

Modeling and Measuring Caring Behaviors

Among Nursing Education Faculty

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## Abstract

The curriculum revolution of the 90s placed new emphasis on caring. Faculty modeling of caring behaviors is a key determinant in the development of caring in nursing students. The focus of this study was the need to evaluate the implementation of caring as a core value to be taught to students in nursing programs. The purpose of this project was to design, develop, and evaluate a quantitative instrument to measure nursing students' perceptions of caring and non-caring behaviors among nursing faculty. A thirty-item Likert-type questionnaire was developed using the existing research data pertaining to descriptors of caring behaviors. Internal consistency reliability was demonstrated ( $\alpha=.90$  for total instrument).

There has been a shift in the way nurse educators think about teaching caring. Since nursing became a profession, nurses have often perceived caring as something that is intricately and mysteriously intertwined with an individual's personality, as something that a person feels or does not feel and that can not normally be taught or acquired. The popular adage about nursing being "calling" rather than a profession is essentially predicated upon the notion that caring is an internal construct that cannot be taught. This anecdotal caring paradigm was challenged by a number of authors over the last two decades of the twentieth century, and nurse educators are now frequently giving some consideration about teaching students how to care.

In one of the earlier and more defining publications of the movement to teach caring, Leininger (1980) asserted that student nurses must learn about the construct of caring and how caring is demonstrated in nursing practice. She further states that it is the responsibility of nursing faculty to teach this caring behavior. Without instruction, opportunities for practice, and evaluation of caring in nursing programs, faculty members cannot be certain that their graduates are capable of including caring behaviors in their nursing practice.

Roach (1984) elaborated that it is an essential challenge for nursing to professionalize human caring by developing nurses' capacity to care in basic nursing education. Developing an environment in which caring models are visible and in which caring is considered an essential component of nursing practice cannot be underestimated in its ability to nurture the capacity of nursing students to understand and integrate caring into their nursing practice. While those who enter nursing may often have a desire to be caring, the ability to express and demonstrate caring must be developed along with other essential nursing skills. Caring behaviors must be actualized and affirmed by the presence of caring models if we expect nursing students to internalize caring as an integral component of competent nursing practice.

There have been numerous calls for further development of educational resources related to caring. Chinn (1989), for example, calls for nurse educators to match their teaching of caring with their other instructional behaviors and provide curricula that enable students to form meaningful human connections.

Motivated by this new focus on the teaching of caring, the National League for Nursing (1990) resolved to include a greater emphasis on caring in nursing education. The resolution passed unanimously and called for nursing curricula to reflect caring as a core nursing value.

Since that resolution in 1990, nursing programs have implemented numerous curricular changes intended to make the teaching and evaluation of caring central to nursing education. As entry-level nursing curricula are revised to reflect caring as a core nursing value, there is a need to evaluate the effectiveness of these curricular changes. Hanson and Smith (1996), in fact, specifically call for further research to develop meaningful ways to evaluate the presence and development of caring in nursing faculty and their students.

### Modeling Caring

Modeling is an effective way to teach students to care. Consciously or otherwise, modeling caring has always been used as an instructional strategy by nursing instructors. Nursing instructors often show students how to demonstrate caring behaviors by demonstrating those caring behaviors themselves. Modeling is one of the most ubiquitous of educational behaviors that focuses on the teaching of caring. Faculty modeling of caring behaviors is a key determinant in the development of caring in nursing students.

If modeling is to be used as a primary strategy for the teaching of caring, it is important for nurse educators to approach modeling as they would other instructional strategies: to legitimize and undergird the content with theory and to seek to evaluate the effectiveness of instruction in order to further develop the quality of that instruction. Theories of caring exist, as do many methods of evaluating the effectiveness of various teaching strategies, but the options

are currently fairly limited for those who wish to evaluate student perceptions of modeled caring behaviors.

Given the frequent use of modeling as an instructional strategy to teach caring among nursing faculty, the lack of a valid instrument with which to evaluate that modeling of caring was unfortunate. The problem addressed in this study was the need for a quantitative instrument to measure students' perceptions of caring and non-caring behaviors among nursing faculty. The purpose of this study was to design, develop, and evaluate a quantitative instrument to measure nursing students' perceptions of caring and non-caring behaviors among nursing faculty.

