the interview measure of justice reasoning, the MJI, have consistently been higher, varying across samples and gender (Skoe & Diessner, 1994; Skoe *et al.*, 1996; Juujärvi, 2006a). Juujärvi (2006a) further showed that care and justice tend to integrate in mature moral thought. Almost all subjects at the post-conventional level of justice development achieved the highest levels of care development (Level 2.5 and 3), but not *vice versa*. Subjects at the highest level of care indeed represented various stages of justice reasoning (ranging from Stage 3/4 to Stage 5 within Kohlberg's scheme). These findings suggest that care development precedes justice development and at the highest level of care people's moral reasoning still varies, due to differences in justice reasoning. Therefore we can expect that among the most sophisticated care reasoners, there are individuals using broadly maintaining-norms thinking as well as those using post-conventional thinking.

In justice reasoning, achieving the post-conventional level is a critical step, because it allows acknowledging that laws and norms might be biased against some social

groups or citizens and in favour of others (Rest *et al.*, 1999). In a similar vein, transition from conventional caring (Level 2) to reflective care (Level 3) means critical understanding that honesty about relationships is the primary moral criterion, instead of maintaining social norms. In both cases, advances in moral reasoning require reflective deliberation on moral issues. At the highest levels of both developments, the person is able to critically question social conventions, rules and norms and is ready to reject absolute moral truths. Even though she or he acknowledges moral relativism, she or he is committed to self-chosen moral values (Skoe, 1993; Rest *et al.*, 1999). Both developments obviously share progress from understanding the nature of moral knowledge as black and white and absolute to one which is more plural and contextual, finally leading to personal commitment to some moral values. This strand of development relating to transformation of the understanding moral knowledge and reality is called meta-ethical development (Perry, 1999). Previous studies have verified the association for post-conventional justice reasoning with political tolerance and respecting human rights (see Rest *et al.*, 1999). As regards care, Skoe *et al.* (1996) found that levels of care reasoning were positively related to the complexity of reasoning and negatively related to authoritarianism. In addition, more advanced care reasoning was related to more consultation with others, indicating openness to reflective discussion.

To summarise our hypotheses so far, we predict that:

- (1) there are no gender differences in care reasoning after controlling for age and field of study as independent variables;
- (2) justice reasoning in terms of the personal interest schema is negatively related to levels of care reasoning;
- (3) justice reasoning in terms of the post-conventional schema is positively related to levels of care reasoning;
- (4) justice reasoning in terms of the maintaining norms schema is not associated with levels of care reasoning; and
- (5) care and justice reasoning are positively related to meta-ethical thinking.

## **Empathy-related constructs and moral reasoning**

### *Justice, care and empathy in previous theory-building*

It has been argued that care-based and justice-based moral judgements are fundamentally different: justice aims at universalising moral rules across all similar cases, whereas care employs particularistic thinking to recognise nuances and varieties of persons and situations, in order to respond to needs adequately (Vreeke, 1991). This implies that care and justice reasoning might employ different empathic capacities, namely perspective taking and affective-based empathy, in divergent ways. Perspective taking, that is the ability to adopt the viewpoint of the other (Davis, 1996), would be essential for sophisticated justice reasoning, whereas empathy, defined as 'an affective response more appropriate to another's situation than one's own' (Hoffman, 2000, p. 4) would be pivotal for sophisticated care reasoning.

Perspective taking has been regarded as a cornerstone for justice reasoning, because it builds the individual's ability to reverse viewpoints in moral decision making. Affective empathy does not similarly contribute to justice reasoning. By contrast, feelings of sympathy may even interfere with objectivity and impartiality, especially at the conventional stages of moral development (Kohlberg, 1984). According to Kohlberg (1984), his theory of justice reasoning nevertheless recognises affect, 'but always as mediated or as structured by cognitive processes, such as role-taking or putting oneself in the place of other' (p. 291). For example, at the highest justice stages, respect for the dignity of persons also means respecting their feelings, supposedly requiring affective empathy.

Empirical research on the issue has been limited and brought results in line with Kohlberg's assertion. Some studies (e.g. Kalle & Suls, 1978; Keljo, 1995) have evidenced no relation between affective empathy and justice reasoning, whereas Skoe *et al.* (2002) found that sympathy was negatively related to the usage of justice reasoning on real-life dilemmas. Nevertheless some theorists (Hoffman, 2000; Pizarro, 2000) have argued that Kohlberg's approach overlooks the significance of empathy for moral functioning, especially in activating and charging moral principles.

In contrast to justice reasoning, affective empathy has been regarded as an essential mark of 'the ethic of care', especially by scholars of philosophy. Gilligan (1982) did not articulate the function of affects and emotions well in her theory, but care-based morality has nevertheless been viewed as an affective-based alternative for the 'ethic of justice' with the Kantian emphasis on rationality (e.g. Blum, 1988; Rudnick, 2001). As Carse (1991) puts it: '...care orientation understands moral judgments as situation-attuned perceptions sensitive to others' needs and to the dynamics of particular relationships, construes moral reasoning as involving empathy and concern, and emphasizes norms of responsiveness and responsibility in our relationships with others' (p. 6). Gilligan and Wiggins (1988) specified that sharing others' feelings motivates care and makes it distinctive from the morality of justice. Hoffman (2000) further argues that the morality of care can take two forms: empathy-driven actual caring and 'principled care', meaning that the individual has internalised care as a moral principle (e.g. always considering others' welfare). The principle of care, like other moral principles, is also likely to be activated by empathic arousal. According to Hoffman (2000), empathic arousal can also activate the principle of justice, but the link between empathy and the principle of care is more obvious than the link between empathy and the principle of justice.

In the light of the recent theory-building, empathic response is nevertheless a complex and multi-determined process that combines perspective taking and affective empathy (Davis, 1996; Eisenberg, 2000; Hoffman, 2000; Pizarro, 2000). Hoffman (2000) further distinguishes two viewpoints in perspective taking: imagining how one would feel (self-focused role-taking) and how the other feels (other-focused role-taking) in the other's place or situation. Perspective taking may lead to experience vicarious feelings of others (pure empathy) or, alternatively, to experience feelings of compassion and concern for others (sympathy) (Eisenberg, 2000). Besides perspective taking, empathic response can also be aroused by other, affective-based

means, such as mimicry, conditioning or association that trigger one's corresponding feelings in an immediate situation (Hoffman, 2000).

