

Measuring Care-Based Moral Development:
The Ethic of Care Interview

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Author Note

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Abstract

This paper presents a recently developed instrument of care-based moral development: The Ethic of Care Interview (ECI, Skoe, 1998, 2008). Based on Carol Gilligan's (1982) theory, the ECI measures five levels of care-based moral thought. These range from an initial position of self-concern, through questioning of self-concern as a sole criterion, to a position of primarily other-concern, questioning of other-concern as a sole criterion, and finally balanced self and other concern. The stages involve a progressively more complex understanding of human interdependence and an increasing differentiation of self and other. The semi-structured ECI interview consists of a real-life moral conflict generated by the participant and three standardized dilemmas. Administration and scoring as well as reliability and validity are described. A series of studies has shown that balanced consideration of the needs of self as well as others appears to develop gradually across childhood into young adulthood. Research findings point to the importance of care-oriented morality for human growth, especially identity and personality development. Further research with the ECI is suggested.

Keywords: care-based moral development, Ethic of Care Interview,

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Essentially, the ethic of care reflects a cumulative understanding of human relationships based on the recognition that self and other are interconnected and that just as violence or harm is in the end destructive to all, so the activity of care benefits both others and self (Gilligan, 1982).

Since Gilligan's original critique of a male-bias in Kohlberg's (e.g., 1984) work on justice-based moral reasoning, there has been considerable controversy and debate regarding possible sex differences in moral development. In her own work, Gilligan observed that when women were asked to talk about their personal real-life moral dilemmas, they often described issues of care and responsibility in relationships that were not well described in Kohlberg's justice-oriented model. The failure of women to fit certain models of human growth, Gilligan (1982) argued, may point to a problem, not in women's development, but "in the representation, a limitation in the conception of human condition, an omission of certain truths about life" (p. 2). In her view, the ethic of justice best represents the moral reasoning and values of men, whereas the ethic of care represents the moral reasoning and values of women.

The empirical evidence on sex differences in moral reasoning is quite complex and controversial. Overall, it seems that both men and women have both justice and care orientations available and use them differentially, depending on various background and contextual factors (Jaffe & Hyde, 2000; Pratt, Skoe & Arnold, 2004). In their meta-analysis of this literature, Jaffe and Hyde (2000) found some modest differences in support of the hypothesis that women are higher in an orientation toward care-related moral issues, whereas men are higher in an orientation to justice. In particular, compared to men, women are more likely to discuss real-life moral conflicts involving close personal relationships. Women also have been observed to view a variety of dilemmas as more important and more difficult to resolve than do men. Thus, there is evidence that women and men differ in terms of how they experience and evaluate moral situations (Skoe, Cumberland, Eisenberg, Hansen, & Perry, 2002; Skoe, Eisenberg, & Cumberland, 2002; Wark & Krebs, 1997).

Regardless of such specifics, Gilligan has been credited with extending the moral domain to include a moral orientation of care (i.e., concern with responsibility, harmony and prevention of hurt in interpersonal relationships) as well a moral orientation of justice (i.e., concern with equality, fairness and individual rights). Today it is generally acknowledged that thinking about care, context and relationship issues is an important component of morality, to which Gilligan's work has drawn attention (e.g., Walker, 2006).

The extensive focus on sex differences has, however, tended to obscure another important implication of Gilligan's (1982) theory: the concept that care reasoning, like justice reasoning, follows specific developmental pathways and varies individually. Based on the one-year follow up of 21 women, ranging in age from 15 to 33 (the Abortion Decision Study), she discussed a developmental continuum in their care orientation. Skoe (1998, 2008) has explored Gilligan's suggestion of developmental trends in the growth of care-oriented moral thought in both men and women, through the construction and validation of the Ethic of Care Interview (ECI). The ECI appears to be the first and, to my knowledge, only attempt at operationalizing Gilligan's theory regarding the developmental aspects of the care ethic.

The purpose of the ECI is to locate individuals in one of the Ethic of Care levels based on their responses to four moral dilemmas. Following Gilligan (1982), each level represents a different mode of resolving conflicts in human relationships and a different apprehension of the central concept that self and other are interdependent. The five levels involve a progressively more complex understanding of human relationships and an increasing differentiation of self and other. These levels will be discussed below. The ECI provides a tool with which to answer questions about the relevance and usefulness of a care-based approach to moral thought (Skoe & Marcia, 1991).

The Ethic of Care Interview

ECI levels and sample responses

The ECI consists of four dilemmas administered in a semi-structured interview format. In addition to a real-life conflict generated by the participant, three standard interpersonal dilemmas are presented that involve conflicts about (a) unplanned pregnancy, (b) marital fidelity, and (c) care for a parent (see Appendix). In line with the theories of Haan (1975) and Gilligan (1982), these dilemmas are used because they represent frequently occurring situations of interpersonal concerns where helping others could be at the price of hurting oneself.

