CONTRIBUTIONS TO THE THEORY OF CARE

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ABSTRACT

This paper discusses how structured conceptualization, conducted as one phase of a larger study, was used to conceptualize "caring" in a nursing context. Variations of the structured conceptualization process were conducted with three different groups; nurses, patients, and nurse theorist/researchers and a separate concept map was derived for each group. The maps are discussed along with implications for the development of a theory of caring and consideration of the advantages and disadvantages of the methodology.

Currently, theorists of caring call for naturalistic inquiry for theory building; while health care managers require rational information for decision making. The results of naturalistic inquiry are often expressed in words, while the results of rationalistic inquiry are often expressed in numbers. The focus of this paper is to describe one investigation of caring between nurses and patients which seeks to meet the information needs of managers while recognizing the current state of theory and research about caring. Trochim's structured conceptualization technique (Trochim, this volume; Trochim & Linton, 1986) is useful in obtaining multi-ple perspectives for the explication of program theory. In addition, the results can be used to develop quantitative measures of caring. Thus, it helps to serve the information needs of both theorists and managers.

The main focus of this paper is to discuss how the structured conceptualization activities, conducted as one phase of a larger study, helped to form a conceptualization of caring. A secondary consideration involves examining the implications of the concept maps for the eventual development of a questionnaire to measure caring.

CONTEXT OF CARING

Human services in the 1980s have had to struggle with the tension between economic and humanistic societal issues. As the world economy moves from production to service, the call for rational management of scarce resources increases. Scientific management practices require rational information for decision making and cost-benefit, and cost-effectiveness approaches are often used as aids for such decision making. In the health care industry, cost containment efforts have predominated policy and reimbursement decisions. Simultaneously, the industry is expected to increase or at least maintain access and quality of health care, and distribute the service equitably. Thus, the industry must address the tension between economic pressures and humanistic values.

One expression of humanistic values is caring. Car-ing or care is a term which is used frequently and taken for granted as an innate human quality. In health care, caring is considered a central component of health services. For nursing, it is considered "the essence and central focus of nursing practice" (Leininger, 1984). Though caring is the essence and central focus of nursing, research about caring is in its very early stages, and theories of professional nursing care are emerging (Leininger 1981, 1984, and Watson, 1979, 1985). To date, there is no universally agreed upon definition of caring, or professional nurse caring. In order to quantify a variable, one must first be able to define it. This presents a challenge in today's competitive health care environment which values rational information for decision making. In order for care to be given priority, it must be expressed in terms comparable to other fac-

tors used in resource allocation decisions. The problem is, that the theory and research about caring does not currently meet the information needs of managers who frequently desire quantification and objectification of relevant variables for decision making.

What is needed is an investigation of caring which recognizes the current state of caring theory and research yet communicates effectively to managers about

the necessary resources to insure its presence. Trochim's (this volume; Trochim and Linton, 1986) structured conceptualization process is a useful tool for collecting and analyzing different perspectives about caring. The concept maps generated through multidimensional scaling and cluster analysis serve as the basis for discussion and emergence of a grounded theory of caring which is particular to a specific setting.

METHOD

Reasons for Choosing Structured Conceptualization Method

This method was chosen for four reasons:

1. To provide a concrete representation for the abstract concept of caring which is useful for the discussion, understanding, and communication of that concept.
2. To develop a grounded definition of caring which was based on both qualitative and quantitative methods.
3. To provide the background information for development of a Likert-type questionnaire to measure caring.
4. To provide an opportunity for greater exploration of construct validity of caring through pattern matching.

The structured conceptualization process allows one to make abstract concepts concrete through visual representations. This picture then helps people to focus discussion on the elements which make up the concept, and the interrelationships between the elements of the concept. This provides a dynamic understanding of the concept rather than a mere listing of its elements. This is especially useful when talking about human processes which by their very nature are dynamic. The concept maps provide a framework from which other relationships can be discussed. Participants often express that the maps do represent some underlying relationships which they had previously considered but which had not been fully expressed. The quantitative nature of the multidimensional scaling and cluster analysis lend strength to the interpretive discussions of the concept map because the participants have confidence that the maps represent measurement of some common ideas. This sense-making phase of the process also allows for discussion of other related aspects of the concept which are not represented by the maps. Thus, an integrated grounded definition of caring using mixed methods can increase confidence that the conceptual domain of interest is being adequately represented.

