

# A case study of theory development: moral behavior in nursing

The theoretical considerations, operationalization of the constructs, and measurement issues of an ongoing program of research designed to explain ethical practice in nursing are presented. They illustrate the constant give and take among research, the empirical world, and theory building. This case study depicts the iterative and complex process of developing constructs and relationships, based on research findings, that explain moral behavior in nursing practice.

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**T**HE THEORETICAL rationale, investigational processes, and empirical findings from an ongoing program of theory development are designed to explain the construct of moral behavior in nursing. This article presents some insights into emerging components of a model, taking a developmental approach to the research that will eventually coalesce into a theory of ethical practice in nursing. Moral reasoning is first described since it provided the initial stimulus for the development and operationalization of moral behavior.

## MORAL REASONING: THE INITIAL CONSTRUCT

Moral reasoning is defined as a cognitive and developmental process characterized by the sequential transformation of the way in which social arrangements are inter-

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preted. Each successive stage in the developmental process of moral reasoning is more complex, comprehensive, differentiated, and effective than the preceding stage, and is characterized by the distinctive ways in which dilemmas and crucial issues are evaluated.<sup>1</sup> The intellectual lineage of the concept of moral reasoning can be traced to the works of Dewey<sup>2</sup> and Piaget.<sup>3</sup> Dewey was the first to suggest that, during childhood, individuals proceed through consecutive stages in the development of moral reasoning. The intellectual process of advanced moral reasoning, according to Dewey, requires a rational approach that takes into account alternative courses of action. He also suggested that, in dealing with a moral dilemma, an individual needs to place the specific conflict within a more global context. Finally, resolution involves an active and personal decision by the individual. Such intellectual processing requires higher levels of reasoning and logic. Thus Dewey, as an educator, posited that the aim of education is to promote intellectual and moral development and to supply optimal conditions under which such development can take place.

Piaget also explored the nature of intellectual growth and development during childhood. Through a process of systematic observation and interview, he discovered that as individuals physically mature and gain social experience, they progress through a series of discernible stages of cognitive growth. According to this framework, individuals begin constructing a mental image of the world in early infancy by means of the sensory and motor systems. The child progresses into a preoperational stage characterized by egocentric,

highly personal thought processes and problem solving based on intuition and appearance. The concrete operational period is marked by the advent of the operation, "an internalized action that is part of an organized structure."<sup>4(p39)</sup> With this intellectual tool, children are able to overcome many of the earlier limitations in reasoning as they consider intentions in evaluating actions and are increasingly aware of the subtleties involved in various social relationships. The formal operational period represents the final stage in intellectual development. The individual capable of hypothetico-deductive thought formulates hypotheses, isolates critical factors, and deals with propositions and abstractions. Piaget's study of cognition in childhood led to his further exploration into the manner in which developmental patterns of intellectual reasoning are used in considering moral issues.

Kohlberg's<sup>5,6</sup> formulation on moral development extended the works of Dewey and Piaget. Through 20 years of longitudinal and cross-cultural study, Kohlberg focused on the development and processes involved in moral reasoning as opposed to the content of moral choice. According to Kohlberg, stages of moral development have several important characteristics. First, each stage is considered a "structured whole," an organized system of thought within which individuals consistently function in their moral judgments. Second, stages are organized in an invariant sequence through which individuals move forward from simple thought to complex moral reasoning. Finally, Kohlberg employs the concept of "hierarchical integrations" in which thought processes involved in higher levels of moral develop-

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ment incorporate intellectual tools derived from earlier levels.<sup>7(p242)</sup>

The stages of moral reasoning, according to Kohlberg,<sup>8</sup> are (1) preconventional, where externally established rules determine right or wrong action; (2) conventional, where expectations of family and group are maintained, and loyalty and conformity to the existing social order are considered important; and (3) postconventional, where the individual autonomously examines and defines moral values and principles apart from the group norms of the culture, with decisions of conscience dictating the right action.

