THE EFFECTS OF SEX, SEX-ROLE, AND TYPE OF MORAL DILEMMA ON MORAL MATURITY AND MORAL ORIENTATION

by

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the Requirements for the Degree of
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of

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#### Abstract

In the context of Kohlberg's and Gilligan's theories of moral development and moral orientation, Study 1 deals with two questions: (a) are there sex or sex-role differences in moral maturity and moral orientation, and (b) does the content of dilemmas affect moral maturity or moral orientation independently from or in interaction with sex or sex-role? One hundred and ten undergraduates at a large university responded to a short form of Kohlberg's test, one impersonal and one personal real-life dilemma, and the Personal Attributes Ouestionnaire. Results indicated, (a) there were no sex or sex-role differences in moral maturity, (b) real-life dilemmas elicited lower stage moral reasoning than hypothetical dilemmas, and personal reallife dilemmas elicited lower stage moral reasoning than impersonal real-life dilemmas, and (c) there was a qualified sex difference (but not a sex-role difference) in moral orientation, in that females made more care-oriented judgments than males on personal real-life dilemmas. The issue of dilemma content was explored as an explanation for the observed differences: females reported more careoriented personal real-life conflicts than males. In Study 2, 30 males and 30 females rated exemplars of real-life conflicts from those reported in Study 1. The results indicated, (a) there were no sex differences in the extent to which issues of care and justice were believed to be involved in different real-life conflicts, (b) there were

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no sex differences in either the experience of or the willingness to discuss different real-life conflicts, (c) there were no sex differences in the extent to which different real-life conflicts were deemed moral concerns, and (d) there was a qualified sex difference on dilemma significance, in that females deemed one of the care-oriented exemplars more significant than males did. It is suggested that types of dilemma affect moral maturity and moral orientation more than types of people (sex or sex-role), but that males and females differ in the types of personal real-life conflict they report. As the results on dilemma significance only partially explain the sex differences observed, future research aimed at examining the nature of the interaction between sex and type of dilemma is encouraged.

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The Effects of Sex, Sex-role, and Type of
Moral Dilemma on Moral Maturity and Moral Orientation

The most prominent of the contemporary theories of moral reasoning, that of Lawrence Kohlberg, has been criticized as being biased against females (Holstein, 1976; Gilligan, 1982; Lyons, 1983; Baumrind, 1986). Initially, criticisms centered around the accusation that Kohlberg's standard scoring system downgraded women's moral maturity in comparison to men's. Recently, however, sex differences in moral orientation have been a focal point of interest and research. The objective of the present study is to examine the effects of sex, sex-role, and type of dilemma on moral maturity and moral orientation.

# Sex and Moral Maturity

Kohlberg, the moral development of an individual is characterized by a progression through a number of stages that are qualitatively different from each other and are defined by certain modes of thinking about and viewing the world. According to Kohlberg, Stage 3 moral reasoning is based on the value of living up to expected good social roles, concern for others and their feelings, and the maintenance of loyalty and trust in relationships, whereas Stage 4 reasoning is based on concern for doing one's duty in society by upholding the social order for the purpose of establishing and maintaining the welfare of society or the group (Colby & Kohlberg, 1987). Gilligan (1982) contends

that because women's moral reasoning is centered around issues of relationships and caring, women tend to be classified more often at Stage 3 moral development, whereas men, who tend to emphasize justice issues of rights and fairness, tend to be classified at Stage 4 moral development in Kohlberg's system.

Although some studies have supported Gilligan's contentions (Holstein, 1976), a meta-analysis of studies that assessed moral development in both sexes (Walker, 1984) revealed that most studies have failed to find a sex difference. Among the relatively few studies reporting differences, there was a tendency for females to score higher than males in childhood and adolescence, but for males to score higher than females in adulthood. Walker (1984) concluded that studies yielding sex differences in moral maturity favoring males are methodologically flawed because they relied on Kohlberg's early scoring manuals and procedures and because their results are confounded by factors such as socioeconomic status and education. Indeed, when such factors are controlled, the apparent sex differences disappear. Although Walker's conclusions have not gone uncriticized (Baumrind, 1986), recent studies have failed to find sex differences in moral maturity (Pratt, Golding, & Kerig, 1987; Pratt, Golding, Hunter, & Sampson, 1988; Walker, DeVries, & Trevethan, 1987).

Sex differences on real-life dilemmas. The data base upon which Gilligan (1982) built her theory consists of

responses from women to real-life moral dilemmas. Although the research on moral maturity on real-life dilemmas is limited, the findings of studies by Walker et al. (1987) and Pratt et al. (1987) suggest that there are no sex differences

## Sex-role and Moral Maturity

Gilligan (1982) claims that the different concerns that men and women emphasize when reasoning about moral dilemmas are sex-related, not sex-specific, and may stem from sex differences in socialization and self-concept. Lyons (1983) suggested that women tend to define themselves as connected and attached to other people (feminine), whereas men tend to define themselves as separate and objective in relation to others (masculine). Thus, following Gilligan's theorizing, observed sex differences in moral maturity may stem from sex-related differences in self-concept, in that feminine persons tend to be classified at lower stages of moral reasoning (Stage 3) and masculine persons tend to be classified more often at higher stages of moral reasoning (Stage 4) in Kohlberg's system. Other researchers (Leahey & Eiter, 1980) have suggested that because postconventional reasoning is characterized by less stereotypic self-concepts and a sense of role independence, persons reasoning at these stages should tend to be androgynous (masculine and feminine).

Gilligan (1982) has contended that self-concept is particularly bound to a sense of morality in women. If this

contention is valid, and if persons who emphasize issues of care (feminine) tend to be classified at lower stages of moral reasoning than others as Gilligan claims, feminine females should be expected to score lower than others on moral maturity.

Sex-role differences on hypothetical dilemmas. Studies on the relation between sex-role and moral maturity have reported mixed results (Block, 1973; Leahev & Eiter, 1980; Bussey & Maughan, 1982; Pratt, Golding, & Hunter, 1984). Block (1973) found that persons classified at the postconventional stages of moral reasoning tended to be androgynous. Leahey and Eiter (1980), too, found that androgynous sex-role conceptions of the self, as assessed by the Bem Sex Role Inventory (BSRI), were related to higher moral stage levels, as assessed by Rest's DIT, than other sex-role conceptions, and that masculine persons tended to score higher on moral maturity than feminine persons; however, these patterns were only found in female subjects. Interestingly, the authors reported that undifferentiated males scored higher on moral maturity than masculine males. Another study (Pratt et al., 1984) found that opposite-sex qualities, as assessed by the <u>Personal</u> Attributes Questionnaire (PAQ), were related to postconventional moral reasoning, and same-sex qualities were related to conventional moral reasoning, especially for males; however, the relationship between sex-role and moral maturity was evident only in comparisons between the

conventional and postconventional stages of moral reasoning. In another study (Bussey & Maughan, 1982), sexrole, as assessed by the BSRI, was not related to moral maturity.

Sex-role differences on real-life dilemmas. Lifton (1985) investigated the effect of sex-role, as assessed by the California Psychological Inventory, on moral reasoning on nonhypothetical moral issues such as substance abuse, family planning, and equal rights. Lifton reported that sex-role was related to moral maturity, in that masculine persons used higher stage moral reasoning than feminine persons. Although Lifton's employment of nonhypothetical dilemmas was aimed at increasing the personal relevance and personal responsibility of the subjects' responses, the moral issues were not spontaneously generated by the subjects themselves and remained impersonal in nature. To date, no research has assessed the effects sex-role may have on moral reasoning on spontaneously reported real-life dilemmas.

#### Dilemma and Moral Maturity

The current and most popular method of assessing moral development involves presenting individuals with Kohlberg's hypothetical moral dilemmas, then asking them to respond to probing questions. According to Kohlberg, the hypothetical dilemmas on Kohlberg's test elicit an individual's highest level of competence in moral reasoning (Colby & Kohlberg, 1987). However, it has been suggested that Kohlberg's test

does not evoke a representative sample of moral judgment (Gilligan, 1982).

Research on the consistency of moral judgment across hypothetical and real-life moral dilemmas is mixed and limited. One study reports higher levels of moral judgment on real-life dilemmas than on hypothetical dilemmas for women (Gilligan & Belenky, 1980). Four studies (Kohlberg, Scharf, & Hickey, 1971; Levine, 1976; Damon, 1980; Higgins, Power, & Kohlberg, 1984; Pratt et al., 1987) have reported lower levels of moral judgment on real-life dilemmas than on hypothetical dilemmas. And one study (Walker et al., 1987), failed to find any evidence of differences between hypothetical and real-life moral dilemmas in stage of moral reasoning, concluding that moral stage is structurally consistent across differing contexts and contents.

Although past research is mixed, the thrust of the results suggest that hypothetical dilemmas pull for higher stage reasoning than real-life dilemmas.

#### Sex and Moral Orientation

According to Gilligan (1982), because Kohlberg's theory emphasizes justice, Kohlberg's system may not adequately assess women's moral reasoning, which focuses on issues of care rather than on justice issues concerning rights and fairness. According to Gilligan (1982), from the perspective of women, "the moral person is one who helps others; goodness is service, meeting one's obligations and responsibilities to others, if possible without sacrificing

oneself" (p. 66). Gilligan (1982) asserts that, in contrast to men, women "not only define themselves in a context of human relationships but also judge themselves in terms of their ability to care" (p. 17). Women's moral judgment is especially closely bound to their self-concept, to feelings of empathy and compassion, to concern with meeting everybody's needs (Holstein, 1976; Gilligan, 1982).

Sex differences on hypothetical dilemmas. Although Gilligan (1982) advocates examining sex differences in moral orientation on real-life dilemmas, she also theorizes that these differences are pervasive; therefore, sex differences in moral orientation should manifest themselves in standard hypothetical dilemmas as well as real-life dilemmas (Walker et al., 1987). However, it has been argued that preconstruction of hypothetical dilemmas by researchers may obscure moral orientations evident in subjects' construction and evaluation of real-life dilemmas (Walker et al., 1987). On the other hand, according to Nunner-Winkler (1984), Kohlberg's dilemmas involve conflicts between care and justice and, therefore, should evoke both care and justice moral reasoning. Indeed, Gilligan (1982) argues that moral orientation affects responses to Kohlberg's hypothetical dilemmas.

Several studies have examined sex differences in moral orientation on standard hypothetical dilemmas and have reported mixed results (see Pratt & Royer, 1982; Langdale, 1986; Rothbart, Hanley, & Albert, 1986; Walker et al.,

1987; Lonky, Roodin, & Rybash, 1988; Pratt et al., 1988; Krebs, Vermeulen, Denton and Carpendale, in press). One study (Langdale, 1986) reported that women made more careoriented judgments than men, and men made more justiceoriented judgments than women. However, Langdale analyzed only the resolution component, and not the construction and evaluation components, of her subjects' reasoning (Walker et al., 1987). One study (Walker et al., 1987) found that females made more care-oriented judgments than males on only two (III and IV') of the nine Kohlberg dilemmas. Three other studies (Pratt et al., 1982; Rothbart et al., 1986; Krebs et al., in press) failed to find sex differences in moral orientation on hypothetical dilemmas. These findings are at variance with Gilligan's theorizing regarding a general sex difference in moral orientation. The sex differences found tend to be qualified in some manner by other factors.

Sex differences on real-life dilemmas. Although some studies have shown that moral orientation differences are sex-related and revealed in responses to real-life moral dilemmas (Gilligan, 1982; Lyons, 1983; Gilligan & Attanucci, 1988), these studies have been criticized in terms of sample size, attrition, and age confoundings (Vasudev, 1988). Furthermore, these studies claim to assess moral reasoning on real-life moral dilemmas, but use "real-life" dilemmas constructed by the researchers themselves. One study (Donenberg & Hoffman, 1988), however, which used

real-life dilemmas provided by the subjects, found that girls made more care-oriented judgments than justice-oriented judgments, whereas boys made both care- and justice-oriented judgments equally.

Rothbart et al. (1986) failed to find a significant sex difference in moral orientation on spontaneously generated real-life dilemmas. Two studies (Walker et al., 1987; Pratt et al., 1988) found that women used more care-oriented judgments than males on real-life dilemmas, but only for middle-adulthood parents. Another study (Ford & Lowery, 1986) failed to find sex differences among persons who were asked to describe and then to rate a moral conflict in terms of how care-oriented and justice-oriented the dilemma was perceived to be, but females nonetheless were more consistent in making care-oriented judgments, and males were more consistent in making justice-oriented judgments. Consistency in moral orientation use, however, has not been supported by other research (Rothbart et al., 1986; Walker et al., 1987; Pratt et al., 1988).

Sex differences in significance of dilemma reported in real-life studies. Sex differences in the amount of significance or importance attributed to real-life dilemmas reported have been found (Ford & Lowery, 1986). Ford and Lowery (1986) reported that women tended to rate their real-life dilemmas more important in their lives and involving more difficult decisions than males.

Interestingly, for both males and females, the more

important the conflicts rated, the more care-oriented reasoning was used. Perhaps females tend to report more important or significant conflicts than males and, as a result, tend to use more care-oriented judgments when discussing such dilemmas.