Based upon an initial pilot study with women and subsequent studies with men as well as women (e.g., Skoe, 1986; Skoe & Marcia, 1991; Skoe & Diessner, 1994), the ECI manual (Skoe, 1993) was constructed containing descriptions congruent with Gilligan's theory (1982) and sample responses for five ethic of care levels. The care levels involve moving from an initial position of self-concern, through questioning of self-concern as a sole criterion, to a position of primarily other-concern, questioning of other-concern as a sole criterion, and finally balanced other and self concern. The three primary care levels, and the two transitional levels, are the following:

At **Level 1**, survival (caring for self), the lowest level in the ECI sequence, individuals think about relational issues in self-protective, pragmatic way, and neglect the needs or feelings of others. The aims are basically to ensure one's own happiness and to avoid being hurt or suffering. There is no consideration of abstract ethical principles or values. The following are brief descriptions of the ECI levels and sample responses to the Betty/Erik dilemma (see Appendix) about an unhappy marriage to a recalcitrant spouse and the possibility of an emotionally satisfying extramarital relationship:

I don't think he should keep having an affair on his wife because that is going to end up not going in a positive direction. (*Why shouldn't he have an affair?*) Either his mistress is going to want him to leave his wife or his wife is going to find out. He is just going to get himself into more problems ... I think life is too short to stay in an unhappy situation. There are too many other opportunities to be happy. (*Why is it important to be happy?*) We are only here for about 80 years or so, we may as well make the best of it.

Level 1.5 concerns transition from self-care (survival) to a sense of responsibility. Concepts of selfishness and responsibility first appear. Caring for the self to ensure survival is criticized as selfish. Although aware of the needs of others, however, self-interest in relationships still is favored.

There's actually three angles you can take it from. The first one would be Erik's happiness. If he's unsatisfied, he should do it. But from a legal/financial standpoint he shouldn't do it because he'd get screwed in the end, just like Derek would, and he'd get into that dilemma where he would lose his kids and Betty would divorce him, he'd lose a lot of money, Carol might leave ... Religiously, I don't know, slash morally, I guess, he shouldn't do it, just because he's married ... It would be very selfish. If you're unhappy try to fix the situation. If not, get a divorce quickly.

At **Level 2** (caring for others), individuals reason about issues in terms of responsibility and care for others, to the exclusion of the needs of self. Being *good* is equated with self-sacrificial concern for other people, and *right* is externally defined, often by the parents, church, or society. There is a strong need for security. Being accepted or liked by other people is so important that others may be helped and protected, even at the expense of self-assertion.

I don't believe in divorces or extramarital flings. She could try other ways to make her husband realize that she wants a bit more out of the marriage, possibly volunteer work or take a part-time job. The kids are old enough to be left alone some of the time ... She has been married a long time. She should try a bit harder to get through to her husband. She has children, divorce is hard on children. I believe in marriage and staying together. Marriage is a commitment, you should stay married.

Level 2.5 concerns transition to a reflective care perspective, marked by a shift in concern from goodness to truth and personal honesty in relationships. Compared to the more “black-and-white” worldview of the previous level, complexities and nuances are expressed. The goodness of protecting other people at one’s own expense is questioned.

Communication doesn't seem to be too good between her and her husband. Her happiness is important because it affects the way you raise your children. If you're not happy in a situation I think you should resolve it. Maybe she should tell her husband that she likes someone else now, or, I guess, divorce or something like that. Whichever way she feels she is more confident about herself ... I think it has a big influence on the kids. Divorce would as well. But if you weigh out the two, an unhappy marriage could be worse for the kids. If he is not going to listen, obviously she does not have a good relationship. You can't have a family if you can't communicate to each other. I think it is best that she get out of it then, put herself into a family where she is more settled and relaxed and the communication is better.

Finally, at **Level 3**, individuals fully realize the ethic of care (caring for both self and others). The needs and welfare of both others and self are encompassed in a more balanced approach to thinking about relationships. The tension between selfishness and responsibility is resolved through a new understanding of human interconnectedness. Out of this realization, the insight arises that by caring for others, you care for yourself, and vice versa; compassion enriches both the giver and the receiver. Concern is expressed for everyone impacted in the situation, and attempts are made to minimize hurt to all parties.

I think that he should seek counseling personally and possibly try and get his wife in some type of counseling as well. I think in this relationship there is more at stake, as they have two children which is a big concern. I don't have children, but I assume that I will have a very strong bond with my children and I would not want to do anything to hurt that. So my advice would be to seek professional help from people who are experienced in dealing with situations like these on a daily basis... If that didn't work, I would seriously consider divorce, if the situation was bad enough. I couldn't live in a miserable situation like that for an extended length of time because I feel that it would just deteriorate to arguing all the time or just a cold indifference, and I don't think either situation is good or beneficial for either the wife or the husband or the children.