Kohlberg also proposed that certain conditions may stimulate or account for the level of moral development. Among these are the individual's stage of intellectual development and the concurrent social and educational climates. Under this model, those people capable of processing information at the level of formal operations will be more advanced in their moral development than those at the level of concrete thought. In addition, environments that provide opportunities for group participation, shared decision making, and assumption of responsibility for consequences of action tend to stimulate the development of higher levels of moral judgment.<sup>5(p183)</sup> Similarly, when education is structured to create cognitive conflict and disequilibrium by showing inadequacies in a person's mode of thinking, the individual is stimulated to seek higher and more adequate ways to reason about moral choice.<sup>9</sup>

To this point, moral development had been the construct under examination for the research. This, however, as conceived, did not require any translation, derivation,

or synthesis into nursing. It described an aspect of human behavior and, as such, was universal in its character.

## MORAL DEVELOPMENT AND MORAL BEHAVIOR

An implicit assumption prevails in the literature that persons at higher stages of moral reasoning are more likely to act morally than those at lower stages. Such an assumption appears to be more inherent in the definition of postconventional principled reasoning than one based on a body of empirical evidence. Thus, the suggestion has been advanced that a nurse at the principled level of moral reasoning would be more likely to question authority and abide by social norms to the extent they serve human values.<sup>10</sup> Similarly, Murphy<sup>11</sup> contended that it is principled thinking that enables nurses to act as morally responsible agents and as advocates for patients' rights. Assertions such as these suggest that an inference has been made from the stage of the individual's moral thought processes to the content of the moral choice and the nature of the ensuing moral act itself. Although some tentative evidence may be available to indicate otherwise, for the purposes of this research, moral reasoning and moral behavior were considered distinct concepts. Moral reasoning refers to the thought processes and cognitive deliberations involved in considering ethical issues, while moral behavior consists of the decisions made and actions taken.

As health care professionals, nurses often find themselves in the position of client guardian and caretaker. As such, they must make authoritative decisions and

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act on those decisions. It is of utmost importance, therefore, that nurses practice morally, according to the established standards of the profession. It is also critical that nurses' moral behaviors be based on thought and reflection (higher levels of moral reasoning) rather than on considerations such as intuition, self-interest, or pragmatic concerns. Within this context, both ethical behaviors and moral reasoning were seen as important considerations in the development of a theory to describe ethical practice in nursing.

While the concept of moral reasoning was found to be fairly well developed and described in the literature, the construct of moral behavior, particularly within the context of professional nursing practice, had not been adequately developed. Blasi<sup>12</sup> reviewed the literature on moral behavior and found that this construct was characterized in terms of delinquency, honesty, altruistic behaviors, and resistance to conformity. Authors have also characterized moral behavior in terms of concern for others and responsible behavior, promise keeping, altruistic commitment, and helping a stranger in need.<sup>13-16</sup> None of these approaches was deemed appropriate or relevant to the context of interest. Thus, the next phase in the theory development process was to conceptually define the construct of moral behavior in nursing

practice and develop a method for its quantification and operationalization.

## EMPIRICAL PROCESSES OF THEORY DEVELOPMENT

### Conceptual definitions

Since the focus of this theory development process was on moral reasoning and ethical behaviors in professional nursing practice, the American Nurses' Association *Code for Nurses*<sup>17</sup> was selected as the framework for assessing behaviors in morally relevant situations. The main purposes of the *Code* are to provide a standard for desirable professional behavior and to serve as a guide for nurses in resolving ethical conflicts that arise in practice. The standards are high and, in most cases, far exceed legal mandates for safe nursing care. Using the *Code for Nurses* as the criterion for professional and moral behavior, a dimension of moral behavior called "professionally ideal moral behavior" was identified. This dimension was defined as professionally valued and ideal nursing behaviors that are congruent with the principles expressed in the *Code for Nurses*.

