

A critique of compromise: Beyond the methods debate

One resolution to the debate about whether quantitative or qualitative methods are appropriate or adequate for nursing's research concerns has been to argue that either or both are legitimate, depending on the research problem. This article suggests that the overt debate is a manifestation of more fundamental differences over ontologies, epistemologies, values, and intentions, and that the compromise solutions mask basic issues that nursing needs to address as nursing science is advanced. Several of the hidden choices in the debate about methods are made explicit, and their implications for nursing practice are identified.

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QUESTIONS ABOUT THE adequacy or appropriateness of the scientific method as a means of inquiry into nursing's concerns were among the most common themes in the nursing research literature over the last decade.^{1,2} In theory, nurse scientists have always had the opportunity to choose from among several research methods, although the dominant ideology of logical positivism had obscured such possibilities until the discussion of different approaches emerged as a theme in nursing's research communities.³⁻⁵ That such questions were raised at all legitimized a variety of scholarship and research methods for those engaged in developing nursing science. This new legitimacy is now demonstrated by the fact that earlier discussions about whether qualitative methods were appropriate have been replaced by discussions of how to evaluate such research.⁶⁻⁸ Today, the issue facing nurse researchers is not whether but when to use qualitative or quantitative methods or a combination of the two.

It has become increasingly popular to argue in the nursing literature against the either/or choice and instead to propose resolving the problem by compromise or coexistence. Various nurse scientists and nurse researchers have advanced the idea that either method is appropriate, depending on the question under study,^{4,9-11} or both methods might be combined appropriately in one study to provide comprehensiveness and cross-validation,¹² and complementary sets of data.¹³

There are, however, potential problems when the question of research methods is resolved this way. The immediate problems posed by such a resolution to the debate, which are usually noted by those who argue for "appeasement" in accepting the coexistence of both approaches,¹⁴ through some variety of triangulation, include the limited resources of time, energy, and expertise available to combine both methods, either in the same study or in the same researcher's repertoire. Despite the fact that the problems are acknowledged, however, the discussions proceed as if there were unlimited resources and as if the research and researcher did not have to dilute or sacrifice both the exquisite precision of measurement developed through quantitative methods and the enriched context that is reached through more qualitative approaches.

This article critiques the arguments for appeasement and compromise. It attempts to elucidate several problems that are inherent in these arguments but that, until now, have not been explored in any depth. First, the argument for coexistence as a solution to the differences in method assumes that the questions or problems of nursing research are "essentially atheoreti-

cal in nature"^{15(p123)} and, in so doing, closes off discussion of the theoretical and practical implications of these questions.¹⁵ Second, a resolution by compromise seems to ignore or deny the significance of work presented to date that acknowledges various philosophies of science as factors in research and theory development;^{3,16-18} that criticizes the myth of research as an objective, value-free activity;¹⁹ and that attempts to divert nursing scholarship from its current "search for structural truth"^{20(p1)} to a focus on questions more relevant to the discipline's "dynamic meaning,"^{20(p2)} as well as from its debates on methodologies to debates on nursing's substance.²¹ Third, a resolution by compromise avoids commentary on the identified political function of scholarship and research traditions.^{2,3,5}

BEYOND THE METHODS DEBATE

The overt choice of using qualitative methods, quantitative methods, or a combination of the two methods is not simply one of appropriate technique, as proponents of the compromise solution would suggest. More fundamental differences than are involved in a mere choice between methods are masked by a deflecting of attention to the differences in the research problems posed, without a transfer of the concerns about appropriateness and adequacy that sparked the initial discussions of the differences. A contrasting approach to the resolution of the conflicts between methods can be found in the arguments advanced by a growing number of social scientists and certain nurse scientists. Fox-Keller,²² Harding,²³ and Lather,²⁴ among others, agree with Morgan that the selec-

tion of a research strategy is a "problematic and value-laden affair,"^{25(p7)} rather than merely a technical choice, and is most appropriately understood as an ethical, moral, ideological, and political activity, and not only an epistemological one.²⁵

With that in mind, it remains for nurse scientists to ensure that their scholarship and their activities as researchers reflect their philosophies and world views. Colleagues in the broader community of social scientists are also raising questions about the assumptions and implications inherent

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in their choice of research methods. In addition to the questions about favored technique, ontology, and epistemology that are part of any discussion about methods,²⁵ nursing—as a practice discipline—faces the further question of a research strategy's implications for practice.