Administration and scoring

The ECI is a semi-structured, individually administered interview which takes about 30 minutes (from 15 to 45 minutes) to complete. To avoid biasing real-life choice by providing an example beforehand, the real-life dilemma is elicited first in various ways: "Have you ever been in a situation where you were not sure what was the right thing to do?" "Have you ever had a moral conflict?" "Could you describe a moral conflict?" Adapted from the work of Gilligan (1982), these questions eliciting a dilemma are then followed by a set of six probe questions: "Could you describe the situation?" "What were the conflicts for you in that situation?" "In thinking about what to do, what did you consider?" "What did you do?" "Did you think it was the right thing to do?" and "How do you know?" The standardized dilemmas are read aloud to the participants while they read along. Probes such as "What do you think Betty/Erik should do?" and "What would you do if you were in the same situation? Why?" are used to examine dilemma reasoning.

The interviews are audio taped for later transcription and scoring. Transcription is not always necessary; the interviews also can be scored from listening to the tapes. Scoring an ECI tape takes about the same time as the actual interview; a transcript takes less time to score.

In determining the level of a person's response, it is important to note whose needs and concerns the person considers in the dilemma situations, and the reasons *why* s/he would or would not do or say something. *What* the person would do is of lesser importance. For example, in the dilemma cited above, a person would be assessed at ECI level 2 (caring for others) either if thinking that Betty/Erik should stay married or if thinking that Betty/Erik should divorce if the reason given

primarily is that “it is better for the children”. In each dilemma, the person should be given ample opportunity to express her or his views and values on each dilemma without the help of suggestions from the interviewer. Conducting a good interview requires both practice and sensitivity (Skoe, 1993).

The Ethic of Care Interview can be scored according to total score across the four dilemmas, yielding a potential range of 4.00 - 12.00 for any single participant, or according to level, yielding five discrete levels. Based on the interview, the participant is given a level score for each dilemma. Quarter scores (e.g., 1.75, 2.25) can be assigned on any given dilemma if the response appears to fall between two levels, but should be used sparingly. If the person does not generate a real-life dilemma, the mean score for the other three dilemmas may be used in place of a real-life score.

Total scores are calculated by summing the ratings on the four dilemmas. Overall level scores on the Ethic of Care Interview are determined by dividing the total scores by four and then rounding to the nearest .5 level (e.g., 1.15 = Level 1; 2.45 = Level 2.5; 2.80 = Level 3). If a person's overall level score falls exactly between two levels (e.g., 2.25, 1.75), a second rater independently scores the person at one of the two adjacent levels.

Reliability

With regard to inter-rater reliability, a difference between two raters no greater than quarter of a level score (e.g., 2.50 and 2.75, is considered agreement; 2.50 and 3.00 is considered disagreement). Correlations between trained raters generally have ranged from .85 to .95 (Cohen's Kappa .86 – 1.00). It appears that training is not always necessary; acceptable inter-rater reliability (.78 - .91, Kappa .63 - .91) also has been obtained between an untrained rater and trained raters (Skoe & Marcia, 1991). Some self-training or practice in interviewing and scoring according to the ECI manual (Skoe, 1993) is, however, strongly recommended before undertaking research with the ECI.

Inter-correlations among the four ECI dilemmas commonly have ranged from about .70 to .90, and correlations of each dilemma with the total score have ranged from .73 to .97. Cronbach's alphas from .86 to .97 also have been calculated. Hence, it appears that the ECI can be scored with a fair degree of inter-rater reliability and internal consistency.

Concurrent Validity

The ECI and justice-based moral reasoning. Since the ECI is a measure of care-based moral reasoning, proposed as an alternative to justice-oriented moral reasoning (Gilligan, 1982) a person's scores on the ECI should be positively correlated with justice reasoning tests. The models of

both Kohlberg and Gilligan have a basis in cognitive developmental (i.e., Piagetian) theory. Research supports this expectation. In the initial study on women (Skoe, 1986; Skoe & Marcia, 1991), there was a positive correlation between the ECI and the Sociomoral Reflection Measure (SRM), a written version of Kohlberg's Moral Judgment Interview (MJJ; Colby & Kohlberg, 1987), developed by Gibbs and Widaman (1982), $r(86) = .37, p < .001$. In the subsequent Skoe and Diessner (1994) study, partial correlations controlling for age showed significant positive relationships between the ECI and the MJJ both for women, $r(73) = .25, p < .02$, and for men, $r(55) = .34, p < .01$. In a later study by Skoe and von der Lippe (2002), the correlation between the ECI and Rest's (1979) multiple-choice justice instrument, the Defining Issues Test (DIT), was also positive, $r(141) = .21, p < .05$. Similarly, in a more recent investigation, Juujärvi, Myyry, and Pessa (2010) observed a correlation of $r(116) = .31, p < .01$, between the ECI and post-conventional scores as measured with the DIT.