Sex differences in types of dilemma reported in reallife studies. The observed sex differences in moral orientation on real-life dilemmas may stem from sex differences in types of dilemma reported, rather than in the ways in which the dilemmas are constructed (Rothbart et al., 1986; Walker, 1986; Walker et al., 1987). Walker et al. (1987) suggest that males spontaneously report impersonal real-life dilemmas more often than females, whereas females spontaneously report personal real-life dilemmas more often than males. Personal real-life dilemmas are defined as those that directly involve a specific person or group of people with whom the subject has a significant relationship. Impersonal real-life dilemmas are those that do not directly involve a specific person or group of people with whom the subject has a significant relationship. Walker et al. suggest that the real-life social experiences of males and females differ and that the types of dilemma experienced by females may be more careoriented than the types of dilemma experienced by males. Thus, when subjects make judgments about real-life dilemmas they have experienced, observed differences in the two orientations may be due not to sex, but to dilemma type

(Rothbart et al., 1986; Walker, 1986). Indeed, Walker et al. (1987) discovered that when dilemma content is held constant, sex differences in orientation disappear!

Several studies (Yussen, 1977; Pratt et al., 1987, 1988) have found that females tend to report more real-life dilemmas centered around friendships, family, and relationship issues than males, and males tend to report more real-life dilemmas centered around nonrelational issues, such as institutional and religious duties than females. Pratt et al. (1988) also found that nonrelational dilemmas tended to elicit justice-oriented reasoning.

In summary, the results of research on the types of real-life conflicts reported (Rothbart et al., 1986; Walker, 1986; Pratt et al., 1988; Walker et al., 1987) and the significance of real-life conflicts reported (Ford & Lowery, 1986) suggest that the observed differences in moral orientation may be due not to sex, but to dilemma content.

#### Sex-role and Moral Orientation

To the extent that moral orientations are tied to self-concept (Gilligan, 1982; Lyons, 1983), sex-role should relate to moral orientation. According to Lyons (1983), individuals who are "individuated" or masculine, that is, separate and objective in relation to others, tend to adopt the justice orientation, whereas individuals who are "connected" or feminine in relation to others tend to adopt the care orientation. If, as Gilligan (1982) argues, self-

concept is particularly bound to a sense of morality in women, it is reasonable to expect an interaction between sex and sex-role on moral orientation. In particular, feminine females should make more care-oriented judgments than others when reasoning about moral dilemmas.

Several studies have assessed the relations of sexrole and other aspects of self-concept to moral orientation (Pratt et al., 1982, 1988; Lyons, 1983; Ford & Lowery, 1986; Lonky, et al., 1988). Pratt et al. (1982) reported that, in women in mature age groups, ideal feminine sexroles, as assessed by the BSRI, were associated with careoriented reasoning, on both abstract and more personally relevant hypothetical dilemmas. Pratt et al. (1988) found that female parents were significantly more likely to have a connected (feminine) self-concept than male parents, and that female parents were significantly less likely to make justice-oriented judgments than male parents on real-life dilemmas. Ford and Lowery (1986) reported that femininity, as measured by the <u>Interpersonal Disposition Inventory</u> (IDI), was positively related to the care orientation, in that feminine males used more care-oriented reasoning than nonfeminine males on real-life dilemmas. Masculinity, however, was not related to either orientation. The authors explained the latter finding in terms of the insensitivity of the IDI in measuring the dimension of masculinity. Another study (Lonky et al., 1988), has suggested that differences between the feminine and masculine sex-roles on

moral orientation should emerge only at the principled level of moral reasoning.

In the present study, Pratt et al.'s (1982) suggestion that sex-role is a better predictor of orientation usage than sex per se will be examined. Furthermore, to the extent that particular dilemmas pull for justice- and care-oriented reasoning, further research on the types of moral conflicts reported by people with different sex-roles should prove fruitful.

## Moral Maturity and Moral Orientation

Stage 3 moral reasoning focuses on relationships—relations of caring, trust, and respect—in Kohlberg's system. Gilligan (1982) suggests that women are classified at Stage 3 moral development because the care—oriented judgments they are disposed to make are classified at Stage 3, whereas males, who tend to focus on justice—related issues of rights and fairness, are classified at higher stages of reasoning. If Gilligan is correct, moral orientation should covary with moral stage: care—oriented judgments should be classified at Stage 3, and justice—oriented judgments should be classified at Stage 4.

Using the Sociomoral Reflection Measure, Gibbs,
Arnold, and Burkhart (1984) reported results that were
consistent with Gilligan's (1982) contention that women
emphasize considerations of care more than men, but that
this difference was not associated with sex differences in
moral maturity. Using Kohlberg's dilemmas, Krebs et al. (in

press) found a negative correlation between moral maturity and care for males, but not for females. Two studies (Pratt et al., 1988; Walker, 1989) reported that care reasoning was associated with higher moral maturity scores than justice reasoning. Although Walker et al. (1987) failed to find any differences in moral maturity among persons with different moral orientations on hypothetical dilemmas, the researchers found that the moral maturity of persons with a justice orientation on real-life dilemmas was significantly lower than the moral maturity of persons with a care or split orientation.

In summary, Gilligan's (1982) contention that careoriented judgments are scored at a lower level of moral maturity than justice-oriented judgments has received only limited support, indeed, there is evidence that care is positively related to moral maturity on real-life dilemmas.

# The Present Study and Expectations

The objective of this study is to compare the effect of sex, sex-role, and type of moral dilemma on moral maturity and moral orientation. Although the results of past research on virtually all of the issues examined in the present study are mixed, the bulk of the evidence favors the following hypotheses.

Moral Maturity. A main effect for sex on moral maturity across dilemmas is not expected (Walker, 1984). A main effect for sex-role on moral maturity across dilemmas is expected, in that androgynous persons should tend to

score at postconventional stages (Block, 1973; Leahey & Eiter, 1980; Pratt et al., 1984) and masculine persons should tend to score higher than feminine persons on moral maturity (Leahey & Eiter, 1980; Lifton, 1985).

Both the BSRI and the PAQ have been used to assess sex-role. Studies have found that of the two measures, the PAQ is superior in terms of content and construct validity (Helmreich, Spence, & Welhelm, 1981; Wilson & Cook, 1984; Day & Korabik, in press), and that the BSRI may lack both convergent and discriminant validity (Wilson & Cook, 1984; Cook, 1985). Pratt et al. (1984) reported that the PAQ was conceptually equivalent to Gilligan's self-concept measure. For these reasons, the PAQ seemed the appropriate choice of instrument for the present study.

Because research suggests that abstract dilemmas, such as Kohlberg's hypothetical dilemmas, elicit higher levels of moral reasoning than real-life dilemmas (Kohlberg et al., 1971; Levine, 1976; Damon, 1980; Higgins et al., 1984; Pratt et al., 1987), a main effect for dilemma type on moral maturity is expected, both in comparisons between hypothetical and real-life dilemmas and between impersonal and personal real-life dilemmas. Impersonal real-life dilemmas are, by definition, more impersonal in nature than personal real-life dilemmas and thus, are expected to elicit higher levels of moral reasoning than personal real-life dilemmas.

Moral orientation. The results of several studies examining sex differences in moral orientation on standard hypothetical dilemmas (see Pratt et al., 1982; Ford & Lowery, 1986; Rothbart et al., 1986; Walker et al., 1987) and on real-life dilemmas (Gilligan 1982; Lyons, 1983; Walker et al., 1987; Donenberg & Hoffman, 1988; Gilligan et al., 1988; Pratt et al., 1988) suggest that if there are sex differences in moral orientation, they should be most likely to manifest themselves on real-life dilemmas, with the expectation that females should make more care-oriented moral judgments than males.

Although findings are mixed, there is a basis in the literature for predicting a relation between sex-role and moral orientation, in that feminine people are expected to make more care-oriented judgments than other persons (Pratt et al., 1982, 1988; Lyons, 1983; Ford & Lowery, 1986; Lonky et al., 1988).

The results of studies by Rothbart et al. (1986) and Walker et al. (1987) suggest a main effect for dilemma type on moral orientation, both in comparisons between hypothetical and real-life dilemmas and between impersonal and personal real-life dilemmas. In particular, abstract dilemmas, such as Kohlberg's hypothetical dilemmas, are expected to elicit more justice-oriented reasoning, and real-life dilemmas are expected to elicit more care-oriented reasoning. Impersonal real-life dilemmas are

expected to elicit less care-oriented reasoning than personal real-life dilemmas.

The anticipated main effects for sex and type of dilemma on moral orientation are expected to be qualified by a significant interaction between sex and type of dilemma. Specifically, it is expected that females will manifest more care-oriented reasoning than males on only the personal real-life dilemmas.

Moral maturity and moral orientation. Gilligan's (1982) contention that care-oriented judgments are scored at a lower level of moral maturity than justice-oriented judgments in Kohlberg's system has received little support (Gibbs et al., 1984; Walker, 1989; Walker et al., 1987; Pratt et al., 1988; Krebs et al., in press). Instead, a positive relation between care reasoning and moral maturity on real-life dilemmas is expected (Walker et al., 1987).

Dilemma significance. Given the results of Ford and Lowery's (1986) study, a significant main effect for sex on dilemma significance is expected. Although no research on the relation between sex-role and dilemma significance has been found, it seems plausible to expect that feminine individuals will rate the personal real-life dilemmas higher on significance than other subjects.

A main effect for type of dilemma on significance is expected, in that hypothetical dilemmas are expected to be deemed less significant than real-life dilemmas, and

impersonal real-life dilemmas are expected to be deemed less significant than personal real-life dilemmas.

Although no research on the relation between sex, sexrole, and type of dilemma on dilemma significance has been found, it seems plausible to expect that feminine females will deem the personal real-life dilemmas most significant.

Moral conflicts. A content analysis of the particular real-life moral conflicts reported will attempt to answer the following two questions: (a) do females and males experience different types of personal real-life dilemmas, and, if so, does this difference account for sex differences in care and justice reasoning, or (b) do females respond to certain types of real-life dilemma with care-oriented reasoning while males respond to the same types of real-life dilemma with justice-oriented reasoning? As in Walker et al.'s (1987) study, the content of the real-life dilemmas will be examined in terms of the specific moral conflicts involved in an attempt to pinpoint the source of whatever sex differences are observed.

In a preliminary study, the frequency with which males and females spontaneously reported impersonal and personal real-life dilemmas was examined. Contrary to Walker et al.'s (1987) finding, the results of the preliminary study suggested that there are no sex differences in the frequency with which persons of universal age spontaneously report impersonal and personal real-life dilemmas. Thus, when subjects are asked to relate particular types of real-

life dilemma in the present study, it is assumed that they are not being forced into a mode of thinking that is unnatural for them.

No research on the effects of sex-role, or sex and sex-role, on types of moral conflict reported by people has been found. However, it seems plausible to expect that feminine persons, particularly females, would report more conflicts centered around caring in relationships than other subjects.

### Study 1

#### <u>Method</u>

#### Subjects

The sample was composed of 110 undergraduates (55 males and 55 females) enrolled at Simon Fraser University. Subjects signed up for this study to fulfill a psychology course requirement. The anonymity and voluntary participation of the subjects was insured. The average age of the male subjects was 20 (range = 17 - 27) and the average age of the female subjects was 19 (range = 18 - 26), this difference is not significant, F(1,108) = 3.75, ns. The overall mean for age was 19.64. Previous studies have found that this age bracket is most sensitive in terms of revealing sex differences in moral orientation (Walker, 1984; Lonky et al., 1987). All but 7 subjects were full-time students.

#### Procedure

After the subjects gave their consent, they were asked to complete a package of questionnaires in a room set up at the university. The questionnaires typically took  $1\ 1/2\ -\ 2$  hours to complete.

Each package contained a form requesting demographic information, a short version of Kohlberg's test (the Heinz dilemma and its extension, the Officer Brown dilemma), instructions for two real-life dilemmas (one impersonal and one personal), a request to supply a list of moral dilemmas encountered in the past few years (see Appendix A), and the Personal Attributes Ouestionnaire (PAQ). The order in which the Kohlberg and real-life dilemmas were given was random. The PAQ was always administered last.

Demographic information. The demographic information collected included sex, age, grade-point average (GPA), marital status, and socioeconomic status (SES) indicators such a number of years of education, occupation, parents' occupation and income (see Appendix B). These variables were measured in order to control for their potential influences on moral reasoning and moral orientation.

Hypothetical dilemmas. The Kohlberg dilemmas were given in accordance with the standard format outlined by Colby and Kohlberg (1987). A description of a hypothetical dilemma is followed by probing questions such as "Should Heinz steal a drug he cannot afford to save his dying wife?" (see Appendix C).

Real-life dilemmas. Subjects were asked to recall and describe significant conflicts that they considered moral in nature. Following similar definitions to those used in Walker et al.'s (1987) study, subjects were asked to provide one moral conflict that did not directly involve them (impersonal dilemma) and one that did directly involve them (personal dilemma) and another person or group of people with whom he or she has had or has a significant relationship. Thus, only the interpersonal nature of the personal real-life dilemma should distinguish it from the impersonal real-life dilemma (see Appendix D). Subjects were asked to respond to questions such as "What did you see to be the issues involved at the time ... what made it a moral conflict?", "What options did you consider?", "How was the conflict resolved?", "Do you think you did the right thing? Why or why not?". Following Gilligan's and others' suggestion, the questions, "What was at stake?" and "Is there another way to see the problem?" also were included (see Brown, 1987).

