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MORAL APPRAISALS BY MALES AND FEMALES IN SITUATIONS  
INVOLVING CONFLICT OF DUTIES

by

Mário C. Azevedo

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MASTER'S THESIS

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This is to certify that the Master's thesis of  
Mário C. Azevedo

has been approved by the Examining Committee  
for the thesis requirement for the Master of  
Arts degree in Education at the December  
1986 graduation.

Thesis committee: Gordon N. Cantor  
Thesis supervisor

Robert H. Buzeth  
Member

David F. Johnson  
Member

David P. Fortson  
Member

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CHAPTER I  
INTRODUCTION

Research on moral choices of males and females in situations involving conflict of duties is related to several areas of investigation in psychology, most of them entangled with philosophical and ideological issues. Sex typing, the psychology of sex differences, the role of conflict in different fields of human development, moral development, and the distinction between content and form/structure are some of the headings, interwoven and overlapping among themselves, related to the psychology of moral choices in conflictual situations.

Ideological and philosophical issues, such as the nature of morality, the ranking of stages of moral development, the weight of situations versus principles in moral decision making, the relative value of different ethical orientations, beliefs, and theories, as well as the consideration of content vs. maxims as criteria for moral evaluation, have in the past been considered to fall outside the realm of scientific psychological inquiry, as this area has been defined by traditional epistemology. However, modern psychologists have developed more and more adequate instru-

ments to investigate some features of problems that previously had been of interest only within the philosophy of ethics. The realization that these empirical instruments are as yet coarse and naive in view of the complexities they are designed to investigate does not invalidate the legitimacy of the inquiry.

The purpose of this study was to examine moral appraisals made with respect to imaginary situations in which the subjects are confronted with a conflict of duties. Two kinds of variables were explored: the use of deontological versus teleological moral orientations and the use of more apodictic or stringent versus more flexible moral principles. The meanings of these labels and the variables they encompass will be discussed below. Though some concepts to be explored have been used in the field of philosophical ethics, this approach is intended to deal with a framework that accepts the postulates of empirical science.

On the one hand, an examination was made of subjects' judgments about moral choices in imaginary situations that appear to involve a conflict between deontological and teleological viewpoints. Two steps were followed in this inquiry. The first analysis determined if female and male subjects tended to rate differently several decisions taken in conflicting situations, according to a deontological or a teleological moral orientation. Second, males' and females'

data were compared to check for possible significant differences in more specific areas of morality. A review of the literature showed that most results were nonsignificant, with a trend that seemed to justify an experimental hypothesis that females would score higher than males with respect to the teleological orientation.

On the other hand, the data were checked for signs of consistency in the use of more apodictic versus more flexible principles in making moral judgments. Again, comparison were made of the responses of males and females, under the experimental hypothesis that females would tend to use more flexible principles, whereas males will use more apodictic moral principles.

### 1.1 Assumptions, Concepts and Variables

#### Content and Form/Structure

A theoretical assumption in this study is that content is worth considering in moral development. Some theories overemphasize the distinction between content and form or structure in moral reasoning, assuming that, in so doing, they would be dealing with a more expurgated or content-free morality. However, contrary to this assumption of neat distinctiveness, the entanglement of these concepts is manifest in the problems that some psychologists, notably Kohlberg, have been confronting in their successive attempts to get

rid of a focus on content in moral judgements (Kohlberg, 1969; 1976; 1981).

Key words such as matter, content, form, and structure have played a significant role in western culture, assuming sometimes different and even contradictory meanings. To trace all of the history of these concepts is beyond the scope of this work. The present discussion is designed only to relate this study to some classic theories of the psychology of moral development.

Form or structure and content have been distinguished with different degrees of success in different realms of knowledge. The emergence of Piaget's genetic epistemology and genetic structuralism in the second quarter of this century attests the fruitfulness of the aforementioned distinction in the study of human intelligence (Piaget, 1947/1950). The word structuralism came to designate the dominant intellectual movement of the 1960's, with special relevance in France, influencing several domains of knowledge, such as philosophy (Althusser, 1969), linguistics and semiology (Barthes, 1964), sociology and history (Foucault, 1966), psychoanalysis (Lacan, 1966), and anthropology (Levi-Strauss, 1955). The appearance of Gestalt theory at the end of the last century in Germany had involved similar concerns. Related steps in this movement were the pioneering work of the Swiss linguist Ferdinand Saussure in the early

1900's (Saussure, 1966), the development of Russian formalism in literature and aesthetics in the twenties, and the foundation of the linguistic Circle of Praga in the middle twenties (Broekman, 1971/1974). An important characteristic of the structuralistic movement was the adoption of communication models suggested by the methodology of linguistics of Saussurean inspiration. Most often, structure was a key word which was opposed not to content but to element. The important dichotomies were defined by Saussure (1966): substance-form (sic), signifier-signified, syntagmatic-paradigmatic, langue-parole, synchronic-diachronic (Lyons, 1973).

American structuralistic theory of moral development evolved directly from Piagetian structuralistic theory of intellectual development with the work spearheaded by Kohlberg (1981; 1984). Piaget (1968/1970), on his side, acknowledges the relevance to his theory of the different structuralistic approaches, though he makes claims for an original methodological structuralism in which structure and function, genesis and history, and individual subject and society are inseparable. Despite early investigations that focused on the contents of child's thoughts (Piaget, 1920/1929), the major part of Piaget's career was devoted to the study of structures and functions of intelligence.

When Kohlberg (1969) translates the Piagetian theory of stages of cognitive development to the domain of moral development, he faces the problem of distinguishing form and content. The successive reformulations of his conceptions of the six moral stages are considered to reflect "a growing clarity in the distinction between form and content" (Kohlberg, 1976; 1984, p. 189). A prominent Kohlberg disciple, Colby (1978), describing the history of moral development stage scoring, states that, "The changes have generally involved the progressive narrowing or 'purification' of the stage construct. ...These features that have been differentiated from the stage structures are themselves neither wholly content nor wholly structure" (p. 101). Some forms of content have been reintroduced in recent theorizations. One example is the conception of "B stages", defined by use of several criteria, among which is the criterion of choice, understood as "...the more 'just' course of action or solution to the dilemma" (Kohlberg, Higgins, Tappan, & Schrader, 1984, p. 677). Kohlberg (1971) joined Piaget in the use of some structural concepts, such as the notions of equilibration and reciprocity. However, whereas Piaget could supply an important argument in favor of the differentiation between structure and content, namely, the description of stages in the formalistic language of logic and mathematics, Kohlberg has not yet done the same in the realm of moral stages.

The conclusion seems to be that, contrary to the main trend of thinking in this field, a radical distinction between structure and content is elusive and difficult to maintain in the study of moral development. Formalistic features of human action, such as ends, purposes, and maxims, seem to be necessary but not sufficient elements to evaluate the morality of human activity.

#### The Dilemma in Moral Dilemmas

In contrast to traditional viewpoints in this field that seem to imply a perfect dichotomy (either "should" or "should not") in judging moral dilemmas, the present study does not reject a priori the hypothesis that the same subject could simultaneously judge both alternatives of a moral dilemma as being morally positive or morally negative. That is to say, in this study, the moral dilemma is considered to consist of two alternative courses of action, not of two alternative judgements. "To act" or "not to act" are true contradictory alternatives. "Should" or "should not" are false contradictory alternatives. It is misleading to consider "should not" as the negative form of "should" in the same way that "not to love" is the negative form of "to love". If we equated "should" and "to love", the equivalent form of "should not" would be "to hate", which is the contrary, not the negation or contradiction of "to love".

In English, some verbs, such as "should", "ought", and "might", do not have a logically negative or contradictory form; they have only contrary forms.<sup>1</sup> They can not constitute alternative options in dilemmas, because a true dilemma does not admit, logically, any additional option.<sup>2</sup> The question, "Do you love or do you not love?" implies a true dilemma, but the question, "Do you love or do you hate?", does not imply a true dilemma, because one can "not love" and simultaneously "not hate". Other alternatives are, for example, "to be friendly" or "to be indifferent". By the same token, "Should or should not?" is not a true dilemma, because between "should" and "should not" other alternatives can be inserted, such as "it is correct", "it is admissible", etc.

This equivocalness becomes manifest when other words, such as "obligatory" and "condemnable", are used. The question, "Is it obligatory or not?" (there are no third alternatives) implies a true dilemma; the question, "Is it obligatory or is it condemnable?" is a false dilemma (it does not exclude third alternatives). Now, the two questions, "Is it obligatory or is it condemnable?" and "Should or

<sup>1</sup> The same happens in Latin languages.

<sup>2</sup> In logic, these propositions are called "disjunctions". In ethics, "dilemma" is the most common label to designate conflicts in which it is impossible for a person to accomplish one of his duties without failing to do one of his other duties (Ladd, 1978).

should not?" are equivalent and neither one necessarily implies a real dilemma. Some investigators have regarded dilemmas posed in terms of "should or should not?" as equivalent to dilemmas posed in terms of "obligatory or not?". Unfortunately, researchers cannot assume a priori that this logical error will not be translated into empirical ambiguities. The subject in an empirical study can be "trapped" by a false contradiction. Once he has been forced to choose one moral position that does not reflect his real position, he could be induced, unknowingly, to justify a choice that is not his own. Of course, several methods, such as role-playing, can be used if the researcher is interested in the subject's ability to justify an arbitrary moral choice, rather than in an exploration of the subject's real moral position. Exemplifying with Kohlberg's "Heinz dilemma", Heinz necessarily faces a "behavioral" dilemma involving the choice between "stealing" and "not stealing". The subject who is being interviewed about this dilemma also necessarily faces a dilemma in terms of choice of alternative courses of action related to the content of the dilemma. However, neither Heinz nor the subject of an experiment necessarily faces a dilemma in terms of the question "should or should not?", because there are "third" alternatives.<sup>3</sup> The subject

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<sup>3</sup> This would be the addo tertium -- "I add a third" -- of the scholasticists.

who is compelled to justify a "should" or a "should not" that is not his own is being asked to show philosophical expertise rather than to exhibit a personal moral level.

In the present study, subjects were asked to face dilemmas that involve conflict between alternative courses of action. Subjects manifested their moral assessments using a scale of six points to judge each one of the two alternatives.

#### Conflict of Negative and Positive Duties

The psychology of moral development has been borrowing concepts from normative ethics since the pioneering studies on moral behavior (Hartshorne & May, 1928). The influence of Kantian formalistic concepts, for example, is manifest in Piaget's (1932/1948) studies of autonomous and heteronomous morality. The same Kantian tradition influenced Kohlberg's notions of principled morality, as well as some of the formal criteria used to make judgments about higher moral adequacy (Kohlberg, 1973) and about substage B, namely, the notions of hierarchy, intrinsicness, prescriptivity, universality, and universalizability (Kohlberg, Levine, & Hewer, 1983).

Two main points contained in the Kantian moral theory have received the most attention in current studies on moral development. The first point is the role of good will,

duty, moral ends, and maxims in determining the morality of human behavior: "An action done from duty has its moral worth, not in the purpose that is to be attained by it, but in the maxim according to which the action is determined" (Kant, 1785/1983, p. 12). The second point is the role of the categorical imperative, in its different formulations, as a moral guide for human action (Kant, 1788/1956). Both influences are related to formal morality. They provide a guide for decision-making in situations involving conflict, but this conflict is mostly between inner motivations.

A realm less explored in psychology is the one related to conflicts between specific moral contents. The matter goes on being discussed by moral philosophers under different labels: natural law, intrinsic evil, positive duties, negative duties, prima facie duties, proportionalism, relativism, agapism, the moral of beneficence, the morality of care, the morality of justice. Kant (1797/1983) made a contribution in this realm, distinguishing between negative duties (also labeled strict or perfect duties) and positive duties (also called broad or imperfect duties). Though the interpretation of Kantian theory is not indisputable (Nell, 1975), a rough outline of Kantian concepts serves the purpose of the present work. Kant described positive duties as those duties that set forth an end and determine certain maxims of action, but without specifying the actions them-

selves. They allow for a certain margin of freedom in achieving their objectives and they are indefinite in the sense that what they demand is without assignable limits, permitting one always to go further in their fulfillment. These duties of virtue are directed by the categorical imperative under a special formulation, called the supreme principle of the doctrine of virtue: "Act according to a maxim whose ends are such that there can be a universal law that everyone have those ends" (Kant, 1797/1983, p. 54). Examples of positive duties to oneself (duties of commission, ad melius esse -- for a better being -- or to moral affluence) are those related to one's own perfection, such as the duty to cultivate oneself. Examples of positive duties to others are those related to the happiness of others, such as the duty of love.

The broader the duty, the more imperfect, therefore, is one's obligation to an action; and the closer one nevertheless brings the maxim of his observance of this broad duty (in his own mind) to the strict duty (of right), so much the more perfect is (he) in his virtuous action (Kant, 1797/1983, p. 54).