The positive relationship between the ECI and justice-based moral reasoning as measured by the MJJ also has been replicated by other studies. In a Finnish longitudinal study of nursing, social work and law enforcement students (assessed at the beginning of their studies, Time 1, and after two years of studying, Time 2), ECI and MJJ scores were highly related at both times on real-life dilemmas, $r_1(57) = .78$ and $r_2(59) = .72$, as well as on hypothetical dilemmas, $r_1(57) = .65$ and $r_2(59) = .53$, all $ps < .001$ (Juujärvi, 2006). Similarly, in a sample of middle-aged and older Canadian adults, the correlation between the ECI (calculated on the basis of two real-life dilemmas) and MJJ scores was $r(33) = .55, p < .01$ (Skoe, Pratt, Matthews, & Curror, 1996, Study 2). These findings indicate that the care and justice systems, although focusing on somewhat distinctive conceptions of morality and moral duties, as argued by Gilligan (e.g., 1982), may share underlying general developmental processes, perhaps in terms of role-taking (Skoe et al., 1996) or ego development (Skoe & von der Lippe, 2002).

Construct validity

The ECI and ego identity. Theoretically, there is a close connection between morality and ego identity. Both are assumed to be related to cognitive development, involving similar processes such as conflict or disequilibrium, exploration and commitment (Marcia, Waterman, Archer, & Orlofsky, 1993). Whereas Kohlberg (1973) believed that certain features of ego development are a necessary but not sufficient condition for the development of moral structures, Marcia (1980) speculated that identity and moral reasoning are related reciprocally. Kohlberg and Gilligan (1972) wrote that "Erikson's picture of an adolescent stage of identity crisis and its resolutions... is a picture dependent upon formal logical thought and of questioning conventional morality" (p. 1078). Accordingly, there should be a positive relationship between the ECI and ego identity development. In the initial study of 86 Canadian university women, 17 – 26 years of age (Skoe, 1986; Skoe & Marcia,

1991), the ECI was positively related to age, $r(84) = .44$, ego identity development (Marcia et al., 1993), $r(84) = .86$, and to the SRM, $r(84) = .37$, all $ps < .001$.

Because the above study was restricted to women, however, it could not address possible sex differences or whether care-based moral thought is more applicable to women than to men, as Gilligan (1982) argued. Therefore, a subsequent study by Skoe and Diessner (1994) of 58 men and 76 women, all university students in USA, 16 – 30 years of age, was conducted, examining the relations among ego identity, care-based and justice-based moral reasoning with use of Kohlberg's interview (MJI). This extended investigation showed that the ECI was positively related to age for both men, $r(56) = .30$, $p < .02$, and women, $r(74) = .52$, $p < .001$, and to justice-based morality (see above) as well as strongly related to ego identity. Controlling for age, the partial correlation between the ECI and identity was $r(73) = .78$, for women, and $r(55) = .59$, for men, both $ps < .0001$.

There were no significant sex differences on the identity, justice or care measures themselves. Although these results suggested that sex differences may not be as pronounced as proposed by Gilligan (e.g., 1982), further analyses indicated the care ethic nevertheless may operate differentially in men and women in important ways. For example, the partial correlation between the ECI and identity was significantly higher than the correlation between the MJI and identity for women only, $t(73) = 6.05$, $p < .001$ (for further details, see Skoe & Diessner, 1994). Hence, the ethic of care may be a more central component of ego identity for women than for men. Replicating the results of Skoe and Marcia (1991), for women care-based moral development was more highly related to identity than was justice-based moral reasoning.

These results are congruent with Gilligan's (1982) argument that women's conceptions of self and morality are intricately linked and that the care ethic has special relevance for women's personality development. The care ethic may influence women's everyday life experiences and thought more than men's, perhaps due to culture, socialization and activity preferences (Skoe, 1998).

The ECI and ego development. Further construct validity was obtained by relating the ECI to ego development. Conceptually, morality has been considered an aspect of ego development (e.g., Blasi, 1998; Gilligan, 1982; Kohlberg, 1984; Loevinger, 1979). In Loevinger's view, ego is that aspect of personality that establishes a basic unity by constructing the meanings one gives to oneself, to other people and to the social world. Her sentence completion test measures sequential stages in the growth of this broad construction of meaning. Empirically, a positive link between ego development as measured with Loevinger's model and justice reasoning is reasonably well established (e.g., Snarey, 1998). A fairly recent Norwegian study by Skoe and Lippe (2002) examined the relations among ego

development and justice and care ethic reasoning levels in 72 men and 72 women, 15 to 48 years old, considering age, education, sex and verbal intelligence.