It is important to note that ethical behavior "presupposes an agent who is free of undue coercion in decision-making."<sup>18(p7)</sup> There are many instances, however, when the nurse is not in the position of a free agent. Curtin grouped the ethical dilemmas nurses face into two categories: "(1) those which arise as to institutional policies and physician orders regarding medical care, and (2) those which arise from the usurpation of the legitimate authority of the nurse vis-à-vis nursing decisions regarding nursing care."<sup>18(p8)</sup> Jameton<sup>19</sup> contended that

14 although nurses assume many responsibilities they have little authority. Thus, nurses must deal with many ethical conflicts that arise as a consequence of the complexity of their roles and their positions in the organizational hierarchy. Jameton referred to this dilemma as the "nurse-in-the-middle" problem,<sup>19(p22)</sup> alluding to the possibility that what is described as ideal moral behavior might not be instituted in the realities of the practice setting.

Thus, given these realities, it was determined that, in describing and measuring moral behavior, provision needed to be made to address not only behaviors considered professionally ideal, but also the extent to which such behaviors are likely to be carried out, given the constraints perceived to exist in institutional practice. This dimension of moral behavior was referred to as "perception of realistically likely moral behavior" and defined as the respondents' assessment of the extent to which nursing actions that are in accord with the *Code for Nurses* in simulated ethical dilemmas were likely to be carried out.

### Operationalizing constructs

The next step in the theory development process was to formulate operational definitions and devise an instrument that would adequately measure the two conceptually derived dimensions of moral behavior—professionally ideal moral behavior and perception of realistically likely moral behavior. Thus, the Judgments about Nursing Decisions (JAND) was constructed (S. Ketefian, unpublished data, June 1983). JAND is a self-administered, objective test with six stories depicting

nurses in ethical dilemmas. Each story is followed by a list of six or seven nursing actions. For each nursing action, respondents check "yes" or "no" in each of two adjoining columns. In column A, which measures professionally ideal moral behavior, respondents indicate whether they thought the nurse experiencing the dilemma in the story should or should not engage in that action. In column B, designed to measure perception of realistically likely moral behavior, respondents indicate whether they thought the nurse experiencing the dilemma is likely to engage in the nursing action. There are a total of 39 items in the test. The current test is a revision of the version utilized in previous research.<sup>20</sup>

Following the initial questionnaire item development, nurse clinicians were consulted to confirm that the conflict situations included in the instrument were representative of the domain of ethical conflicts that nurses experience in practice. In addition, seven experts on nursing ethics were asked to evaluate each item in terms of the extent to which it embodied the tenets of the *Code for Nurses*. Once the content validity of the instrument was satisfied in this manner, it was determined that the instrument would be scored by assigning a weight of one for each appropriate nursing action selected and a zero for an inappropriate action. These would be summed to yield a score for professionally ideal moral behavior and a score for perception of realistically likely moral behavior.

Empirical evidence for the construct validity of the JAND was obtained through a number of related studies. As discussed previously, reports in the litera-

ture have suggested that the reasoning process involved in moral choice is related to the kind of choice made.<sup>6,12,21</sup> It was therefore hypothesized that the higher the nurses' developmental level of moral reasoning, the more likely it was that the nursing actions they chose would be in accordance with those advocated in the *Code*, as reflected in high scores on the JAND. Accordingly, a sample of 79 nurses engaged in practice, of whom 43 held baccalaureate or higher degrees and 36 held either diploma or associate degrees, were administered the JAND and the Defining Issues Test (DIT). The latter has been demonstrated to be a valid and reliable measure of moral reasoning.<sup>22</sup> The Pearson product moment correlation between the perception of realistically likely moral behavior scale of the JAND and moral reasoning measured by the DIT was 0.19 ( $P < 0.05$ ). While the magnitude of this correlation was not impressive, it provided tentative evidence of construct validity for the JAND.<sup>23</sup>

