Article

Maintaining Validity: The Development of the Concept of Trust

Judith E. Hupcey
The Pennsylvania State University
University Park, Pennsylvania, USA

© 2002 Hupcey. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Maintaining validity while moving a concept to a higher level of maturity is a dilemma that faces all qualitative researchers. In this section, research projects related to the concept of trust will be used to illustrate how new studies can be built on previous ones and then all studies integrated to develop a comprehensive model without compromising validity. The multiple stages of inquiry will be elucidated using the strategies of deconstruction, development of a skeletal framework, and scaffolding as described by in the opening section by Morse and Mitcham.

The strategy of deconstruction was used in the initial project (Morse, 2000), which was a multidisciplinary concept analysis to determine the level of conceptual maturity. Once it was determined that trust was not well developed in the context of health care interactions, literature was used as data (Morse, 2000) to advance the concept further for the purposes of concept clarification. Although this began the process of identifying the structural features of the concept, these data left us with many questions, particularly since the trust literature was context bound and thus not easily applied to health care relationships. A skeletal framework was then developed to investigate trust in health care relationships using grounded theory (Hupcey, Penrod, & Morse, 2000). This project also advanced the concept further toward maturity, but some aspects still remained unclear. For example, risk as a precondition for trust as found during the concept clarification was not necessarily seen when trust was applied to health care relationships. The strategy of scaffolding was then used as data collection continued with other types of participants and in different contexts to clarify discrepancies in the data and verify the developing model of the concept of trust in health care interactions (Hupcey, Clark, Hutcheson, & Thompson, in press; Thompson, Hupcey, & Clark, in press). Here, I focus on the process of deconstruction, and briefly describe the development of a skeletal framework and the scaffolding process for this research program related to the concept of trust.
using the strategies of deconstruction, development of a skeletal framework, and scaffolding as described by in the opening section by Morse and Mitcham.

The strategy of deconstruction was used in the initial project (Morse, 2000), which was a multidisciplinary concept analysis to determine the level of conceptual maturity. Once it was determined that trust was not well developed in the context of health care interactions, literature was used as data (Morse, 2000) to advance the concept further for the purposes of concept clarification. Although this began the process of identifying the structural features of the concept, these data left us with many questions, particularly since the trust literature was context bound and thus not easily applied to health care relationships. A skeletal framework was then developed to investigate trust in health care relationships using grounded theory (Hupcey, Penrod, & Morse, 2000). This project also advanced the concept further toward maturity, but some aspects still remained unclear. For example, risk as a precondition for trust as found during the concept clarification was not necessarily seen when trust was applied to health care relationships. The strategy of scaffolding was then used as data collection continued with other types of participants and in different contexts to clarify discrepancies in the data and verify the developing model of the concept of trust in health care interactions (Hupcey, Clark, Hutcheson, & Thompson, in press; Thompson, Hupcey, & Clark, in press). Here, I focus on the process of deconstruction, and briefly describe the development of a skeletal framework and the scaffolding process for this research program related to the concept of trust.

Deconstruction

Concept analysis

The concept of trust became a focus of inquiry because, in our earlier studies, trust kept emerging as an important, yet underdeveloped, concept. For example, trust was an important aspect in the development of the nurse-patient and nurse-family relationship and was also needed to help a critically ill patient “feel safe” while in the ICU (Hupcey, 1998, 1999, 2000, 2001). However, the development and maintenance of trust was not understood and many times appeared to be only a component of the interaction or relationship, so as a concept it was not well delineated. This led to our decision to use a criteria-based evaluation to analyze the concept of trust to determine its level of maturity (Morse, Hupcey, Mitcham, & Lenz, 1996). This analysis informed our decision of how to proceed with concept advancement.

Since trust is an important concept for all caring disciplines, it was decided that trust would be analyzed considering literature from the disciplines of psychology, sociology, medicine, and nursing (see Hupcey, Penrod, Morse, & Mitcham, 2001). From the initial examination of the literature, we found that there were many "lay" meanings of the term; it was used interchangeably with faith and confidence, it was used in a variety of contexts, and it was used in both interpersonal and professional relationships. In addition, there was little agreement about the definition and structural features among the disciplines selected in this study. We also found that the concept was transferred between disciplines. For example, nursing borrowed psychology’s interpersonal perspective of trust and placed it into the context of a professional (nurse-patient) relationship.