In addition, empathic arousal triggers personal distress that is defined as 'self-focused, aversive, affective reaction to the apprehension of another's emotion', such as discomfort or anxiety (Eisenberg, 2000, p. 672). By cognitive processing personal distress may turn to feelings of sympathy or alternatively, personal distress may lead to egoistically alleviate one's own discomfort. Feelings of distress dominate in the beginning of life and prevail as some part of advanced emotional response in all ages (Eisenberg, 2000; Hoffman, 2000.) To summarise, personal distress, empathy and sympathy are regarded as divergent emotional experiences that may result from perspective taking or by other means.

It is also reasonable to expect that empathic or personal distress (Davis, 1996), as a 'by-product' of empathic arousal, is negatively related to care development. Based on the theory of care development (Gilligan, 1982; Skoe, 1993), it could be predicted that experiencing distress decreases alongside care development, when the differentiation of self and other increases. As a consequence, the person is better able to differentiate between needs of self and others and obviously less prone to feel confused about the other's situation. There is some indirect evidence for the negative link between care reasoning and empathic or personal distress, as Cliffordson (2002) found that personal distress was negatively related to social competence and communication skills.

#### *Previous studies on care reasoning and empathy-related constructs*

Despite its theoretical significance, the relationship between care-oriented moral reasoning and empathy-related constructs is a rather unexplored issue. There is, however, some evidence on the significance of perspective taking for care reasoning, similarly to justice reasoning. Care-related conflicts can also be socio-cognitively complex ones, e.g. including conflicting demands and social pressure to behave against one's own values, thus requiring advanced perspective taking (Helkama, 2004; Juujärvi, 2006b). Consistent with this, role taking in real-life dilemmas has been found to be related to levels of care reasoning (Skoe *et al.*, 1996; Juujärvi, 2003). Therefore, we expect that perspective taking is positively related to both modes of moral reasoning in the present study.

With regard to affective empathy, there are some findings available. In Juujärvi's (2003) longitudinal study, students at the highest level of care were more emotionally empathic than others at the end of education. Skoe *et al.* (2002) found that sympathy is positively related to the usage of care orientation in real-life moral conflicts, but negatively related to the usage of justice orientation. Eisenberg and associates used a measure of pro-social reasoning (i.e. reasoning in situations where one's needs, wants and desires are in conflict with those of others, Eisenberg, 2006). They found positive associations between sympathy (and perspective taking) and pro-social reasoning among children and adolescents (Eisenberg *et al.*, 1991, 2001, 2002).

There is also evidence that the positive link between pro-social reasoning and affective empathy is true, especially for males (Eisenberg *et al.*, 1991, 1995). The lack of significant associations in the case of females might be due to a ceiling effect, given the higher empathy level for females than males in most of the studies (e.g. Mehrabian & Epstein, 1972; Eisenberg *et al.*, 1991; Eisenberg & Morris, 2001). The same pattern of gendered correlations has been found in studies of personal values and affective empathy. For instance, Myyry and Helkama (2001) found that correlations between emotional empathy and values which aim to support the welfare of others, like universalism and benevolence, were non-significant for females but significant for males. Based on these findings it could be predicted that the association of affective empathy and care reasoning among males is more positive than among females.

Based on previous theory-building and studies, we further summarise our hypotheses as follows:

- (6) perspective taking is positively related to care and post-conventional justice reasoning;
- (7a) sympathy is positively related to care reasoning, or alternatively;
- (7b) the relationship between sympathy and care reasoning is moderated by gender; and
- (8) personal distress is negatively related to care reasoning.

## Methods

### *Participants*

Participants were 129 first-year students from a university of applied sciences in southern Finland. Universities of applied sciences provide bachelor-degree educational programs within the European Higher Educational Area. They usually take 3.5–4 years (210–240 ECTS), compared with master-degree programs in universities taking 5 years (300 ECTS). The participants were 96 women and 33 men, representing various fields of study as follows: 35% social and correctional services, 30% healthcare, 22% business management and 13% security management. Students of social and correctional services were forthcoming social counsellors, roughly half of them oriented to work in prisons and other criminal services in future. Students of healthcare were intending nurses, one third of them specialising in public healthcare. Business students were oriented towards trade and business management, whereas students of security management were future leaders in security services.

Educational programs of healthcare, as well as social and correctional services, were female-related, with 97 and 85% of students being women, whereas security management was male-related, 65% of students being men. Business management students were equally distributed by gender. The mean age of the participants was 26.7 years ( $SD = 8.8$ ). The mean age of the women was 27.0 years ( $SD = 9.4$ ) and

the mean age of the men 25.7 years ( $SD = 6.9$ ). The difference between the ages was not significant.

### Measures

*Care-based moral reasoning.* Skoe's Ethic of Care Interview consists of four dilemmas administered in a structured interview format. A self-generated real-life moral conflict was administered first. For the specific purposes of this research project, a participant was requested to generate a real-life conflict related to her or his work experiences in the first place. If she or he did not report any, she or he was asked to tell of a real-life situation where she or he was not sure of the right thing to do. In addition to a real-life conflict, the ECI contains three standard interpersonal dilemmas surrounding: (1) unplanned pregnancy, (2) marital fidelity, and (3) care for a parent. The dilemmas are adjusted for gender with male protagonists for men and with female protagonists for women.