As predicted on the basis of theory and previous research (e.g., Kohlberg, 1984; Loevinger, 1979; Skoe, 1998; Skoe & Diessner, 1994), both care as measured by the ECI and justice as measured with the DIT (Rest, 1979) were positively related to ego development as measured with the Washington University Sentence Completion Test (SCT; Loevinger & Wessler, 1970; Hy & Loevinger, 1996). Furthermore, the correlation between ECI total scores and ego development, $r(142) = .58, p < .0001$, was significantly higher than the one between DIT P scores and ego development, $r(139) = .20, p < .02, t(138) = 4.38, p < .0001$.

When age, education and verbal intelligence were controlled, the relation between ego development and ECI remained significant, $r(136) = .51, p < .001$, but the relations between ego development and the DIT, $r(136) = .13, ns$, and between the ECI and the DIT, $r(136) = .13, ns$, were not.

The ECI's low positive relationship to verbal intelligence, $r(142) = .34, p < .001$, in this study, is reasonable considering it is a verbal test assessing complex reasoning about care for self and others. The results also demonstrate, however, that the ECI is conceptually distinct from verbal intelligence. With verbal intelligence partialled out, the variance shared between the ECI and ego development remained substantial, $r(141) = .53, p < .001$. By contrast, the DIT did not relate significantly to ego development or to care reasoning, $r(138) = .11, ns$, and $.11, ns$, when the effect of verbal intelligence was controlled. Hence, the results suggested that the weak positive relationships between the DIT and ego development, as well as between DIT and ECI are reduced to their common overlap with verbal ability, likely "the most salient marker of general intelligence" (Sanders, Lubinski, & Benbow, 1995, p. 502). This is not the case for the relation between the ECI and ego development (Skoe & Lippe, 2002). A principal component factor analysis with a promax (oblique) rotation was computed for the major variables in this study. Three factors were extracted with eigenvalues greater than one that accounted for 41% of the total factor variance. All variables loaded on one of three factors as follows: Factor 1 – SCT .87, and ECI .86; Factor 2 – age .88, and education .77; Factor 3 - DIT .90, and verbal intelligence .63.

Ego and care development appear to have more in common with each other than they have with justice development. This may be the case especially at the higher stages where both ego and care developments involve greater ability to integrate respect for personal autonomy with responsibility, compassion and intimacy in relationships. Therefore, ego development and care development may be seen as mutually enhancing

The ECI and empathy. Another evaluation of construct validity was the ECI's relationship to empathy. Conceptually, there is a close connection between care and empathy; the latter is generally viewed as a multidimensional construct, involving three separate dispositions: perspective taking, empathic concern (or sympathy), and personal distress. To see if these dispositions might be differentially related to care-based moral development, the ECI and Davis's (1996) multidimensional empathy measure were administered to 58 Canadian university students (30 were women), ranging in age from 20 to 42 years (Skoe, 2010). Partial correlations, controlling for age, parents education, and sex, showed that empathic perspective taking was positively (.37), and personal distress negatively (-.36) related to ECI scores, both p 's < .01.

Analyses also indicated a curvilinear relationship between the ECI and sympathy for women, but not for men. Women at ECI Level 2 (self-sacrificing care for others) scored significantly higher on sympathy than did all others. This was predicted because sympathy involves high emotional reactivity and more selfless concern for others (Davis, 1983, 1996), paralleling the "other-oriented" position of ECI Level 2.

In sum, the results of this study support the view that empathy plays a constructive role in care-oriented moral development (e.g., Hoffman, 2000). Participants who demonstrated more integrated care reasoning also showed greater tendencies to see the world from others' points of view as well as lower levels of anxiety and uneasiness in reaction to others' distress. Of course, the causal ordering of these relationships cannot be determined from these correlational data, and further research is required. The relations between care reasoning levels and empathy-related responding likely are bi-directional. Dispositional perspective taking could be underlying the capacity to consider mutually the needs of others and self as assessed on the ECI, but it also is plausible that higher levels of care reasoning provide the potential for people to understand or consider others' situations and viewpoints. In any case, the findings provide some convergent and discriminant validity for the ECI. Of course, because the sample is homogenous and modest in size, replication is required.

In a Finnish sample of with students in various fields (Juujärvi et al., 2010), the ECI was positively associated with both empathic perspective taking and meta-ethical thinking, $r_s(127) = .29$ and $.31$, $p_s < .01$. Furthermore, the ECI and sympathy were positively related for men, $r(35) = .40$, $p < .01$, but not for women, whereas ECI and personal distress was negatively related (marginally) for women, $r(95) = -.20$, $p = .051$, but not for men. Further cross cultural studies are required; both care reasoning and empathy may be differentially valued or emphasized for women and men across time and nations.