DIFFERENCES BETWEEN METHODS

The choice between methods has meaning and implications beyond the technical. It is a choice between an open-system and a closed-system view of the world; between knowledge that is legitimately sought and developed for inclusion in nursing science and that which is not legitimate; between definitions of science as a force for change or as a defense of the

status quo; and between a nursing practice that hopes to predict and control phenomena and that which attempts to understand and explain them.

Questions of technique

On the one hand, as has been the case in nursing's dominant ideology until now, research is viewed as a neutral technical process. Research methods are contingent on the questions asked,⁹ and are controlled and evaluated by the bureaucratic processes through which the researcher reveals or discovers knowledge.²⁶ Accumulated, developed, and abstracted, this discovered knowledge forms the basis of a discipline's science.

On the other hand, research is viewed as a function of specific sociohistorical forces,¹⁻³ whereby the researcher, via distinctively human, as opposed to merely technical, activities, creates knowledge rather than discovering or revealing it.^{23,25,27} That is, the research activity contributes to the emergence of a world or reality that was not there before the research. Through such research the knowledge created is logically characterized by the same attributes that identify human phenomena, eg, the rational and the emotional, the objective and the subjective, and the passionate and the controlled. Logically, then, such characteristics also describe the science created through such an approach to research.

The nature of reality

The debate about methods not only distinguishes between two concepts of research activities but also differentiates between two concepts of the nature of

reality and human phenomena, the open-system and the closed-system views. What does the nurse researcher believe about reality? Is it certain and predictable? Are human phenomena predictable? Are they controllable? Or are they unique and uncertain?

Where research is understood as a technical activity that uncovers preexisting knowledge, it implies passive reality and a closed-system view. To believe that reality exists independent of the researcher, waiting to be discovered, is to negate a basic concept of the open-system view of the world, ie, that people exist through an interactive process with their environment, a process that is incessantly dynamic and through which both participants change and reform.²⁸ Therefore, research as an atheoretical, technical activity dependent for its nature only on an atheoretical problem or question conforms to the closed-system view of the world.

The nature of knowledge

Compromise between research methods also avoids differences in assumptions of what constitutes valid knowledge. What is an appropriate epistemology or epistemologies for nursing science? What is accepted as valid information? Where and how is it found?

If the nature of reality is as much a function of the knowledge maker as of the piece of reality being studied, then the knowledge itself is partly a function of the researcher and so will exhibit distinctively human characteristics. Such a view of research and created knowledge insists on multiple representations of reality that include the researcher's bias rather than

control for it. Valid knowledge, then, would necessarily include and not merely allow for example, the researchers' feelings, intuitions, and opinions, as well as their thoughts, ideas, and empirically demonstrated theories.

This approach is in obvious contrast to the technical atheoretical approach wherein the goal is to determine the most valid representation of reality or representations that are acceptable along a validity continuum. In fact, the question of validity becomes moot, and another measure of knowledge must be sought.

The nature of science

The differences between these understandings of research, reality, and knowledge have implications for the functions and intentions of science. Understanding the methods debate as simply a technical one avoids questions that are relevant to the multiple functions of science. Does science establish the norms and standards of reality? And those of the abnormal and deviant? Does it serve as ideology? Does it allow other views of science?

With only few exceptions, nurse researchers have measured and sought to situate their science by parameters established by Dickoff and James.²⁹ Within this prevailing understanding, the ultimate aim of science is to enable the nurse scientist to predict and control the phenomena being studied and researched. Description and explanation are sought not for their inherent value, but as a step toward this other, more highly valued end.