The interviews were recorded and scored according to *The ethic of care interview manual* (Skoe, 1993) which contains specified scoring instructions and sample responses for each dilemma. In general, the scoring contains five ethic of care levels. Level 1 is survival (caring for self). The perspective is characterised by caring for self to ensure survival and personal happiness. The questions of rightness emerge mainly if the person's own needs are in conflict. There is little, if any, evidence of caring for other people. Level 1.5 is transition from survival to responsibility that entails attachment to others. The person can criticise her or his own judgement and behaviour as selfish. There is some concern for other people, but survival of self is still the main aim. Level 2 concerns conventions of goodness (caring for others). This perspective is characterised by the elaboration of responsibility and providing care for those who are dependent and unequal. Conventionally defined goodness becomes the primary concern because survival is seen to depend on the acceptance of others that define 'right'. She or he feels responsible for the actions of others and others are responsible for her or his choices. Good is equated with self-sacrificing caring for others. Level 2.5 is transition from a conventional to a reflective care perspective, a shift from goodness to truth about relationships. There is a reconsideration of the relationship between self and others, as the person questions the goodness of protecting others at one's own expense. The new sense of responsibility to oneself places an emphasis on personal honesty. Psychological survival again becomes a central concern. Level 3 is concerned with the ethic of care (caring for both self and other). This perspective focuses on the dynamics of relationships and dissipates the tension between selflessness and responsibility through a new understanding of the interconnection between others and self. The person takes responsibility for choices she or he makes as criteria for goodness become internal. There is now a balance of moral considerations between self and other and both are included in the compass of care.

The participant is given a level score for each dilemma, ranging from 1 to 3. The ECI yields a total score across the four dilemmas, with a range of 4.0–12.0 for a participant. The ECI overall score is calculated as an average of the four dilemmas



and overall level score is determined by rounding to the nearest 0.5 level. In cases where the score falls between two levels (e.g. 2.25), a second scorer assesses the interview and classifies the score into one or the other level. In this study two additional scorers assessed all controversial cases.

All three scorers were educated in Skoe's workshops. Thirty interviews were randomly selected and cross-scored for reliability. Correlations were:  $r(9) = .96$  for Scorers 1 and 2;  $r(9) = .99$  for Scorers 1 and 3; and  $r(9) = .94$  for Scorers 2 and 3, all  $ps < .01$ . Inter-rater agreements on dilemmas within  $1/4$  level were: 93% for Scorer 1 and 2; 90% for Scorers 1 and 3; and 79% for Scorers 2 and 3. Cohen Kappas were 0.88, 0.86 and 0.73, respectively. Skoe (1998) reported inter-rater correlations ranging from .87–.96 and Cohen Kappas, ranging from 0.63–1.00 in other studies. Hence, current inter-rater findings are consistent with the previous findings on the ECI.

Internal consistency of the ECI has previously been measured by inter-correlations of scores on the four dilemmas, with between-dilemma correlations ranging from .73–.92 and the dilemma-total score correlations from .82–.97 (see Skoe, 1998). Inter-correlations between the dilemmas ranged from .65–.80, dilemma total-score correlations ranging from .73–.80. Cronbach's alpha was .86, compared with .94–.97 reported in previous studies (Skoe, 1998). To conclude, internal consistency findings are acceptable but somewhat lower than those found in previous studies.

*Justice-based moral reasoning.* A short version of Rest's (1979) original Defining Issues Test (DIT) was used to measure justice-based moral reasoning. A short version includes three moral dilemmas (Heinz and the Drug, Escaped Prisoner and Newspaper). The details of dilemmas were slightly modified into the Finnish context. The DIT is a multiple-choice test with 12 items representing various stages of Kohlberg's theory in each dilemma. Respondents are asked to rate the relative importance of each item on a five-point scale (1 = of no importance to 5 = of very high importance) and then to rank the four most important items. The most often used index from the DIT is the so-called P-score, which is based on the ranking variables and relative importance that a respondent gives to items representing the post-conventional moral reasoning. The P-score measures concern for sharable values, such as human rights and full reciprocity and equity in society. For example, a sample item in the Heinz and the Drug dilemma is 'Whether the druggist's rights to his invention have to be respected'. Based on the ranking variables, the DIT also yields a *personal interest score* (representing Stage 2 and 3 items) and a *maintaining norms score* (representing Stage 4 items). The personal interest score measures concern for own personal interest and the welfare of significant others (e.g. 'Whether Heinz is stealing for himself or doing this solely to help someone else'). The maintaining norms score measures concern for maintaining norms, laws and social order in society (e.g. 'Would stealing in such a case bring about more total good for the whole society or not?').

The DIT has been used in over 400 published studies and its validity and reliability is well established. Cronbach alphas for dilemmas and test-retest correlations have

been around .80 (see Rest *et al.*, 1999). A reliability check to the DIT measure was conducted by controlling the missing rating or ranking items and inconsistency between rating and ranking (see Rest, 1979). Eleven participants did not pass the reliability check and were therefore excluded from the analyses involving the DIT.

*Meta-ethical thinking.* Meta-ethical thinking was measured by the Meta-Ethical Questionnaire, developed by Clarkeburn *et al.* (2003). The questionnaire is purported to measure development of understanding meta-ethical concepts concerning source and type of moral answers, the role of authority, the nature of multiplicity, personal responsibility and relationship with multiplicity and the purpose of moral discussion. The questionnaire includes 10 statements on the Osgood scale. It consists of three subscales describing successive developmental positions: safety in dualism; distress in relativism; and comfort in commitment. Every item consists of the two opposite statements whose correspondence with one's own opinion is evaluated on the five-point scale.

For the purpose of this study, an overall mean score (scoring from 1 to 5 for each item) was used to measure meta-ethical thinking in general. One item (Number 8) was removed because of its low reliability. The final measure consisted of nine items, with Cronbach's alpha .63 that can be regarded as acceptable. Clarkeburn *et al.* (2003) did not report alphas in their study, hence there is no comparable information on reliability.

*Empathy-related responding.* Three seven-item subscales of Davis's (1996) of Interpersonal Reactivity Index (IRI) were used to measure different aspects of empathy by a five-point scale (0 = does not describe me very well to 4 = describes me very well). *Empathic concern*, with seven items, measures the tendency to experience feelings of warmth and concern for others (e.g. 'I often have tender, concerned feelings for people less fortunate than me'). Empathic concern is often also called sympathy (e.g. Eisenberg *et al.*, 2005) and the same concept is also used in this study. *Perspective taking* measures the tendency to take the point of view of others (e.g. 'I try to look at everybody's side of a disagreement before I make a decision'). *Personal distress* measures the tendency to experience anxiety and discomfort in the presence of distressed others (e.g. 'I sometimes feel helpless when I am in the middle of very emotional situation'). Cronbach's alphas were .81 for sympathy, .72 for perspective taking and .80 for personal distress.