Dilemma significance. Attached to the end of each dilemma was a sheet requesting information from each subject about the perceived significance of the particular dilemma (see Appendix E). Subjects were asked to rate each dilemma on a 6 item scale set up in a 5-point Likert format. The dilemmas were rated for personal relevance, personal involvement, personal investment, emotional involvement, importance, and representativeness.

Sex-role. The PAQ contains a 24-item adjective rating scale for tapping masculine (instrumental) and feminine (expressivity) traits (see Appendix F). Three eight-item scales are set up in a 5-point Likert format. The version of the PAQ used in this study was the shortened form, which contains only items that refer to socially desirable traits.

#### Scoring

Moral maturity. The Kohlberg dilemmas were scored according to the procedure outlined in the scoring manual compiled by Colby and Kohlberg (1987). The procedure involves (a) classification of interview material into discrete interview judgments (issue/norm/element units), (b) matching them with their conceptual counterparts, the criterion judgments, in the manual, and (c) assigning stage scores. Stage scores are weighted and summed to produce either global stage scores ranging from Stage 1 to Stage 5, or weighted average scores (WASs), ranging from 100 to 500 (see Colby & Kohlberg, 1987, pp. 158-188). Interrater reliability on the overall WASs on 30 (27.27%) of the hypothetical dilemmas was 90% agreement (r = .93) within 33 weighted average points.

Although the criterion judgments in Colby and Kohlberg's (1987) manual relate to the dilemmas on Kohlberg's test, it is possible to assign stage scores to the types of moral judgment given in real-life dilemmas (Kohlberg & Candee, 1984; Walker, et al., 1987). As in the

hypothetical dilemmas, stage scores and WAS scores were calculated for the real-life dilemmas. As a check, the level of moral development for each real-life dilemma was also determined using stage structure definitions instead of criterion judgments. Reliability was 95% agreement. The scoring for both the hypothetical and real-life dilemmas was conducted in such a manner that the scorer was unaware of the subjects' identity and scores on other dilemmas. Interrater reliability on the overall WASs on 24 (24.74%) of the impersonal and 25 (24.27%) of the personal real-life dilemmas was 88% agreement (rs = .98) and .82, respectively) within 33 weighted average points.

Moral orientation. As Walker et al. (1987) explain, Lyons' (1982) scoring system for orientations involves an "either/or" assignment of either the rights or the response orientation and, therefore, cannot be scored as coordinated. However, as Walker et al. point out, these orientations are not mutually exclusive. Gilligan (1982) acknowledges that both sexes are "aware" of both orientations and may articulate both (implicitly or explicitly) in a "figure-ground" type of way. The methodology outlined by Gilligan (Brown, 1987) involves assigning orientation scores at both the interview judgment level and the global level. A similar approach was adopted in this study.

Interview judgments were scored on a percentile scale according to the percentage of care exhibited in the

judgments. (The average number of judgments involved in each type of dilemma was roughly 7.) Judgments that were predominantly care in orientation received a percentage score of 100; whereas judgments that were predominantly justice in orientation received a percentage score of 0. Judgments that were both care and justice in orientation received a percentage score of 50. Judgments that were predominantly care in orientation (exhibiting 75% or more of the care orientation), but which harbored an element of the justice orientation received a percentage score of 75. Similarly, judgments that were predominantly justice in orientation (exhibiting 75% or more of the justice orientation), but harbored an element of the care orientation received a percentage score of 25. An overall percent care score was calculated for each subject on each of the dilemmas by averaging the percent scores assigned to each judgment over all scorable judgments given on a particular dilemma. These overall percent care scores represented the percent of care exhibited on a particular dilemma and were used for the purposes of statistical analyses.

Although the procedure has been used primarily with real-life dilemmas (Gilligan, 1982; Lyons, 1983; Gilligan & Attanucci, 1988), it is possible to score Kohlberg's hypothetical dilemmas for moral orientation. As with the scoring for level of moral development, scoring for orientations on the hypothetical dilemmas was conducted in

a manner that insured that the scorer was unaware of both the subjects' identity and scores on other dilemmas. Interrater reliability was determined using the quantitative care-justice scale. Interrater reliability on care for 28 (25.45%) of the hypothetical dilemmas was 79% agreement (r = .88) within 10 percentage points. Interrater reliability on care for 24 (24.74%) of the impersonal and 27 (26.21%) of the personal real-life dilemmas was 71% agreement and 70% agreement, respectively (rs = .67 and .90, respectively) within 10 percentage points.

Moral conflicts. A content analysis of the specific moral conflicts involved in the real-life dilemmas was conducted following much the same procedure as that employed by Walker et al. (1987). Three overriding categories were employed in order to classify each moral conflict. (The terms care and justice were employed to describe the content of the different types of conflict, that is, the specific issues involved, whereas moral orientation scores refer to the care scores obtained for each subject by summing and averaging specific judgments.)

Conflicts centered around issues of responsibility, concern for others, trust and betrayal in relationships, issues related to Gilligan's ethic of care, were classified as care-oriented conflicts, whereas conflicts centered around issues of codes of conduct, principles and values, reciprocity, fairness, or concern for self, issues related to the ethic of justice, were classified as justice-

oriented conflicts. Conflicts centered around both types of issues, usually pitted against each other, were classified as care/justice-oriented conflicts. For example, both a dilemma involving coworker loyalty versus honesty in the workplace and a dilemma involving friendship loyalty versus reporting a friend who cheats on an exam or shoplifts were classified under the broader category of care/justice-oriented conflicts. The broad categories of moral conflicts were derived for both the impersonal and personal real-life dilemmas. Interrater reliability of the classification of 25 (25.77%) of the specific impersonal real-life dilemmas and 25 (24.27%) of the specific personal real-life dilemmas into one of the three categories was 92% agreement. Kappa, a correlation statistic that corrects for chance agreement, was .89 for both real-life dilemmas.

Sex-role. The PAQ was administered and scored as outlined by Spence and Helmreich (1978). By summing the 8 item scores, scores representing an agency index (M) and expressivity index (F) were obtained for each subject. Subjects of both sexes were pooled and then rank ordered according to their scores on the M scale, and then according to their scores on the F scale. The median scores on the M and F scales were determined and, using a median split method, subjects were classified according to their position above or below the medians. (The median scores matched the norms published by Spence et al. [1978] for college age individuals.) Subjects who scored above the

median on M and below the median on F were classified as masculine; whereas subjects who scored above the median on F and below the median on M were classified as feminine. Subjects who scored above both the M and F medians were scored as androgynous; whereas subjects who scored below both the M and F medians were scored as undifferentiated.

Socioeconomic status. Parents' occupation and income were used to determine SES. Information on occupational income was obtained from Employment and Immigration Canada. Subjects were classified according to their parents' annual income into categories representing different levels of socioeconomic status (these categories were obtained through Statistics Canada). Subjects with a parental income of \$15,497 or less were classified in the first category; subjects with a parental income of more than this but less than \$27,997 were classified in the second category. Subjects with a parental income between \$27,997 and \$41,988 were classified in the third category. Subjects with a parental income between \$41,988 and \$61,100 were classified in the fourth category. Subjects with a parental income of more than \$61,100 were classified in the fifth category. Scores of 1 through 5 were assigned to each subject according to his or her respective category.

#### Results

### Demographic Information

The mean age for males (20) did not differ significantly from the mean age for females (19), F(1,102)

= 2.80. Neither the main effect for sex-role nor the interaction between sex and sex-role on age was significant, Fs(3,102) = 0.30 and 0.35, respectively.

The mean SES for males (3.65) did not differ from the mean SES for females (3.48), F(1,91) = 0.69. Neither the main effect for sex-role nor the interaction between sex and sex-role on SES was significant, Fs(3,91) = 1.10 and 1.01, respectively.

# Moral Maturity, Moral Orientation, and Dilemma Significance

A 2 X 4 X 3 (sex X sex-role X type of dilemma) multivariate analysis of variance (MANOVA), with repeated measures on the last factor and moral maturity, moral orientation, and dilemma significance as dependent variables (DVs) revealed statistically significant main effects for sex  $(F(3,79)=3.72,\ p<.02)$  and dilemma  $(F(6,76)=1720.86,\ p<.00001)$ , qualified by an interaction between sex and dilemma  $(F(6,76)=2.43,\ p<.03)$ .

To investigate the impact of each effect on the individual DVs, univariate analyses of variance (ANOVAs) were conducted. In order to test whether the effects observed in one variable were due to differences in another variable, analyses of covariance were also conducted. The results of the ANCOVAs duplicated those produced by the ANOVAs. The results produced by the ANCOVAs are provided as they reveal differences in one variable that are independent from differences in other variables.

## Moral Maturity

A 2 X 4 X 3 (sex X sex-role X type of dilemma) analysis of covariance (ANCOVA) was conducted on moral maturity, with care as the covariate and type of dilemma as repeated measures. Table 1 presents the summary of this analysis of covariance. Table 2 presents mean WASs as a function of sex, sex-role, and dilemma. (The total number of subjects contributing to the analyses is less than 110 because some subjects failed to complete all three types of dilemma due to time constraints.)

Insert Tables 1 and 2 about here

The ANCOVA revealed a highly significant main effect for type of dilemma on moral maturity, F(2,165) = 25.00, p < .00001. The probability level was adjusted to .01 using the Bonferroni correction for multiple comparisons. Post hoc comparisons revealed that (a) subjects scored higher on the hypothetical dilemmas than they did on each of the real-life dilemmas, and (b) subjects scored higher on the impersonal real-life dilemmas than they did on the personal real-life dilemmas.

Inspection of Table 3 reveals that the correlations between the WASs of the hypothetical and (a) the impersonal and (b) the personal real-life dilemmas were not significant, rs = .09 and .03, respectively. The correlation between the WASs of the impersonal and personal

real-life dilemmas also was not significant, r = .16. These patterns did not differ between the sexes. Of the 47 males who responded to each of the three dilemmas, 10.64% scored at identical stages on a 13-point scale across dilemmas, and 42.55% scored at identical or adjacent stages. Of the 44 females who responded to each of the three dilemmas, 34.09% scored at identical stages on a 13-point scale across dilemmas, and 77.27% scored at identical or adjacent stages.

An additional 2 X 4 X 3 (sex X sex-role X type of dilemma) ANCOVA on moral maturity, with dilemma significance as the covariate and type of dilemma as repeated measures, duplicated the results reported above—only the main effect for dilemma was significant.

### Insert Table 3 about here

In order to pinpoint the source of variation in moral maturity across dilemmas, a content analysis was conducted on the real-life dilemmas eliciting the lowest and the real-life dilemmas eliciting the highest stages of moral reasoning. Preliminary inspection suggested that the dilemmas differed in the extent to which they involved the self. To test the possibility that self-oriented dilemmas elicit lower stages of moral reasoning than other-oriented dilemmas, the senior author rated the 19 impersonal and 7 personal real-life dilemmas scored at Stage 3/4 or higher

and the 15 impersonal and 16 personal real-life dilemmas scored at Stage 2 on the extent to which the focus of concern was on the self, self and other, or generalized others. The pivotal issues emphasized in each dilemma were also identified. (Interrater reliability was 100% agreement.) The results of this analysis revealed that 100% of the impersonal real-life dilemmas and 72% of the personal real-life dilemmas scored at Stage 3/4 or higher involved issues centered around rights, freedom, and life with a focus on generalized others (e.g., Persian Gulf war, abortion, capital punishment), not unlike Kohlberg's standard hypothetical dilemmas. However, 100% of the impersonal real-life dilemmas and 81% of the personal reallife dilemmas scored at Stage 2 involved issues centered around reciprocity, authority and punishment (e.g., cheating on exams, stealing money, parental expectations), with a focus on either costs and benefits to the self or to a specified other, usually someone with whom the subject identified.

#### Moral Orientation

A 2 X 4 X 3 (sex X sex-role X type of dilemma) ANCOVA was conducted on percent care scores, with moral maturity as the covariate and type of dilemma as repeated measures. Table 4 presents the summary of this analysis of covariance. Table 5 presents mean percent care scores as a function of sex, sex-role, and dilemma. (The total number of subjects contributing to the analyses is less than 110

because some subjects failed to complete all three types of dilemma due to time constraints.) Table 6 presents frequency distributions for the moral orientation scores as a function of sex and type of dilemma. (For Table 6, orientation scores that consisted of more than 60% care were considered primarily care, orientation scores that consisted of between 40% and 60% of care were considered both care and justice, and orientation scores that consisted of less than 40% care were considered primarily justice.)

Significant main effects for sex (F(1,82) = 8.62, p <.004) and dilemma (F(2,165) = 34.47, p < .00001) were qualified by a significant interaction between sex and dilemma (F(2,165) = 6.41, p < .002). Analyses of simple effects, with p adjusted to .01, revealed that (a) the hypothetical dilemmas evoked more justice-oriented judgments than the impersonal real-life dilemmas, and the impersonal real-life dilemmas evoked more justice-oriented judgments than the personal real-life dilemmas, but only for females, (b) the hypothetical dilemmas evoked more justice-oriented judgments than the personal real-life dilemmas for both sexes, and (c) females made significantly more care-oriented judgments on the personal real-life dilemmas than males, who made more justice-oriented judgments on the personal real-life dilemmas than females (mean percent care scores = 69.30% vs. 39.47%) (see Tables 4, 5 and 6).