Complementarily, negative duties specify exactly the actions with which the duty is concerned. They assign definite limits to the duty and, because they are, or could be, expressed in negative terms, they can be completely fulfilled. These duties of right are directed by the supreme principle of the doctrine of the right: "Act externally so

that the free use of your choice can coexist with the freedom of any man according to a universal law" (Kant, 1797/1983, p. 55). Examples of negative duties to oneself (duties of omission, ad esse -- for the being -- or to moral health, expressed in the principle, "Live in accordance with nature") are those related to self-preservation as a physical or moral being, such as the ones that forbid self-murder or the immoderate use of substances. Examples of negative duties to others are those related to the respect owed to others' rights, such as not calumniating or not killing an innocent.

In cases of apparent conflict, according to Kant, negative duties permit no exceptions. Though, similarly, positive duties do not admit exceptions, they can be limited by competing higher positive duties or by negative duties.

#### Deontological vs. Teleological Orientations

A purpose of this study, as stated above, was to inquire about moral choices when subjects are confronted with a conflict of duties. Philosophers have categorized duties in several ways. The previous section described how Kant distinguished positive and negative duties. Similarly, philosophers have constructed theories to account for how humans, normatively, should make decisions in situations that involve conflict of duties. This study used descrip-

tively two categories that were first paired by Broad (1930): deontological<sup>4</sup> and teleological theories. Both labels have been used in different contexts and different dichotomies.<sup>5</sup> As the words are used here, deontological theories hold that "some actions are intrinsically right or wrong and thus obligatory or forbidden, regardless of the motives for which they are performed or the states of affairs in which they result" (Cahil, 1981). Teleological theories, as they are defined by Frankena (1973), appeal directly or indirectly to the excess of good over evil produced as a criterion of what is right, or state, as Broad (1930) put it, that "the rightness or wrongness of an action is always determined by its tendency to produce certain consequences which are intrinsically good or bad" (p. 206).

#### Apodicticity vs. Flexibility of Principles

There are three ways of determining that an individual uses principles in his moral judgments. The first -- what Kohlberg calls "principled moral reasoning" -- involves determining that someone uses higher moral principles as directives in engaging in moral reasoning. The second way

<sup>4</sup> The word "deontology" was coined by Jeremy Bentham -- a teleologist philosopher -- as a title of a book "on the science of morality" (Baier, 1978).

<sup>5</sup> A similarly frequent dichotomy of adjectives opposes "deontic" (relative to moral obligation) and "aretaic" (relative to moral value) (Frankena, 1973).

-- illustrated in ordinary language when someone is called a person "of principle" -- involves the individual's adhering to principles when that individual is confronted with concrete circumstances that seem to hinder the application of these principles. The third way -- used in this study -- involves the individual's tendency to differentiate the universe of morality into sharply distinct realms: good and bad, right and wrong, condemnable and obligatory. This tendency will be called here apodicticity of principles. A more flexible way of understanding the principles of morality would allow use of the categories of "condemnable" and "obligatory", but would also include other, less stringent categories, such as "correct" and "admissible". This tendency will be called here flexibility of principles.

### 1.2 Research Questions

This study is concerned with differences between males and females when they are asked to judge about alternative options in moral dilemmas that involve conflict of duties. The following research questions were specifically considered:

1. Do males score higher than females in deontological moral orientation?
2. Do females score higher than males in teleological moral orientation?

3. Do males value more than do females some specific negative duties, namely:
  - a) not breaking a promise;
  - b) not lying;
  - c) not killing an innocent; and
  - d) not violating property rights?
4. Do females value more than do males some specific positive duties, namely:
  - a) compassion for animals;
  - b) togetherness;
  - c) responsibility for individuals; and
  - d) responsibility for the common good?
5. Do females manifest a degree of approval higher than that of males, when confronted with dilemmas that pit specific positive duties against one another, namely:
  - (a) self-interest;
  - (b) responsibility for individuals; and
  - (c) responsibility for common good?
6. Do males score higher than females in apodictic moral judgments?

NOTE. These same questions raised about males and females will be repeated about "masculine" and "feminine" subjects.

## CHAPTER II

### REVIEW OF THE LITERATURE

Two points will be considered in the literature on the differences in moral choices in situations of conflict: a) studies of gender differences in moral reasoning; and b) studies of differences in moral orientation.

#### 2.1 Gender Differences in Moral Reasoning

Empirical studies on gender differences in moral reasoning have only an indirect relevance for the purpose of the present study. Only a brief examination of this topic will be made here.

Studies that reveal sex differences in moral reasoning in childhood and early adolescence are infrequent. For 41 samples in studies reviewed by Walker (1984), only 6 involved reports of significant sex differences, most of them indicating a more mature moral development for females, though to a small degree.

Walker (1984) reviewed 35 studies reporting results on sex differences in late adolescence and youth. In only 10 of 46 samples were significant differences revealed. In most of the cases in which significant differences were

found, more mature moral development was in this instance reported for males, though once again to a small degree. Some of these latter samples were drawn from ethnic populations in which women have, traditionally, a lower social status. For example, Bar-Yam, Kohlberg, and Naame (1980) reported higher levels of moral reasoning for boys in a Moslem-Arab sample, and no differences in kibbutz or in Christian samples. More significant were the differences found in university samples such as those reported by Haan, Smith, and Block (1968) and by Bussey and Maughan (1982). A curious finding in this latter study was the influence of the sex of the characters in moral stories. When a female protagonist was used in Kohlberg's dilemmas, women maintained the same moral level (stage three), whereas men dropped from stage four to stage three. Levine (1976) reported a significant interaction, with women remaining more frequently than men at stage three on dilemmas that involved fictitious characters; no differences were reported when dilemmas involved primary others (mother or best friend).

Again, small differences, but with a slightly greater frequency than in younger-aged subjects, appear in studies with adults. Walker (1984) reviewed 13 studies, involving 21 samples, among which four involved reports of significant sex differences, all favoring men. These latter studies include Haan, Langer, and Kohlberg (1976), Holstein (1976),

Kuhn, Langer, Kohlberg, and Haan (1977), and Parikh (1980). Referring to the same studies, Kohlberg, Levine, and Hwer (1983), elaborating on Walker's review, stress that these studies failed to control "...for education and job status, as defined by the Hollingshed index or some similar measure..." (p. 347). Most of these findings can be dealt with by Kohlberg's theory, which postulates the influence of interactional factors in moral development. A recent sharp controversy between Baumrind (1986) and Walker (1986) clearly deals with issues that are concerned with moral orientation. Some of these issues will be reviewed in the next section.

## 2.2 Gender Differences in Moral Orientation

The idea of a morality of care and responsibility as a special moral orientation is not a current invention. Philosophers have talked about moral principles of benevolence and beneficence, as well as about imperfect or positive duties. Social and developmental psychologists have accumulated a voluminous research literature on caring, sharing and helping behavior (Mussen & Eisenberg-Berg, 1977), empathy (Hoffman, 1976), positive morality, altruism, and prosocial behavior (Bridgeman, 1983; Staub, Bar-Tal, Karylowski, & Reykowski, 1985). However, Gilligan should be credited with introducing the idea of a contrast between a male's and

a female's moral orientation -- an ethic of justice and rights vs. an ethic of care and responsibility.

Gilligan, in a series of studies (1977, 1979, 1982a, 1982b), has developed a theory of moral orientation that was intended to correct/complement Kohlberg's theory of moral development. Gilligan's theory can be summarized in terms of five points:

- a) Classical developmental psychologists (Freud, Piaget, Bettelheim, Levinson, McClelland, Kohlberg, and Erikson) are factually right when they distinguish between men's and women's routes of development.
- b) These psychologists are, however, wrong when they portray the male pattern of development as the more adequate model of development.
- c) Though the ethic of care and the ethic of justice can be looked on as complementary moral trends, women score higher than men with respect to the ethic of care or responsibility.
- d) The different voice that sounds in women's morality mirrors a different orientation to life, with roots in the connectedness-separatedness difference and in the prevailing attention given to the contextuality of moral conflicts.
- e) The main factor that influences different sex moral orientations is the early mother-child relationship.

Theoretically, Gilligan adopts an eclectic position, claiming converging support from different theorists, ranging from Chodorow (1974) and Loevinger and Wessler (1970) to Horner (1972) and Perry (1968). Empirically, Gilligan has not given a full account of her research data. The original research involved interviewing 21 women who faced the decision about whether or not to have an abortion. In addition, these women were interviewed about three of Kohlberg's dilemmas. A second study was a follow-up study in which 25 students were interviewed in the senior year of college and reinterviewed five years later about real life personal dilemmas. In a third study, children, adults, and older subjects were interviewed. Gilligan does not report methodological details or quantitative and comparative data. She quotes extensively from interview transcripts to support the concept and the stages of development of the morality of care and responsibility. These stages of the morality of care mirror, *grosso modo*, Kohlberg's stages of the morality of justice.

Golding and Laidlaw (1979) report a study, with Maritime women, aimed at comparing the moral judgment of full-time homemakers with that of full-time career women. The absence of significant differences supported Gilligan's hypothesis that women experience a different course of development -- different from the one experienced by men. No quantitative data were reported in this study.

Pratt and Royer (1982) report two experiments designed to test Gilligan's hypothesis regarding differences in moral orientations. The first experiment used a modified version of Rest's (1979) Defining Issues Test (DIT) preference technique with 24 pairs of female and male college students. Two different modified versions of DIT emphasized either a morality of care or a morality of responsibility. Ideal self-concept was measured using Bem's (1974) Sex Role Inventory (BSRI). The second experiment used the same technique, but some dilemmas were modified to include a familiar person (father) as a protagonist. The sample included high school students and mature men and women. The results gave partial support to Gilligan's theory. Significant sex differences were not found in moral orientation. However, considering the sample as a whole, including males and females, a more feminine ideal self, as measured by the Bem Sex-Role Inventory (BSRI), was associated with a responsibility-focused moral orientation. The data did not support the expectation, based on Gilligan (1977) and Levine (1976), that moral orientations would differ with respect to personal and hypothetical dilemma contexts.

Pratt, Golding, and Hunter (1983) used three different tasks -- Kohlberg's Moral Judgment Interview (MJI), Rest's DIT, and a forced-choice Story Pair task -- to investigate Gilligan's notions about moral orientation. The tasks

focused either on use of a "fairness" orientation (being concerned with rights violations) or on the use of a "utilitarian" orientation (being concerned with negative consequences). The sample included 10 men and 10 women in each of three age groups (18-24, 30-50, and 60-75 yrs.). Neither in the use of utilitarian elements nor in the use of fairness elements was there a significant age, sex, or interaction effect.

Pratt, Golding, and Hunter (1984) tested sex differences and sex-role-related variations with reference to stage level and moral orientation. The sample included 30 males and 30 females, aged from 18 through 75 years. Four instruments were used: Kohlberg's MJI, BEM's BSRI, Spence and Helmreich's (1948) Personal Attributes Questionnaire (PAQ), and Simple M and F Scales. Results indicated evidence of sex differences in moral orientation (based on Kohlberg's "element" scores) at the principled level of moral reasoning (measured by DIT). No overall sex differences were found in the "element" usage. The pattern of differences in "element" usage at the principled level was consistent with Gilligan's theory of sex differences in moral orientation. However, the results did not support Gilligan's claim that women's moral orientations follow a different course of development, since there were no significant differences between men and women at the lower moral

development levels. Some patterns of association were found involving moral orientation and sex role patterns, as measured by the Personal Attributes Questionnaire (PAQ).

Sobesky (1983) measured subjects' principled level through Rest's DIT and asked subjects what they should and would do in resolving four versions of the Heinz dilemma. These different versions manipulated situational factors, varying the negative consequences for the actor (Heinz) and for another (Heinz's wife). Both types of consequences influenced moral judgments and moral choices, showing that content may affect moral reasoning and decision making.

Lyons (1983) reports results in support of Gilligan's main assertions:

- a) that there are two distinct modes of describing the self in relation to others -- separate/objective and connected; and
- b) that there are two ways of considering moral issues -- a morality of rights and justice and a morality of responsibility and care.

The sample included 18 matched pairs of males and females, aged from 8 through 60-plus years. Data (collected by Gilligan and Murphy in 1978) were obtained through scheduled interviews which focused on hypothetical and real life conflicts. Intercoder reliability ranged from 75 to 84 percent. In real life conflicts, women used considerations of

responsibility more frequently than considerations of rights and the inverse happened with men. However, to some degree, all the individuals called upon both care and justice considerations. After age 27, women increased in percentage of consideration of rights, though still using consideration of responsibility more frequently. Similarly, the results supported Gilligan's hypothesis about a relationship between sex, moral orientation, and modes of self-definition.