The development of this instrument is intended to serve as a means to evaluate the use of modeling as an instructional strategy to implement caring into nursing curricula. Nursing faculty who seek to effectively model caring have needed a valid tool with which to measure the extent to which students perceive instructor behaviors as caring and/or non-caring. Similarly, program administration, which must often be informed by subjective data, required a valid instrument to gather baseline data prior to implementing a new curriculum. The instrument may also be used longitudinally and formatively, to measure the effectiveness of curriculum changes that are manifested by changes in teaching behavior.

Evaluating the teaching of caring is not a luxury. With goal attainment measures currently a focus of many nursing program accreditation organizations, there is a need to quantify curriculum outcome data. The quality of evaluative procedures can greatly effect not only accreditation status, but also program funding and continuance.

### Methods

In order to accomplish the stated purpose of this study, the following was undertaken:

1. Likert type questionnaire items were designed to measure student perceptions of caring behaviors among nursing faculty.

2. The questionnaire items were used to develop a survey instrument that would yield useful quantitative data about student perceptions of caring behaviors among nursing faculty.
3. The instrument was evaluated using established validation procedures.

### Theoretical Foundations

The Miller Perceived Caring Index (MPCI) was developed from a review of the existing literature on caring and phenomenological studies. This review revealed common caring behaviors and concepts addressing the teaching of caring to nursing students. These common caring behaviors informed the development of the questionnaire items included in the MPCI.

The lived experiences of nursing students as expressed in qualitative studies identify the following twelve caring behaviors among nursing faculty: Role Modeling; Respect; Empathy; Openness/Genuineness/Honesty; Listening/Authentic Presencing; Motivating/Concerned about Learning/Inspires Learning; Sensitivity; Reinforcing/Responding; Encouraging; Relaxing; Availability/Flexibility; Competence/Prepared for Class; and Helpful.

### Research Design

In order to determine the efficacy of the final instrument, a formative evaluation model was central to the study. Evaluation at each of the developmental phases allowed the researchers to revise and change the instrument as needed.

#### *Step 1: Development of Questionnaire Items*

To generate optimal content validity, instrument design proceeded utilizing the suggested guidelines of Waltz, Strickland, and Lentz (1991). Objectives for design were listed to guide the development of the instrument. Questionnaire items were designed based upon the previously identified caring behaviors drawn from the nursing literature on caring.

A five-point Likert type scale was chosen to generate interval data, allowing for robust statistical analysis. A master list of questionnaire items was compiled and then evaluated by an expert panel consisting of two nurse educators from the university at which the instrument was developed. Panel members were provided information about the intended use of the instrument,

along with definitions of key concepts, and a list of the caring behaviors being measured.

Informal validation by the experts consisted of a review of the questionnaire items using a four-point rating scale that asked the panel member to rate the item as: 1) not relevant, 2) somewhat relevant, 3) quite relevant, or 4) very relevant (Waltz & Bausell, 1981). The criteria for judgment included: Items should be clear, unambiguous, and grammatically correct, items should show evidence of coverage, and items should show relevance to the construct of caring. The content validity index score was 100% and no revision of the instrument was required.

### *Step 2: Development of Questionnaire*

The development of the questionnaire was supported by the literature concerning the design and development of Likert type instruments and the measurement of social attitudes (Mueller, 1986). The questionnaire contained half positive and half negative items to preclude the possible effect of acquiescence response set. Two experts in the area of attitude measurement evaluated the questionnaire. These experts were asked to decide if the items, collectively, were comprehensive in measuring the domain of caring as described by the relevant literature. In order to promote accuracy in the participants' response, they were asked to give careful consideration to the kinds of information needed, structure, and format of questioning in addition to the choice of words in the items. An accurate and appropriate response of accurate interpretation of items asked so that an accurate response can be obtained is paramount. An effort was made to include items that were clear and concise in order to reduce extraneous information that might alter the accuracy of responses (Abbott & Bordens, 1988, p. 170). This procedure enhances the reliability of the questionnaire and adds to construct validity.

The panel experts were asked to rate each item as previously described. They were also asked to evaluate the structure of items and the overall format or appearance of the questionnaire. The response of the experts indicated 100% agreement for item structure, content, overall formatting, and appearance of the questionnaire.

### *Step 3: Evaluation of Questionnaire*

Formal validation and reliability procedures were conducted. Descriptive statistics included item mean and standard deviation. Inter-item correlation coefficients were computed using Cronbach's Alpha. The internal-consistency coefficients described similarity in measurement across items rather than stability over time or across forms. Only items with an Alpha Coefficient of 0.3 or higher were retained in the final questionnaire.