Other philosophers, social scientists, and nurse scientists have suggested that science is not necessarily progressive or concerned

with prediction and control, but, rather, that science plays a number of diverse roles. For example, when nurse scholars Munhall and Oiler speak of science as either "restricting or liberating,"^{11(p32)} they echo the criticism raised by Habermas, who spoke of science as either liberating or repressive.³⁰ Others question whether science as ideology nurtures or restricts the freedom of individuals and society,^{23,27,31} and whether particular approaches to the development of science serve to promote health or limit its potential.³²

IMPLICATIONS FOR NURSING, NURSES, AND NURSING PRACTICE

Aspects of questions of technique, views of reality, the nature of knowledge, and the nature of science have been discussed, in some cases in quite "human," rather than merely technical, terms. The following sections bring the discussion more thoroughly into the realm of human concerns. Once nurse scientists look beyond the obvious debate to select their research methods, they face choices that speak directly to the nature of nursing and the relationship between the nurse and the patient. Different responses to the selection of a research method clarify, to some extent, different understandings about the goals of nursing practice and the intention of nurses. To an even greater extent, however, a discussion that begins, rather than concludes, with the variety of nursing's interests, nurses' intentions, and goals of nursing practice, helps to clarify the more abstract choices that have emerged in the debate about methods.

Nursing's interests

As arguments for the scientific bases for nursing practice have been developed and presented, they seem to have either merged or not explicitly differentiated three distinctly different interests.³³ First, there has been an understandable tendency—given the power of the combined social forces that would see nursing and nurses in other than independent positions—to emphasize the struggle necessary to strengthen nurses' influence and control over the definition of nursing practice. The same concerns about control can be noted in the arguments for nursing's development as an autonomous profession, a second obvious interest of nurses.

However, as yet unanswered questions arise when this emphasis on control is then carried over to a third area of interest for nursing, ie, discussions about human phenomena. Does the nurse scientist acknowledge a difference between holistic human phenomena, which by definition are neither predictable nor controllable, and human behavior as one aspect of human phenomena, which has been clearly and repeatedly demonstrated to be both? While this question was implicit in the earlier discussions in the literature concerning the appropriateness and adequacy of the scientific method, it has been obscured by the compromise solution that sees the

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choice among methods as a technical one. It is resurrected in the context of this discussion to make the choice explicit for nurse scientists. If the difference is not acknowledged, then the most appropriate methods of inquiry are those of the traditional scientific method that have prevailed in nursing until now. If the difference is acknowledged, then one must ask whether such inquiry can ever provide significant information about human phenomena.

In the former case (unacknowledgment), efforts and energies that are invested in such inquiry more likely serve interests other than patient concerns. They might, for instance, serve to control the extent of nursing practice or the profession and might have less value for the ongoing development of the human phenomena that also hold nursing's interest. It can be, and has been, logically argued that benefits to nursing eventually translate to patient care benefits, and this has been demonstrated in many situations. The regressive or repressive influence of the development of nursing science on the scope of nursing science and on people's health, however, has been less clearly argued and presented and now deserves attention.

As they acknowledge the differences between various understandings of science, then, nurse scientists must distinguish among research activities that serve nurses and nursing, those that serve patients and the public's health, and those that serve both. Is their science intended to legitimize nursing as a scientific discipline by expanding and refining the ability to predict and prescribe human behavior? Or is it intended to be useful in helping the nonscientific population to understand and explain their experiences in the world?

Is there a science to be developed that might combine these polarities?

Nurses' intentions

If nurse scientists assume that human phenomena can be predicted and controlled, they will most appropriately seek information that will allow the caregiver to be most efficient. Both scientist and provider, then, would approach their daily activities with the aim of predicting and controlling the subjects of their study and the recipients of their care. In assuming that such can be done, the nurse necessarily would strip these individuals of their potential for autonomous, self-determination, reducing them in the process to the status of objects. Unless nurses, for whatever reason, held themselves to be different from those who need their care, one consequence of this behavior would be to limit their own potential and to reduce themselves from subject to object status in their world.