The ECI and social interaction. With regard to intimate social interaction, recently Skoe, Pratt and Øvregård (2011) examined the links among care-based moral development, commitment, and trust measured with the Trust in Close Relationships Questionnaire (TIR; Rempel et al., 1985) in 90 Canadian young adults, approximately 26 years of age. As predicted, participants who were in a committed romantic relationship scored significantly higher both on care reasoning and interpersonal trust, compared to those who were not in a committed relationship. Care reasoning and trust were significantly correlated ($.30, p < .01$). A mediation analysis (Baron & Kenny, 1986), however, suggested that this relationship was partly mediated by being in a committed relationship (Sobel test = $2.28, p < .03$). These findings suggest that people higher in the ECI may be more able to establish and maintain a committed romantic relationship, which in turn might lead to higher levels of interpersonal trust.

Higher ECI levels also are linked to greater volunteer participation such as helping sick and elderly people as well as charity donations (Pratt et al., 2004; Skoe, 1998). By contrast, 51 forensic psychiatric patients in mid adulthood, all who had committed violent acts, such as homicide and rape (Adshead, Brown, Skoe, Glover, & Nickerson, 2008), with the exception of two persons, all scored at the lowest ECI levels (survival, caring for self). These data suggest that the ECI is associated positively with prosocial behavior and negatively with antisocial or criminal behavior.

The ECI, age and education. Both cross-sectional and longitudinal data show that care reasoning levels as tested with the ECI are positively related to age in adolescents and young adults, but relatively stable in mid- to late adulthood. This is congruent with findings on justice-based moral thinking (e.g., Juujärvi, 2006; Pratt et al., 2004; Skoe et al., 1996), and thereby provide some construct validity for the ECI as a developmental measure.

Whereas it has been fairly well documented that justice reasoning is positively related to education (e.g., Skoe et al., 1996), research suggest that care reasoning depends inconsistently on this variable. Some studies show non-significant correlations between ECI scores and level of education, for example, women, $r(28) = .17, ns$, and $r(19) = .21, ns$, men, $r(28) = .16, ns$, and $r(14) = -.01, ns$ (Skoe et al., 1996, Study 1 and 2 respectively); women, $r(63) = -.04, ns$, men $r(27) = .13, ns$ (Skoe et al., 2011). Others show small to moderate positive correlations, for example, women, $r(72) = .32, p < .01$, men, $r(72) = .24, p < .05$, or combined, $r(144) = .27, p < .005$ (Skoe & Lippe, 2002). This inconsistent pattern of results, which also is the case for ego development (e.g., Hauser, 1976), should be examined more closely. The effects of education might depend on length, type and quality, for instance, and might vary across age and nations. For example, Juujarvi (2006) observed that over a 2-year period, Finnish social work students progressed in care reasoning, but law enforcement

students did not. Moreover, perhaps not surprisingly, people studying social work scored higher on the ECI than people studying business (Juujärvi et al., 2010).

The ECI and sex differences. Finally - back to the beginning, the question of sex differences in moral development. The evidence for such differences in the ECI has been quite complex. Most studies have not found significant differences between males and females in average ECI levels during adolescence or young adulthood (e.g., Pratt *et al.*, 2004; Skoe, 2010; Skoe & Diessner, 1994; Sochting, Skoe & Marcia, 1994). As an example, in the study by Skoe and Lippe (2002), the mean ECI levels for women ($M = 2.20, SD = .53$) and for men ($M = 2.18, SD = .53$), were both between levels 2 and 2.5, $F(1, 142) = .02, p = .883, ns$; the magnitude of the effect size was close to zero (Cohen's $d = -.04$). In later adulthood, however, women scored higher than men in two independent Canadian samples (Skoe et al., 1996). Studies among children and early adolescents showed a similar sex difference (favouring girls) in the U.S. (Meyers, 2001) and Canada (Skoe & Gooden, 1993). Skoe et al. (1999) compared care-based moral reasoning measured with the ECI in Norwegian early adolescents with data obtained previously from Canadians of the same age (Skoe & Gooden, 1993). In the Canadian sample, girls ($M = 1.77, SD = 0.26$) scored higher (near the mid-point of level 2) than did boys ($M = 1.51, SD = 0.31$), $F(1, 44) = 8.94, p < .01$; the magnitude of the effect size was large favoring girls ($d = -.91$). In contrast, Norwegian girls ($M = 1.48, SD = 0.26$) scored similar to Norwegian boys ($M = 1.51, SD = 0.30$), $F(1,77) = .33, ns$; the magnitude of the effect size was trivial favoring boys ($d = .11$). Hence, sex differences may be bound with culture. A meta-analysis on the ECI (covering seven independent samples) indicated a small to moderate advantage for females ($d = -.34$) that appeared larger among middle-aged and older adults than among adolescents and young adults (Jaffee & Hyde, 2000). Moderator analyses for age differences could not be conducted, however, due to the small sample of studies.