### *Procedure*

This study was a part of research project on moral development during higher education. The initial sample included all first-year students from a university of applied sciences. The respondents filled out, via the Internet, a questionnaire consisting of demographic questions, scales for the IRI, the DIT and the meta-ethical questionnaire. The questionnaire also contained other measures, not dealt with in this article

and it took about one hour to complete. Participants for the ECI were pre-selected to represent business, healthcare, social and correctional services and security management in order to cover both care-oriented and not-care-oriented fields of study. The students were recruited through classes and all volunteers were interviewed by five interviewers trained in Skoe's workshop. The interviews took approximately 20–50 minutes. After the interviews, participants also filled out other questionnaires, not dealt with in this article. Those who had not filled out the questionnaire via the Internet were reminded to do so. Those who did not fill out the questionnaire ( $n = 48$ ) were excluded from the sample. No remuneration was provided for participation.

## Results

### *The ECI total scores and ECI levels*

The mean of the participants' ECI scores was 8.70 ( $SD = 1.81$ ). The distribution of participants across the ethic of care levels was as follows: Level 1: 3% ( $n = 4$ ), Level 1.5: 15% ( $n = 20$ ), Level 2: 38% ( $n = 49$ ), Level 2.5: 30% ( $n = 38$ ) and Level 3: 14% ( $n = 18$ ).

### *Care reasoning, gender and field of study*

The mean of the ECI scores was 8.84 ( $SD = 1.92$ ) for women and 8.32 ( $SD = 1.81$ ) for men, the difference being not significant,  $t(1,127) = -1.35$ , *n.s.* In order to investigate the impact of gender and field of study, an analysis of covariance was computed, with gender and field of study as the independent variables, the ECI total score as the dependent variable and age as the covariate. Age was positively related to the ECI scores,  $F(1,120) = 18.61$ ,  $p < .01$ , indicating significant positive correlation (see Table 1). A main effect for field of study was also significant,  $F(3, 120) = 2.97$ ,  $p < .05$ , whereas a main effect for gender was not,  $F(1,120) = 0.87$ , *n.s.* There was not gender  $\times$  field of study interaction effect. The model explained 25% of the variance in the ECI scores ( $\Delta R^2 = .20$ ).

*Post hoc* comparisons with Duncan's test showed that social services students scored higher on the ECI than security management students and business students

Table 1. Means and standard deviations of ECI scores according to field of study

Field of study	<i>M</i>	<i>SD</i>
Social services	9.45 <sub>a</sub>	1.69
Nursing	8.54 <sub>a,b</sub>	1.80
Security management	8.21 <sub>b,c</sub>	2.35
Business management	8.02 <sub>c</sub>	1.76
Total	8.70	1.81

Note: Values that do not share the same subscript within the column are different at level  $p < .05$ .

and healthcare students scored higher than business students (see Table 1). These results supported the expectation that women do not score higher on care reasoning than men after controlling for field of study. Instead, students of helping professions were more advanced in care reasoning than other students.

#### *Correlations between ECI, empathy and DIT measures and meta-ethical thinking*

Consistent with the prediction, the ECI was negatively related to the personal interest score,  $r(127) = -.32, p < .01$ , and positively related to the post-conventional score and meta-ethical thinking, both  $r(127) = .31, ps < .01$  (see Table 2). As predicted, the ECI and the maintaining-norms score were not significantly associated. It is worth noting that the post-conventional score and meta-ethical thinking were also positively associated,  $r(127) = .22, p < .01$ .

As hypothesised, perspective taking was positively related to the ECI,  $r(128) = .29, p < .01$  and to the post-conventional score,  $r(117) = .28, p < .01$ . The hypotheses of the positive association for sympathy and the ECI and the negative association for the personal distress and the ECI did not receive support from the total sample (see Table 2). However, further gender-specific analysis revealed that sympathy and the ECI were positively correlated for men,  $r(35) = .40, p < .01$ , while the correlation for women was non-significant,  $r(95) = -.05, n.s.$  The hypothesis of the negative association between the ECI and personal distress was marginally supported among women,  $r(95) = -.20, p = .051$ , whereas the correlation for men was non-significant,  $r(35) = .17, n.s.$

It is worth noting that sympathy and the post-conventional score were positively related in the total sample,  $r(117) = .29, p < .01$ . Further analysis specified that this was due to the significant correlation for men,  $r(28) = .37, p < .01$ , whereas the correlation for women was not significant,  $r(88) = .19, n.s.$  There was also a positive significant correlation for perspective taking and sympathy in the total sample,

Table 2. Pearson's correlations between major variables and means and standard deviations

	1	2	3	4	5	6	7	8	9
1. Age									
2. ECI	.38**								
3. Personal interest score	-.32**	-.33**							
4. Maintaining norms score	.22**	.06	-.46**						
5. Post-conventional score	.04	.31**	-.40**	-.49**					
6. Meta-ethical thinking	.03	.31**	-.10	-.09	.22*				
7. Perspective taking	.11	.29**	-.25**	-.01	.28**	.21			
8. Sympathy	.02	.14	-.11	-.13	.29**	.17	.35**		
9. Personal distress	-.28**	-.06	.12	-.13	.05	-.07	-.24*	.26*	
10. Means	26.71	8.70	22.91	38.00	31.75	4.10	2.57	2.76	1.38
11. SD	8.81	1.90	14.29	15.48	15.79	0.45	0.51	0.62	0.61

Notes:  $N = 129, n = 118$  with DIT constructs; \* $p < .05$ , \*\* $p < .01$ .

$r(128) = .35, p < .01$ , that was contributed by men,  $r(32) = .49, p < .01$ . Again, there was no significant correlation for women,  $r(88) = .18, n.s.$

#### *Major variables predicting care reasoning*

A linear regression analysis with the stepwise-method was performed to examine unique contributions of the major variables to the prediction of ethic of care reasoning. All variables were entered simultaneously in the analysis. The regression analysis yielded four models, the last one explaining altogether 28% of the variance. Gender, sympathy, personal distress, the personal interest schema and the maintaining norms schema did not prove to be significant predictors and were therefore excluded in the analysis. Age remained the most significant predictor for care reasoning, followed by meta-ethical thinking, post-conventional score and perspective taking. The detailed results of the regression analysis are presented in Table 3.