If, in contrast, nurse scientists assume the uniqueness and unpredictability of human phenomena, they then face certain dilemmas. Either they abandon their attempts to predict and control, and so threaten nursing's status as a legitimate science and autonomous profession, or they continue their attempts but distort inherently uncontrollable phenomena into measured and predictable units to develop a science as science has traditionally been defined. In the first instance, they sacrifice either nursing's interests, their own as nurses, or both; in the latter, they sacrifice the interests of the phenomena—people who are to receive nursing care.

A third possibility facing nurse scientists

and other scientists is to question the prevailing definitions of science and the professions.^{34,35} This third solution is even more threatening to nursing's understanding of itself than either of the first two solutions. The dilemma that has finally been uncovered by the methods debate is whether science and professionalism are designed and/or able to serve humanity or whether they will instead serve those with the power to define and control what is meant by science and professionalism.

Nursing practice

As science translates to practice, then, the question becomes whether the nature of nursing practice is to be directed toward the control of human phenomena or toward assisting others in more fully understanding their realities and their positions within them.^{3,34} If the goal is control, then knowledge that allows for accurate prediction is needed, and research methods are most appropriately sought that will generate valid, reliable, and generalizable information. This would allow nurses to predict and prescribe behavior. In addition, methods must accommodate the distortions that are necessary to predict and control what, by definition, cannot be predicted and controlled. In other words, the prevailing ideology of technical-rational-purposive systems would continue to be developed, and the position of nurse researchers relative to their subjects and nurse providers relative to those who receive their care would continue to be as scientific, objective, and detached as possible.

If, instead, the ultimate aims of nursing science and nursing practice are explana-

tion and understanding of human phenomena, there would be changes for both the nurse researcher and the nurse provider. If the goal of practice is to assist people in developing potential that is uniquely theirs, then research is needed that will give researchers and providers information to enhance the depth and complexity of their understanding of individual instances. The choice is how to become more fully engaged in the lives of those who are to receive nursing care, rather than more completely distanced from their daily activities.

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Returning to the original question, then, of when to use qualitative methods, when to use quantitative methods, and when to combine the two, the debate about research methods actually has become a debate about exploring the choices through which the researchers make and remake themselves as human beings. Once understood in this way, then, the major distinction between research methods is not between the quantitative and the qualitative, or the appropriateness of the two for a particular research question. Nor is the question of method appropriately answered by the attempt at compromise and diplomacy that would allow either method, or both together, depending on the research question. Instead, the more basic distinctions are which method assumes the same reality as the researcher's, which accepts the same definition of science, which allows a similar understanding of the relationship between researchers and their objects of study, and which is directed toward similar ends.

For nurse scientists, as for other scientists, choosing between quantitative and qualitative methods therefore means choosing to work either with a closed-system or open-system view of the world; choosing to seek either absolute or relative and contextual knowledge and to develop either a definitive or dynamic science; and choosing to learn how to predict and control phenomena with more reliability and validity or to understand and explain phenomena more fully.

As nurse scientists express their human essence and spirits through their research activities, the choice between quantitative and qualitative methods takes on deeper meaning. Nurse researchers may choose to stand apart from their own realities and those of others, to observe and study them rationally and dispassionately, in order to

predict with as much certainty as possible what will happen next. Or nurse scientists may choose to enter into a dialogue and dialectical engagement with these realities in such a way that both the observer and the observed enjoy the status of cocreators in a human project characterized by its innovation and unpredictability.

In Munhall's reflections, "Methodological Issues in Nursing Research: Beyond a Wax Apple," she asks, "More important, perhaps, is it important?"²⁰ Probably not, if the attention is fixed only on the technical question of which method. Most assuredly yes, however, once nurses go beyond the technical to the real choices that now face nurse scientists—choices that can affirm or deny both nurses and those for whom they care as holistic, evolving, and healthy beings.

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