Nonetheless, the ECI was found to be more strongly related to identity development for women than for men as noted above (Skoe & Diessner, 1994) and to androgynous gender role orientation for women only (Skoe, 1995; Sochting et al., 1994). These findings suggest that care reasoning development is more central to women's than to men's personality development. So, although research results with the ECI suggest that sex differences are not as pronounced as claimed by Gilligan, they also indicate that such differences may be more subtle and complex than simple main effects on standardized measures. Several samples were restricted to university student populations, and sex differences (perhaps cultural differences as well) may be minimized in such samples. Many additional variables must be considered in understanding moral development besides sex, such as cohort variations, gender roles, situational context, sample and location characteristics, stage or period in life, cultural background and religious experience.

Retrospect and Prospect

Overall, then, the ECI appears to be a stable and sensitive test of an individual's developmental level of care-based moral thought. This instrument generally has good internal consistency and yields reliable scores even with self-trained raters. More than 1,500 participants have so far been assessed, of both sexes, of several nationalities, and ranging in age from 10 to 85 years of age. Construct validation of the ECI has been an ongoing process closely involved with theory development and research results (Gibbs & Widaman, 1982).

The ECI is a unique measure of care-reasoning in that it assesses developmental care levels, can be used in a wide age range with both men and women, takes only about 30 minutes to administer and score, does not require any external or extensive self-training (the manual is only 26 pages long), and yields substantial and reliable information about the participant's personal and interpersonal or psychosocial functioning. Furthermore, it can be used in several countries with different languages without much translation/back-translation work, as only the dilemmas need to be translated. Both interviewers and participants usually find the interview both interesting and enjoyable. In short, the ECI is a relatively inexpensive and efficient tool for assessing an individual's level of care-based moral thought.

A series of studies has shown that variations in care-reasoning levels have implications for personal and interpersonal adaptation across the lifespan. The ECI levels are strongly and positively related to identity and personality development, as well as to pro-social interactions and behavior. They are also linked to cognitive abilities such as perspective-taking, justice reasoning and verbal intelligence. Individuals higher in care development appear to have a greater ability to cope with conflicts and other people's distress, to tolerate ambiguity, and to balance their concern for others and self. The highest levels of ethic of care represent the integration of capacities for autonomy and for intimacy (Skoe, 2008; Skoe & Lippe, 2002). Research has shown, however, that in normal groups people rarely score at the highest care level; generally, only around 15% are rated at ECI level 3 (Skoe, 1998).

Although there has been less research on care than on justice aspects of moral thought, there is a growing body of work on pro-social concerns in moral conflicts (e.g., Carlo, 2006; Eisenberg *et al.*, 2005) and on care-based moral development (e.g., Juujärvi, 2005, 2006; Juujärvi *et al.*, 2010; Skoe, 2010, in press). Most of this research has been conducted on children, adolescents and young academic populations. Research on moral thought and understanding in adults remains surprisingly scarce. As people grow older, they likely go through experiences that initiate thinking and

re-evaluation of life, moral values, self and relationships. In adulthood people usually encounter such life issues as establishing long-term relationships, marriage, home, children, serious career decisions, leadership or work responsibilities, taking care both of one's children as well as aging parents, and coping with one's own aging process. These challenges of maturity, all of which involve care for both oneself and others, may help to move persons forward toward the higher ECI levels.

In addition to the effects of such normative challenges, it has been argued that crisis reveals, as well as creates, character. Encounter with stress and conflict provide an opportunity for positive development, although it may also lead to moral nihilism (Gilligan, 1982). If this is true, one might predict that certain types of crises or painful events will stimulate personal growth, for example, turbulent divorce or breakups of important relationships, or serious illness or death of significant others. Considering the use of care-based moral thought in the broader context of life span development, more sophisticated capacities in reasoning about care of self and others may serve as an important psychological resource in adapting to the central tasks of adulthood, such as achieving intimacy, a sense of generativity and ego integrity (e.g., Erikson, 1982, Skoe et al., 1996). Each one seems to integrate these two components (self and other), although somewhat differently, across adulthood. Hence, balanced care for self and others may be an important part of maturity or wisdom (Skoe, 1998, 2008).

It is, of course, interesting for any developmental model to consider the relations between that model and other frameworks. One such model that receives attention in this special issue is Common's (e.g., 2008) Model of Hierarchical Complexity (MHC). A suggested relationship between the ECI levels and the MHC stages (M. L. Commons, personal communication, December 12, 2010) is presented in Table 1. Each of the ECI levels can be linked to the gradual growth of a capacity to reason about a system of variables (self and other's desires, needs, and welfare) in increasingly complex ways, as shown in the table. It would be interesting to study how these stages might serve as possible enabling capacities in the development of care reasoning over the life course.