Level of maturity

The first step in deconstructing a concept is to determine its level of maturity, and for trust, this was an interdisciplinary level of maturity. A mature concept is one that can be readily adapted for research purposes: it is well-defined, has distinct attributes, well-delineated boundaries, and well-described preconditions and outcomes (Morse, Mitcham, Hupcey, & Tasón, 1996). To determine level of maturity, we searched discipline-specific databases for literature and research on trust in our four identified
disciplines (i.e., psychology, sociology, medicine, and nursing). Each data source (i.e., article, book, or book chapter) was analyzed for maturity according to four philosophical principles (Morse, Hupcey, Mitcham, & Lenz, 1996). The epistemological principle focuses on whether the concept is clearly defined and well-differentiated from other concepts. The pragmatical principle focuses on the concept’s fit with the discipline and how it has been appropriately operationalized. The linguistic principle is the extent to which the concept has been used consistently and appropriately within context. The logical principle examines how well the concept hold its boundaries when theoretically integrated with other concepts.

When trust was evaluated according to these four principles, gaps were identified both globally and within individual principles. Epistemologically, trust was found to be inadequately defined with competing definitions. Pragmatically, the concept was embedded with other concepts and rarely operationalized. Linguistically, trust was found to be context bound, and logically it did not hold its boundaries and was often overlapped with other concepts, such as respect (Hupcey, Penrod, Morse, & Mitcham, 2001). From this criteria-based evaluation across the four disciplines, trust was determined to be partially mature as an interdisciplinary concept. Although the body of literature was adequate (that is, in volume and quality), the literatures were not well integrated toward an interdisciplinary consensus in meaning. Therefore, the next step in the process was to advance conceptual maturity by clarifying the concept by gaps per principle and globally. The research approach chosen was concept clarification through a critical analysis of the literature.

**Concept clarification**

Once level of maturity is determined, there are two ways to go depending on the quantity and quality of the literature available (see the figure below). For this project, we used the literature first because the literature was adequate in both quality and quantity in all four disciplines. So we proceeded with a critical analysis of the literature for the purpose of concept clarification, using the method described by Morse (2000).

![Figure 1](image-url)
The first step in the concept clarification is to posit critical inquiries to be asked of the data/literature. Next, a literature search is completed to add additional articles, if needed, to the already existing data set of articles. These articles are then individually analyzed for each discipline’s treatment of the critical inquiries. Finally, the findings are theoretically integrated, and the structural features of the concept are clarified (i.e., the attributes, boundaries, preconditions, outcomes, and definition).

**Critical inquiries**

Since the researchers have already done a significant amount of reading and analyzed the literature to get to this point, this prior knowledge is used to help generate meaningful questions to be asked of the data. So this process is not started blindly. However, to avoid the pitfalls of “tunnel vision” or loss of validity, an interdisciplinary team generated discipline and specialty-specific questions. This incorporated both the previous knowledge base of the researchers and discipline-specific knowledge to generate questions that were not context or discipline bound. For the trust project, there were researchers from different disciplines, nurses from various specialties, and a lay participant.

The critical inquiries are universal questions to be asked of the data that are relevant to the concept of interest. A total of 10-15 questions are developed with the knowledge that these inquiries can be revised, combined, or deleted as the analysis progresses. For trust, we developed a list of 11 critical inquiries (Hupcey, Penrod, Morse, & Mitcham, 2001). The following is a list of the inquiries:

- Does an individual develop trust instantaneously or is trust built over time?
- Does an individual’s needs force him/her to trust?
- By trusting another, does an individual place him/herself at risk?
- Does an individual have a choice to trust or not to trust?
- Is trust an inherent characteristic or does an individual learn to trust others?
- Does an individual trust another person by virtue of role or the individual’s personal characteristics?
- Is trust unilateral, bilateral, or reciprocal?
- Does maintenance of trust between individuals involve testing behaviors?
- Are there types or kinds of trust?
- What are the ramifications and/or manifestations of loss of trust or distrust?
- What is the expected outcome of trusting?

**Analysis and integration of findings**

Each critical inquiry is asked of each article from the four disciplines. We used four long sheets of paper, one for each discipline. Each sheet of paper had the list of the 11 inquiries down the left side and the title, authors, and journal name for each article listed across the top. For each article, the answer for each inquiry was documented along with direct quotes and the page in the article where the information could be found.

Following completion of this step, the research team met and, as a group, analyzed and integrated the findings. Through this process, the structural features of trust were explicated (Hupcey, Penrod, Morse, & Mitcham, 2001). They are as follows:

**Attributes:**

- Dependency on another individual to have a need met;
- Choice or willingness to take some risk;
- An expectation that the trusted individual will behave in a certain way; testing of the trustworthiness of the individual.

Preconditions:
- A need that cannot be met without the help of another;
- Prior knowledge and/or experience with the other; and
- Some assessment of risk or what is at stake.

Boundaries:
- Trusts ceases to exist when:
  - The decision to place oneself in a dependent or vulnerable position is not based on some assessment of risk;
  - There is a perception no choice; and
  - The risks outweigh the benefits.

Outcomes:
- An evaluation of the congruence between expectations of the trusted person and actual behaviors.