Construct validity considers attitude to be a legitimate and important entity in its own right (Mueller, 1986). There is no one procedure for establishing construct validity but it is determined, rather, by a combination of validation procedures. Two acceptable indicators and their procedures are: Content validity by the opinion of judges and internal consistency.

The use of the opinions of judges was accomplished in step one and two of the questionnaire development process. Experts were utilized to determine the appropriateness of questionnaire items and later the constructed questionnaire. Another important factor in the analysis of content validity was the manner in which behavioral descriptors were chosen for inclusion in questionnaire items. Self-report data, the actual words that consistently appeared in phenomenological studies, were used as caring behavioral descriptors. This was done in an effort to operationalize the actual descriptors of caring behaviors verbalized by participants in the phenomenological studies.

The internal consistency supplied evidence of construct validity. If a scale has a high index of internal consistency, the items are substantially intercorrelated. They are working together to measure the same underlying variable. This constitutes evidence that a construct is being measured. "The combination of content validity plus internal consistency supplies acceptable evidence of construct validity for attitude scales" (Mueller, 1986, p. 72).

### Data Collection, Analysis, and Results

The study began after approval by the committee for the protection of human subjects, at the university at which the instrument was developed. A cover letter was constructed as a means



of introducing and legitimizing the study. In the cover letter, participants were told that they had a clear choice to not participate in the study, that their identity would remain anonymous, and that all information would be treated in a confidential manner.

### *Field Trial 1*

The instrument contained 30 items that were scored in a Likert type scale: strongly disagree (1), disagree (2), no opinion (3), agree (4), and strongly agree (5). In order to minimize the acquiescence response set, fifteen of the items were negative statements, fifteen of the items were positive statements, and all items were randomly distributed in the questionnaire. Items scored a 4 or 5 indicate a positive attitude and items scored a 1 or 2 indicate a negative attitude toward the caring behavior being measured.

The questionnaire and demographics information sheet was assembled with the cover letter and consent and piloted on a group of 37 students in an associate degree nursing class. The questionnaire was administered in a controlled environment to help minimize the effect of history on the internal validity of the instrumentation.

Scores on this questionnaire can range from 30 to 150 for the 30 item total scale. Higher scores indicate higher levels of agreement about the attitudinal object (caring behaviors of faculty member). The total range of scores for this group was 111 to 150 with a mean score of 137. The item mean was 4.6, which indicated the group perceived the faculty member to exhibit a high number of caring behaviors.

Initial scale analysis for the 37 respondents, a convenience sample of associate degree nursing students, revealed individual inter-item correlations ranging between 0.31 and 0.76. Because there were no items that fell at or below 0.30 no items were deleted. The scale had a total alpha reliability coefficient of 0.85, which is a relatively high reliability.

Individual review of each item indicated that there were some items that required rewording. Some participants indicated that they did not know the meaning of particular words

and thus the items were re-worded with clarity in mind. Items that yielded a high number of middle responses (no opinion) were re-worded to increase the accuracy of responses.

#### *Field Trials 2-6*

The revised, 30 item, questionnaire and demographics information sheet was assembled with the cover letter and consent and administered to five groups of students in associate degree nursing classes. These groups had 18 to 42 participants in each group

The total range of scores for the groups was 31 to 181 with a mean score of 108. The item mean was 3.6, which indicates that the groups' perceived the faculty members to exhibit a high number of caring behaviors. The scale had a total alpha reliability coefficient of 0.90. This is a very high alpha and indicates a high level of internal consistency.

#### Conclusions and Recommendations

As faculty become aware of those behaviors that are perceived as caring by students, teaching strategies and attitudes may be reinforced, changed or developed. This facilitates the establishment of a curriculum with caring as one of its defining philosophies.

This study developed a quantitative instrument that measures caring and non-caring behaviors among nursing faculty. It is hoped that the resulting instrument will assist nursing administrators and faculty in evaluating programs that have or are considering curriculum changes to include caring as a central theme.

This study was conducted using a limited population. It will now be important to administer the instrument to a large number of individuals, in diverse populations to determine its reliability across cultures. The expanded study will allow for factor analysis (along with the previous statistical analysis methods) of data and add to the construct validity, internal consistency and reliability of the instrument.

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