Nunner-Winkler (1984) used the Kantian concepts of positive or imperfect duties and negative or perfect duties to represent Gilligan's concepts of the ethic of rights and justice (linked to the experience of an "individuated self", more typical of males) and of the ethic of care and responsibility (linked to the experience of a "connected self", more typical of females). Elaborating on the Kantian concepts, Nunner-Winkler disagrees with Gilligan's contention that Kohlberg neglected situational peculiarities in his hypothetical dilemmas. The reason was that Kohlberg (unlike Kant) oriented his dilemmas in such a way that perfect duties not only may be violated, but, at times, should be violated. Curiously, when Kohlberg neglects situational contingencies (as Gilligan criticizes him for doing), he does it to establish new perfect duties (e. g., "to save a life") and makes an inflection towards a morality of care, in Gilligan's direction, rather than towards a morality of

right. Nunner-Winkler and Rainer Dobert gathered some empirical data in order to test two hypotheses derived from Gilligan's theory. Their conclusions were negative. First, females did not opt for transgression of perfect duties more often than did males. Second, females did not give more consideration to contextual particularities than did males.

In conclusion, empirical research does not yet show a coherent pattern of findings. Either some important factors influencing moral reasoning and moral orientation have not yet been identified or researchers have not yet developed adequate methodology for working in this realm.

CHAPTER III  
MATERIAL AND METHODS

3.1 Subjects

Subjects were students at the University of Iowa, enrolled in Fall semester courses in 1986. Among them, 32 females and 32 males, who were enrolled in introductory courses in educational psychology in the College of Education, received bonus points for their participation; 4 females and 4 males were enrolled in an accounting course and each one received a compensation of five dollars. Students whose native language was not English were excluded from the sample. One student who misunderstood the instructions was also excluded from the sample.

Female students who volunteered for this study heavily outnumbered male students (94 females vs. 32 males from the course in educational psychology and 8 females vs. 4 males from the course in accounting). In order to have a sample with the same number of females and males, 32 females were selected from among the volunteers enrolled in educational psychology and 4 from among the volunteers enrolled in accounting. A random sampling technique, included in a computer statistical package, was used to make these selec-

tions. Thus, the data that were used in the definitive computation were collected from 36 females and 36 males. There are no missing data.

Average age for females was 21.6 years (SD = 3.9) and for males was 22.5 years (SD = 3.3). Table 1 shows the frequencies and percentages of females and males by academic level in the university.

Table 1  
Frequencies and Percentages of Females  
and Males by Academic Levels in the  
University

<u>Grades</u>	<u>Females</u>	<u>%</u>	<u>Males</u>	<u>%</u>
Fresh.	0	0.00	1	1.39
Soph.	14	19.44	3	4.17
Junior	16	22.22	13	18.06
Senior	4	5.56	19	26.38
Grad.	2	2.78	0	0.00
Total	36	50.00	36	50.00

The students enrolled in educational psychology were distributed among six sections. It was possible to compute the exact percentage of volunteers in two of these sections:

6 male students volunteered from among 18 male students (33.33 %) and 50 female students volunteered from among 86 female students (58.14 %).

By virtue of the fact that only two courses were used as an accessible population, this sample is not considered to be representative of the population of college students or even of students at the University of Iowa.

### 3.2 Measuring Instrument

The instrument used in this study consisted of ten stories, prepared for this work, plus Kohlberg's well-known Heinz dilemma. These stories portray individuals confronted with moral dilemmas that imply a decision between two courses of action. The experimental subjects were asked to rate with respect to each story two dilemmatic courses of action, on the basis of a scale containing six different judgments which run from 1 (condemnable) to 6 (obligatory), as reproduced in Figure 1.

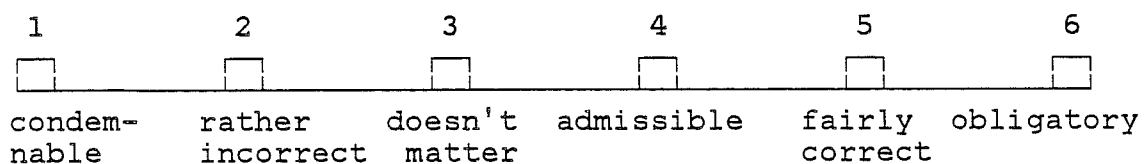


Figure 1. Scale Used to Rate the Two Possible Courses of Action in Each Dilemma

The explanation of this scale that was given to the subjects of this study, introducing the Booklet of Stories, is reproduced in Appendix B. This 6-point scale is intended to be more sensitive as an indicator of subjects' moral choices than the traditional answer in terms of "should-should not". Of course, this approach lacks the sensitivity and extensiveness of the "clinical" method, as that method is used by Kohlberg to study moral judgment.

The Booklet of Stories used in the present study is reproduced in Appendix A. The order of the dilemmas was randomized in every Booklet. Table 2 summarizes the type of conflict, the theme, and the type of duties that are considered to be expressed in the different dilemmas.

Subjects, males and females, rated the questions in group sessions, except for a small number (approximately 10) who participated individually.

### 3.3 Measurement of Deontological and Teleological Orientation

The questions that follow each dilemma inquire about two kinds of duties, each of them dealing with either a deontological or a teleological moral orientation. In Kantian terms, the questions deal either with negative or with positive duties. Though the definitions of positive and negative duties do not completely coincide with those of

Table 2

## Dilemmas and Expressed Duties

DILEM- MA	CONFLICT	THEME	QUESTION 1 ==>
1	Negat. vs. posit.	Informing hunters about the presence of deer	"Should Mike signal to hunters?"
2	Posit. vs. negat.	Divulging secrets about Russian involvement in Middle East	"Should Sandy disclose the secrets told by Semyon?"
3	Negat. vs. posit.	Testifying about presence of a black man at scene of crime	"Should Eddie say he had seen the man at scene of crime?"
4	Posit. vs. negat.	Tell teacher about friends' tampering with electric system in school	"Should Jeanette keep silent about what her friends did?"
5	Negat. vs. posit.	Bomb politician's house in order to save wife's life	"Should Maurice refuse to bomb the politician's house?"
6	Posit. vs. negat.	Officer kill courier to prevent enemy from learning about defense plans	"Should Antonio kill the courier?"
7	Negat. vs. posit.	Discovery re. money owed to wealthy acquaintance	"Should Mrs. Mc- Master let Mrs. O' Brien know re. the money immediately?"
8	Posit. vs. negat.	The Heinz dilemma	"Should Heinz steal the drug?"

Table 2 (cont.)

EXPRESSED DUTY	QUESTION 2 =====>	EXPRESSED DUTY	DI-LEMMA #
NEGAT. Don't break a promise (dependability)	"Should Mike keep quiet & protect the deer?"	POSIT. Compassion for animals	1
POSIT. Responsibility for the common good	"Should Sandy keep information secret?"	NEGAT. Don't break a promise (dependability)	2
NEGAT. Don't lie (tell the truth)	Should Eddie say he's not sure he recognizes the man?"	POSIT. Responsibility for individuals	3
POSIT. Togetherness (friendship and helping)	"Should Jeanette tell teacher what she knows re. what her friends did?"	NEGAT. Don't lie (tell the truth)	4
NEGAT. Don't kill	"Should Maurice agree to bomb the house & so save his wife?"	POSIT. Responsibility for individuals (for wife's life)	5
POSIT. Responsibility for the common good	"Should Antonio let the courier live?"	NEGAT. don't kill	6
NEGAT. Don't violate property rights (justice)	"Should Mrs. McMaster delay telling Mrs. O'Brien?"	POSIT. Responsibility for individuals' (son's) achiev.	7
POSIT. Responsibility for individual (wife's) life	"Should Heinz accept the druggist's decision?"	NEGAT. Don't violate property rights	8

Table 2 (cont.)

DILEMMA	CONFLICT	THEME	QUESTION 1 ==>
9	Posit. vs. posit.	Save friend from drunk persecutor	"Should Bessie keep her door locked?"
10	Posit. vs. posit.	Stay with foster parents or go to university	"Should Helen stay with her adoptive parents indefinitely?"
11	Posit. vs. posit.	Report brother as a spy	"Should Hugo report his brother to the authorities?"

Table 2 (cont.)

EXPRESSED DUTY	QUESTION 2 =====>	EXPRESSED DUTY	DI- LEM- MA #
POSIT. Self-interest (pers. security)	"Should Bessie open the door & help her friend?"	POSIT. Responsibility for individuals' (frd.'s) welfare	9
POSIT. Responsibility for individ.'s (rl.'s) welfare	"Should Helen refuse to stay with parents indefinitely?"	POSIT. self-interest (self-realizat.)	10
POSIT. Responsibility for the common good	"Should Hugo keep silent about his brother?"	POSIT. Responsibility for individuals' (rel.'s) welfare	11

teleological and deontological moral orientations, respectively, it is contended that, in the present dilemmas, these concepts can be equated, as explained below. The first eight of the dilemmas used in this experiment are assumed to involve alternative courses of action that pit negative duties against positive ones. The last three dilemmas are assumed to involve pairs of positive duties that conflict with each other (Appendix A).

#### Global Score -- Deontology vs. Teleology

The accomplishment of negative duties is assumed to be expressed in the moral decisions that appear in the first questions of dilemmas 1, 3, 5, and 7, and the second questions of dilemmas 2, 4, 6, and 8 (Table 2). Subjects who approve the moral decisions identified in these eight questions are considered to follow certain moral principles, regardless of their consequences. Therefore, these subjects adopt what is termed here a deontological moral orientation. In contrast, positive duties are considered to be expressed in the first questions of dilemmas 2, 4, 6, and 8, and in the second questions of dilemmas 1, 3, 5, and 7. When subjects approve the decisions that are identified in these alternative questions, they are seen as refraining from adhering to certain moral principles in order to attain other goals, the attainment of which would be hindered if

adherence to those principles (negative duties) occurred. These solutions seem to reflect a teleological moral orientation and the fulfillment of positive duties.

The rationale discussed in the previous chapter explains why in this study the two contradictory courses of action, which constitute the only possible choices, are to be rated on a 6-point scale, instead of using only the traditional double judgment "should-should not". In the present work, the moral choice is concerned directly with the "content" of the dilemma, that is, with the alternative courses of action. Each one of the first eight dilemmas (1, 2, 3, 4, 5, 6, 7 and 8) has one scale for the deontological orientation and another scale for the teleological orientation, ranging from 1 ("condemnable") to 6 ("obligatory").

#### Specification of Negative Duties (Eight Dilemmas)

It is possible to make a more finely-grained analysis regarding the two orientations referred to above. Included in the first eight dilemmas are four negative duties that are designed to portray the deontological orientation (Table 2). These duties include the following:

- a) not breaking a promise or dependability (dilemma 1, first question, and dilemma 2, second question);
- b) not lying or telling the truth (dilemma 3, first question, and dilemma 4, second question);

- c) not killing (dilemma 5, first question, and dilemma 6, second question); and
- d) not violating the right of property or justice (dilemma 7, first question, and dilemma 8, second question).

#### Specification of Positive Duties (Eight Dilemmas)

The dimension "teleological orientation" encompasses four "positive duties" (Table 2) that are pitted against the "negative duties" described in the previous section. The positive duties included in the first eight dilemmas (1, 2, 3, 4, 5, 6, 7, and 8) are the following:

- a) compassion for animals (dilemma 1, second question);
- b) togetherness or friendship and helping (dilemma 4, first question);
- c) responsibility for individuals, pitted against several negative duties (dilemmas 3, 5, and 7, second question, and dilemma 8, first question); and
- d) responsibility for the common good (dilemmas 2 and 6, first question).

#### Positive vs. Positive Duties (Three Dilemmas)

Dilemmas 9, 10, and 11 are aimed at testing the subjects about special moral conflicts in which negative duties are not clearly involved. These dilemmas pit positive against positive duties, namely, self-interest, responsibil-

ity for individuals, and responsibility for the common good (Table 2). These three dilemmas involve the following pairings:

- a) self-interest (personal security) pitted against responsibility for individuals' (friends') security (dilemma 9);
- b) responsibility for individuals' (relatives') welfare, pitted against self-interest (self-realization) (dilemma 10); and
- c) responsibility for the common good (national security), pitted against responsibility for individuals' (relatives') security (dilemma 11).

These pairings imply a double set of focuses. One set of responses is focused on relationships of privileged connectedness (with a friend, a brother, or the foster parents). The other set of responses is focused on one's own person and on the community.