This grounded conceptualization of caring and the examination of interrelationships can serve as the basis for questionnaire item development. Items can be developed which represent both the unique characteristics

of caring found on different maps, as well as the overlapping concepts of caring. This gives greater confidence in the instrument's validity.

Aside from the validity of the instrument, structured conceptualization can contribute to construct validity through pattern matching processes (Trochim, 1985). Do the theoretical relationships expressed in the concept maps remain viable when compared with obtained measures? If they do match, then theoretical conceptualizations are strengthened. If they do not match, then there may be problems with the theoretical conceptualization and/or the measurement process. This feedback process between theory and practice is aided by the concrete nature of structured conceptualization process in which one can "see" the patterns and relationships.

Concept Mapping Processes

Variations of the structured conceptualization process were conducted with three different groups; nurses, patients, and nurse theorist/researchers as shown in Table 1. Each of these processes is described in turn.

Nurses. This study focuses on caring which occurs between nurses and patients in the acute care hospital setting. Thus, a sample of acute care hospital nurses were asked the question, "When you think about the patient in the hospital setting, what do you think of as caring?" This question was posed to small informal groups of nurses of about 3-6 people each. Approxi-

TABLE 1
STEPS IN CONCEPT MAPPING PROCESS FOR THE
THREE PARTICIPANT GROUPS

Participant Group	Concept Mapping Steps		
	Generation	Sorting/Rating	Interpretation
Nurses	Brainstorming	Yes	Yes
Patients	No, used above with revisions	Yes	Yes
Nurse Theorists/ Researchers	No, used items from literature	Yes	Yes

mately 40 people were involved in generating their ideas of caring. Without editing (except for absolute duplication of items), the entities which were generated were put on 3 by 5 cards. Members of the nursing council, who represent a cross section of nurses from the hospital, then sorted these cards in "any way which made sense to them." They also rated each of the 80 entities on a scale of 1-5 with 1 being least central to caring, and 5 being most central to caring. This same sorting and rating process was also done with a group of nurse managers. The data from the two groups of nurses were then combined and one concept map for nurses was computed. The map was then interpreted in each of two meetings, one with nursing staff, and one with nurse managers. The results were then combined into one interpreted map for nurses.

Patients. Eleven female members of a hospital sponsored health information group participated as volunteers for research about caring. This sample was chosen as representative of the patients who will be administered a questionnaire about caring during a later phase of the study. That group of patients will be women hospitalized for hysterectomies. These female volunteers were given the same eighty items which the nurses had generated. They were asked to review the items to add any that they felt were missing. No items were added; however, clarification of the meaning for some of the items was provided. The women then sorted and rated the items in the same manner as the nurses. The

group then convened to interpret the map and discuss the results.

Nurse Theorists and Researchers of Caring. This group meets annually for a national conference on Care and Caring at which the latest research and theoretical concepts are shared. Twelve nurse researchers and theorists participated in the process of sorting and rating items on caring. Seventy-nine items were taken from the literature on caring by the investigator. The data were analyzed and a concept map generated. An initial interpretation of the map was obtained from some nurse theorists. Further interpretation will be obtained during the next annual meeting of this group.

Some Methodological Concerns
The structured conceptualization process takes time to complete in its entirety from generation of entities through map interpretation. Only the nurse group participated fully in all three phases (see Table 1). Patients and nurse theorists were less available for all three phases, due to access and time constraints. Therefore, it was decided to use data sets which those participants did not generate. However, they did sort, rate, and interpret the maps. The decision to eliminate the generation step may affect confidence that the items represent the conceptual domain for those participants. However, the effects of this are minimized by allowing for revision of the data set through addition of other items. The nurse researchers and theorists did add some items; the patient group did not add items.

RESULTS

Interpretation of Concept Maps

Nurses. Figure 1 is the concept map for nurses, as they interpreted it. In interpretation, it is assumed that clusters which are closer in distance are also more similar. The higher the average rating for items in that cluster, the more central are those items to the concept of caring and the more layers the cluster has on the map.