We also hypothesised that gender would moderate the relationship between sympathy and care reasoning. Table 4 reports the interaction effect of sympathy and gender on the ECI. The interaction was significant ( $\beta = -.23, p < .05$ ), indicating that males with higher sympathy scores were higher on ethic of care than males obtaining lower scores on sympathy.

Table 3. Linear regression analysis for major variables predicting the ECI scores

	$\beta$	$R^2$	$\Delta R^2$	Significance of change
1. Model				
Age	.35***	.12	.11	$F(1,116) = 15.97***$
2. Model				
Age	.35***			
Meta-ethical thinking	.27**	.19	.18	$F(1,115) = 10.46**$
3. Model				
Age	.34***			
Meta-ethical thinking	.24*			
Post-conventional score	.23*	.25	.23	$F(1,114) = 8.14**$
4. Model				
Age	.32***			
Meta-ethical thinking	.22**			
Post-conventional score	.19*			
Perspective taking	.19*	.28	.26	$F(1,113) = 5.14*$

Notes: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

Table 4. Hierarchical regression predicting ethic of care score as a function of gender and sympathy and their interaction

	$\beta$	R <sup>2</sup>	$\Delta R^2$	Significance of $\Delta R^2$
Step 1				
Gender				
Sympathy	.11	.02	.01	$F(2, 126) = 1.488, ns.$
Step 2				
Gender $\times$ sympathy	-.23	.06	.04	$F(1, 125) = 5.084^*$

Note: \* $p < .05$ .

### *Empathy and reasoning constructs across ECI levels and gender*

In order to examine potential curvilinear relationships between care reasoning and other major variables, a series of analyses of variance was conducted, with the ECI overall levels and gender as independent variables. Due to cell size considerations and for clarification purposes, Level 1 and 1.5 as well as Level 2.5 and 3 were combined. Means and standard deviations are reported in Table 5.

With regard to empathy-related constructs, care levels had a significant effect only on perspective taking,  $F(2, 123) = 4.16, p < .05$ . *Post hoc* comparisons with Duncan's procedure showed that the participants at the lowest level scored lower on perspective taking than other participants. There was a marginally significant interaction for gender and sympathy,  $F(2, 123) = 2.92, p = .058$ . Men at the highest levels of care

Table 5. Empathy and the DIT measures and meta-ethical thinking across the ECI levels

	Level 1 and 1.5	Level 2	Level 2.5 and 3
Personal interest score	29.82 <sub>a</sub> (15.77)	25.94 <sub>a</sub> (15.02)	17.80 <sub>b</sub> (11.21)
Maintaining norms score	37.89 <sub>a</sub> (17.82)	35.58 <sub>a</sub> (14.09)	40.13 <sub>a</sub> (15.73)
Post-conventional score	23.51 <sub>a,b</sub> (15.49)	29.64 <sub>b,c</sub> (15.22)	36.54 <sub>c</sub> (15.00)
Meta-ethical thinking	3.85 <sub>a</sub> (0.38)	4.02 <sub>a</sub> (0.50)	4.28 <sub>b</sub> (0.36)
Perspective taking	2.32 <sub>a</sub> (0.61)	2.55 <sub>b</sub> (0.49)	2.70 <sub>b</sub> (0.44)
Sympathy	2.74 <sub>a</sub> (0.70)	2.63 <sub>a</sub> (0.67)	2.88 <sub>a</sub> (0.53)
Personal distress	1.51 <sub>a</sub> (0.69)	1.33 <sub>a</sub> (0.58)	1.36 <sub>a</sub> (0.61)

Notes: Values that do not share the same subscript within the rows are different at level,  $p < .05$ ;  $ns = 19$  for Level 1 and 1.5, 46 for Level 2, 53 for Level 2.5 and 3 in personal interest, maintaining norms and post-conventional scores;  $ns = 24$  for Level 1 and 1.5, 49 for Level 2, and 56 for Level 2.5 and 3 in sympathy, perspective taking, personal distress and meta-ethical thinking.

( $n = 9$ ,  $M = 2.60$ ,  $SD = 0.49$ ) tended to score higher on sympathy than those at Level 2 ( $n = 17$ ,  $M = 2.08$ ,  $SD = 0.65$ ) and those at the lowest levels ( $n = 7$ ,  $M = 2.04$ ,  $SD = 0.68$ ).

Gender had a significant main effect for all empathy constructs:  $F(1, 123) = 38.91$  for sympathy,  $F(1, 123) = 8.66$  for personal distress and  $F(1, 123) = 6.44$  for perspective taking,  $ps < .001$ ,  $.01$  and  $.05$ , respectively. Women scored higher than men on sympathy ( $M = 2.95$ ,  $SD = 0.65$  versus  $M = 2.22$ ,  $SD = 0.49$ ), on personal distress ( $M = 1.46$ ,  $SD = 0.56$  versus  $M = 1.12$ ,  $SD = 0.68$ ) and on perspective taking ( $M = 2.63$ ,  $SD = 0.48$  versus  $M = 2.38$ ,  $SD = 0.55$ ).

With regard to the reasoning constructs, analyses revealed significant main effects for care levels on the post-conventional score,  $F(2, 112) = 5.47$ , and on meta-ethical thinking,  $F(2, 123) = 6.13$ ,  $ps < .01$ . A main effect on the personal interest score was marginally significant,  $F(2, 112) = 3.02$ ,  $p = 0.53$ . Gender had no significant effect and there were no interaction effects. *Post hoc* comparisons showed that the participants at the highest levels of care (2.5 and 3) obtained a higher post-conventional score than the participants at the lowest levels (1 and 1.5), as well as higher meta-ethical thinking score compared with other participants. They also tended to have a lower personal interest score than other participants. To summarise, the results show that higher care levels are qualified by greater amount of post-conventional justice reasoning, less personal interest, as well as by more advanced meta-ethical thinking, whereas less advanced perspective taking is more typical of the lowest care levels.