#### 3.4 Measurement of Apodicticity vs. Flexibility of Principles

In the previous chapter, a dimension was defined involving the use of apodictic vs. more flexible moral principles. The present study involves an attempt to deal with this dimension, the assumption being made that the more prone a subject is to use apodictic or stringent moral prin-

principles, the more she or he will use the values 1 and 6 on the 6-point scale, as they appear in Figure 1. Given that each subject made two responses to each dilemma, the maximum score for frequency of apodicticity of moral principles, considering only the first eight dilemmas, is 16 (obtained by counting the number of times that each subject uses 1 ("condemnable") or 6 ("obligatory"). It was predicted that males would score higher in apodicticity. A link between the male sex and firmness of principles is suggested by Freud (1925). A second reason to hypothesize that females would score lower in apodicticity of principles is based on the literature that suggests that females attend more than males to the contextuality of conflicts (Gilligan, 1982a); this attention given to the complexities involved in the contextuality of conflicts is assumed in this study to hinder the use of extreme judgments such as "condemnable" or "obligatory".

### 3.5 Measurement of Masculinity and Femininity

A measure of masculinity and femininity was used, notwithstanding the ambiguities that are associated with these terms and concepts. Masculinity and femininity are terms encompassing biological, psychological and sociocultural phenomena. Sex-typing, sex-role orientation, gender identity, and sexual preference are some related but distinguish-

shable constructs that appear in the literature (Deaux, 1984; Huston, 1983; Orlofsky, 1980).

The Bem Sex-Role Inventory -- BSRI -- (Bem, 1974), was selected for the present work, though it has been the target of several conceptual and methodological critiques. The BSRI (revised version, Bem, 1981) was chosen from among other equivalent measures because no alternatives in this realm are free of flaws and because the BSRI is easier to administer than are some of the competing instruments. Some important debates about the BSRI are related to the meaning of and dimensions involved in the concepts of "masculinity", "femininity", and "androgyny" (Spence & Helmreich, 1978; Taylor & Hall, 1982), as well as to the statistical features of the characteristics that constitute the 60 items of the inventory (Pedhazur & Tetenbaum, 1979). It seems appropriate to conclude with Spence and Helmreich (1980) that the so-called masculinity scale is primarily a measure of instrumentality, and the femininity scale is primarily a measure of expressiveness.<sup>6</sup>

In the present study, the concepts of masculinity and femininity are considered equivalent to those of instrumentality and expressivity, as defined by Parsons and Bales

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<sup>6</sup> Parsons and Bales (1955) proposed the notions of "instrumental orientation" (a cognitive focus on getting the job done and the problem solved) to describe masculinity and of "expressive orientation" (a focus on feelings and relationship with others) to describe femininity.

(1955). The measures of masculinity and femininity are used in addition to the categories of "males" and "females" to inquire into possible differences in moral orientation.

Given the limited scope of the present study, a design that would completely conterbalance the order of presentation of the dilemmas does not seem practicable. In order to increase the generalizeability of the study, the order of the dilemmas was randomized for each subject in every booklet that was used in this study (Appendix A).

## CHAPTER IV

## RESULTS

The purpose of this study was to investigate differences between males and females when they are confronted with moral conflicts which involve different classes of duties. Subjects responded to questions that purported to reflect a deontological or a teleological moral orientation. They responded to each question by making a rating on a 6-point scale (1 = "condemnable", 6 = "obligatory"). Hence, a rating of 6 would indicate a strong deontological or teleological orientation on the subject's part, whereas a rating of 1 would indicate a lack of such an orientation.

The first eight dilemmas were supposed to measure both dimensions, deontological and teleological, whereas the last three dilemmas dealt exclusively with the teleological orientation.

#### 4.1 The First Eight Dilemmas

##### Differences in Deontological and Teleological Moral Orientation

Table 3 presents the means and standard deviations for the male and female subjects' ratings made in response to the deontologically oriented questions associated with the

first eight dilemmas. Table 4 provides the same information for the teleologically oriented questions.

Table 3

Means and Standard Deviations -- Male and  
Female Ratings in Response to the  
Deontological Questions

<u>Dilemma</u>	Sex			
	Females		Males	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	4.14	1.55	3.69	1.49
2	3.22	1.76	2.97	1.56
3	3.86	1.73	3.44	1.78
4	3.67	1.41	3.31	1.39
5	3.56	1.89	3.97	1.52
6	4.33	1.55	3.39	1.59
7	4.25	1.56	3.56	1.66
8	3.00	1.43	2.50	1.46
Overall	3.75	0.74	3.35	0.73

An analysis of variance was conducted on the data on which the means and SDs presented in Tables 3 and 4 are based. Sex was a between-subjects variable and orientation

Table 4

Means and Standard Deviations -- Male and  
Female Ratings in Response to the  
Teleological Questions

<u>Dilemma</u>	<u>Sex</u>			
	<u>Females</u>		<u>Males</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	3.19	1.41	3.50	1.44
2	4.47	1.55	4.33	1.47
3	3.11	1.62	3.44	1.66
4	3.69	1.26	3.89	1.33
5	2.89	1.58	2.75	1.50
6	2.47	1.59	3.44	1.93
7	3.44	1.59	3.61	1.50
8	3.56	1.61	4.42	1.61
Overall	3.35	0.79	3.67	0.79

(deontological vs. teleological) and dilemma (1 through 8) were within-subjects variables. A summary of the results of the analysis of variance appears in Table 5.

As can be seen in Table 5, the only significant main effect in the analysis is that for dilemma ( $F[7, 490] = 5.37, p < .001$ ). The relevant means and SDs are presented in Table 6.

Table 5  
 Analysis of Variance for Differences  
 Between Males and Females in Moral  
 Orientation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	90.99		
Sex	1	0.46	0.46	0.36
Subjects(Sex)	70	90.53	1.29	
<u>Within Subjects</u>	1080	2979.70		
Orientation	1	0.46	0.46	0.06
Sex x Orientation	1	37.20	37.20	4.64*
Orientation x Subjects(Sex)	70	560.91	8.01	
Dilemma	7	29.74	4.25	5.37**
Sex x Dilemma	7	5.77	0.82	1.04
Dilemma x Subjects(Sex)	490	387.68	0.79	
Orientation x Dilemma	7	202.52	28.93	8.24**
Sex x Orientation x Dilemma	7	35.01	5.00	1.42
Orien. x Dil. x Sub.(Sex)	490	1720.41	3.51	
Error(w.)	1050	2669.00		
<u>Total</u>	1151	3070.68		

\* Probability < .05

\*\* Probability < .001

Table 6

Means and Standard Deviations for the First  
Eight Dilemmas (Collapsed Over Sex and  
Orientation)

<u>Dilemma</u>	<u>Mean</u>	<u>SD</u>
1	3.63	0.54
2	3.75	0.62
3	3.47	0.58
4	3.63	0.62
5	3.29	0.81
6	3.41	0.69
7	3.72	0.55
8	3.37	0.76
Overall	3.53	0.28

As indicated in Table 6, the overall ratings given the various dilemmas (collapsing over sex and orientation) ranged from 3.29 (for dilemma 5) to 3.75 (for dilemma 2). The overall ratings given by the two sexes were virtually identical (female mean = 3.55, male mean = 3.51) ( $F[1, 70] = 0.36, p > .05$ ). Similarly, the overall ratings given the two orientations were virtually identical (mean for deontological = 3.55, mean for teleological = 3.51) ( $F[1, 70] = 0.06, p > .05$ ).

Of the remaining two significant effects in the analysis, one -- the interaction between orientation and dilemma ( $F[7, 490] = 8.24, p < .001$ ) -- indicates that the differences between the two orientations varied across the various dilemmas. The relevant means and SDs are presented in Table 7, where it may be seen that the deontological ratings were higher than teleological in five instances (dilemmas 1, 3, 5, 6, and 7), whereas the teleological ratings were higher in three cases (dilemmas 2, 4, and 8).

The second significant interaction -- that between sex and orientation ( $F[1, 70] = 4.64, p < .05$ ) -- is of crucial relevance to the purpose of this study. As indicated in Tables 3 and 4, the females gave higher ratings than did the males for the deontological questions (means for females = 3.75, means for males = 3.35), whereas the females gave lower ratings for the teleological questions (mean for females = 3.35, means for males = 3.67). This is exactly the opposite of what had been predicted.

This significant sex by orientation interaction effect suggested a follow-up test to determine whether the difference between mean scores of females and males was significant for both the deontological and the teleological orientation. Table 8 presents the results of an analysis of variance to assess sex effects within each type of orientation (deontological and teleological).

Table 7  
Means and Standard Deviations for the  
Various Orientation/Dilemma  
Combinations

<u>Dilemma</u>	Orientation			
	Deontological		Teleological	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	3.92	1.52	3.35	1.43
2	3.10	1.65	4.40	1.51
3	3.65	1.75	3.28	1.64
4	3.49	1.40	3.79	1.29
5	3.76	1.72	2.82	1.53
6	3.86	1.63	2.96	1.83
7	3.90	1.64	3.53	1.54
8	2.75	1.46	3.98	1.66
Overall	3.55	0.75	3.51	0.80

The design in each case was a two-factor (2 x 8) repeated measures analysis of variance. Sex was a between-subjects factor and dilemma (1-8) was a within-subjects variable. Table 8 indicates a significant effect for dilemma in both the deontological and the teleological analysis and a significant sex effect in the deontological ana-

Table 8

Analysis of Variance to Follow up the Sex x  
Orientation Interaction by Assessing the Sex  
Effect Within the Deontological Orientation and  
Within the Teleological Orientation

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<u>Deontological orientation</u>				
<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	323.21		
Sex	1	22.96	22.96	5.35*
Subjects(Sex)	70	300.25	4.29	
<u>Within Subjects</u>	504	1225.12		
Dilemma	7	90.79	12.97	5.70**
Sex x Dilemma	7	19.55	2.79	1.23
Dilemma x Subjects(Sex)	490	1114.78	2.28	
<u>Total</u>	575	1548.33		

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<u>Teleological orientation</u>				
<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	365.88		
Sex	1	14.69	14.69	2.93
Subjects(Sex)	70	351.19	5.02	
<u>Within Subjects</u>	504	1156.00		
Dilemma	7	141.47	20.21	9.97**
Sex x Dilemma	7	21.22	3.03	1.50
Dilemma x Subjects(Sex)	490	993.31	2.03	
<u>Total</u>	575	1521.88		

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\* Probability < .05

\*\* Probability < .001

lysis. The significant dilemma effect in the deontological analysis ( $F[7, 490] = 5.70, p < .001$ ) and in the teleological analysis ( $F[7, 490] = 9.97, p < .001$ ) reflects the presence of the significant orientation x dilemma interaction effect and the significant dilemma main effect that were found in the overall analysis (Table 5).

The sex effect is of crucial importance for the purposes of this study. On the one hand, the sex effect in the deontological analysis ( $F[1, 70] = 5.35, p < .05$ ) indicates that the superiority of females' over males' scores for the deontological orientation is statistically significant. On the other hand, the sex effect in the teleological analysis ( $F[1, 70] = 2.93, p > .05$ ) does not reach the required level of statistical significance.

#### Differences Between Females and Males in Appraising Negative Duties

One of the purposes of this study was to inquire about differences between males and females when they are asked to appraise the accomplishment of specific types of negative duties. Negative duties were categorized in Chapter III (see p. 35) by collapsing pairs of questions from among those that were deontologically oriented (i. e., negative-duty related). Table 9 shows the mean scores and standard deviations of the four types of negative duties for females and males.

Table 9

Means and Standard Deviations -- Male and Female  
Ratings in Response to the Questions Concerned  
with Negative Duties

<u>Negative Duties</u>	Sex			
	<u>Females</u>		<u>Males</u>	
	Mean	SD	Mean	SD
"Not breaking a promise"	3.68	1.07	3.33	1.04
"Not lying"	3.76	1.20	3.37	1.16
"Not killing"	3.94	1.20	3.68	1.15
"Not violating property rights"	3.63	1.13	3.03	1.26

Table 2 (pp. 31-33) identified the specific questions that led to categorizing the following types of negative duties: (a) "not breaking a promise"; (b) "not lying"; (c) "not killing"; and (d) "not violating property rights". It will be seen in Table 9 that the mean rating for the four types of negative duties was in each case higher for females than for males.

The basis for the pairing of negative duties in this exploratory study was just the manifest content of the dilemmas, without consideration being given to the statistical features of the results.

An analysis of variance was performed on the data which produced the means and SDs presented in Table 9. Sex was a between-subjects factor and negative duty (1 through 4) was a within-subjects variable. Table 10 summarizes the results.