Cluster 3 includes positive innate affective human qualities which are especially important qualities for a nurse to have. Clusters 7, 6, and 5 include cognitive aspects of caring as well as the affective qualities found in cluster 3. These three clusters also include the element of action, that is expression of caring through action. Cluster 7 demonstrates this through "creating a climate in which a therapeutic relationship can be developed." Cluster 6 is "providing personalized care to a patient while respecting that person's autonomy." Cluster 5 includes those actions which "enable a person toward independence," helping a person to help themselves.

Cluster 4 includes activities which help the nurse to

manage the environment, cluster 2 includes coordinating and advocacy activities, and cluster 1 includes those activities which help the nurse to adapt care to the individual needs of the patient and to accommodate those needs.

Starting at cluster 3 moving clockwise around the map, clusters include a combination of affect, cognition, and action. Cluster 3 includes affective elements of caring, primarily. The clusters from 7 to 1 (moving clockwise), can be taught and learned and are the professionalized aspects of caring. Cluster 3 includes innate qualities that a nurse should have and which are less subject to being learned.

The nurses also saw the "nursing process" expressed in the map. The nursing process is one foundation of nursing theory which frames all nursing activities in a four-part process: assessment, planning, implementation, and evaluation. Each step is part of a continuous feedback process. Cluster 1 is seen as assessment and evaluation, clusters 2 and 4 as planning, and clusters 7 to 5 as implementation. Cluster 3 includes the basic elements of a caregiver which provide the necessary foundation for the nursing process.
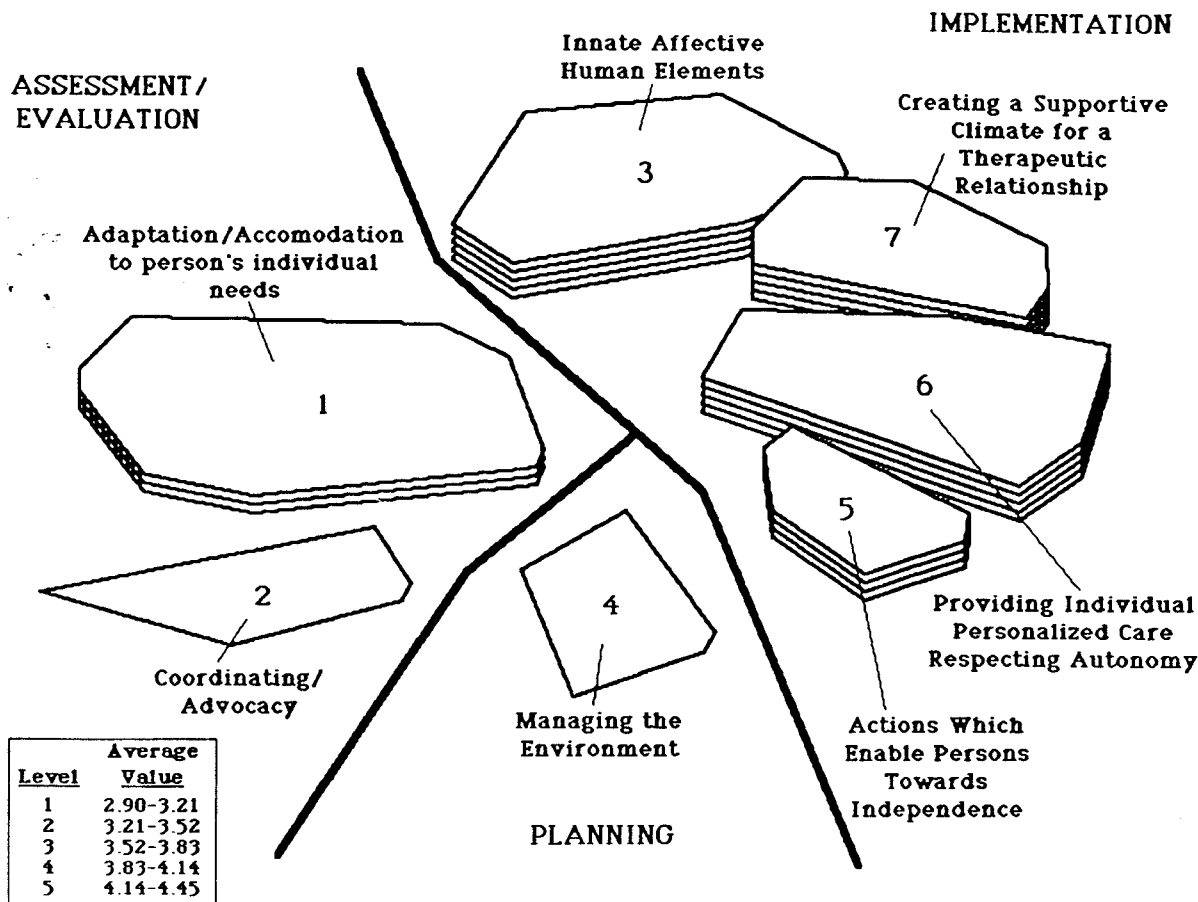
Figure 1. Nurses' concept map.