Insert Tables 4, 5, and 6 about here

As shown in Table 3, the correlations between the percent care scores on the hypothetical dilemmas and (a) the impersonal and (b) the personal real-life dilemmas were not significant, rs = .07 and .08, respectively. These patterns did not differ between the sexes. There was a significant positive correlation between the care scores on the impersonal real-life dilemmas and the personal reallife dilemmas, r = 0.43, p < .01. This correlation was significant for males only (r = 0.48, p < .01 vs. r = 0.23for females), but the difference between the two correlations was not significant, z = 1.35. Of the 47 males who responded to each of the three dilemmas, 12.77% displayed identical orientation scores on a 5-point scale (with 20%, 40%, 60%, and 80% as the cutoff points) across dilemmas, and 46.81% displayed identical or adjacent orientation scores. Of the 44 females who responded to each of the three dilemmas, 2.27% displayed identical orientation scores on a 5-point scale across dilemmas, and 29.55% scored at identical or adjacent orientation scores.

An additional 2 X 4 X 3 (sex X sex-role X type of dilemma) ANCOVA on percent care scores, with dilemma significance as the covariate and type of dilemma as repeated measures, duplicated the results reported above--

the main effects for sex and dilemma were qualified by a significant interaction between sex and dilemma.

### Moral Maturity and Moral Orientation

There was a significant negative correlation between the WASs and the percent care scores on the hypothetical dilemmas, r = -0.33, p < .01 (see Table 3), but correlational analyses conducted for each sex revealed that this relation applied only to males (r = -0.56, p < .01, vs. r = 0.00 for females). The difference between the two correlations is significant: z = 3.23, p < .001. There was a significant positive correlation between the WASs and the percent care scores for both males (r = .42) and females (r = .30) on the personal real-life dilemmas (see Table 3).

Tables 7, 8, and 9 present percent frequency distributions of moral orientation as a function of moral maturity and sex on the hypothetical dilemmas, impersonal real-life dilemmas, and the personal real-life dilemmas, respectively. (For Tables 7, 8, and 9, the same percent care cutoff points were employed as in Table 6.)

Insert Tables 7, 8, and 9 about here

For the hypothetical dilemmas, analyses revealed nonsignificant chi squares for both males  $(x^2(4, N = 55) = 5.74)$  and for females  $(x^2(4, N = 55) = 1.76)$ . For the impersonal real-life dilemmas, analyses revealed significant chi squares for males  $(x^2(4, N = 50) = 27.07, p)$ 

< .00001), but not for females ( $x^2$ (4, N = 46) = 7.52, ns). Post hoc analyses, with p adjusted to .01, revealed that more males reasoning at Stage 2/3 or less and more males reasoning at Stage 3/4 or more made justice-oriented judgments than care/justice- and care-oriented judgments (see Table 8). For the personal real-life dilemmas, analyses revealed significant chi squares for both males  $(x^2(4, N = 52) = 15.54, p < .004)$  and for females  $(x^2(4, N = 52))$ = 50) = 20.27, p < .0004). Post hoc analyses, with p adjusted to .01, revealed that (a) more males reasoning at Stage 2/3 or less made justice-oriented judgments than care/justice- and care-oriented judgments, and (b) more females reasoning at Stage 3 made care-oriented judgments than care/justice- and justice-oriented judgments (see Table 9). (The number of males and females contributing to the analyses is less than 55 for the real-life dilemmas because some subjects failed to complete these types of dilemma due to time constraints.)

Additional post hoc analyses, with p adjusted to .01, revealed that care-oriented judgments were most likely to be classified at Stage 3 for males on the impersonal real-life dilemmas and for both sexes on the personal real-life dilemmas.

# <u>Dilemma Significance</u>

The internal consistency of each set of significance scores was evaluated by Coefficient Alpha analyses in order to assess whether aggregation of the scores by dilemma was

justified. The Coefficient Alphas for the hypothetical dilemmas, impersonal real-life dilemmas, and personal real-life dilemmas were 0.79, 0.81, and 0.81, respectively. Thus, the scores were aggregated such that each individual received a total score out of 30 for each dilemma.

A 2 X 4 X 3 (sex X sex-role X type of dilemma) ANCOVA was conducted on dilemma significance, with moral maturity as the covariate and type of dilemma as repeated measures. Table 10 provides the summary of this analysis of covariance. Table 11 presents mean significance scores as a function of sex, sex-role, and dilemma. (The total number of subjects contributing to the analyses is less than 110 because some subjects failed to complete all three types of dilemma due to time constraints.)

Insert Table 10 and 11 about here

Significant main effects for sex  $(F(1,80)=6.30,\ p<0.01)$  and dilemma  $(F(2,161)=85.49,\ p<0.00001)$  were qualified by a significant three-way interaction between sex, sex-role and dilemma  $(F(2,161)=2.58,\ p<0.02)$ . In view of the small number of subjects in each sex and sex-role category, however, the three-way interaction was not interpreted. With regard to the main effect for dilemma, post hoc analyses, with p adjusted to .01, revealed that males and females deemed personal real-life dilemmas more significant than both the hypothetical and the impersonal

real-life dilemmas. In view of the significant three-way interaction, however, these results must be interpreted with caution.

There was a significant positive correlation between the significance scores and the percent care scores on the personal real-life dilemmas, r = 0.22, p < .05 (see Table 3). However, correlational analyses conducted for each sex failed to reveal significant correlations for males (r = 0.21) and females (r = 0.12).

An additional 2 X 4 X 3 (sex X sex-role X type of dilemma) ANCOVA on dilemma significance, with care as the covariate and type of dilemma as repeated measures, duplicated the results reported above.

# Moral Conflicts

Content analyses of the real-life dilemmas involved classifying the specific moral conflicts into 3 categories-(a) justice-oriented, (b) care/justice-oriented, and (c) care-oriented. For example, conflicts centered around issues of responsibility, concern for others, trust and betrayal in relationships were classified as care-oriented conflicts, whereas conflicts centered around issues of codes of conduct, principles and values, reciprocity, fairness, or concern for self were classified as justice-oriented conflicts. Conflicts centered around both types of issues, usually pitted against each other, were classified as care/justice-oriented conflicts.

Inspection of Table 12 reveals some interesting trends. As expected, males and females did not differ significantly in the frequency with which they reported types of impersonal real-life moral conflicts ( $x^2$ (2, N = 97) = 1.21), but they did differ significantly in the frequency with which they reported types of personal real-life moral conflicts ( $x^2$ (2, N = 103) = 18.25, p < .0001). Post hoc analyses, with p adjusted to .01, revealed that (a) more females than males reported personal real-life moral dilemmas involving issues of care, and (b) more males than females reported personal real-life moral dilemmas involving conflicts between issues of care and justice. Table 13 provides representative examples of each type of moral conflict.

Insert Tables 12 and 13 about here

Mean WASs, care scores, and significance scores were determined for each type of personal real-life moral conflict across sex. (In view of the small number of subjects in each sex-role category, analyses of the effects of sex-role were not interpreted.) A 2 X 3 (sex X type of personal real-life dilemma) ANCOVA conducted on moral maturity, with care as the covariate, failed to reveal any significant main effects or interactions. A 2 X 3 (sex X type of personal real-life dilemma) ANCOVA conducted on dilemma significance, with moral maturity serving as the

covariate, also failed to reveal any significant main effects or interactions.

A 2 X 3 (sex X type of personal real-life dilemma) ANCOVA was conducted on percent care scores, with moral maturity as the covariate. While the main effect for sex was not significant (F(1,94) = 0.08), there was a significant main effect for type of personal real-life dilemma (F(2,94) = 72.33, p < .00001). Post hoc comparisons, with p adjusted to .01, revealed (a) conflicts centered around care-oriented issues elicited more careoriented judgments than other conflicts and (b) conflicts centered around justice-oriented issues elicited more justice-oriented judgments than other conflicts. Post hoc comparisons, with p adjusted to .01, on each type of moral conflict revealed there were no sex differences on (a) moral maturity, (b) care, or (c) significance. Table 14 presents mean care scores as a function of type of personal real-life conflict and sex.

Insert Tables 14 and 15 about here

Subcategories representing the most frequent type of moral conflict reported in each category of personal real-life moral conflict were also derived (see Table 15).

Interrater reliability of the classification of 24 of the specific conflicts into one of the subcategories was 92% agreement between the author and one other rater (Kappa =

.83). Four independent raters were asked to re-classify the subcategories back into the three broader categories--two raters provided 100% agreement (Kappa = 1.00) and 2 provided 83% agreement (Kappa = .68). Within each type of personal moral conflict, there were no differences in the proportion of males and females reporting each subcategory type of conflict. Further analyses with mean WASs, care scores, and significance scores as the dependent variables were not interpreted due to the small number of subjects in each subcategory.

### Discussion

Several issues were addressed in this study pertaining to Kohlberg's theory of moral development (see Colby & Kohlberg, 1987) and Gilligan's (1982) theory of moral orientation. The discussion will focus on the results of the present study of the effects of sex, sex-role, and type of dilemma on moral maturity, moral orientation, and dilemma significance, and the consistency or inconsistency of the results with past research. Furthermore, some novel findings lend encouragement to further research in this area.

#### Moral Maturity

Consistent with the conclusion reached by Walker (1984) in his meta-analysis, the results of the present study failed to reveal any sex differences in moral maturity on hypothetical or real-life dilemmas. According to Holstein (1976), women have more difficulty relating to

hypothetical dilemmas because of the objectivity and impartiality intrinsic in such dilemmas and this causes them to make lower stage judgments. If such a difficulty exists, it was not reflected in the levels of moral maturity evidenced by the female subjects in this study.

Contrary to expectation and the findings of studies by Leahey and Eiter (1980), Pratt et al. (1984), and Lifton (1985), but consistent with other studies (Bussey & Maughan, 1982), sex-role was not related to moral maturity, independently from or in interaction with sex. There were not enough subjects at postconventional stages to assess the relationship between androgyny and higher levels of moral reasoning. Given the general lack of consistent results among studies investigating the relationship between sex, sex-role, and moral maturity, it is suggested that sex-role does not influence moral maturity.

As expected, there was a significant difference between dilemmas on the level of moral maturity they evoked. Contrary to the conclusions reached by Walker et al. (1987), but consistent with the conclusions of other research (Kohlberg et al., 1971; Levine, 1976; Damon, 1980; Higgins et al., 1984; Pratt et al., 1987), Kohlberg's hypothetical dilemmas elicited higher levels of moral judgment than the real-life dilemmas, and the impersonal real-life dilemmas elicited higher levels of moral judgment than the personal real-life dilemmas. These differences were not due to either differences in frequency of care

judgments or differences in the significance of the dilemmas: the dilemma differences in moral maturity pertained when moral orientation and significance were controlled.

The hypothetical dilemmas were expected to elicit more Stage 4 and 5 moral reasoning, and the more personally relevant real-life dilemmas were expected to elicit more Stage 3 reasoning. Perhaps because of the age of the subjects, the levels of moral maturity were lower than expected, and, therefore, the range of moral maturity scores constricted. Although there were significant differences between types of dilemma on moral maturity, all dilemmas elicited moral judgments in the Stage 3 range.

Constriction in the range of moral maturity scores notwithstanding, subjects scored significantly lower on some dilemmas than on others. To attempt to pinpoint the source of this difference, a content analysis of the real-life dilemmas eliciting the lowest and the real-life dilemmas eliciting the highest stages of moral reasoning was conducted. The results of the content analysis suggest that the types of issues involved in dilemmas affects or evokes the level of moral judgment people respond with. In particular, dilemmas involving issues centered around rights, freedom, and life, with a focus on generalized others, tend to evoke Stage 3/4 or higher moral reasoning, whereas dilemmas involving issues centered around reciprocity, authority and punishment, with a focus on

either costs and benefits to the self or to a specified other with whom the subject identifies, tend to evoke Stage 2 moral reasoning. Thus, consistent with past research (Lonky et al., 1988), dilemmas involving self-oriented issues elicited lower stage reasoning than dilemmas involving issues pertaining to social issues and generalized others.

Kohlbergian-type hypothetical dilemmas evoke the highest level of moral reasoning available to people (competence), but people do not always perform at their level of competence. Furthermore, people vary in the levels of competence available to them. For example, the results of the present study suggest that the females were more consistent in stage of moral reasoning across dilemmas than the males were (42.55% of males scored at the same of adjacent stage across dilemmas, whereas 77.27% of females scored at the same or adjacent stage across dilemmas). Perhaps this is an artifact of the constricted range of moral maturity scores.

#### Moral Orientation

Gilligan's (1982) theory proposes that females adopt the care-orientation more often than males, and males adopt the justice-orientation more often than females, especially when responding to real-life moral dilemmas. The results of this study supply partial support for this assumption. Females did make more care-oriented judgments than males, but the effect was qualified by an interaction with type of

dilemma--females made more care-oriented judgments than males only on the personal real-life dilemmas. Gilligan implies that sex differences in moral orientation should be more pervasive--that is, that they should generalize more across contexts--than found in the present study.

The hypothetical dilemmas were expected to elicit more justice-oriented judgments than the real-life dilemmas, and the impersonal real-life dilemmas were expected to elicit more justice-oriented judgments than the personal real-life dilemmas; furthermore, it was expected that this pattern would prevail across sex and sex-role. The results of this study provide partial support for this assumption: hypothetical dilemmas elicited more justice-oriented judgments than the personal real-life dilemmas for both males and females, but the hypothetical dilemmas elicited more justice-oriented judgments than the impersonal reallife dilemmas from females only. Similarly, only females made more care-oriented judgments on the personal real-life dilemmas than on the impersonal real-life dilemmas. Perhaps these differences stemmed from differences in the types of real-life conflict reported by males and females.