Table 10

Analysis of Variance for Differences Between  
Females' and Males' Scores in Four Types of  
Negative Duties

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	161.60		
Sex	1	11.48	11.48	5.35*
Subjects(Sex)	70	150.12	2.14	
<u>Within Subjects</u>	216	233.32		
Negative-duty	3	8.72	2.91	2.73*
Sex x Negative-duty	3	1.09	0.36	0.34
Negat.-duty x Subjects(Sex)	210	223.51	1.06	
<u>Total</u>	287	394.92		

\* Probability < .05

Table 10 shows two significant effects, similar to those that were found in the analysis of the deontological

orientation. The significant effect for duty ( $F[3, 70] = 2.73, p < .05$ ), which mirrors the dilemma effect in the deontological analysis, indicates that both males and females gave different weights to the four types of negative duties, as can be seen in Table 11

Table 11

Means and Standard Deviations -- Overall Responses to the Questions Concerned with Four Types of Negative Duties (Collapsed Over Sex)

<u>Negative Duties</u>	<u>Mean</u>	<u>SD</u>
"Not breaking a promise"	3.51	1.06
"Not lying"	3.57	1.20
"Not killing"	3.81	1.18
"Not violating property rights"	3.32	1.23

The significant effect for sex ( $F[1, 70] = 5.35, p < .05$ ) mirrors the sex effect that appeared in the deontological analysis and it is of crucial interest for the purposes of the present study. Contrary to what had been predicted, females scored higher than did males in the set of four types of negative duties (see Table 9).

Differences Between Females and Males in  
Appraising Positive Duties

Positive duties were considered (in Chapter III, p. 36) to be involved in one or several teleologically oriented responses. Table 12 presents means and SDs for males' and females' scores on positive duties.

Table 12

Means and Standard Deviations -- Male and Female  
Ratings in Response to the Questions Concerned  
with Positive Duties

<u>Positive Duties</u>	Sex			
	<u>Females</u>		<u>Males</u>	
	Mean	SD	Mean	SD
"Compassion for animals"	3.19	1.41	3.50	1.44
"Togetherness"	3.69	1.26	3.89	1.33
"Responsibility for individuals"	3.25	1.04	3.56	1.05
"Responsibility for common good"	3.47	1.15	3.89	1.21

The pattern in Table 12 mirrors the results for the teleological analysis -- that is to say, conversely to what happened with respect to the negative duties, females did not score higher than males on positive duties.

An analysis of variance was performed on the data related to the questions involving negative duties, for which the means and SDs are presented in Table 12. A two-factor (2 x 4) repeated measures design was used. Sex was a between-subjects factor and positive-duty (1 through 4) was a within-subjects variable. Table 13 summarizes the results of the analysis of variance.

Table 13

Analysis of Variance for Differences Between  
Females' and Males' Scores in Four Types of  
Positive Duties

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	170.64		
Sex	1	6.72	6.72	2.87
Subjects(Sex)	70	163.92	2.34	
<u>Within Subjects</u>	216	280.58		
Positive-duty	3	9.94	2.58	2.58
Sex x Positive-duty	3	0.44	0.15	0.12
Posit.-duty x Subjects(Sex)	210	270.20	1.29	
<u>Total</u>	287	451.24		

As may be seen in Table 13, no significant effects appear in this analysis. The data do not support the hypothesis of significant differences between the sexes for mean ratings given the four types of positive duties.

#### 4.2 Differences Between Females and Males for the Responses Given About the Positive Duties in the Last Three Dilemmas

Dilemmas 9, 10, and 11 differ from the first eight dilemmas in that they pit positive against positive duties. The two possible decisions in each dilemma reflect a moral orientation that seems more teleological than deontological, by virtue of the fact that the most important factor involved in the decision seems to be the weight of the consequences.

In order to detect a possible interaction effect, a distinction was made between two sets of responses, according to the issues involved in the manifest content of the dilemma. One set of responses is focused on relationships of privileged connectedness (friendship and kinship); the other set is focused on one's own person and on the community. Both sets, however, seem to involve positive duties.

Table 14 and 15 present means scores and SDs for females and males on questions focused, respectively, upon relationships of privileged connectedness and upon one's own person or the community.

Table 14

Means and Standard Deviations -- Male and  
Female Ratings in Response to Questions  
Focused on Relationships of Privileged  
Connectedness

<u>Dilemma</u>	Sex			
	<u>Females</u>		<u>Males</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	4.89	1.26	5.11	1.14
10	3.44	1.48	3.50	1.42
11	3.19	1.74	3.17	1.78
Overall	3.84	0.98	3.93	0.76

An analysis of variance was performed on the data on which the means and SDs presented in Tables 14 and 15 are based. The design included three factors (2 x 2 x 3). Sex was a between-subjects variable and focus (relationship of privileged connectedness vs. one's own person or the community) and dilemma (9 through 11) were within-subjects variables. A summary of the results appears in Table 16, where it will be seen that four significant effects were obtained.

The main effect for focus ( $F[1, 70] = 10.65, p < .01$ ) indicates that the subjects as a total group gave higher

Table 15

Means and Standard Deviations -- Male  
and Female Ratings in Response to  
Questions Focused on One's Own Person  
and the Community

<u>Dilemma</u>	Sex			
	<u>Females</u>		<u>Males</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	2.31	1.21	2.56	1.58
10	3.19	1.26	3.47	1.21
11	3.94	1.67	4.33	1.64
Overall	3.14	0.86	3.45	0.79

ratings for relationships of privileged connectedness (mean = 3.88) than for a focus on one's own person or the community (mean = 3.30).

The main effect for dilemma ( $F[2, 140] = 5.65, p < .01$ ) indicates the overall ratings associated with the three dilemmas were not all comparable (mean for dilemma 9 = 3.72, for dilemma 10 = 3.40, for dilemma 11 = 3.66).

The interaction between focus and dilemma ( $F[2, 140] = 32.99, p < .01$ ) is shown in Table 17, where it may be seen that higher ratings were given for privileged connectedness

Table 16

Analysis of Variance for Differences  
Between Females and Males in Dilemmas  
Dealing Exclusively with Positive Duties  
(Last Three Dilemmas)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	67.96		
Sex	1	4.08	4.08	4.47*
Subjects(Sex)	70	63.88	0.91	
<u>Within Subjects</u>	360	1120.33		
Focus	1	36.75	36.75	10.65**
Sex x Focus	1	1.33	1.33	0.39
Focus x Subjects(Sex)	70	241.58	3.45	
Dilemma	2	8.00	4.00	5.65**
Sex x Dilemma	2	0.10	0.05	0.07
Dilemma x Subjects(Sex)	140	99.23	0.71	
Focus x Dilemma	2	234.68	117.34	32.99**
Sex x Focus x Dilemma	2	0.68	0.34	0.10
Focus x Dil. x Subj.(Sex)	140	497.97	3.56	
Error(w.)	350	838.79		
<u>Total</u>	431	1188.30		

\* Probability < .05

\*\* Probability < .01

than for own person or community in the case of dilemmas 9 and 10, but the reversed relationship held for dilemma 11.

Table 17

Means and Standard Deviations for the  
Two Focuses of the Last Three Dilemmas

<u>Dilemma</u>	<u>Focus</u>			
	<u>Privileged connectedness</u>		<u>Own person or community</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	5.00	1.20	2.43	1.40
10	3.47	1.44	3.33	1.23
11	3.18	1.75	4.14	1.66
Overall	3.88	0.87	3.30	0.83

The remaining significant effect -- that for sex ( $F[1, 70] = 4.47, p < .05$ ) -- is the crucial one for the purposes of this study. The males (mean = 3.69) gave higher ratings to the positive duties involved in dilemmas 9, 10, and 11 than did the females (mean = 3.49). In Chapter I, it was predicted that females would manifest a degree of approval higher than that of males when confronted with dilemmas that pit positive duties against one another. The results revealed a sex effect that is exactly the opposite of what had been predicted.

### 4.3 Differences Between Females and Males in Making Apodictic Judgments

It was predicted in Chapter I that males would score higher than females in apodicticity of moral judgments. The criterion to evaluate the degree of "apodicticity" was expressed by the number of times that the subjects employed the values 1 ("condemnable") or 6 ("obligatory"), which are the extremes of the 6-point scale used to rate the decisions suggested in each dilemma.

Table 18 shows the means and SDs for females and males on apodicticity of moral judgments, as far as this dimension is expressed in the use of the extremes of the scale when judging the first eight dilemmas. The possible range would run from 0 to 16 (8 dilemmas x 2 questions).

A t-test was performed on the data presented in Table 18. The result does not show evidence of a statistically significant difference between males and females on apodicticity of judgments ( $t[70] = 0.46$ , two-tailed  $p > .05$ )

### 4.4 Differences on Deontological and Teleological Orientation Between Groups Divided According to "Femininity" and According to "Masculinity" Scores

Subjects were administered the Bem Sex-Role Inventory, in the revised form (Bem, 1981). This inventory provides two types of measures -- "femininity" and "masculinity", or, as Spence and Helmreich (1980) put it, "expressiveness" and

Table 18

Means, Standard Deviations and t-Test on  
Female and Male Apodicticity of  
Judgments

	Sex	
	<u>Females</u>	<u>Males</u>
Mean	4.25	3.92
Standard deviation	2.70	3.43
-----		
(t = 0.46; df = 70; two-tailed p > .05)		
-----		

"instrumentality". Table 19 presents means, SDs, and medians on femininity and masculinity for females and males and for the whole sample.

The examination of Table 19 shows that females scored higher in femininity than in masculinity (means are 5.41 and 4.74, respectively). Unexpectedly, males also scored higher in femininity than in masculinity (means 4.99 and 4.66, respectively). However, this pattern does not seem markedly aberrant when comparison is made with Bem's (1981) Stanford normative sample, as described in Table 20

Bem (1981) recommends that subjects be classified on the basis of a median split into four distinct sex-role

Table 19

Means, Standard Deviations, and Median on  
"Femininity" and "Masculinity" for Females and  
Males, and for the Whole Sample

<u>Sex</u>	<u>Femininity</u>		<u>Masculinity</u>		<u>N</u>
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>	
Females	5.41	0.86	4.74	0.81	36
Males	4.99	0.73	4.66	0.91	36
Overall	5.32	0.77	4.70	0.85	72
Whole sample median	5.35		4.65		

groups: (a) feminine (higher-femininity, lower-masculinity scores); (b) masculine (higher-masculinity, lower-femininity scores); (c) androgynous (higher-femininity, higher-masculinity scores), and (d) undifferentiated (lower-femininity, lower masculinity scores). In this phase, it seemed to fit more with the purpose of the present study to construct a dichotomous variable that would mirror the distinction female-male, and would allow for a comparison of results. Thus, instead of being combined, masculinity and femininity were transformed into dichotomous variables on the basis of

Table 20

Means and Standard Deviations on "Femininity" and  
"Masculinity" for Females and Males in Bem's  
Stanford Normative Sample

Sex	Sexual role				N
	Femininity		Masculinity		
	Mean	SD	Mean	SD	
Females	5.57	0.76	4.78	0.81	340
Males	5.19	0.78	4.88	0.79	476
Overall	5.38	0.79	4.83	0.80	816
Whole sample median	5.50		4.80		

Reproduced from Bem, 1981.

a median split and they were examined separately. This way, two sets of contrasted groups were studied: (a) higher-femininity vs. lower-femininity groups; and (b) lower-masculinity vs. higher-masculinity groups.

Differences Between "Higher-Femininity"  
and "Lower-Femininity" Subjects on  
Deontological and Teleological  
Orientation

Tables 21 and 22 present mean scores and SDs of "higher-femininity" and "lower-femininity" subjects' ratings made in response to the deontologically and teleologically oriented questions, respectively.

Table 21

Means and Standard Deviations --  
Higher-Femininity and Lower-Femininity  
Ratings in Response to the  
Deontological Questions

<u>Dilemma</u>	<u>Femininity</u>			
	<u>Higher-femininity</u>		<u>Lower-femininity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	4.00	1.47	3.83	1.59
2	3.22	1.62	2.97	1.69
3	3.91	1.68	3.38	1.81
4	3.78	1.27	3.19	1.49
5	3.64	1.73	3.89	1.72
6	3.78	1.55	3.94	1.72
7	4.11	1.61	3.69	1.65
8	2.83	1.36	2.67	1.57
Overall	3.66	0.71	3.45	0.79

Based on these data, an analysis of variance was performed involving a three-factor repeated measures design. Femininity (higher and lower) was a between-subjects factor, and orientation (deontological vs. teleological) and dilemma (1 through 8) were within-subjects variables. Table 23 summarizes the results of the analysis of variance.

Table 22

Means and Standard Deviations --  
Higher-Femininity and Lower-Femininity  
Ratings in Response to the  
Teleological Questions

<u>Dilemma</u>	Femininity			
	<u>Higher-femininity</u>		<u>Lower-femininity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	3.27	1.37	3.42	1.50
2	4.53	1.58	4.28	1.50
3	3.11	1.58	3.44	1.70
4	3.81	1.26	3.78	1.33
5	3.11	1.58	2.53	1.44
6	2.86	1.79	3.06	1.88
7	3.39	1.66	3.67	1.41
8	3.89	1.53	4.08	1.79
Overall	3.50	0.79	3.53	0.83

An examination of Table 23 reveals two significant effects -- an orientation by dilemma interaction effect and a main effect for dilemma. The same effects have already appeared in Table 5, where they have been analyzed. Neither of them is crucial for the purposes of this study.