Patients. Figure 2 is the concept map for patients as they interpreted it.

Cluster 3 is a highly rated cluster which includes those integrated qualities of the nurse which increase trust between the nurse and patient and includes the way in which the nurse respects the patient's autonomy, and how honest and professional the nurse is with the patient. Clusters 6 and 7 are those clusters which demonstrate caring in action (based on the trust expressed in clusters 3 and 4). Cluster 6 is "informing the patient, and being informed." It involves the interactions between the nurse and the patient related to teaching and learning. Cluster 7 includes more activities which the nurse does for the patient to be "as helpful as possible." In addition, it includes the patient's family as recipients of these activities. Cluster 5 has less to do with individual patient/nurse interactions and more to do with formalized aspects of caring which involve caring for a group of patients. This includes maintenance of the environment or milieu.

Cluster 1 includes advocacy activities. Cluster 2 includes items which involve a higher degree of nurse control. They could be the paternalistic aspects of car-

ing which foster dependency and include such things as "holding a patient's hand," and "doing what's best for the patient regardless if it is what's wanted." Patients describe these items as potentially non-caring items depending on the degree of control the nurse has versus the control the patient has. Patients want to have the control.

Theorists. Figure 3 shows the interpreted concept map for nurse theorists and researchers of caring.

Clusters 1, 2, and 3 are the basic elements of caring. Cluster 1 includes those elements associated with Watson's theory of care (1979) which emphasize existential, phenomenological processes between care giver and receiver. These terms are expressed in academic terminology. Clusters 2 and 3 are Leininger's basic elements of caring (1981, 1984) which are expressed in more common universal terminology. Clusters 5, 4, and 7 highlight the implementation of caring. Cluster 5 describes the teaching and learning process. Cluster 4 suggests items related to the coordination and maintenance of the milieu. Clusters 6 and 7 involve observable nursing behaviors which put caring into action.
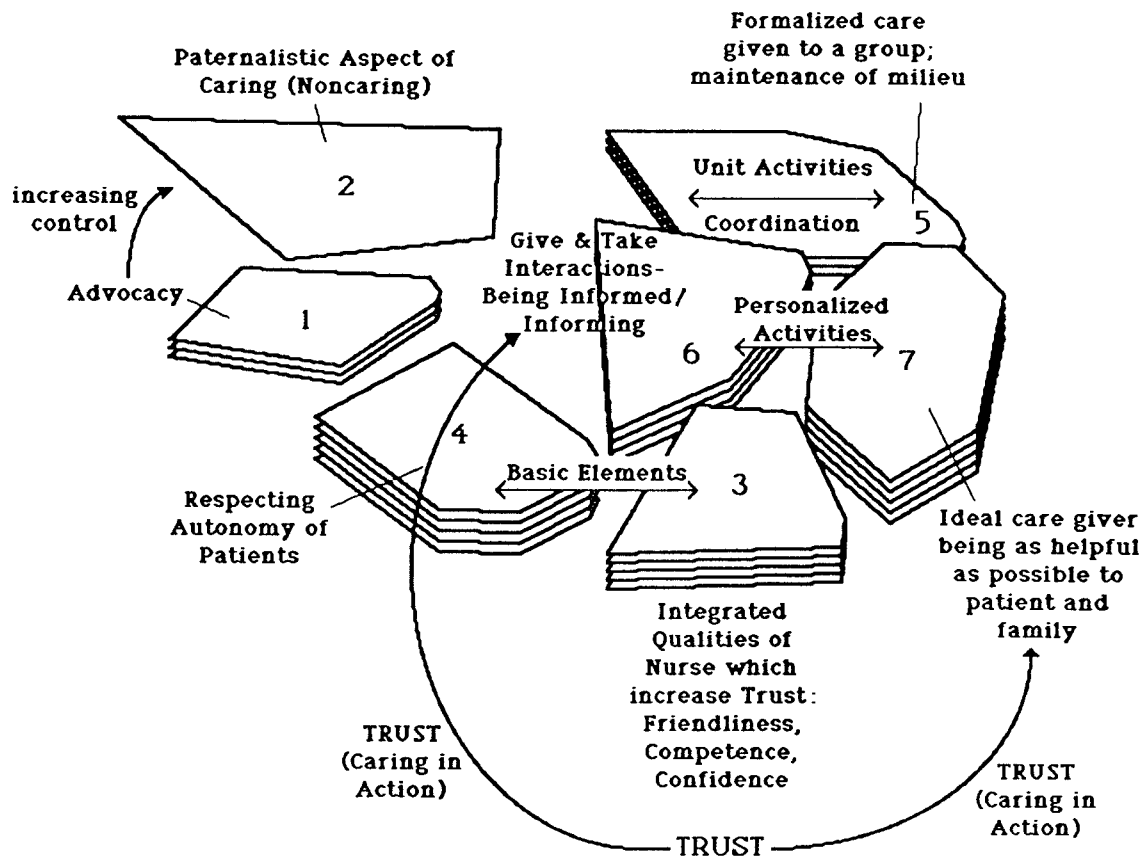
Figure 2. Patients' concept map.