Analyses of within subject consistency revealed that males were more consistent than females in their use of moral orientation across dilemmas (46.81% of males displayed the same or adjacent moral orientation scores across dilemmas, whereas 29.55% of females displayed the same or adjacent moral orientation scores across dilemmas).

The significant positive correlation between care scores on the impersonal and personal real-life dilemmas found for males, but not for females, is consistent with these results. (Note, however, that the difference between the two correlations was not significant). Also, males were as consistent in stage of moral reasoning as they were in moral orientation across dilemmas, whereas females were less consistent in moral orientation than they were in stage of moral reasoning across dilemmas. However, the competence/performance issue in moral reasoning does not pertain to care and justice reasoning, instead, the latter pertains more to content of judgments than to structure. Once more, these differences may be artifacts of the differences in the types of real-life conflict reported by males and females.

Contrary to expectation and past research (Pratt et al., 1982; Lyons, 1983; Ford & Lowery, 1986), sex-role was not related to moral orientation, independently or in interaction with sex. Thus, as with moral maturity, sex-role does not appear to influence moral orientation.

## Moral Maturity and Moral Orientation

Gilligan assumes that women are downscored on moral maturity, as assessed by Kohlberg's justice-oriented system, as a result of their focus on the care-orientation. Interestingly, in the present study, and consistent with past research (Krebs et al., in press), a negative correlation between moral maturity and care was found only

for males on the hypothetical dilemmas. Contrary to this trend and partially consistent with Walker et al.'s (1987) conclusions, a positive correlation between moral maturity and care was found on the personal real-life dilemmas for both sexes. Because there were so few subjects evidencing postconventional reasoning, no conclusions could be reached regarding the relationship of postconventional reasoning and moral orientation.

Gilligan (1982) has contended that women who use the care orientation are classified at Stage 3 and that men who use the justice orientation are classified at Stage 4 in Kohlberg's system. This contention received mixed support in the present study. It was not supported on Kohlberg's hypothetical dilemmas, but it was partially supported on the real-life dilemmas. Males reasoning at both low (Stage 2/3 or lower) and high (Stage 3/4 or higher) stages on the impersonal real-life dilemmas were significantly more likely to make justice-oriented judgments than care- and care/justice-oriented judgments. Furthermore, care-oriented judgments were more likely to be classified at Stage 3 on the impersonal real-life dilemmas than at any other stages, but only for males. Females reasoning at Stage 3 were significantly more likely to make care-oriented judgments than care/justice- and justice-oriented judgments, but only on the personal real-life dilemmas. Finally, males reasoning at Stage 2/3 or lower were more likely to make

justice-oriented judgments than care- and care/justiceoriented judgments on the personal real-life dilemmas.

To summarize, the results of this study supply only partial support to Gilligan's contention that care-oriented judgments are classified at Stage 3 and justice-oriented judgments are classified at Stage 4 in Kohlberg's system. Gilligan's claim that womens' level of moral maturity is downgraded on Kohlberg's test because they make more care-oriented judgments than males, and that these judgments are scored at Stage 3, was not supported. Care-oriented judgments were more likely to be classified at Stage 3 only on the real-life dilemmas and only for males on the impersonal real-life dilemmas. Justice-oriented judgments were not more likely to be classified at high stages, or at any other stages, on either the hypothetical or the real-life dilemmas.

#### Dilemma Significance

A novel finding in the present study suggests that while there were no sex-role differences, there were qualified sex and dilemma differences in the degree of significance assigned to general types of dilemma (partially supporting Ford & Lowery, 1986). As might be expected, both males and females deemed the personal real-life dilemmas more significant than the hypothetical and impersonal real-life dilemmas. In addition, females attached more significance to all types of dilemma than

males. However, these conclusions must be interpreted with caution due to the significant three-way interaction.

Partially consistent with the results of Ford and Lowery's (1986) study, there was a significant positive correlation between care and dilemma significance on the personal real-life dilemmas, but this did not pertain for males and females separately. The issue of dilemma significance was followed up in the second study reported here.

### Moral Conflicts

The classification of the real-life conflicts into categories involved rating the specific issues involved in each conflict on descriptions that fit the descriptions of care and justice made by Gilligan. Thus, the three types of conflict included care-oriented conflicts, care/justiceoriented conflicts, and justice-oriented conflicts. (This categorization of types of conflict was different and independent from the assignment of moral orientation scores to subjects, which involved summing and averaging specific judgments about the conflict). The results of the conflict classification indicated that most of the impersonal reallife dilemmas involved conflicts of justice, whereas the personal real-life dilemmas tended to involve conflicts of care or care versus justice, consistent with Gilligan's suggestion that Kohlberg's conflicts are not very representative of the kinds of personal conflict people experience in everyday life.

A closer examination of the specific moral issues around which the real-life dilemmas centered revealed an interesting trend--females and males reported the same types of impersonal real-life moral conflict, but tended to differ in the types of personal real-life conflict they reported. Partially consistent with the conclusions reached by Walker et al. (1987), females were more likely than males to report conflicts involving care-oriented issues, and males were more likely than females to report conflicts involving care/justice-oriented issues. Contrary to Gilligan's (1982) theorizing, but consistent with Walker et al.'s (1987) results, there were no sex differences on (a) moral maturity, (b) care, or (c) significance within each type of conflict.

As one would expect, conflicts centered around careoriented issues evoked more care-oriented judgments than
other conflicts, and conflicts centered around justiceoriented issues evoked more justice-oriented judgments than
other conflicts. Also, conflicts centered around
care/justice-oriented issues evoked equivalent amounts of
both care- and justice-oriented judgments. Thus, type of
real-life moral conflict appears to be more strongly
related to moral orientation than sex (or sex-role).

In view of these findings, the conclusion that females made more care-oriented judgments than males on the personal real-life dilemmas must be qualified. Females reported significantly more care-oriented types of personal

real-life conflict than males, whereas males reported more care/justice-oriented types of personal real-life conflict than females. Thus, contrary to Gilligan's contention that males and females construct and think about the same types of dilemma differently, the apparent sex difference in moral orientation on the personal real-life dilemmas in the present study appears to stem from the sex difference in the type of moral conflict reported. This is important in terms of the person-situation or constructivism-contextualism controversy: moral orientation (and maybe moral stage) are jointly determined by the types of dilemma people experience and the orientations (stage structures) available to them.

Why did females report more care-oriented personal real-life moral conflicts than males, and why did males report more care/justice-oriented personal real-life moral conflicts than females? There are several possible answers to this question. First, the differences may stem from social experience. If the social experiences of males and females differ (Walker et al., 1987), females may experience more care-oriented types of moral conflict than males in everyday life, and males may experience more care/justice-oriented types of moral conflict than females in everyday life. Second, the differences could stem from differences in willingness to discuss care- and care/justice-oriented types of moral conflict. Third, males and females might differ in the extent to which they deem

real-life moral conflicts significant, and may choose to report their most significant conflict. Finally, it has been suggested (Haan, 1975; Pratt et al., 1988) that females view personal relationship problems as more central to the moral domain than males, and, therefore, may find them better exemplars of moral conflicts.

In conclusion, the first part of this project supplied some support for both Kohlberg's and Gilligan's positions, but failed to confirm either. Although there were no sex differences in moral maturity, as expected by Gilligan (1982), there were sex differences in moral orientation, at least on personal real-life dilemmas. Contrary to the positions of both Gilligan and Kohlberg, however, moral maturity and moral orientation were significantly affected by dilemma content. The purpose of the following study is to attempt to explain the sex difference in the frequency of types of personal real-life moral conflict reported.

### Study 2

Given the results of Study 1 and of Walker et al.'s (1987) study, and if the possibility that females experience more care-oriented real-life dilemmas than males is true, females should report experiencing more care-oriented moral conflicts than males, and in light of the results in Study 1, males should report experiencing more care/justice-oriented conflicts than females. On the other hand, the differences observed in Study 1 may have stemmed from a sex difference in willingness to discuss moral

conflicts on anonymous questionnaires: females may be more willing than males to discuss care-oriented conflicts, whereas males may be more willing than females to discuss care/justice-oriented conflicts.

In Study 1, subjects were asked to describe the most significant real-life moral conflicts they could recall. Because females reported more care-oriented personal real-life moral conflicts than (a) males and (b) other types of conflict, it may be that females deem care-oriented real-life moral conflicts most significant. If this is true, females in Study 2 should rate care-oriented moral conflicts (a) more significant than males should and (b) more significant than other conflicts, and in light of the results in Study 1, males should rate care/justice-oriented conflicts (a) more significant than females should and (b) more significant than other conflicts.

If it is true that females deem care-oriented conflicts more central to the moral domain than males do (Haan, 1975; Pratt et al., 1988), females in Study 2 should rate care-oriented moral conflicts (a) more of a moral concern than males should and (b) more of a moral concern than other conflicts, and in light of the results in Study 1, males should rate care/justice-oriented conflicts (a) more of a moral concern than females should and (b) more of a moral concern than other conflicts.

According to Gilligan, females tend to use the careorientation more often than males when responding to dilemmas, and males tend to use the justice-orientation more often than females when responding to dilemmas. Yet, in Study 1 there were no sex differences in moral orientation when dilemma content was held constant, rather males and females differed in the frequency with which they reported types of personal real-life moral conflict. If this is true, then the males and females in Study 2 should not differ in the extent to which they believe issues of care and justice are involved in real-life moral conflicts. The purpose of asking subjects in Study 2 to rate each type of conflict in terms of the extent to which they believe issues of care and justice are involved is to (a) supply additional support for the contention that there are no sex differences in moral orientation when dilemma content is held constant and (b) validate the personal real-life moral conflict typology derived in Study 1.

#### Method

#### Subjects

The sample was composed of 60 undergraduates (30 males and 30 females) enrolled at Simon Fraser University.

Subjects signed up for this study to fulfill a psychology course requirement, except five who participated on a purely voluntary basis. The anonymity and voluntary participation of the subjects was insured. The average age for males was 22 (range = 17 - 29) and the average age for females was 20 (range = 17 - 25). (This difference is

significant: F(58) = 8.71, p < .01.) The overall average age was 21.

### Procedure

After the subjects gave their consent, they were asked to complete a questionnaire in a room set up at the university. The questionnaire typically took 30 to 45 minutes to complete.

Each questionnaire contained instructions for 8 reallife conflicts (see Appendices G and H) and a form requesting demographic information (see Appendix B).

Demographic information. The demographic information collected included sex, age, grade-point average (GPA), marital status, and socioeconomic status (SES) indicators such a number of years of education, occupation, parents' occupation and income. These variables were measured in order to determine the similarity of the subjects in Study 2 with the subjects in Study 1.

Real-life moral conflicts. In order to select a sample of real-life conflicts that were representative of those provided in Study 1, the subcategories of moral conflicts derived in Study 1 (see Table 15) served as exemplars, providing the subjects with 2 real-life conflicts from each of the three types (care-oriented, care/justice-oriented, and justice-oriented) of personal real-life conflict.

(Although two additional exemplars were provided, only the 6 representing the 3 categories were included in statistical analyses.) Three examples of the most

frequently occurring specific types of conflicts within each subcategory were also provided (see Appendix G). Subjects were asked to read each conflict and then respond to the following open-ended question, "What did you see to be the main issue(s) involved in the decision, that is, what do you see to be at stake?"

The open-ended question was followed by 5 questions set up in a 5-point Likert format (see Appendix H). These questions asked to what extent subjects (a) experience different real-life conflicts, (b) deem different real-life conflicts significant, (c) deem different real-life conflicts as moral concerns, and (d) are willing to discuss different real-life conflicts on anonymous questionnaires. Subjects were also asked to rate each conflict in terms of the extent to which they believed issues of care and justice were involved.

### Scoring

Main issues. To analyze data on the main issues subjects believed were involved in each real-life conflict, the issues subjects listed were classified into one of three categories (see Table 16). For example, if the issues centered only around responsibility, concern for others, or trust and betrayal in relationships, issues related to Gilligan's ethic of care, the issues were classified as care-oriented, whereas issues centered only around codes of conduct, principles and values, reciprocity, fairness, or concern for self, issues related to the ethic of justice,

the issues were classified as justice-oriented. Thirdly, a care/justice-oriented category served as the classification for those responses which contained issues of both care and justice. Interrater reliabilities for the classification of the responses of 15 subjects to each conflict into one of the categories ranged from 87% to 100% agreement (Kappas ranged from .60 to 1.00).

Close-ended questions. Subjects received scores from 1 to 5 for each question for each conflict.

Socioeconomic status. SES was determined in the same manner as outlined in Study 1.

### Results

### Demographic Information

The average age for males in Study 2 was 22 and the average age for males in Study 1 was 20. The average age for females in Study 2 was 20 and the average age for females in Study 1 was 19. The mean age for subjects in Study 2 (21) differs significantly from the mean age for subjects in Study 1 (19), t(168) = 3.10, p < .01.

The mean SES for males in Study 2 (4.00) did not differ from the mean SES for females (3.72), F(1,45) = 1.06, ns. The mean SES for subjects in Study 2 (3.85) did not differ from the mean SES for subjects in Study 1 (3.57), t(144) = 1.76, ns.