Table 23

Analysis of Variance for Differences Between  
Higher-Femininity and Lower-Femininity in  
Moral Orientation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	90.99		
Femininity	1	2.26	2.26	1.78
Subjects(Femininity)	70	88.73	1.27	
<u>Within Subjects</u>	1080	2979.70		
Orientation	1	0.46	0.46	0.05
Femininity x Orientation	1	4.38	4.38	0.52
Orientation x Subjects(Fem.)	70	593.73	8.48	
Dilemma	7	29.74	4.25	5.37**
Femininity x Dilemma	7	6.05	0.86	1.09
Dilemma x Subjects(Fem.)	490	387.39	0.79	
Orientation x Dilemma	7	202.52	28.93	8.16**
Fem. x Orient. x Dilemma	7	17.69	2.53	0.71
Orient. x Dil. x Sub.(Fem.)	490	1737.73	3.55	
Error(w.)	1050	2718.85		
<u>Total</u>	1151	3070.68		

\* Probability < .05

\*\* Probability < .001

Because the interaction between "femininity" and moral orientation is nonsignificant, it does not make sense to test the simple effects, as was done earlier with the sex variable. The hypothesis of a significant relationship between femininity and moral orientation (deontological vs. teleological) is not supported by the data.

Differences Between "Lower-Masculinity"  
and "Higher-Masculinity" Subjects on  
Deontological and Teleological  
Orientation

Table 24 presents the means and SDs for "lower-masculinity" and "higher-masculinity" subjects' ratings made in response to the deontologically oriented questions associated with the first eight dilemmas. Table 25 provides the same information for the teleologically oriented questions.

An analysis of variance was conducted on the data on which the means and SDs presented in Tables 24 and 25 are based. A three-factor (2 x 2 x 8) repeated measures design was used. Masculinity (lower and higher) was a between-subjects factor, and orientation (deontological vs. teleological) and dilemma (1 through 8) were within-subjects variables. Table 26 summarizes the results of the analysis of variance.

The significant effects that are found in the analysis of variance, as can be seen in Table 26, are the same as those which were found in the analysis of variance related

Table 24

Means and Standard Deviations --  
Higher-Masculinity and Lower-Masculinity  
Ratings in Response to the Deontological  
Questions

<u>Dilemma</u>	<u>Masculinity</u>			
	<u>Higher-masculinity</u>		<u>Lower-masculinity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	3.67	1.35	4.17	1.66
2	2.97	1.54	3.22	1.77
3	3.58	1.59	3.72	1.92
4	3.58	1.25	3.38	1.55
5	3.97	1.75	3.55	1.68
6	3.81	1.62	3.91	1.66
7	4.17	1.58	3.64	1.68
8	2.94	1.41	2.56	1.50
Overall	3.59	0.75	3.52	0.77

to "femininity" -- namely, an orientation by dilemma interaction effect and a dilemma main effect. Again, no significant masculinity x orientation interaction is in evidence, thus making simple effects tests superfluous. The hypothesis of a relationship between masculinity and moral orienta-

Table 25

Means and Standard Deviations --  
Higher-Masculinity and Lower-Masculinity  
Ratings in Response to the Teleological  
Questions

<u>Dilemma</u>	<u>Masculinity</u>			
	<u>Higher-masculinity</u>		<u>Lower-masculinity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
1	3.42	1.23	3.27	1.61
2	4.50	1.36	4.31	1.65
3	3.13	1.53	3.42	1.75
4	3.69	1.21	3.89	1.37
5	2.61	1.50	3.03	1.56
6	2.97	1.93	2.94	1.74
7	3.39	1.53	3.67	1.55
8	3.81	1.70	4.17	1.61
Overall	3.44	0.79	3.67	0.79

tion (deontological vs. teleological) is not supported by the data.

Table 26

Analysis of Variance for Differences Between  
Lower-Masculinity and Higher-Masculinity in  
Moral Orientation

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	90.99		
Masculinity	1	0.46	0.46	0.36
Subjects(Masculinity)	70	90.53	1.29	
<u>Within Subjects</u>	1080	2979.70		
Orientation	1	0.46	0.46	0.06
Masculinity x Orientation	1	3.23	3.23	0.38
Orient. x Subjects(Masc.)	70	594.87	8.50	
Dilemma	7	29.74	4.25	5.23**
Masculinity x Dilemma	7	2.94	0.42	0.53
Dilemma x Subjects(Masc.)	490	390.51	0.80	
Orientation x Dilemma	7	202.52	28.93	8.17**
Masc. x Orient. x Dilemma	7	21.08	3.01	0.85
Orien. x Dil. x Sub.(Masc.)	490	1734.34	3.54	
Error(w.)	1050	2719.71		
<u>Total</u>	1151	3070.68		

\* Probability < .05

\*\* Probability < .001

4.5 Relationship Between "Femininity" or  
"Masculinity" and the Positive Duties Expressed  
in the Last Three Dilemmas

The analysis of the relationship between "femininity" or "masculinity" and the the positive duties expressed in the last three dilemmas followed the same pattern that was used in the analysis of the relationship between sex and the same set of duties.

Tables 27 and 28 present the mean scores and SDs for higher-femininity and lower-femininity subjects on questions focused, respectively, on relationships of privileged connectedness and on one's own person or the community.

Table 27

Means and Standard Deviations --  
Higher-Femininity and Lower-Femininity Ratings  
in Response to Questions Focused on  
Relationships of Privileged Connectedness

<u>Dilemma</u>	<u>Femininity</u>			
	<u>Higher-femininity</u>		<u>Lower-femininity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	5.06	1.15	4.94	1.26
10	3.33	1.43	3.61	1.46
11	3.02	1.75	3.33	1.76
Overall	3.80	0.92	3.96	0.83

Table 28

Means and Standard Deviations --  
Higher-Femininity and Lower-Femininity Ratings  
in Response to Questions Focused on One's Own  
Person and the Community

<u>Dilemma</u>	<u>Femininity</u>			
	<u>Higher-femininity</u>		<u>Lower-femininity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	2.31	1.32	2.56	1.48
10	3.19	1.12	3.47	1.34
11	3.03	1.75	3.89	1.72
Overall	3.30	0.82	3.31	0.86

An analysis of variance was performed on the data on which the means and SDs presented in Tables 27 and 28 are based. The design included three factors (2 x 2 x 3) with repeated measures. Femininity (higher and lower) was a between-subjects factor, and focus (relationships of privileged connectedness vs. one's own person or the community) and dilemma (9 through 11) were within-subjects variables. A summary of the results appears in Table 29

An examination of Table 29 reveals a significant focus by dilemma interaction effect ( $F[2, 140] = 33.37, p < .001$ )

Table 29

Analysis of Variance for Differences Between  
Higher-Femininity and Lower-Femininity Subjects  
in Dilemmas Dealing Exclusively with Positive  
Duties (Last Three Dilemmas)

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	67.96		
Femininity	1	0.75	0.75	0.78
Subjects(Femininity)	70	67.21	0.96	
<u>Within Subjects</u>	360	1120.33		
Focus	1	36.75	36.75	10.62*
Femininity x Focus	1	0.59	0.59	0.17
Focus x Subjects(Fem.)	70	242.32	3.46	
Dilemma	2	8.00	4.00	5.79*
Femininity x Dilemma	2	2.54	1.27	1.84
Dilemma x Subjects(Fem.)	140	96.79	0.69	
Focus x Dilemma	2	234.68	117.68	33.37**
Fem. x Focus x Dilemma	2	6.42	3.21	0.91
Orient. x Dil. x Sub.(Fem.)	140	492.23	3.52	
Error(w.)	350	831.34		
<u>Total</u>	431	1188.30		

\* Probability < .01

\*\* Probability < .001

and two significant main effects, namely, focus ( $F[1, 70] = 10.62, p < .01$ ) and dilemma ( $F[2, 140] = 5.79, p < .01$ ). These effects appeared previously in Table 16, where they were examined in relationship to the factor of sex. No significant effect appears in Table 29 in relationship to femininity. Thus, there is no interest in testing simple effects. The hypothesis of a significant relationship between femininity and the appraising of positive duties pitted with one another, as they appear in the last three dilemmas, is not supported by the data.

Tables 30 and 31 present the mean scores and SDs for lower-masculinity and higher-masculinity subjects on questions focused, respectively, on relationships of privileged connectedness and on the one's own person or the community.

An analysis of variance was performed on the data on which the means and SDs presented in Tables 30 and 31 are based. The design included three factors ( $2 \times 2 \times 3$ ) with repeated measures. Masculinity (lower and higher) was a between-subjects factor, and focus (relationships of privileged connectedness vs. one's own person or the community) and dilemma (9 through 11) were within-subjects variables. A summary of the results appears in Table 32

An examination of Table 32 reveals a significant focus by dilemma interaction effect ( $F[2, 140] = 34.07, p < .001$ ) and two significant main effects, namely, focus ( $F[1, 70] =$

Table 30

Means and Standard Deviations --  
 Lower-Masculinity and Higher-Masculinity Ratings  
 in Response to Questions Focused on  
 Relationships of Privileged Connectedness

<u>Dilemma</u>	<u>Masculinity</u>			
	<u>Lower-masculinity</u>		<u>Higher-masculinity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	5.03	0.94	4.97	1.42
10	3.64	1.48	3.31	1.41
11	2.83	1.54	3.53	1.89
Overall	3.83	0.77	3.94	0.97

10.59,  $p < .01$ ) and dilemma ( $F[2, 140] = 5.71, p < .01$ ). These effects appeared previously in Table 16, where they were examined in relationship to the factor of sex. No significant effect appears in Table 32 in relationship to masculinity. Thus, there is no interest in testing simple effects. The hypothesis of a significant relationship between masculinity and the appraising of positive duties pitted with one another, as they appear in the last three dilemmas, is not supported by the data.

Table 31

Means and Standard Deviations --  
 Lower-Masculinity and Higher-Masculinity  
 Ratings in Response to Questions Focused on  
 One's Own Person and the Community

<u>Dilemma</u>	<u>Masculinity</u>			
	<u>Lower-masculinity</u>		<u>Higher-masculinity</u>	
	<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
9	2.47	1.34	2.39	1.48
10	3.06	1.24	3.61	1.18
11	4.31	1.56	3.97	1.75
Overall	3.27	0.89	3.32	0.79

4.6 Differences in Groups Characterized  
 According to "Femininity" and According  
 to "Masculinity" in Making Apodictic  
 Judgments

In the same way in which apodicticity was studied above for differences between males and females, comparable comparisons are shown in Table 33 for higher-femininity and lower-femininity subjects, and in Table 34 for lower-masculinity and higher-masculinity subjects.

A t-test performed on the data that appear in Table 33 does not reveal a statistically significant difference in apodicticity of judgments between higher-femininity and low-

Table 32

Analysis of Variance for Differences Between  
Lower-Masculinity and Higher-Masculinity Subjects  
in Dilemmas Dealing Exclusively with Positive  
Duties (Last Three Dilemmas).

<u>Source</u>	<u>df</u>	<u>SS</u>	<u>MS</u>	<u>F</u>
<u>Between Subjects</u>	71	67.96		
Masculinity	1	0.59	0.59	0.62
Subjects(Masculinity)	70	67.37	0.96	
<u>Within Subjects</u>	360	1120.33		
Focus	1	36.75	36.75	10.59*
Masculinity x Focus	1	0.08	0.08	0.02
Focus x Subjects(Masc.)	70	242.83	3.47	
Dilemma	2	8.00	4.00	5.71*
Masculinity x Dilemma	2	1.20	0.60	0.86
Dilemma x Subjects(Masc.)	140	98.13	0.70	
Focus x Dilemma	2	234.68	117.34	34.07**
Fem. x Focus x Dilemma	2	16.54	8.21	2.40
Orient. x Dil. x Sub.(Masc.)	140	482.11	3.44	
Error(w.)	350	827.07		
<u>Total</u>	431	1188.30		

\* Probability < .01

\*\* Probability < .001

Table 33

Means, Standard Deviations and t-Test on  
Higher-Femininity and Lower-Femininity  
Apodicticity of Judgments

	Femininity	
	<u>Higher-femininity</u>	<u>Lower-femininity</u>
Mean	3.75	4.42
Standard deviation	2.40	3.63

(t = 0.92; df = 70; two-tailed p > .05)

er-femininity subjects ( $t[70] = 0.92$ , two-tailed  $p > .05$ ). Similarly, a t-test performed on the data that appear in Table 34 does not reveal a statistically significant difference on apodicticity of judgments between lower-masculinity and higher-masculinity subjects ( $t[70] = -1.31$ , two-tailed  $p > .05$ ).