Themes Common to All Three Maps

All three maps have some cluster of basic elements of caring, which are in close proximity to a cluster(s) highlighting interactions between a nurse and patient on a personal one-to-one basis. Each of the maps has elements of advocacy, and coordination and maintenance of the milieu. These are further away and less highly rated than the direct care giving (implementation) clusters described above. Each of the maps includes a dynamic element of putting caring into action. It is not enough to have caring feelings, they must be put into action which is often observable. Any questionnaire items which are developed should cover these basic areas of the conceptualization of caring; core elements, personalized care, maintenance and coordination of the milieu, advocacy, and action.

It is useful to look at the degree of correspondence between the maps. For instance, we can compare between the patient's cluster 3, the nurse's cluster 3, and the theorist's cluster 2. Each of these clusters represents the basic elements of caring. Items common to all three are warmth, being nonjudgmental (acceptance), kindness, trust, and compassion. Common between nurses and theorists were the items of touching, humor, and having a genuine attitude (authenticity). Common be-

tween the nurse and the patient were being honest; friendly; courteous and polite; and having confidence. Common between the patients and the nurse theorists was the item, listening (allowing people to verbalize).

It is also useful to examine the similarity in the clustering of items as well as the different clusters themselves. For example, in their main cluster, patients included such items as "the nurse being knowledgeable about an illness," "maintaining confidentiality," "giving patients choices," and "making the patient feel secure." These items were important aspects of the basic elements of care for patients. Therefore, any questionnaire would have to include these concepts when measuring patients' perceptions of caring. These same ideas were part of the conceptualization of caring for nurses; however, they were included in different clusters. A more detailed analysis of clusters reveals such differences as the one related to touch. Both nurses and theorists included touch in their most important central cluster of caring attributes, and both rated it fairly high (nurses, 3.60, theorists 3.82). Yet, patients included this item in their lowest rated cluster furthest away from the patients' central concepts of caring. Patients rated this item a 3.10, and it was in close proximity to item "hold their hand" which was rated a 2.40.