Within the Commons' system, higher stages beyond systematic capabilities are also described. This raises the interesting possibility that we might consider the idea of a higher ECI level that takes a wider, societal perspective, involving care also for something beyond or larger than the interpersonal relationship itself. One could imagine, for example, an ECI level 3.5, balanced care for self and other in interaction with society, which may correspond with MHC stage 12 of Metasystematic reasoning. Using the Commons' framework to think about this, both self/other relations and society could be viewed as systems that must be brought into interaction and mutual coordination in the person's thinking. The societal level, in which the self/other relationship is embedded, includes a sense of care and responsibility to society, the environment and future generations; this level may, in turn, be a

transition to a hypothetical ECI level 4 that takes a broader, more universal or even cosmic perspective on the transactions between self, other, the wider world, and life itself.

Adulthood is a time when many begin to question the meaning of their life in the long run and in the face of their own mortality. Such existential questioning certainly could be related to care-reasoning development toward higher and more sophisticated levels. For example, Noddings (2002) noted that for people living in a violent world, the search for meaning is especially important; engaging in such a search is a sign of caring for oneself, and part of learning to care for self is “a concomitant learning to care for others” (p. 35). Her words echo those of Kohlberg (1970) who wrote that we must find meaning in our own lives before we can find it in helping others. In his lecture on a metaphoric Stage 7, Kohlberg (1970) said “To answer the question of why be moral is to tell you the meaning of life, to give you faith” (p. 1). Faith may also be an answer to “Why care?” Perhaps finding meaning in life is a key to gaining insight, not only into human interconnection, but also into one’s unity with the cosmos, nature or God (Kohlberg & Ryncarz, 1990).

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Table 1

The Relationship between the Ethic of Care Interview and Common's Model of Hierarchical Complexity

The Ethic of Care Interview		Model of Hierarchical Complexity	
Level		Stage	
		Number	Name
1.0	Survival (caring for self)	7	Primary
1.5	Transition from self-care to responsibility	8	Concrete
2.0	Self-sacrifice (caring for others)	9	Abstract
2.5	Transition to reflective care	10	Formal
3.0	Balanced care for self and others	11	Systematic
3.5	Integrated care for self and others	12	Metasystematic

APPENDIX

The Ethic of Care Interview

The Researcher Generated Dilemmas

The specific researcher generated dilemmas for *females* are as follows:

The Lisa Dilemma

Lisa is a successful teacher in her late twenties who has always supported herself. Her life has been centered on her work and she has been offered a permanent position for next year. Recently she has been involved in an intense love affair with a married man and now finds that she is pregnant.

What do you think Lisa should do? Why?

The Betty Dilemma

Betty, in her late thirties, has been married to Erik for several years. They have two children, 8 and 10 years old. Throughout the marriage Betty has been at home, looking after the house and the children. For the last few years Betty has felt increasingly unhappy in the marriage relationship. She finds her husband demanding, self-centered and insensitive as well as uninterested in her needs and feelings. Betty has several times tried to communicate her unhappiness and frustration to her husband, but he continually ignores and rejects her attempts. Betty has become very attracted to another man, Steven, a single teacher. Recently, Steven has asked Betty for a more intimate, committed relationship.

What do you think Betty should do? Why?

The Kristine Dilemma

Kristine, a 26-year-old woman, has decided to live on her own after having shared an apartment with a girlfriend for the last three years. She finds that she is much happier living alone as she now has more privacy and independence and gets more work and studying done. One day her mother, whom she has not seen for a long while as they do not get along too well, arrives at the doorstep with two large suitcases, saying that she is lonely and wants to live with Kristine.

What do you think Kristine should do? Why?

The specific researcher generated dilemmas for *males* are as follows:

The Derek Dilemma

Derek is a married, successful teacher in his late twenties. His life has been centered on his work and he has been offered a permanent position for next year. Recently, he has been involved in an intense love affair with a single woman who has just told him that she is pregnant and that it is his child.

What do you think Derek should do? Why?

The Erik Dilemma

Erik, in his late thirties, has been married to Betty for several years. They have two children, 8 and 10 years old. Throughout the marriage Betty has been at home, looking after the house and the children. For the last few years Erik has felt increasingly unhappy in the marriage relationship. He finds his wife demanding, self-centered and insensitive as well as uninterested in his needs and feelings. Erik has several times tried to communicate his unhappiness and frustration to his wife, but she continually ignores and rejects his attempts. Erik has become very attracted to another woman, Carol, a single teacher. Recently, Carol has asked Erik for a more intimate, committed relationship.

What do you think Erik should do? Why?

The Chris Dilemma

Chris, a 26-year-old man, has decided to live on his own after having shared an apartment with a friend for the last three years. He finds that he is much happier living alone as he now has more privacy and independence and gets more work and studying done. One day his father, whom he has not seen for a long while as they do not get along too well, arrives at the doorstep with two large suitcases, saying that he is lonely and wants to live with Chris.

What do you think Chris should do? Why?