## Discussion

### *Relations between care reasoning, justice reasoning and meta-ethical thinking*

The aim of this study was to examine relations between care and justice reasoning, reflective thinking and empathy-related constructs with a sample of young adults. The sample consisted of first-year students in a university of applied sciences in Finland. The general level of care reasoning is consistent with that of another Finnish first-year student sample including nursing, social work and law enforcement students (Juujärvi, 2006a). Compared to other academic samples (Skoe, 1998), the participants in this study tend to represent conventional caring-for-others reasoning (Level 2), instead of surrounding transitional phases. This can be interpreted as an effort to maintain normative ideals of care that guide students to respond to the needs of the dependent and the helpless, characteristic for their future professions as nurses and social counsellors (65% of the participants). In line with this, social services and nursing students scored higher in care reasoning than security and business management students. There was, however, no gender difference, consistent with previous findings from North-European and academic samples (Skoe, 1998; Juujärvi, 2006a).

Care reasoning was positively related to post-conventional level of justice reasoning, consistent with previous findings (Skoe & Diessner, 1994; Skoe & von der Lippe, 2002; Juujärvi, 2006a). Individuals at the highest levels of care were also the most advanced in justice reasoning, suggesting that care and justice tend to integrate in

mature moral thought, as proposed by Kohlberg (1984). This indicates that the ethics of care and justice do not exclude but complement each other in sophisticated moral reasoning: both capacities can be possessed by the same individual and used when solving moral conflicts. In addition, we gained new knowledge on relations between care and implicit justice reasoning through other DIT constructs. Consistent with our expectations, the personal interest schema was negatively related to care reasoning. In turn, perspective taking was positively related to care reasoning and the post-conventional schema, but negatively linked to the personal interest schema. To interpret these results, care and justice reasoning seem to share a developmental 'push' from egoistic self-interest towards considering others' needs and interests more broadly, obviously through gradually growing capacity to adopt the viewpoint of others.

In contrast, the maintaining-norms schema was not related to care reasoning, remaining constant across developmental levels. This means that the person may adopt a societal viewpoint to the moral problems irrespective of her or his level of care development. For example, a person who strives for enhancing co-operation in society may be insensitive to the needs of particular citizens or close ones. A helping professional may rigidly follow the authorities' rules and laws while still having capacity to respond adequately to clients' needs. One can be critically reflective on her or his personal relationships but still apply normative moral thinking to strangers. Obviously many moral conflicts in real life stem from contradiction between care and normative justice thinking. In future studies it would be intriguing to examine how different combinations of levels in care and justice are realised in real-life moral conflicts.

Consistent with the prediction, both care and justice reasoning were positively related to meta-ethical thinking, the relation being even stronger for care reasoning. The progression towards the highest levels of care means that black-and-white thinking grows grey when the person starts to question the moral worth of normative caring (Skoe, 1993). The transition towards balanced caring of self and others requires much reflective thinking on relationships that are contextualised and now seen from the relativistic viewpoint. Given that care development precedes justice development (Juujärvi, 2006a), the general shift from conventional to post-conventional morality may start in the sphere of relationships and then expand to strangers and all people in the society.

#### *Dispositional empathy and moral reasoning*

Our findings point out the importance of perspective taking for moral reasoning. Perspective taking was positively related to care and post-conventional justice reasoning. It also uniquely predicted care reasoning, consistent with a recent study (Skoe, 2010) using the same measures. In conflict situations, justice reasoning tries to weight conflicting claims of each party and care reasoning considers each person's particular needs in order to find a balanced solution. Care-related conflicts, however, are not limited to face-to-face situations and may involve several claimants. On the



other hand, justice-related conflicts may be socio-cognitively simple (Helkama, 2004; Juujärvi, 2006b). Therefore the ability to take the perspective of another seems to be equally essential for both modes of moral reasoning.

In contrast, our findings on the links between moral reasoning and sympathy were gender-specific and less obvious, in line with Skoe's (2010) findings. Sympathy predicted care reasoning only for men. It was also positively related to their perspective taking and post-conventional justice reasoning. The present findings are in line with previous longitudinal studies reporting a more pronounced link between dispositional affective empathy and pro-social reasoning for males than females in adolescence (Eisenberg *et al.*, 1991, 1995). This suggests that sympathy plays a different role in pro-social moral development for females and males. It could be that for males, capacity to experience sympathy develops through advances in perspective taking embedded in moral development, whereas females learn to get aroused and experience sympathy through other means at an earlier age than boys. In line with this explanation, there is growing support for gender differences favouring girls in children's non-verbal responses (see Eisenberg *et al.*, 2006). In addition, Eisenberg *et al.* (2002, 2005) have found that sympathy did not increase from age 15–16 to age 25–26 (whereas perspective taking did), but sympathy at the age of 16 nevertheless predicted pro-social moral reasoning at the age of 20. Hoffman (2000) argues that the highest level of sympathy can be achieved even in adolescence and after that age empathy development becomes more subtle (meaning, e.g., susceptibility to feel others' emotions). Maybe this holds true for females, whereas males may follow a different pattern, fostering growth in sympathy in tandem with care (and justice) development. Our correlational design and small sample do not nevertheless justify far-reaching conclusions; longitudinal designs and larger samples are needed to scrutinise whether such gender-specific developmental patterns exist.

There is also another explanation for the absence of the link between sympathy and care reasoning for women. This study replicates a well-known gender difference in self-reported affective empathy favouring women (see Davis, 1996). This, in turn, may at least partly be due to women's desire to present themselves as emotionally empathic, in keeping with professional and gender role expectations. Most female participants were nursing and social services students who are required to have a warm and compassionate attitude towards patients and clients as a sign of appropriate motivation already at entrance tests, whereas most male participants represented security and business management, without such strong demands. This may have deflated differences in sympathy between care levels among women.