Additional empirical support for the validity of the JAND was obtained from the sample described above by comparing the moral behavior scores of the two educational groups. Professional education and technical education are purported to be diverse forms of preparation for different types of nursing practice. This is particularly true with respect to collegiate emphasis on theoretical and research-based knowledge,<sup>24</sup> development of intellectual skills and operations,<sup>25</sup> engagement in complex problem-solving,<sup>26</sup> autonomous decision making, and assumption of individual responsibility for the consequences of one's actions.<sup>27</sup> It was therefore postulated that professionally and technically prepared nurses would dif-

fer in their identification of realistically likely moral behavior as measured by their performance on the B column of the JAND. This hypothesis was supported ( $t = -1.73$ ,  $df = 77$ ,  $P < 0.05$ ).<sup>28</sup>

The factor structure of column B, the perception of realistically likely moral behavior dimension of the JAND, was also explored in an effort to further establish the validity and reliability of the questionnaire. Data obtained from 489 practicing nurses were utilized in the analyses. A principal component factor analysis with varimax rotations was performed on the intercorrelation matrix among the 39 items from the column B scale. Varimax solutions were explored in four through eight dimensions following the application of screen tests on the initial 14 factors with eigenvalues greater than or equal to one.<sup>29</sup> Items were retained that correlated 0.30 or higher with a given factor. The simplest factor structure was observed in the seven-factor solution. Seven dimensions of moral behavior were identified (S. Ketefian, unpublished data, June 1983). Cronbach's formula for coefficient alpha was employed to calculate an internal consistency of 0.66 for the 32 retained items of column B. These 32 items were utilized in subsequent analyses involving this dimension of moral behavior. Coefficients of internal consistency calculated across different registered nurse samples ( $N = 309$ ) range from 0.66 to 0.73.

Research to this point had focused on conceptually defining and developing a measure for moral behavior. Satisfied that the measure was indeed valid and reliable, the next step in theory development was to propose and empirically test those factors and relationships that might contribute to

- 16 explaining moral behavior among practicing nurses.

### Empirical testing of variable relationships

Studies were planned and conducted to test variable relationships. It was first theorized that high levels of perceived job autonomy would lead to increased job satisfaction and job performance and, hence, to greater assumption of personal responsibility for professional behavior in general and moral behavior specifically. It was further hypothesized that a high level of work pressure would lead to a decrease in job satisfaction, which would, in turn, interfere with nursing judgment and performance, as evidenced by lower levels of moral behavior. Data supported a positive relationship between perceived job autonomy and moral behavior ( $r = 0.16$ ,  $P < 0.05$ ,  $N = 186$ ), and a negative relationship between perceived job pressure and moral behavior ( $r = -0.14$ ,  $P < 0.05$ ,  $N = 197$ ). Perceived job autonomy and perceived job pressure together accounted for greater variance in moral behavior than either variable alone ( $F = 3.5$ ,  $df = 2$ ,  $182$ ,  $P < 0.05$ ) (S. Ketefian, unpublished data, September 1984).

In another study, it was hypothesized that nurses' professional-bureaucratic role conceptions influence the extent to which they practice in accordance with their professional values.<sup>30</sup> Professional role conception referred to the individual's value orientation with regard to the nursing profession, ie, commitment to practice standards, involvement in professional organizations, belief in scientific knowledge as the basis for nursing practice, and

exercise of professional judgment in decision making. Bureaucratic role conception referred to values of loyalty to the employing institution and those in authority, and following administrative rules and routines.<sup>31</sup>

Each of these role conceptions was broken into two subscales: the normative scale described the ideal nursing role, while the categorical scale reflected a perception of the actual practice of the role. The professional, categorical role conception was positively related to moral behavior ( $r = 0.30$ ,  $P < 0.001$ ), while the professional, normative role conception was negatively related ( $r = -0.13$ ,  $P < 0.05$ ).

The relation of bureaucratic normative and categorical role conceptions to moral behavior could not be clearly interpreted. Hierarchical, multiple regression analysis showed that the combination of professional normative and bureaucratic normative role conceptions, as well as professional categorical and bureaucratic categorical role conceptions, accounted for greater variance in moral behavior than either element in each pair of variables alone. Analyses generally showed that the professional role conception, especially the categorical, is a better predictor of moral behavior, contributing greater variance than the bureaucratic role conception.<sup>30</sup> However, given the magnitude of the relationships observed, the findings of this study need to be viewed as suggestive rather than definitive.