The mean GPA for males in Study 2 (3.03) did not differ from the mean GPA for females (2.99), t(44) = 0.21, ns. The mean GPA for subjects in Study 2 (3.02) did not

differ from the mean GPA for subjects in Study 1 (2.83), t(144) = 1.87, ns.

Of the subjects in Study 2, 2 (1 male and 1 female) were married. Similarly, of the subjects in Study 1, 2 (1 male and 1 female) were married.

## Main Issues

Table 16 presents a classification of the types of main issues subjects attributed to each of the 6 types of conflict by sex. Analyses revealed differences between dilemmas on the main issues involved for males  $(x^2(10, n = 30) = 189.21, p < .00001)$ , and for females  $(x^2(10, n = 30) = 161.04, p < .00001)$ . Post hoc comparisons, with p adjusted to .01, revealed that were no sex differences in type of main issues believed to be involved in each conflict.

Insert Table 16 about here

Post hoc analyses, with p adjusted to .01, revealed that (a) more subjects believed the main issues involved in the "intervene" and "loyal" (care-oriented) conflicts were care-oriented than care/justice- or justice-oriented, (b) more subjects believed the main issues involved in the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) conflicts were care/justice-oriented than care- or justice-oriented, and (c) more subjects believed the main issues involved in the "honesty"

and "stand up for rights" (justice-oriented) conflicts were justice-oriented than care- or care/justice-oriented.

# Analyses of Dependent Variables

A 2 X 6 (sex X type of dilemma) MANOVA, with repeated measures on the last factor and care/justice-issues, experience, significance, willingness to discuss, and moral concern as dependent variables (DVs) revealed a significant main effect for type of dilemma (F(5,54) = 15.56, p < .00001). To investigate the impact of this effect on the individual DVs, univariate analyses were conducted.

A 2 X 6 (sex X conflict) ANCOVA was conducted on each dependent variable, with age as the covariate and type of conflict as repeated measures. Table 17 presents mean ratings as a function of sex, type of conflict, and question.

Insert Table 17 about here

# Issues of Care and Justice

The means on the care-justice scale suggest that subjects rated all conflicts as involving both care and justice issues--none rated any as involving entirely care or entirely justice issues. Nonetheless, there was a significant main effect for conflict, F(5,290)=31.93, p<0.0001) on issues of care and justice. As expected, post hoc comparisons, with p adjusted to .003, revealed that the "intervene" and "loyal" (care-oriented) conflicts were

rated as involving more issues of care than the other conflicts. However, the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) conflicts did not differ significantly from the "honesty" and "stand up for rights" (justice-oriented) conflicts.

### Experience of Conflict

There were no significant main effects or interactions on the extent to which subjects reported experiencing each type of conflict.

### Significance of Conflict

The main effect for conflict  $(F(5,290)=3.35,\ p<.006)$  was qualified by a significant interaction between sex and conflict  $(F(5,290)=5.23,\ p<.0001)$ . Analyses of simple effects, with p adjusted to .01, revealed significant effects for conflict for both males and females. Superscripts in Table 17 indicate which differences between conflicts were significant at p<.003 in an analysis of simple comparisons. Simple comparisons, with p adjusted to .01, also revealed that females attributed more significance to the "intervene" (careoriented) conflict than males did.

### Willingness to Discuss Conflict Anonymously

There was a significant main effect for conflict on willingness to discuss, F(5,290)=2.89, p<.02. Post hoc comparisons, with p adjusted to .003, revealed only a marginally significant difference (p<.006) between the "friend acted wrongly" (care/justice-oriented) conflict

(mean = 3.75) and the "stand up for rights" (justice-oriented) conflict (mean = 4.23).

### Moral Concern of Conflict

There was a significant main effect for conflict  $(F(5,290)=18.93,\ p<.00001)$  on moral concern. Post hoc comparisons, with p adjusted to .003, revealed that (a) the "intervene" and "loyal" (care-oriented) conflicts were rated as less of a moral concern than all other conflicts except the "stand up for rights" (justice-oriented) conflict, and (b) the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) conflicts were rated more of a moral concern than all other conflicts except the "honesty" (justice-oriented) conflict.

#### Discussion

In Study 1 the real-life dilemmas were classified into 3 categories (justice-oriented, care/justice-oriented, and care-oriented) on the basis of the nature of the specific conflicts involved in an attempt to pinpoint the reason why females made more care-oriented judgments than males on the personal real-life dilemmas. In Study 1, we found that females reported more care-oriented personal real-life moral conflicts than males, and males reported more care/justice-oriented personal real-life moral conflicts than females. When dilemma content was held constant, the sex difference in moral orientation disappeared.

Although males reported significantly fewer careoriented conflicts than females, care-oriented conflicts (that is to say, conflicts involving issues of concern and responsibility for others and relationships versus interfering or betrayal) elicited more care judgments from both sexes than the other types of real-life dilemma, whereas justice-oriented conflicts (that is to say, conflicts involving issues of rights, fairness, equality, reciprocity, or abstract principles) elicited more justice judgments from both sexes than the other types of real-life dilemma. Care/justice-oriented conflicts (that is to say, conflicts involving relationship issues and principle issues) tended to elicit both care and justice judgments.

Subjects in Study 2 (a) rated exemplars from Study 1's personal real-life moral conflict categories on a Likert scale in terms of the extent to which they believed issues of care and justice were involved and (b) were asked to list the main issues they believed to be involved in each conflict. A content analyses of the main issues described for each conflict involved classifying the specific responses on descriptions that fit the descriptions of care and justice made by Gilligan into one of three categories (justice-oriented, care/justice-oriented, and care-oriented). Contrary to Gilligan's constructivistic argument, but consistent with the results in Study 1, results from both the care-justice scale and the content analysis of the main issues indicated that males and females did not differ in the extent to which they believed

issues of care and justice were involved in each type of

Subjects rated all the conflicts on the care-justice scale as involving both care and justice issues, that is, none rated any as involving entirely care or entirely justice issues. Nonetheless, subjects rated the "intervene" and "loyal" (care-oriented) conflicts as involving more issues of care than the other types of conflict. As expected, the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) conflicts were rated as involving both care and justice issues. However, contrary to expectation, the "honesty" and "stand up for rights" (justice-oriented) conflicts were not rated as involving more issues of justice than the "relationship versus values" or the "friend acted wrongly" (care/justiceoriented) conflicts -- both types of conflict were viewed as involving issues of both care and justice. Perhaps people interpret dilemmas differently when given only essential information from the way they do when they have actually experienced them.

The content analyses of the main issues revealed a stronger differentiation between types of conflict than the Likert scale responses described above. In particular, type of conflict pulled strongly for the types of issues believed to be involved: more subjects viewed the "intervene" and "loyal" (care-oriented) conflicts as involving care-oriented issues than care/justice- or

justice-oriented issues, more subjects viewed the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) conflicts as involving care/justice-oriented issues than care- or justice-oriented issues, and more subjects viewed the "honesty" and "stand up for rights" (justice-oriented) conflicts as involving justice-oriented issues than care- or care/justice-oriented issues.

# Experience of Conflict and Willingness to Discuss Conflict Anonymously

contrary to expectation, females did not report experiencing the "intervene" and "loyal" (care-oriented) types of moral dilemma more than males, and males did not report experiencing the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) types of moral dilemma more than females. Furthermore, there were no differences between males and females on the extent to which they reported experiencing each type of conflict. Thus, the sex difference in frequency of conflicts reported in Study 1 does not seem to stem from sex differences in the probability of experiencing certain types of real-life conflicts. The present study also failed to support the possibility that the sex differences in Study 1 stemmed from sex differences in willingness to discuss certain real-life conflicts.

#### Significance of Conflict

The results of Study 2 suggest that females attribute more significance to "intervene" (care-oriented) conflicts than males do. In Study 1, 30% of females, compared to 7.5% of males, reported this particular type of care-oriented personal real-life conflict. Although these findings are consistent with the conclusion that the females in Study 1 made more care-oriented judgments than males on the personal real-life moral dilemmas because they deem the care-oriented personal real-life moral dilemmas more significant (and therefore are more likely to report them), this line of thought is not supported by other data in Study 1 and in Study 2. First, in Study 1, 32% of females, compared to 13% of males, reported "loyal" (care-oriented) conflicts; however, females in Study 2 did not deem these conflicts more significant than males did. Furthermore, females did not deem either the "intervene" or the "loyal" (care-oriented) conflicts more significant than any of the other types of conflict.

Second, males in Study 1 reported more care/justiceoriented personal real-life moral conflicts than females,
but males in Study 2 only deemed the "relationship versus
values" (care/justice-oriented) conflict more significant
than two other types of conflict--"intervene" (careoriented) conflicts and "stand up for rights" (justiceoriented) conflicts. In addition, females in Study 2 deemed
the "relationship versus values" (care/justice-oriented)

conflict more significant than three other types of conflict--"stand up for rights" (justice-oriented) conflicts, "honesty" (justice-oriented) conflicts, and "loyal" (care-oriented) conflicts.

The particular types of personal real-life moral conflict in Study 1 did not differ in the extent to which they were deemed significant by males and females, whereas, in Study 2, there were significant differences between dilemmas on dilemma significance, and this latter difference was qualified by an interaction with sex. It is important to note, however, that subjects in Study 1 were asked to report the most significant real-life dilemmas they had experienced, whereas subjects in Study 2 rated the significance of different types of conflict they did not report.

Thus, the present study only partially supported the possibility that the sex differences in Study 1 stemmed from sex differences in the extent to which males and females attribute significance to different types of reallife dilemma. Future research geared at investigating sex differences in the attribution of significance to real-life dilemmas and the relation of these attributions to the probability of reporting such conflicts is encouraged.

# Moral Concern of Conflict

Contrary to expectation, females did not deem the "intervene" or "loyal" (care-oriented) conflicts more of a moral concern than males did, and males did not deem the

"relationship versus values" or "friend acted wrongly" (care/justice-oriented) conflicts more of a moral concern than females did. Furthermore, there were no differences between males and females on the extent to which any of the other types of conflict were considered moral concerns. Thus, the present study failed to support the possibility that the sex differences in Study 1 stemmed from sex differences in the extent to which males and females view different types of real-life dilemma as moral concerns.

A novel finding suggests that (a) the "intervene" and "loyal" (care-oriented) real-life conflicts were deemed less of a moral concern than other conflicts, except the "stand up for rights" (justice-oriented) conflicts by both sexes, and (b) the "relationship versus values" and "friend acted wrongly" (care/justice-oriented) real-life conflicts were deemed more of a moral concern than other conflicts, except the "honesty" (justice-oriented) conflicts by both sexes. (The "honesty" and "stand up for rights" conflicts did not differ in the extent to which they were deemed moral concerns.) Future research aimed at investigating the real-life moral conflicts males and females deem of moral concern should prove fruitful.

To summarize, the results of Study 2 suggest that males and females do not experience different types of dilemma, or differ in the extent to which they would be willing to discuss different types of dilemma. Nor do males and females differ in the extent to which they deem real-

life conflicts as moral concerns. Females in Study 2 deemed the "intervene" (care-oriented) conflict more significant than males did; however, this finding only partially explains the sex difference in frequency of types of personal real-life dilemma reported in Study 1.

The results of Study 2 raise a number of questions. Why did females and males differ in the extent to which they attributed significance to one type of care-oriented real-life moral conflict and not to both types? Are there other types of real-life moral conflict that females and males might attribute differing amounts of significance to? Why did females in Study 1 report more care-oriented types of personal real-life dilemma than care/justice-oriented types of personal real-life dilemma when females in Study 2 deemed only one of the care/justice-oriented types of conflict more significant than other types of conflict? Lastly, to what extent does the significance of a type of dilemma influence the likelihood of reporting such a type on an anonymous questionnaire? Future research is necessary to answer these questions.

In conclusion, the thrust of the results of the present project suggest that types of dilemma (situation) affect moral maturity and moral orientation more than types of people (sex or sex-role), but that males and females differ in the types of personal real-life moral conflict they report. While the nature of a dilemma appears to influence moral orientation, it is possible that one's

moral orientation influences the spontaneous construal of a dilemma (Walker, 1989). Since, the nature of this interaction could not be determined in the present study, future research examining the interaction between sex and type of dilemma and its effects on moral maturity, moral orientation, and dilemma significance is encouraged.

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# Appendix A

			ID:	
Real	-life Dile	mma List		
Reflecting back on your	experienc	se, could yo	ou identify	y some
moral conflicts you hav	e experier	ced in the	past few :	years?
Please describe them br	ciefly and	say why you	ı consider	them
moral conflicts.				
			<u></u>	
			<u>.</u>	

# Appendix B

<b>T F</b>		
TD		
$ \perp$ $\nu$		

# Demographic Information

AGE:	SEX:	ETHNICITY:
G.P.A.:	MAJOR:	·
HIGHEST LEVEL OF E	DUCATION OBTAINED:	·
OCCUPATION:		SALARY:
MARITAL STATUS:	YEARS	MARRIED:
SPOUSE'S OCCUPATION	N:	SALARY:
NUMBER OF CHILDREN	: AGE(S)	OF CHILDREN:
PARENT'S (GUARDIAN	'S) OCCUPATION:	
SIBLINGS (PLEASE S	PECIFY SEX AND NUM	MBER):
BIRTH ORDER:		

# Appendix C

#### Dilemma III

Please read the following dilemmas and answer the questions as fully as possible. You may find that you have answered some questions before you come to them. Whenever possible, elaborate on your answers, but feel free to say "see above". If you need more space, please write on the back of the page.