As a third explanation, we doubt the validity of Davis's measure in assessing the relation between care development and affective empathy. Davis's measure is limited to tap sympathy, that is, feelings of concern and compassion. It does not measure more sophisticated forms of empathy, e.g. accurately sharing feelings of the other, that are outcomes of more advanced, other-focused perspective taking, plausibly more relevant to care reasoning at the highest levels (see Hoffman, 2000). In line with this, Juujärvi (2003) found that students at the highest level of care were the most empathic, as measured by Mehrabian and Epstein's (1972) Questionnaire of

Emotional Empathy. It is also worth noting that the IRI is a dispositional measure, therefore not measuring empathy aroused by a real situations. Early theories of care (e.g. Gilligan, 1982; Noddings, 1984) emphasise actual empathic response as a sign of genuine care that perhaps cannot be verified by dispositional measures. Obviously we need more sophisticated measures to scrutinise nuances in empathy and perspective taking.

Our assumption that care reasoning and personal distress are negatively related received only marginal support from women. This finding is in contradiction with the theoretical framework of the ECI and findings by Skoe (2010). According to the theory, individuals at the highest level of care have worked through the confusion about responsibilities for caring for self and others and therefore they are psychologically less disturbed by others' misfortunes and more adequate in responding to their needs (see Skoe, 2010). The absence of the expected link between empathic distress and care reasoning may, however, be due to the characteristics of the sample: students in security management, nursing and correctional services obtained lower scores on personal distress than those found in other studies (e.g. Skoe, 2010). Those students are oriented towards professions and work conditions where they face suffering and needy people (nursing), as well as conflicting situations with emotionally aroused people (security management, correctional services). Therefore they may be prepared to deal with personal distress, as reflected in their low scores.

It could be fruitful to further examine the role of affective empathy within the larger framework of moral functioning, such as Rest *et al.*'s (1999) model including sensitivity, motivation, moral judgement and moral character or Fisher and Tronto's (1990) model of the caring process, involving components of caring about, taking care of, care giving and care receiving. There is evidence that affective empathy directly motivates pro-social behaviour (Eisenberg *et al.*, 2001; Hardy, 2006) supporting Hoffman's (2000) assertion on two-fold care: empathy-driven responding and care as a moral principle. It clearly seems that the Ethic of Care Interview measures 'principled care' and how it is applied in moral conflicts. In future, we need a more comprehensive model in order to explain and understand the wholeness of care-related moral functioning.

### *Implications for education*

Our findings point out the importance of perspective taking and reflection for moral development. Therefore, the rehearsal of taking the viewpoints of others in real-life conflicts or simulated professional situations—i.e. generating socio-cognitive conflicts (situations where different viewpoints are represented by different people in a way that makes it difficult to just comply with others' opinions) (Doise & Mugny, 1982)—combined with guided reflection may foster students' ethical reasoning (see Sprinthall, 1994). It seems that male students in particular would gain from this kind of rehearsal, because it may also develop their abilities in affective empathy. Professionals' and workers' empathy is at present seen as more and more important for the ethics as well as for the quality of services in business management (Maak &

Pless, 2009). When students understand perspective taking as an integral part of professional expertise they should be more able to deliver such services to customers in ways that best meet their needs.

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## References

- Blum, L. A. (1988) Gilligan and Kohlberg: implications for moral theory, *Ethics*, 98(3), 472–491.
- Carse, A. L. (1991) The voice of care: implications for bioethical education, *Journal of Medicine and Philosophy*, 16(1), 5–28.
- Clarkeburn, H., Downie, R. J., Gray, C. & Matthew, B. (2003) Measuring ethical development in life sciences students: a study using Perry's developmental model, *Teaching in Higher Education*, 28(4), 443–456.
- Cliffordson, C. (2002) The hierarchical structure of empathy: dimensional organization and relations to social functioning, *Scandinavian Journal of Psychology*, 43(1) 49–59.
- Colby, A., & Damon, W. (1983) Listening to a different voice, *Merrill-Palmer Quarterly*, 29(4), 473–481.
- Davis, M. H. (1996) *Empathy: a social psychological approach* (Boulder, CO, Westview Press).
- Doise, W. & Mugny, G. (1984) *The social development of the intellect* (Oxford, Pergamon).
- Eisenberg, N. (2000) Emotion, regulation and moral development, *Annual Review of Psychology*, 51, 665–697.
- Eisenberg, N. (2006) *Altruistic emotion, cognition and behavior* (Hillsdale, NJ, Erlbaum).
- Eisenberg, N., Carlo, G., Murphy, B. & Van Court, P. (1995) Prosocial development in late adolescence: a longitudinal study, *Child Development*, 66(4), 1179–1197.
- Eisenberg, N., Cumberland, A., Guthrie, I. K., Murphy, B. C. & Shepard, S. A. (2005) Age changes in prosocial responding and moral reasoning in adolescence and early adulthood, *Journal of Research on Adolescence*, 15(3), 235–260.
- Eisenberg, N., Guthrie, I. K., Cumberland, A., Murphy, B. C., Shepard, S. A., Zou, Q. & Carlo, G. (2002) Prosocial development in early adulthood: a longitudinal study, *Journal of Personality and Social Psychology*, 82(6), 993–1006.
- Eisenberg, N., Miller, P.A., Shell, R., McNalley, S. & Shea, C. (1991) Prosocial development in adolescence: a longitudinal study, *Developmental Psychology*, 27(5), 849–857.
- Eisenberg, N. & Morris, A. (2001) The origins and social significance of empathy-related responding. A review of empathy and moral development: implications for caring and justice by M.L. Hoffman, *Social Justice Research*, 14(1), 95–120.
- Eisenberg, N., Spinrad, T. & Sadowsky, A. (2006) Empathy-related responding in children, in: M. Killen & J. Smetana (Eds) *Handbook of moral development* (Mahwah, NJ, Erlbaum), 517–549.
- Eisenberg, N., Zhou, Q. & Koller, S. (2001) Brazilian adolescents' prosocial moral judgment and behavior: relations to sympathy, perspective taking, gender-role orientation and demographic characteristics, *Child Development*, 72(2), 518–534.
- Fisher, B. & Tronto, J. (1990) Toward a feminist theory of caring, in: E. K. Abel & M. K. Nelson (Eds) *Circles of care: work and identity in women's lives* (Albany, SUNY Press), 35–62.
- Gilligan, C. (1982) *In a different voice: psychological theory and women's development* (Cambridge, MA, Harvard University Press).