Developing the skeletal framework

Following completion of a concept analysis, a skeletal framework is developed to help focus the subsequent inquiry. We had already identified structural features of the concept of trust; however, the application of these features to health care interactions was not clear, and may not fit into this new context. We also knew that there were still unanswered questions, such as:

- Are there features of an individual that foster or inhibit the trusting process?
- Can factors that enable the development and maintenance of trust be identified and transferred?
- Is there a difference between immediate trust of a class of individuals (such as patients toward physicians) and trust built over time with a particular individual?
- What are the differences between the loss of trust and never having trust (i.e., mistrust or distrust)?
- How is trust reestablished once it is lost?
- Under what conditions can a professional-client relationship exist without trust?

To answer these remaining questions, and to further advance the concept of trust (or to build the skeletal framework) particularly within a health care relationship, a qualitative study using the methods of grounded theory was undertaken. To develop the skeletal framework, we built upon the previous concept analysis, using the prior findings as a guide to context (that is, to identify data collection sites where the concept would be manifested). The grounded theory study was conducted with adult patients during an
acute care hospitalization as participants (Hupcey, Penrod, & Morse, 2000). The principles of grounded theory were followed, including theoretical sampling and the constant comparative method of data analysis. The initial interviews were semi-structured as trust was explored. To ensure that validity was not jeopardized, the "unanswered questions" from the concept analysis were used as a guide for follow-up interview questions once the participants told their whole story. In addition, these data were analyzed independently from the findings generated from the concept analysis. From this study, a model of the development and maintenance of trust in health care providers was developed. Once the model was developed, these results were compared with the results of the concept analysis to identify areas of congruence and incongruence between the two analyses.

| Concept Analysis                        | Grounded Theory                        |
|----------------------------------------|----------------------------------------|
| **Congruence**                         | **Congruence**                         |
| Need identified that cannot be met by self | Need identified that health care provider must meet |
| Subject to testing                     | Testing behaviors present              |
| Outcome is congruence                  | Congruence between expectations and actual behaviors of health care providers results in the development and maintenance of trust |
| between expectations and actual behaviors of the other |                                      |

| **Incongruence**                       | **Incongruence**                       |
|----------------------------------------|----------------------------------------|
| Involves assessment of risk            | Risk not mentioned*                    |
| Willing dependence on someone          | Willing dependence or choice not always present in hospitalized patients |

*(Note: although risk is not mentioned, it does not mean that it was absent, it may be implicit)*

From this comparison, it appeared that hospitalized patients have unique features that may influence the areas of incongruence. For example, would individuals who are not presently hospitalized assess the risk versus benefit when developing a relationship with a provider, do non-hospitalized individuals feel they have a choice of providers, and would a person responsible for decision-making for a patient (such as a parent or legal guardian) have a different trajectory when developing and maintaining trust in their charge’s health care provider?

**Building a scaffold**

Although a skeletal framework was clearly delineated in the first two studies, further research was needed to develop the scaffold. Data collection continued with other types of participants and in different contexts. This was done to: further explore the concept of trust in healthcare providers, to clarify the discrepancies in the earlier studies, and to verify the model that was developed in the grounded theory. In order to maintain validity, these studies were again undertaken without using the previously developed
model as a guide. Participants were allowed to tell their whole story before follow-up questions addressing incongruencies and gaps in the model were asked.

Two studies have been completed so far and a third study is underway to help build the scaffold. The first study was with parents of previously hospitalized children, using a grounded theory approach (Thompson et al., in press). This study revealed that parents have a similar trajectory when developing and maintaining trust in health care providers, as did the adult hospitalized patients. However, there were areas of incongruence between the two groups (see figures 2 and 3).

Figure 2: The development and maintenance of trust in health care providers (Hupcey, Penrod, & Morse, 2000).
Parents in this study did not exhibit the same three trajectories of unmet expectations as the adults (mistrust with no way out of the health care system; mistrust with a way out, where they left the present health care system and entered a new health care system; and rebuilding trust). Parents also remained vigilant, watching the care provided, although they may have expressed that their expectations for care were met or exceeded.

The second study used focus groups with community-dwelling elders to investigate trust in primary health care providers (Hupcey, Clark, Hutcheson, & Thompson, in press). The ongoing study, using adults in the community, is focusing on mistrust or loss of trust to address pieces of the model that were not well described or where there are areas of incongruence in the earlier studies.

Summary

In this section, I presented the progression of a research program addressing the concept of trust using the strategies of deconstruction, development of a skeletal framework, and scaffolding. Each piece of this project built on previous studies, using the prior knowledge to inform the subsequent study, for example with context, but not as a model or framework for the initial interview questions or the analysis. This process helped to maintain validity within each study and across the entire project. Once completed, the
findings of each study were compared to previous results, as the framework is built and pieces of the scaffold are filled in to develop a more comprehensive model of trust in health care providers.