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid \$400 for the radium and charged \$4,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money and tried every legal means, but he could only get together about \$2,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it. " So, having tried every legal means, Heinz gets desperate and considers breaking into the man's store to steal the drug for his wife.

- 1. Should Heinz steal the drug? Why or why not?
- 2. Is it actually right or wrong for him to steal the drug? Why or why not?

- 3. Does Heinz have a duty or obligation to steal the drug? Why or why not?
- 4. Does it make any difference whether or not Heinz loves his wife? Why or why not?
- 5. Suppose the person dying is not his wife but a stranger. Should Heinz steal the drug for the stranger? Why or why not?
- 6. Suppose it's a pet animal he loves. Should Heinz steal to save the pet animal? Why or why not?
- 7. Is it important for people to do everything they can to save another's life? Why or why not?
- 8. It is against the law for Heinz to steal. Does that make it morally wrong? Why or why not?
- 9. In general, should people try to do everything they can to obey the law? Why or why not?
- 10. How does this apply to what Heinz should do?
- 11. In thinking back over the dilemma, what would you say is the most responsible thing for Heinz to do? Why is that most responsible?

#### Dilemma III'

Heinz did break into the store. He stole the drug and gave it to his wife. In the newspapers the next day there was an account of the robbery. Mr. Brown, a police officer who knew Heinz, read the account. He remembered seeing Heinz running away from the store and realized that it was Heinz who stole the drug. Mr. Brown wonders whether he should report that it was Heinz who stole the drug.

- 1. Should Officer Brown report Heinz for stealing? Why or why not?
- 2. Suppose Officer Brown were a close friend of Heinz, should he report him then? Why or why not?

  Officer Brown did report Heinz. Heinz was arrested and brought to court. A jury was selected. The jury's job is to find whether a person is innocent or guilty of committing a crime. The jury finds Heinz guilty. It is up to the judge to determine the sentence.
- 3. Should the judge give Heinz some sentence, or should he suspend the sentence and let Heinz go free? Why or why not?
- 4. Thinking in terms of society, should people who break the law be punished? Why or why not? How does this apply to how the judge should decide?
- 5. Heinz was doing what his conscience told him when he gave the woman the drug. Should a lawbreaker be punished if he is acting out of conscience? Why or why not?

6. Thinking back over the dilemma, what would you say is the most responsible thing for the judge to do? Why is that the most responsible?

#### Appendix D

#### Impersonal Real-life Dilemma

Please recall the most significant conflict that you consider moral in nature which did not directly involve yourself and a specific person or group of people with whom you have or had a significant relationship. Next, answer the following questions about the conflict in as much detail as possible:

- 1. Please describe the conflict in detail, stating the points of view of all parties.
- 2. What did you see to be the issues involved at the time, that is, what was at stake; what made it a moral conflict?
- 3. What options did you consider? Would you list each option possible in the conflict and indicate whether you considered it at the time, and if so why you rejected it as wrong or accepted it as right?
- 4. What did you think about at the time, and how did you feel? How did you feel about it for the other(s) involved?
- 5. How was the conflict resolved; what ended up happening?
- 6. Do you think you did the right thing? Why or why not? If not, what should have been done? How about the other people or person involved?
- 7. Is there another way, or other ways, to see the problem (other than the way you described it)? If so, please specify.

# Personal Real-life Dilemma

Please recall the most significant conflict that you consider moral in nature which directly involved yourself and a specific person or group of people with whom you have or had a significant relationship. Next, answer the following questions about the conflict in as much detail as possible:

# Appendix E

#### Relevance Scale

After you have completed this dilemma, please respond to the items below. Each item consists of a pair of adjectives with the letters A-E in between. For example:

Not good

Very good

Each pair describes contradictory adjectives -- that is, the dilemma cannot be both at the same time, such as very good and not good. The letters form a scale between the two extremes. If you think the dilemma is not good, you would choose A. If you think the dilemma is good, you might choose D. If it is only medium, you might choose C, and so forth.

Now, go ahead and answer the questions by circling the appropriate letter. Be sure to answer every question, even if you're not sure.

1. Extreme personal relevance LOW personal relevance

A...B...C...D...E

2. Extreme personal involvement

Low personal involvement

A....B....C....D....E

3. Extreme personal investment

Low personal investment

A....B....C....D....E

cm1	T C C	_	~	a 1.		D 1 1 .
THE	Effects	OI	sex.	Sex-role,	ana	DITEMMa

84

4.	Extreme emotiona involvement	1	Low emotional involvement
		ABCDE	
5.	Extreme importan	ce	Low importance
		ABCDE	
6.	Representative o real-life dilemm I encounter		Not representative of real-life dilemmas I encounter
		ABCDE	
7.	Approximately ho	w long did you spend	thinking about

(talking about) this dilemma? \_\_\_\_\_

## Appendix F

#### Personal Attributes Ouestionnaire

The items below inquire about what kind of a person you think you are. Each item consists of a <u>pair</u> of characteristics with the letters A-E in between. For example:

Not at all artistic

Very artistic

Each pair describes contradictory characteristics--that is, you cannot be both at the same time, such as very artistic and not at all artistic.

The letters form a scale between the two extremes. You are to choose a letter which describes where you fall on the scale. For example, if you think you have no artistic ability, you would choose A. If you think you are pretty good, you might choose D. If you are only medium, you might choose C, and so forth.

Now, go ahead and answer the questions by circling the appropriate letter. Be sure to answer every question, even if you're not sure.

1. Not at all aggressive Very aggressive

A....B....C....D....E

2. Not at all independent Very independent

A....B....C....D....E

3. Not at all emotional Very emotional

A....B....C....D....E

4.	Very submissive		Very	dominant
		ABCDE	1	
5.	Not at all excit in a <u>major</u> crisi			excitable major crisis
		ABCDE		
6.	Very passive		Very	active
		ABCDE		
7.	Not at all able self completely		self	to devote complelelty thers
		ABCDE		
8.	Very rough		Very	gentle
		ABCDE		
9.	Not at all helpf to others	ul	Very to ot	helpful chers
		ABCDE		
10.	. Not at all comp	petitive	Very	competitive
		ABCDE		
11.	. Very home orien	ited	Very	worldly
		ABCE		
12.	. Not at all kind	l	Very	kind
		ABCDE		
13.	Indifferent to others' approva	1		ly needful of ss' approval
		ABCDE		

14.	Feelings not easily hurt						elings sily hur	rt .	
		AB	3	.c	.D	.E			
15.	Not at all awar feelings of oth						ry aware elings c		rs
		AB	3	.c	.D	.E			
16.	Can make decisi easily	ons					s diffic king dec	_	
		AB	3	.c	.D	.E			
17.	Gives up very e	easily					ver give sily	e up	
		AB	3	.c	.D	.E			
18.	Never cries	АВ	3	.c	.D		ies very	easily	У
19.	Not at all self-confident					Ve se	ry lf-confi	dent	
		AB	3	.c	.D	.E			
20.	Feels very inferior						els very perior	,	
		АВ	3	.c	.D	.E			
21.	Not at all unde with others	erstand:	ing				ry under th other		ng
		AB	3	.c	.D	.E			
22.	Very cold in rewith others	elation	S			re	ry warm lations hers		
		7\ 1⊇	,	C	ח	F			

23. Very little need for security

Very strong need for security

A...B....C....D....E

24. Goes to pieces under pressure

Stands up well under pressure

A....B....C....D....E

## Appendix G

#### Real-life Decisions

Please read the decisions on the following pages carefully. After you read each decision, please respond to the following question, using the space provided: What do you see to be the main issue(s) involved in the decision, that is, what do you see to be at stake?

Next, rate the decision in terms of how often you experience decisions like it. For example, if you experience decisions like the one you are rating very frequently, give it a score of five (5), whereas if you experience it rarely, give the decision a score of one (1). Next, rate the decision in terms of how personally significant you believe it is, that is, how important and involving it would be if you experienced it. Next, rate each type of decision for how willing you would be to discuss it anonymously on a questionnaire (when you were guaranteed that no one would ever know who discussed the decision).

Next, please rate the extent to which you believe each decision involves issues of care and justice. Issues of care may be defined as centered on concern for others, relationships, interpersonal responsibility, trust, and the connection between people. Issues of justice may be defined as emphasizing rights, autonomy, reciprocity, and fairness, with reference to abstract principles and codes of conduct.

Finally, please rate the extent to which you believe each decision constitutes a moral concern.

Now go ahead and read the decisions. Please be sure to respond to each one.

- 1. Deciding whether or not to be open and honest in your dealings with others when you can obtain things you want by being dishonest (e.g., to be honest or not when playing a game; whether or not to reveal that you have received more pay than you have earned; whether or not to take money owed you from friend/relative without their knowing).
- 2. Deciding whether or not to intervene in you friend's or relative's business for his or her sake (e.g., whether or not to tell your friend that he/she is in a bad relationship; whether or not you should express concerns about a friend's health; whether or not you should support your friend when you believe it is more his/her boy/girlfriend's responsibility).
- 3. Deciding whether or to whom to be loyal (e.g., being torn between two friends who dislike each other but with whom you want to maintain relationships; whether or not to see friend's ex; to love one relative or not when another pushes against it).
- 4. Deciding whether or not to stand up for your values or opinions and/or respect another's right to opinion (e.g., he/she is racist or sexist; he/she endorses vandalism; he/she has different opinion on cross-border shopping/environmental issues).

- 5. Deciding what to do in a relationship in which you are asked to do or are faced with doing something against you will or against your beliefs (e.g., your friends want you to use drugs/alcohol; your friends want you to engage in theft; going out with someone or having premarital sex with someone when your/their (religious) values are against it).
  6. Deciding what to do after you discover that a coworker (or friend or relative) does something wrong (e.g., whether or not to report a friend/relative after you find out that he or she shoplifts; whether or not to report a friend/relative after you find out that he or she has cheated on an exam; what to do about a friend who has copied your schoolwork or borrowed something of yours without asking).
- 7. Deciding whether to do what your parents want and expect of you or to do what you want (e.g., choosing an academic career; choosing a religion; choosing a particular lifestyle).
- 8. Deciding what to think of yourself or what to do after you have acted inappropriately (e.g., a practical joke turns bad; you disregard rules at school/work; your private activities offend many people).

# Appendix H

How often have you experienced decisions 1	ike this?
Not at all	Very frequently
134	.5
How significant would this decision be to	you?
Not at all	Very significant
134	.5
How willing would you be to discuss this t	ype of decision
on an anonymous questionnaire if you were	experiencing it?
Not at all	Very willing
134	.5
If you were experiencing a dilemma like th	is, to what
extent would you view it in terms of issue	s of care and
justice?	
Very care- oriented	Very justice- oriented
134	.5
If you were experiencing a dilemma like th	is, to what
extent would you view it as constituting a	moral concern?
Not at moral concern 1234	Definitely a moral concern

Table 1

A Summary of the Analysis of Covariance on Moral Maturity

Source	Sum of Squares	D.F.	Mean Square	F
Sex	22.99	1	22.99	0.01
Sex-role	6809.60	3	2269.87	0.99
Dilemma	90860.27	2	45430.13	25 <b>.00*</b>
Sex X Sex-role	8850.28	3	2950.09	1.28
Sex X Dilemma	2192.26	2	1096.13	0.60
Sex-role X Dilemma	10632.86	6	1772.14	0.98
Sex X Sex-role X Dilemma	8908.88	6	1484.81	0.82

Note. Care served as the covariate.  $\bar{p} < .00001$ .

Table 2

Mean WASs as a Function of Sex, Sex-role, and Dilemma

		Type of Dilemma						
Group	N	Hypothetical	Impersonal	Personal	Mean			
Males:	• •	224 50	200 57	050 55	212 22			
Masculine	14	334.50	328.57	278.57	313.88			
Feminine	10	320.10	305.00	290.00	305.03			
Androgynous Undifferentiated	12	332.33	279.17	266.67	292.72 283.91			
Undifferentiated	11	315.36	281.82	254.54	263.91			
Mean	47	326.40	300.00	272.34	299.58			
Females:								
Masculine	80	317.25	293.75	281.25	297.42			
Feminine	14	318.50	303.57	289.29	303.79			
Androgynous	15	316.87	296.67	290.00	301.17			
Undifferentiated	07	329.29	278.57	292.86	300.24			
Mean	44	319.43	295.45	288.64	301.17			
Both:								
Masculine	22	328.23	315.91	279.55	307.89			
Feminine	24	319.17	304.17	289.58	304.31			
Androgynous	27	323.74	288.89	279.63	297.42			
Undifferentiated	18	320.78	280.56	269.44	290.26			
Mean	91	323.03	297.80	280.22	300.35			

Table 3 Correlation Matrix of WASs, Care Scores, and Significance Scores as a Function of Dilemma

	WAS Hypo- thetical		Per-	Care Hypo- thetical	Imper-	Per-	Signif. Hypo- thetical	Imper-	
WAS Hypo- thetical	1.00	0.09	0.03	-0.33**	-0.17	-0.21	* 0.08	0.11	0.06
WAS Impersonal		1.00	0.16	0.00	0.07	0.04	0.03	0.02	0.19
WAS Personal			1.00	0.07	0.20*	0.41	**-0.08	0.13	0.12
Care Hypo- thetical				1.00	0.07	0.08	0.05	-0.05	-0.06
Care Impersonal					1.00	0.43	**-0.15	0.09	0.03
Care Personal					•	1.00	-0.08	0.17	0.22*
Significan Hypothetic							1.00	0.28*	* 0.02
Significan Impersonal								1.00	0.31**
Significan Personal	ice								1.00

Note. Signif. = Significance scores.  $^*p < .05$ .  $^{**}p < .01$ .