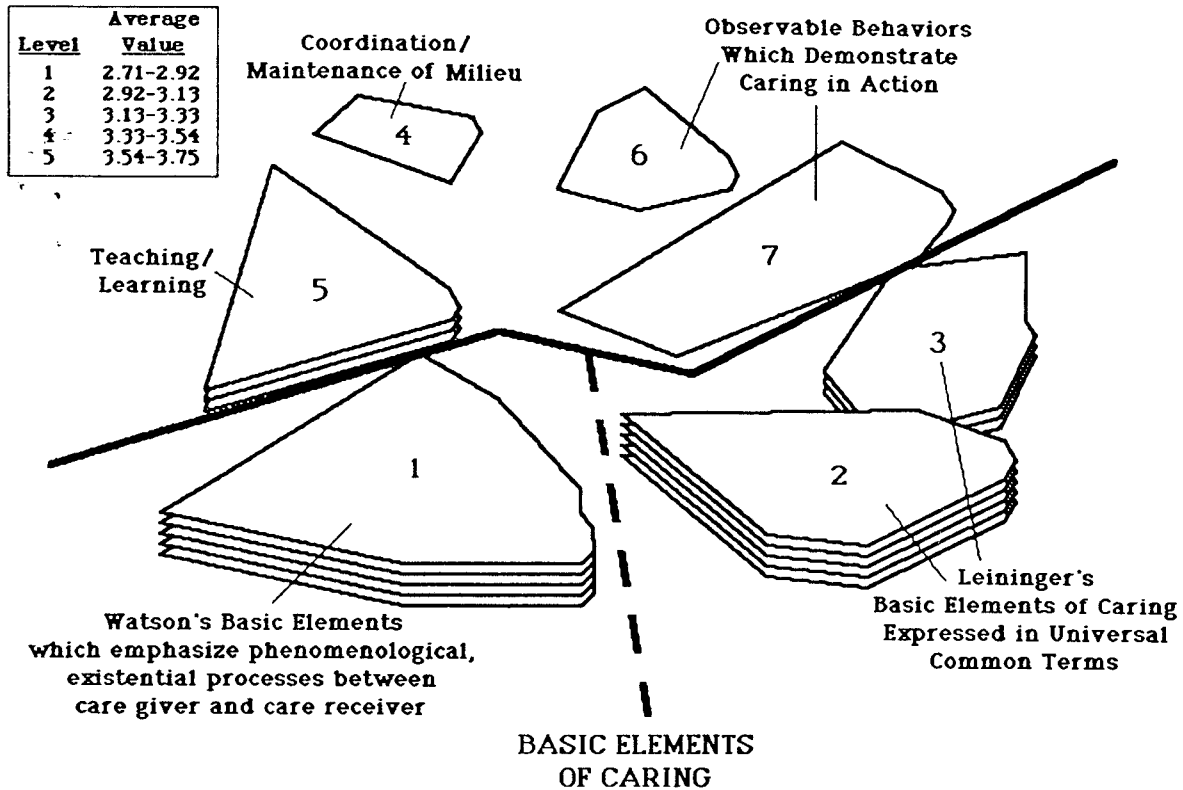
Figure 3. Nurse theorists' concept map.

Thus, there seem to be some differences in the way that patients, nurses, and nurse theorists think about touch. As patients discussed the map's meaning, they suggested that those items reflected a dependent and powerless position for the patient, a position which they rejected.

Thus any measures of caring might reflect that patients will not value receiving touch, or having their hand held, as much as the nurses will value providing that aspect of caring.

CONCLUSION

One benefit in the use of structured conceptualization is that it provides a mechanism for engaging people in the explication of program theory (grounded theory) which can then serve as a theoretical pattern for construct validity when measures of a concept are obtained. In this case the concept maps for caring provided by the different participant groups can serve as the basis for predicting patterns in the obtained data. In addition, the process helps to define the conceptual domain so that it can be adequately represented in the measurement instrument.

Aside from the utilitarian benefits of using the structured conceptualization process, the technique provides a vehicle for group discussion of abstract concepts of importance to participants. The visual representation allows participants to see patterns and relationships which they may have intuitively felt were present but which they had never articulated. Participants often express that it is "fun" to engage in these activities. This feeling of goodwill helps to set the stage for cooperation and participant interest in other stages of a research project. It may even positively influence utilization of results. It is an energizing process which allows people to generate their ideas, see them displayed and then discuss their meaning. Structured conceptualization can help to make participation in research a more engaging and less formidable phenomena for program staff and clients.

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