Table 34

Means, Standard Deviations and t-Test on  
 Lower-Masculinity and Higher-Masculinity  
 Apodicticity of Judgments

	Masculinity	
	Lower-masculinity	Higher-masculinity
Mean	3.61	4.56
Standard deviation	3.18	2.92

(t = -1.31; df = 70; two-tailed p > .05)

CHAPTER V  
DISCUSSION AND CONCLUSION

The present study was designed to explore possible differences between males and females confronted with the task of having to evaluate moral duties. Deontological and teleological moral orientations (conceptualized in terms of negative and positive duties) were the main ethical classificatory categories that were employed to develop the dilemmas used in the study. These categories have been formulated in the realm of ethical philosophy. They were considered in this study to constitute a coarse translation of two moral orientations that have been contrasted since Gilligan (1977) as the "ethic of justice and rights" vs. the "ethic of care and responsibility". Since the appearance of Gilligan's work, the ethic of care and responsibility has been considered to reflect the female's moral orientation, whereas the ethic of justice and rights reflects the male's orientation.

Though the theory of a different morality for females and males has enjoyed growing popularity, the related literature shows only a small number of studies reporting significant differences between males and females in judging

moral issues. Besides, almost all these studies used interviewing as the main method of assessment. Almost every study that used more "objective" tools failed to find significant sex differences in this realm.

Most of the issues addressed in the present work were supposed to reflect current concerns expressed in the literature on sex-typed moral development by such well-known theorists as Carol Gilligan (1977) and Lawrence Kohlberg (Kohlberg, Levine, & Hewer, 1983). Initially, it was hypothesized in this study that males would manifest a prevalent deontological moral orientation, valuing more than females certain "negative" duties, as these were defined in Kantian philosophy. In contrast, females were expected to be more inclined to value the teleological orientation, scoring higher with regard to positive duties. This framework was considered to be an operational translation of the ethic of justice versus an ethic of care. The research questions that guided the present work are repeated in the following items.

1. Do males score higher than females in deontological moral orientation?
2. Do females score higher than males in teleological moral orientation?
3. Do males value more than do females some specific negative duties, namely:
  - a) not breaking a promise;

- b) not lying;
  - c) not killing an innocent; and
  - d) not violating property rights?
4. Do females value more than do males some specific positive duties, namely:
- a) compassion for animals;
  - b) togetherness;
  - c) responsibility for individuals; and
  - d) responsibility for the common good?
5. Do females manifest a degree of approval higher than that of males, when confronted with dilemmas that pit specific positive duties against one another, namely:
- (a) self-interest;
  - (b) responsibility for individuals; and
  - (c) responsibility for common good?
- 6 Do males score higher than females in apodictic moral judgments?

NOTE. These same questions raised about males and females were repeated with respect to "masculine" and "feminine" subjects.

#### 5.1 Remarks on the Sample and the Instrument

The instrument used in the present study consisted of a set of ten moral dilemmas, constructed for this work, plus

Kohlberg's well-known Heinz dilemma. Subjects were asked to rate each of two possible courses of action proposed in each dilemma. In so doing, subjects had to express approval or disapproval of moral choices associated with a deontological or teleological moral orientation -- that is to say, an ethic of rights or an ethic of care.

The instrument differs in two ways from those used in similar studies in moral development. The first innovation consists of the use of a pair of questions for the two "horns" of the moral dilemma. For example, in the case of dilemma 6 (Appendix A), the subjects were asked if Antonio should "kill the prisoner" and also if Antonio should "let the prisoner live". The purpose was to test the subject in relation to the two moral orientations of concern -- deontological and teleological.

Considering the first eight dilemmas, the negative correlation between the the two orientations collapsed over dilemmas is, as expected, fairly high (Pearson  $r = -.74$ ). The correlation between the two orientations in individual dilemmas is smallest for dilemma 5 (Pearson  $r = -.50$ ) and greatest for dilemma 3 (Pearson  $r = -.77$ ). Categorizing females and males for computational purposes as 1 and 2, respectively, the correlation between sex and the deontological orientation is  $r = -.27$ , and that between sex and the teleological orientation is  $r = .20$ . The correlation

between the deontological and the teleological orientation, sorting the sample by sex, is  $r = -.78$  for females and  $r = -.66$  for males. The analyses of variance summarized in Table 8 indicates that the sex effects for the two orientations are not of the same magnitude. That difference seems to suggest that it is not inappropriate to question the subjects regarding both "horns" of the moral dilemma.

The relative significance to the subjects of the two questions associated with each dilemma is reflected to a degree in the differences between the means of the two orientations (Tables 3, 4, and 7). In Table 7 these differences run from  $-0.30$  (dilemma 4) to  $-1.30$  (dilemma 2).

A second methodological innovation of this study consists of the use of an evaluative scale containing six different judgments, from 1 to 6 ("condemnable", "rather incorrect", "doesn't matter", "admissible", "fairly correct", "obligatory" ) (see p. 29, Figure 1 ). This 6-point scale was intended to be more sensitive as an indicator of subjects' appraisals than the traditional way of questioning in terms of "should-should not". James Rest (1979) used a 3-point scale ("should", "can't decide", "should not") for appraising moral decisions, and used a 5-point scale ("great", "much", "some", "little", and "no") only to evaluate the weight of different reasons in the process of decision making. Strictly speaking, the subject is faced with

two options -- "should-should not" -- since the category "can't decide" implies a suspension of judgment.

The six evaluative categories used in the present work were selected on intuitive grounds and without any scientific or philosophical basis. The equality of intervals between the six values of the scale is assumed to be only approximate and it is possible that the labels are not completely free of ambiguity. Subjects were provided with an explanation of the scale (Appendix B) and the instructions invited them to go back to refresh their memories as often as needed.

An apparent incongruence is manifest when the overall rating means are examined. Most of the means are not far from 3.50 (the overall mean is 3.53 -- see Table 6). However, this does not mean that the subjects tended to judge most of the issues as "doesn't matter". On the contrary, the percentage of "doesn't matter" in the whole set of data is 8.7 %, whereas the expected chance percentage would be around 16.6 %. By including the value 3 ("doesn't matter"), it was intended to provide the subjects with an opportunity to judge that a certain issue had no moral implications (yet, this would still be a judgement made from a moral point of view). Sometimes a doubt arose as to whether subjects understood a given dilemma or whether they wanted to express their own difficulty in deciding by using this value

as a substitute for "can't decide". For example, with respect to dilemma 6, first question, four subjects (5.6 % of the total number of subjects) appraised with "doesn't matter" an issue that was concerned about killing a prisoner. Though the meaning of these answers is not clear, there is no evidence of sexual bias in this type of reaction.

### 5.2 The Variables of Sex, Masculinity, and Femininity

This study purported to deal primarily with one independent variable, namely, sex (males and females). Additionally, the same research questions that were asked about males and females were posed with respect to "higher-" and "lower-femininity" as well as "lower-" and "higher-masculinity" subjects.

These additional variables proved useless, as far as the type of analysis that was followed in Chapter IV is concerned. The potential relevance of the sex-role variables (i. e., high vs. low femininity, high vs. low masculinity) was suggested by two studies -- by Leahey & Eiter (1980) and by Pratt and Royer (1982). The study by Leahey & Eiter (1980) indicated that the sex-role conceptions of the self tended to be more consistently related to moral stage level (in Kohlberg's system) for adolescent females than for males.

Pratt and Royer (1982) used a modified version of Rest's (1979) DIT preference technique. They found an association between femininity of ideal self and the responsibility orientation in women, whereas they failed to show association of the responsibility orientation with sex differences or with the "real" self concept. In the present study, no association was found between "real" self-concept, assessed through a sex-role inventory, and moral orientation, whereas a significant association was found between sex and moral orientation. However, there is no strict contradiction between the two sets of outcomes, since the present work did not deal with the question of a possible association between moral orientation and "ideal" self concept.

### 5.3 Sex Differences and Moral Orientation

Research questions number 1, 2 and 5 are answered negatively. However, the results included three statistically significant effects opposite to those which had been predicted -- namely: (a) a statistically significant interaction effect between sex and orientation; (b) a statistically significant simple effect for sex with respect to the deontological questions associated with the first eight dilemmas; and (c) a statistically significant sex effect for the the deontological questions (positive duties) involved in all of the various questions regarding the last three dilem-

mas. These significant effects reflect a double morality conception linked to sex differences, though with signs (directions of differences) opposite to those designated by Gilligan (1977).

It does not seem reasonable to try to develop a special theory to explain the findings. Unless other empirical studies appear confirming the existence of a specialization of moral orientations, it seems more reasonable to conclude only that the current theories concerning double morality do not fit the available empirical evidence.

Were the subjects following distinct deontological and teleological principles when they judged the respective questions that were purported to involve these principles? The present study was not intended to answer this question. An evaluation of the instruments used would call for obtaining the reaction of expert judges, checking for reliability, interviewing the subjects about each dilemma, and, perhaps, using more specific techniques such as getting the subjects to think aloud. A cursory examination of the results of this study seems to support an assumed -- not proved -- reliability (and perhaps validity) of the instrument, on the grounds of the relative consistency of patterns found in the male and female ratings.

#### 5.4 Sex Differences in Specific Types of Negative and Positive Duties

Research questions 3 and 4, regarding specific types of "negative" and "positive" duties, were answered consistently with the findings discussed in the preceding section. Both questions had a negative answer and, with regard to research question 3, the evidence showed females scoring higher than males with respect to negative duties.

This finding does not add new information to question number 1 (concerned with the deontological moral orientation generally). The purpose of including this topic was to check about the possibility of identifying more finely-grained distinctions within each of the moral orientations in question. The legitimacy of categorizing certain questions into types of positive and negative duties has yet to be investigated in theoretical, phenomenological, or statistical terms.

#### 5.5 Sex Differences and Apodictic Judgements

Research question number 6 was answered negatively. No evidence appeared showing that sex differences exist in the use of more stringent moral categories, such as "it is condemnable" or "it is obligatory".

This research question was suggested by theoretical reasons that were referred to earlier. On practical

grounds, this variable was dealt with because it seems that, when most studies in the field ask the classical question "should-should not", they are using a 2-point scale equivalent to "obligatory-condemnable". Answers given to the Heinz dilemma (Appendix A -- story number 8) indicate that most subjects would prefer to use categories different from "obligatory-condemnable". From among 72 subjects, 16 reacted to the first question by responding "obligatory" or "condemnable" ("condemnable" = 14; "obligatory" = 2 ) and 12 from among 72 did the same with the second question ( "condemnable" = 10; "obligatory" = 2 ). The overall mean across dilemmas was 8.4 for "condemnable" and 9.3 for "obligatory", with a possible range from 0 to 72.

#### 5.6 Conclusion

Some inferences are suggested by the results of the present study. This study failed to find support for the prevalent theory about sex differences in moral choices. In fact, what is more interesting, some evidence has been obtained that seems to run in the direction opposite to what had been hypothesized.

The following items summarize the most important findings.

- a) "Sex" was found to be a significant factor in relationship to the moral assessment of choices made in

situations of conflict of duties; in contrast, the dichotomized variables "femininity" (high vs. low) and "masculinity" (high vs. low) were not shown to be significantly related to deontological or teleological orientation, and, consequently, to positive or negative duties.

- b) The results failed to confirm the expectation that males would score higher than females in strength of deontological moral orientation, or that females would score higher than males in strength of teleological orientation.
- c) On the contrary, in opposition to some theories currently in vogue, evidence was found that female ratings in appraising the deontological questions are significantly higher than male ratings.
- d) Some evidence was found indicating that sex interacts with moral orientation in that the difference between female and male ratings in appraising moral choices, which favors the female ratings with respect to deontological orientation, tends to favor the male ratings with respect to the teleological orientation.
- e) The present study failed to find evidence supporting the expectation that males would value more than do females certain types of negative duties.

- f) On the contrary, also in opposition to some currently influential theories, some evidence was found that females value more than do males certain types of negative duties, such as: (a) not breaking a promise; (b) not lying; (c) not killing; and (d) not violating property rights.
- g) This study failed to find evidence confirming the expectation that females value more than do males certain types of positive duties, such as: (a) compassion for animals; (b) togetherness; (c) responsibility for individuals; and (d) responsibility for the common good.
- h) In dilemmas that exclusively pit positive against positive duties, the present study failed to find evidence supporting the expectation that females would manifest a degree of approval higher than that of males.
- i) On the contrary, in opposition to what had been predicted based on theoretical grounds, some evidence was found showing that males value more than do females certain positive duties that had been pitted with each other, such as: (a) self-interest; (b) responsibility for individuals; and (c) responsibility for the common good.

j) No evidence was found supporting the hypothesis that males would score significantly higher than females in apodicticity of moral judgments -- that is to say, males did not significantly more often than females use the most stringent judgments of the scale employed in this study ("it is obligatory" and "it is condemnable").