Table 4

A Summary of the Analysis of Covariance on Percent Care

Source	Sum of Squares	D.F.	Mean Square	F
Sex	9643.13	1	9643.13	8.62*
Sex-role	4408.09	3	1469.36	1.31
Dilemma	38453.91	2	19226.96	34.47**
Sex X Sex-role	62.38	3	20.79	0.02
Sex X Dilemma	7152.40	2	3576.20	6.41***
Sex-role X Dilemma	4455.09	6	742.52	1.33
Sex X Sex-role X Dilemma	5487.16	6	914.53	1.64

Note. Moral maturity served as the covariate. \* $^{*}p$  < .004. \* $^{*}p$  < .0001. \* $^{**}p$  < .002.

Table 5

Mean Percent Care Scores as a Function of Sex, Sex-role, and Dilemma

		Type of Dilemma				
Group	N	Hypothetical	Impersonal	Personal	Mean	
Males:		00.14	05.11			
Masculine	14	20.14	26.14	43.21	29.83	
Feminine	10	33.70	29.70	46.80	36.73	
Androgynous	12	19.00	42.08	43.08	34.72	
Undifferentiated	11	27.45	25.55	24.09	25.70	
Mean	47	24.45	30.83	39.47	31.58	
Females:						
Masculine	80	29.13	27.50	70.88	42.50	
Feminine	14	22.64	52.71	69.50	48.29	
Androgynous	15	30.33	39.20	75.27	48.27	
Undifferentiated	07	18.43	39.57	54.29	37.43	
Mean	44	25.77	41.43	69.30	45.50	
Both:						
Masculine	22	23.41	26.64	53.27	34.44	
Feminine	24	27.25	43.13	60.04	43.47	
Androgynous	27	25.30	40.48	60.96	42.25	
Undifferentiated		23.94	31.00	35.83	30.26	
			·			
Mean	91	25.09	35.96	53.89	38.31	

Table 6 Percent Frequency of Moral Orientation as a Function of Sex and Dilemma

		Moral Orientation				
Group	N 	Primarily Care	Care/ Justice	Primarily Justice		
Hypothetical: Males Females	55 55	3.60 3.60	18.20 16.40	78.20 80.00		
Impersonal: Males Females	51 46	21.60 26.10	7.80 23.90	70.60 50.00		
Personal: Males Females	53 50	28.30 68.00	26.40 14.00	45.30 18.00		

Table 7

Frequency of Moral Orientation on Hypothetical
Dilemmas as a Function of Sex and Stage

M1		Stage	
Moral Orientation	2/3-	3	3/4+
Males:	(5)	(22)	(28)a
Primarily Justice Care/Justice Primarily Care	60.00 20.00 20.00	72.73 22.73 4.55	85.71 14.29
Total	100.00	100.01b	100.00
Females:	(5)	(31)	(19)
Primarily Justice Care/Justice Primarily Care	100.00	80.65 16.13 3.23	73.68 21.05 5.26
Total	100.00	100.01b	99.99b
Both:	(10)	(53)	(47)
Primarily Justice Care/Justice Primarily Care	80.00 10.00 10.00	77.36 18.87 3.77	80.85 17.02 2.13
Total	100.00	100.00	100.00

ans are given in brackets. bTotals do not add to 100 due to rounding.

Table 8

Frequency of Moral Orientation on Impersonal
Real-life Dilemmas as a Function of Sex and Stage

	*		
May 1		Stage	
Moral Orientation	2/3-	3	3/4÷
Males:	(15)	(18)	(17)a
Primarily Justice Care/Justice Primarily Care	93.33 6.67	27.78 11.11 61.11	94.12 5.88
Total	100.00	100.00	100.00
Females:	(8)	(32)	(6)
Primarily Justice Care/Justice Primarily Care	87.50 12.50	37.50 28.13 34.38	66.67 16.67 16.67
Total	100.00	100.01b	100.01b
Both:	(23)	(50)	(23)
Primarily Justice Care/Justice Primarily Care	91.30 8.70	34.00 22.00 44.00	86.96 8.70 4.34
Total	100.00	100.00	100.00

ans are given in brackets. bTotals do not add to 100 due to rounding.

Table 9 Frequency of Moral Orientation on Personal Real-life Dilemmas as a Function of Sex and Stage

		Stage	
Moral Orientation	2/3-	3	3/4+
Males:	(21)	(28)	(3)a
Primarily Justice Care/Justice Primarily Care	66.67 23.81 9.52	21.43 32.14 46.43	100.00
Tota1	100.00	100.00	100.00
Females:	(10)	(36)	(4)
Primarily Justice Care/Justice Primarily Care	50.00 30.00 20.00	5.56 8.33 86.11	50.00 25.00 25.00
Total	100.00	100.00	100.00
Both:	(31)	(64)	(7)
Primarily Justice Care/Justice Primarily Care	61.29 25.81 12.90	12.50 18.75 68.75	71.43 14.29 14.29
Total	100.00	100.00	100.01b

ans are given in brackets. bTotals do not add to 100 due to rounding.

Table 10

A Summary of the Analysis of Covariance on Dilemma Significance

Source	Sum of Squares	D.F.	Mean Square	F
Sex	185.97	1	185.97	6.30*
Sex-role	53.18	3	1 <b>7.</b> 73	0.60
Dilemma	3104.06	2	1552.03	85.49**
Sex X Sex-role	100.22	3	33.41	1.13
Sex X Dilemma	28.28	2	14.14	0.78
Sex-role X Dilemma	204.26	6	34.04	1.88
Sex X Sex-role X Dilemma	281.06	6	46.84	2.58***

Note. Moral maturity served as the covariate. p < .01. \*p < .00001. \*\*\*p < .02.

Table 11 Mean Significance Scores as a Function of Sex, Sex-role, and Dilemma

		Typ			
Group	N 	Hypothetical	Impersonal	Personal	Mean
Males:					
Masculine	14	17.93	18.00	23.14	19.69
Feminine	10	14.90	16.40	26.00	19.09
Androgynous	11	17.18	17.45	26.18	20.27
Undifferentiated	11	16.36	15.27	22.73	18.12
0		2000	1002,	22.73	10.12
Mean	46	16.72	16.87	24.39	19.33
Females:					
Masculine	08	14.50	20.13	27.00	20.54
Feminine	13	18.46	21.69	27.31	22.49
Androgynous	15	17.67	19.93	24.47	20.69
Undifferentiated	07	19.14	14.86	27.71	20.57
Mean	43	17.56	19.67	26.33	21.19
Both:					
Masculine	22	16.68	18.77	24.54	20.00
Feminine	23	16.91	19.39	26.74	21.01
Androgynous	26	17.46	18.88	25.19	20.51
Undifferentiated	18	17.44	15.11	24.67	19.07
		17 12		25 22	20.22
Mean	89 	17.12	18.22	25 <b>.</b> 33	20.22

Table 12

Percent Responses of Type of Real-life Dilemma in Terms of Moral Conflict

Moral Conflicta	Frequency		For Each Group Females <sup>C</sup>
Impersonal dilemmas:			
1. Justice-oriented	. 65	68.63	65.22
2. Care/justice-oriented	• • •	13.73	21.74
3. Care-oriented	•	17.65	13.04
5. Care-oriented	• 10		
Tota1	. 97	100.01d	100.00
Personal dilemmas:			
1. Justice-oriented	. 15	20.75	8.00
2. Care/justice-oriented		58.49	30.00
3. Care-oriented	•	20.75	62.00
J. Care-orienced	•	34	
Total	. 103	99.99d	100.00
Total			

aSee text for descriptions of the conflict types.  $^{\rm b}$  For impersonal, n=51, and for personal, n=53.  $^{\rm c}$  For impersonal, n=46, and for personal, n=50.  $^{\rm d}$  Totals do not add to 100 due to rounding.

#### Table 13

## Examples of Moral Conflicts on Personal Real-life Dilemmas

## 1. Justice-oriented:

- work overpays: keep money vs. honesty.
- to steal money from friend/relative vs. honesty.
- to respect others' values vs. discrimination.
- to stand up for family's property rights vs. unfairness.

#### 2. Care/justice-oriented:

- loyalty to friendship vs. upholding the law.
- autonomy vs. parental wants/expectations.
- to have premarital sex and maintain relationship vs. violating self-worth/values.
- to leave peers vs. violating self-worth/values.

#### 3. Care-oriented:

- concern for friend vs. interfering.
- romantic affairs vs. trust in relationship.
- loyalty to sibling vs. loyalty to parent.
- abandoning family vs. abuse.

aSee text for descriptions of the conflict types.

Table 14 Mean Percent Care as a Function of Sex and Moral Conflict on Personal Real-life Dilemmas

Moral Conflicta	Percent Care for Each G Males <sup>C</sup> Females <sup>d</sup>	roupb Both
1. Justice-oriented	1.73 (11) 2.00 (04) 39.50 (31) 49.79 (15) 85.36 (11) 84.84 (31)	42.82

<sup>&</sup>lt;sup>a</sup>See text for descriptions of the conflict types. <sup>b</sup>ns are given in brackets. <sup>c</sup> N = 53. <sup>d</sup> N = 50.

#### Table 15

# Personal Real-life Moral Conflict Categories and Subcategories

#### 1. Justice-oriented:

- (a) Deciding whether or not to stand up for your values or opinions and/or to respect another's right to opinion.
- (b) Deciding whether or not to be honest in your dealings with others when you can obtain things you want by being dishonest.

## 2. Care/justice-oriented:

- (a) Deciding what to do after you discover that your coworker (or friend or relative) does something wrong.
- (b) Deciding what to do in a relationship in which you are asked to do or are faced with doing something against your will or against your beliefs.

#### 3. Care-oriented:

- (a) Deciding whether or not to intervene in your friend's or relative's business for their sake.
- (b) Deciding whether or to whom to be loyal.

Table 16

Percent Responses of Type of Main Issues as a Function of Type of Conflict and Sex

	Main Issues <sup>a</sup>			
Conflict	Care	Care/	Justice	
Group		justice		
Care-oriented:				
oute offenous				
"Intervene":				
Males:	93.33	3.33	3.33	
Females:	86.67	10.00	3.33	
Mean:	90.00	6.67	3.33	
"Loyal":				
Males:	83.33	10.00	6.67	
Females:	70.00	23.33	6.67	
Mean:	76.67	16.67	6.67	
Care/justice-				
oriented:				
"Relationship				
vs. values":				
Males:	3.33	73.33	23.33	
Females:	3.33	66.67	33.33	
Mean:	1.67	70.00	28.33	
"Friend acted				
wrongly":				
Males:	3.33	<b>76.</b> 67	20.00	
Females:	6.67	70.00	23.33	
Mean:	5.00	73.33	21.67	
,				
Justice-				
oriented:				
"Honesty":				
Males:		36.67	63.33	
Females:		30.00	70.00	
Mean:		33.33	66.67	
"Stand up				
for rights":				
Males:		16.67	83.33	
Females:		6.67	93.33	
Mean:		11.67	88.33	

Note. Total N = 60 (30 males and 30 females).

<sup>&</sup>lt;sup>a</sup> See text for descriptions of issues.

Table 17

Mean Ratings as a Function of Type of Conflict, Sex, and Question

	Question <sup>a</sup>					
Conflict Group	Care/ justice issues	Exper- ience	Signif- icance	Willing- ness to discuss	Moral concern	
Care-oriented:						
"Intervene":     Males:     Females:     Mean:	1.73 1.50 1.62	3.37 3.53 3.45	3.27c,d 4.47 3.87	4.23 4.07 4.15	3.17 3.20 3.18	
"Loyal": Males: Females: Mean:	2.07 1.90 1.98	2.97 3.03 3.00	4.27¢ 3.87¢ 4.07	4.03 4.17 4.10	3.27 3.40 3.33	
Care/justice- oriented:						
"Relationship vs. values": Males: Females: Mean:	2.93 3.07 3.00	3.40 3.10 3.25	4.27d 4.53e,f 4.40b	4.07 3.93 4.00	4.27 4.73 4.50	
"Friend acted wrongly": Males: Females: Mean:	3.43 3.57 3.50	3.46 2.70 3.08	3.97 4.00 3.98	3.87 3.63 3.75	4.10 4.60 4.35	
Justice- oriented:						
"Honesty": Males: Females: Mean:	3.30 2.63 2.97	3.37 3.27 3.32	4.10 3.93f 4.02	3.80 3.93 3.87	4.10 4.33 4.22	
"Stand up for rights": Males: Females: Mean:	3.73 3.30 3.52	3.30 3.63 3.47	3.67 3.83 3.75b	4.17 4.30 4.23	3.53 3.97 3.75	

Note. Total N = 60 (30 males and 30 females).

asee text for descriptions of questions. b,c,d,e,f, Means within each column that share the same superscript are significantly different at p  $\angle$  .003.