- Gilligan, C. & Wiggins, G. (1988) The origins of morality in early childhood relationships, in: C. Gilligan, J. V. Ward, J. M. Taylor & B. Bardige (Eds) *Mapping the moral domain* (Cambridge, MA, Harvard University Press), 111–138.
- Hardy, S. A. (2006) Identity, reasoning, emotion: an empirical comparison of three sources of moral motivation, *Motivation and Emotion*, 30(3), 207–215.
- Helkama, K. (2004) Values, role-taking and empathy in moral development, *New Review of Social Psychology*, 3(1–2), 103–111.
- Hoffman, M. L. (2000) *Empathy and moral development: implications for caring and justice* (New York, Cambridge University Press).
- Jaffee, S. & Hyde, J. S. (2000) Gender differences in moral orientation: a meta-analysis, *Psychological Bulletin*, 126(5), 703–726.
- Juujärvi S. (2003) *The ethic of care and its development: a longitudinal study among practical nursing, bachelor-degree social work and law enforcement students* (Helsinki, Yliopistopaino).
- Juujärvi, S. (2005) Care and justice in real-life moral reasoning, *Journal of Adult Development*, 12(3), 199–210.
- Juujärvi, S. (2006a) The ethic of care development. A longitudinal study of moral reasoning among practical-nursing, social-work and law-enforcement students, *Scandinavian Journal of Psychology*, 47(3), 193–202.
- Juujärvi, S. (2006b) Care reasoning in real-life moral conflicts, *Journal of Moral Education*, 35(2), 197–211.
- Kalle, R. J. & Suls, J. (1978) The relationship between Kohlberg's moral judgment stages and emotional empathy, *Bulletin of the Psychonomic Society*, 11(3), 191–192.
- Keljo, K. (1995) *Towards a multi-modal approach to moral education: an exploratory study*. Doctoral dissertation, Emory University, Atlanta GA.
- Kohlberg, L. (1984) *The psychology of moral development* (San Francisco CA, Harper & Row).
- Lyons, N. P. (1983) Two perspectives: on self, relationship and morality, *Harvard Educational Review*, 53, 125–145.
- Maak, T. & Pless, N. (2009) Business leaders as citizens of the world: advancing humanism on a global scale, *Journal of Business Ethics*, 88(3), 537–550.
- Mehrabian, A. & Epstein, N. (1972) A measurement of emotional empathy, *Journal of Personality*, 40(4), 525–543.
- Myyry, L. & Helkama, K. (2001) University students' value priorities and emotional empathy, *Educational Psychology*, 21(1), 25–40.
- Narvaez, D. & Bock, T. (2002) Moral schemas and tacit judgment or how the Defining Issues Test is supported by cognitive science, *Journal of Moral Education*, 31(3), 297–314.
- Noddings, N. (1984) *Caring: feminine approach to ethics and moral education* (Berkeley CA, University of California Press).
- Perry, W. G. J. (1999) *Forms of ethical and intellectual development in the college years: a scheme* (San Francisco CA, Jossey-Bass).
- Pizarro, D. (2000) Nothing more than feelings? The role of emotions in moral judgment, *Journal for the Theory of Social Behavior*, 30(4), 355–375.
- Pratt, M. W., Skoe, E. E. & Arnold, M. L. (2004) Care reasoning development and family socialization patterns in later adolescence: a longitudinal analysis, *International Journal of Behavioral Development*, 28(2), 139–147.
- Rest, J. R. (1979) *Development in judging moral issues* (Minneapolis, MN, University of Minnesota Press).
- Rest, J., Narvaez, D., Bebeau, M. J. & Thoma, S. J. (1999) *Postconventional moral thinking: a neo-Kohlbergian approach* (Mahwah, NJ, Erlbaum).
- Rudnick, A. (2001) A meta-ethical critique of care ethics, *Theoretical Medicine*, 22(13), 505–517.
- Skoe, E. E. (1993) The ethic of care interview manual, Unpublished manuscript available from the author upon request (University of Oslo, Oslo).

- Skoe, E. E. A. (1998) The ethic of care: issues in moral development, in: E. E. Aspaas Skoe & A. L. von der Lippe (Eds) *Personality development in adolescence: a cross-national and life-span perspective* (London, Routledge), 143–171.
- Skoe, E. E. A. (2010) The relationship between empathy-related constructs and care-based moral development in young adulthood, *Journal of Moral Education*, 39(2), 191–211.
- Skoe, E. E. & Diessner, R. (1994) Ethic of care, justice, identity and gender: an extension and replication, *Merrill-Palmer Quarterly*, 40(2), 102–119.
- Skoe, E. E., Eisenberg, N. & Cumberland, A. (2002) The role of reported emotion in real-life and hypothetical moral dilemmas, *Personality and Social Psychology Bulletin*, 28(7), 962–973.
- Skoe, E. E. & Gooden, A. (1993) Ethic of care and real-life moral dilemma content in male and female early adolescents, *Journal of Early Adolescence*, 13(2), 154–167.
- Skoe, E. E., Pratt, M. W., Matthews, M. & Curror, S. E. (1996) The ethic of care: stability over time, gender differences and correlates in mid- to late-adulthood, *Psychology and Aging*, 11(2), 280–293.
- Skoe, E. E. & von der Lippe A. (2002) Ego development and the ethics of care and justice: the relations among them revisited, *Journal of Personality*, 70(4), 485–507.
- Sprinthall, N. A. (1994) Counseling and social role taking: promoting moral and ego development, in: J. Rest & D. Narvaez (Eds) *Moral development in the professions: psychology and applied ethics* (Hillsdale, NJ, Erlbaum), 85–99.
- Vreeke, G. J. (1991) Gilligan on justice and care: two interpretations, *Journal of Moral Education*, 20(1), 33–46.
- Wark, G. R. & Krebs, D. L. (1996) Gender and dilemma differences in real-life moral judgment, *Developmental Psychology*, 32(2), 220–230.
- Wark, G. R. & Krebs, D. L. (1997) Sources of variation in moral judgment: toward a model of real-life morality, *Journal of Adult Development*, 4(3), 163–178.

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