An attempt to reconcile the results of this study with current prevalent theories regarding sex-typed moral development raises perplexing questions about such an inconsistency. Some caveats should be kept in mind when considering the main findings of this study. First, although the instrument used in this study seems promising, its psychometric properties need to be investigated. Second, the sample was selected among a rather meager and biased accessible population; the possibility exists that the results are due to idiosyncratic characteristics of the accessible population that was used. Third, if the evidence found in this research is confirmed in subsequent studies, a theory has to be constructed or an ad hoc explanation has to be attempted to account for the findings, which do not seem consistent with currently popular theories in the field. Fourth, a perfunctory examination of the correlations between the variable "sex" and the other dependent variables shows that the classificatory variable "sex" accounts only for a small percentage of the variance present in the data.

The conclusions of this work seem to cast into doubt some popular conceptions about the morality of males and females. The evidence gathered in the present study contradicts the theories that attribute to men the morality of prohibitions and to women the morality of good deeds. More evidence is required, however, to accept as definitive the reversed pattern that is manifest in the results of this study.

### 5.7 Suggestions for Future Research

The results of the present study are perplexing; they suggest a need for a straight replication with an enlarged accessible population. In such replication, the measure of "real" self-concept might usefully be replaced by a measure of "ideal" self-concept.

Other useful contributions would include (a) a study of the psychometric properties of the instrument (dilemmas and evaluative scale); (b) a phenomenological analysis of the dilemmas (how do subjects structure cognitively and affectively the issues involved in the content?); (c) an examination of the advantages of including the two questions or only one question associated with each dilemma; (d) an examination of the effects of pitting negative against negative duties; and (e) the inclusion of alternative independent classificatory variables such as the "ideal" self-concept or other dimensions of the personality.

## APPENDIX A

BOOKLET OF STORIES: MORAL  
DILEMMAS USED IN THIS STUDY

## BOOKLET OF STORIES

STORY NUMBER 1 -- MIKE

Mike is a high school student. This year, when the hunting season opened, Mike got a job. He was hired to post himself on the top of a hill and indicate to the hunters if any deer appeared. On the second day, he saw a pair of young deer and felt sorry for them.

Now Mike has a problem. If he does not inform the hunters about the presence of the deer, he fails to perform his job; if he does his job, he will inform the hunters and the deer will be killed.

Should Mike signal to the hunters, --that is, do what he was hired for?

Should Mike keep quiet and protect the lives of the deer?

STORY NUMBER 2 -- SANDY

Sandy was an American university student on vacation in Europe. During a trip in the Eastern European countries, Sandy came to know a young Russian man, named Semyon, who worked for his government. Though they were not close

friends, it happened that once, at a party, they got to talking and having some drinks together. Sandy got curious and asked him about his work. She promised to keep whatever he told her secret, and he gave her some important details about the Russian involvement in the Middle East. When Sandy returned to the U.S., she realized how important these secrets could be for the safety of her own country.

Now Sandy has this problem to solve. On the one hand, she does not wish to break her promise, but, on the other hand, she thinks she could help her country.

Should Sandy disclose the secrets, for the safety of her own country?

Should Sandy keep the information secret, as she promised?

### STORY NUMBER 3 -- EDDIE

During the time of the civil rights movement, some members of the KKK in Tuscaloosa, Alabama, murdered an integration leader and tried to place the blame for the crime on an innocent black man, called Greg. Eddie Farrel was a night watchman in the city. Though Eddie had seen the black man at the scene of the crime, he did not let himself be fooled, because he knew all the facts with certainty. How-

ever, for reasons too complicate to explain here, he felt he was unable to supply evidence in court against the real murderers.

During the trial, Eddie realized two points. First, no one except him had seen the black man at the scene of the crime. Second, the real murderers had "planted" circumstantial evidence in such a way that, if he ever testified to having seen Greg at the scene of the crime, the jury would likely be convinced they should condemn the innocent defendant to die.

Should Eddie tell the truth -- that he had seen the defendant at the scene of the crime -- even though the jury might as a result be induced to condemn an innocent man to die?

Should Eddie declare falsely that he was not sure he recognized the defendant, though in doing so he would not be telling the truth?

#### STORY NUMBER 4 -- JEANETTE

Jeanette is a ninth grader. She has three classmates -- Jane, Greg, and Lucy -- who are all good friends. Last Saturday, she was working in the school with her friends and she saw them fooling with the electric control board and

damaging some of the wires. On the following school day, the teacher turned on the lights and a shortcircuit damaged a fuse in some electronic equipment; replacing the fuse would cost only a few dollars. The teacher was infuriated and asked the students whether they knew anything about what had happened. Jeanette's friends denied that they knew anything.

Now Jeanette has a problem. If she tells what she knows, her friends could be severely punished.

Should Jeanette keep silent about what she knows and so protect her best friends?

Should Jeanette tell the teacher what she knows and so respect the truth?

#### STORY NUMBER 5 -- MAURICE

Maurice was a pilot in the French Air Force. He was married to Agnes, whom he loved. When World War II started, the Nazis tried to kill a French politician, known for his anti-Nazi activities. The Nazis had always failed in their attempts and now they tried to use kidnapping to accomplish their purpose. When Agnes was on vacation in Italy, she was kidnapped and taken to a hidden place. Then Maurice was informed that, if he did not kill the politician, they would kill his wife Agnes.

Though Maurice will not be discovered if he bombs the politician's house, he is reluctant to comply with this demand. However, that is the only way to save his wife.

Should Maurice refuse to bomb the politician's house, though he would lose his wife as a result?

Should Maurice agree to bomb the politician's house, though the politician is an honest man?

#### STORY NUMBER 6 -- ANTONIO

The French Emperor Napoleon sent an army to invade Portugal in 1810. The French troops were killing and robbing Portuguese citizens, and ravaging monuments. During the siege of the city of Coimbra, the French army intercepted a Portuguese military courier. This military messenger was interrogated under torture and, when he was about to collapse, the French took him to the city hospital to be treated before the definitive interrogation was to be conducted. There was a Portuguese officer, called Antonio, who was in the hospital, disguised as a janitor. Antonio recognized the prisoner as the expert who had designed plans to expell the foreign invaders. It would be a national catastrophe if the invaders came to know these plans.

Antonio, during the next few minutes, must choose whether to let this prisoner live or to kill him to prevent him from revealing the secret plans and thus damaging the whole nation.

Should Antonio kill this prisoner, even if the prisoner is his countryman and is innocent of any voluntarily committed crime?

Should Antonio let the prisoner live, even if this endangers the independence of his nation and the security of his fellow citizens?

#### STORY NUMBER 7 -- MRS. MCMASTER

In 1929, Fred McMaster and Sean O'Brien died in a car accident. The two men were neighbors in Lone Tree, Iowa. Their widows faced different economic conditions. Mrs. McMaster would have to try to run a small farm with restricted credit, due to the great depression. Her only son, James, seemed doomed to having to abandon his dream of becoming a lawyer. Mrs. O'Brien, in contrast, possessed a solid fortune. A few weeks after the unfortunate casualty, Mrs. McMaster discovered a sack containing several thousands of dollars. However, a private note signed by her husband explained that this money was owed to the O'Briens and was due to be paid at this time.

Mrs. McMaster is pondering if it would be wrong to keep her discovery secret for a period of some years. With this money, James could pursue his career and at a later time would pay the O'Briens the amount owed plus interest.

Should Mrs. McMaster announce her discovery without delay and, in so doing, respect the O'Brien's rights?

Should Mrs. McMaster delay the announcement of her discovery for some more years in order to assure her son's getting his education?

#### STORY NUMBER 8 -- HEINZ

In Europe, a woman is near death from a special kind of cancer. There is one drug that the doctors think might save her. It is a form of radium that a druggist in the same town has recently discovered. The drug is expensive to make, but the druggist is charging ten times what the drug cost him to make. He paid \$200 for the radium and is charging \$2000 for a small dose of the drug. The sick woman's husband, Heinz, goes to everyone he knows to borrow the money, but he can get together only about \$1000, which is half of what it costs. He tells the druggist that his wife is dying and asks him to sell the drug cheaper or let him pay later. The druggist says, "No, I discovered the drug and I'm going to make money from it."

Heinz is desperate and considers breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug that might save his wife?

Should Heinz accept the druggist's decision and so respect the druggist's rights?

#### STORY NUMBER 9 -- BESSIE

Bessie is ten years old. She had just come home from school when she looked out of the window and saw her classmate, Erik, crying and running through the street. He was being pursued by a drunk man who tried to beat him with a big stick. Bessie knew that her house was locked. She wanted to help, but at the same time she feared the danger.

Bessie has this problem to solve. If she does not unlock her door, her friend may be hurt badly. If she opens the door, the drunk man may force his way into the house and she will also be in great danger.

Should Bessie keep the door locked and avoid getting involved in the matter?

Should Bessie open the door and try to help her friend, at the expense of her own personal safety?

STORY NUMBER 10 -- HELEN

Helen is an orphan. Her parents died when she was an infant. Then she was adopted by the Stevensons, who are an old couple, living on a farm. The Stevensons have no children or near relatives. They love Helen very much and she loves them. Helen is now nineteen years old and she wants to leave the farm to study at the university. This is the second year she has been waiting to leave.

Helen has a problem to solve. Her adoptive parents are too old to endure any change. Helen fears they would die sooner if they moved to the city or if she left them. However, so long as she does not leave the farm, she will not realize her ambition to study at the university.

Should Helen stay with her adoptive parents as long as they need her, even if she has to forego the pursuit of her career for some time?

Should Helen refuse to stay with her adoptive parents as long as they need her, even if they are likely to suffer from her departure?

STORY NUMBER 11 -- HUGO

Hugo was an infant when his parents died and since then he has been living with his oldest brother, Faust, who is a

high ranking army officer. Now Hugo has graduated from the university. Hugo has been wondering about Faust's economic resources that seem to allow for a very high standard of living. Recently, Hugo was terribly disturbed by the discovery that his brother was a spy working against his own country.

Hugo tried in vain to keep Faust from continuing this practice, which was threatening the safety of the nation.

Should Hugo report his brother to the authorities, and so manifest his loyalty to his country?

Should Hugo keep silent regarding his discovery about his brother's activities, because of his relation to him?

APPENDIX B  
INSTRUCTIONS AND SCALE USED TO  
RATE THE MORAL DILEMMAS

## INSTRUCTIONS AND SCALE USED TO RATE THE MORAL DILEMMAS

## INSTRUCTIONS

You are asked to make your best judgment about the decisions that are made in the following stories. Your answers will be kept anonymous. Your judgment is supposed to be made under the hypothesis that there are only two possible solutions for each problem. Therefore, the two questions that follow each story are to be read together, before making a judgment.

Please check one of the six positions that you will find in the rating scale that follows each question. Choose, from among six labels, that one which comes closest to reflecting your own view about the decision in question. Note that the core of each decision to be judged is underlined in each question.

The words used as labels in each scale have the meaning of common language, as you can verify on the next page. If you forget the meaning of the scale, please come back to page 2 to refresh your memory.

## SCALE USED TO RATE EACH DECISION

1	2	3	4	5	6
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
condem- nable	rather incorrect	doesn't matter	admissible	fairly correct	obligatory

- (1) Obligatory (morally) means that a given choice ought to or should be made. A moral obligation is implied.
- (2) Fairly correct (morally) means that a given choice is morally right or appropriate, though a moral obligation is not implied.
- (3) Admissible (morally) means that a given choice is not praiseworthy, but it constitutes the minimal conditions for moral acceptability.
- (4) Doesn't matter (morally) means that a given choice is morally neutral. Moral values are not involved.
- (5) Rather incorrect (morally) means that a given choice involves moral imperfection; moral objections to the choice can be made, though not of an extremely serious nature. This label is less extreme than condemnable.
- (6) Condemnable (morally) means that a given choice is morally reproachable or blameworthy; serious moral objections to it can be made.

PLEASE DO NOT SKIP ANY QUESTION. THANK YOU.

APPENDIX C  
BIOGRAPHICAL DATA

## QUESTIONNAIRE

NOTE: this last questionnaire is also anonymous. Please do not leave any item unmarked.

1. Please, CHECK THE YEAR in which you are currently enrolled:

a) Undergraduate (Col.)    Fresh.    Soph.    Jr.    Sr.:

b) Graduate (Col.)            MA program            Ph.D. program:

2. SEX                            Male                            Female:

3. Is Your NATIVE LANGUAGE English?    Yes                            No:

4. YEAR OF BIRTH: 19\_\_

THANK YOU for your cooperation.

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