### THEORETICAL CONSIDERATIONS BASED ON EMPIRICAL EFFORTS

The purpose of this exploration has been to develop a model of ethical decision

making based on the results of empirical research. The approach described thus far has been inductive; rather than initiating the process with a formal model, the procedure began with a set of specific hypotheses that were tested empirically. Subsequently, the linkages discovered will form the basis of a theoretical model of ethical decision making. However, there is much more to be discovered before claiming to understand the nature of this construct. The difficulties with this approach lie not only in theoretical construct clarification, but in empirical complexities, including measurement issues, which intrude in a compelling way on one's theoretical efforts. The following theoretical considerations have arisen from the empirical efforts to date.

In describing the findings of studies relating moral behavior to other variables of interest, it has already been noted that due to the low magnitudes of the relationships, no definitive conclusions can be drawn. Thus, knowledge of linkages in a proposed model must remain tentative until further testing and replication occur.

Another area of consideration relates to measurement. The initial intent in devising the JAND was to gain insight into what nurse respondents thought they should do in an ethical dilemma. In analyzing data from column A (what the nurse in the dilemma should do), the range of scores and standard deviations were found to be quite low, with responses skewed toward the high end of the scale. Thus, subjects tended to respond in a professionally desirable manner by selecting nursing actions they knew were most appropriate. Because of the low variability in scores in column A and the concomitant low coefficients of

internal consistency (0.38 to 0.42), this scale was abandoned. Thus, column B became the single instrument to operationalize the construct of moral behavior.

Given this methodological constraint, the original question remained: What would nurse respondents say they would do when confronted with a selected ethical dilemma? To address this question, the following procedure was used. Forty-six nurses who had completed the original questionnaire (with columns A and B intact) were asked, following a three-week interval, to complete the instrument with different instructions. This time they were asked explicitly what *they* would do (column C) in each situation. Thus, three sets of data were available on these subjects: (1) what they thought the nurse should do (column A), (2) what they thought was realistically likely to be done (column B), and (3) what *they* would do in the situation (column C). Responses to column C were not significantly different from column A ( $t = 1.99$ ,  $df = 45$ ,  $P > 0.05$ ). However, there was a significant difference between the nurses' assessment of what they thought would realistically be done by the nurse in the story (column B) and what they claimed they would do in the same situation (column C) ( $t = 7.95$ ,  $df = 45$ ,  $P < 0.001$ ). Reliability scores for column C were low and similar to those in column A.

These findings suggest that nurses in this sample felt they would, in the given situations, behave in a manner consistent with the ideal, professionally appropriate nursing actions. Furthermore, the respondents felt that they were more likely to behave in this ideal manner than the nurse in the story. There is some question as to whether



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these findings validly reflect the respondents' approach to nursing practice. It would appear that the extent to which individuals can respond without bias on matters concerning their own behavior is questionable. The value of asking what the professionally ideal action should be (column A) is also in doubt due to the scale's inability to discriminate. In this case, the problem of social desirability may have been operating. The responses to column B (what the nurse in the story is likely to do) appear to be the most reliable scale for measuring moral behavior. The reasonable reliability of this scale must be tempered by the fact that no direct inference can be made to the respondents' own actions. Yet, what frame of reference would these respondents be using? How can they know

what another nurse would do? One must consider the distinct possibility that, in responding to what the nurse in the story would do, the subjects were reflecting what they are most likely to do but are doing so more objectively than if they were directly asked what *they* would do in the situation.

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There has been a tendency in the nursing literature to approach theory development in something of a recipe-like fashion, suggesting at times that the process is linear in both design and implementation. However, the reality of theory development is closer to a system of creative chaos, an untidy process where there is constant give and take among research, the empirical world, and theory building. In this mode, thinking and insights in one domain force modification and change in others.

Although the process is complex and often arduous, theory will develop when we have the knowledge at hand, that is, the knowledge, insights, and research about linkages and relationships that form the basis of the theory as a whole,

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