Chapter 10
Grounded Theory Approaches to Research on Virtual Work:
A Brief Primer

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ABSTRACT

This chapter explains how researchers can effectively employ grounded theory to study virtual work. The chapter defines grounded theory, reports the history of its development, describes its data collection and analysis, as well as offers guidelines for writing research reports of grounded theory analyses of human interactions surrounding virtual work.

INTRODUCTION AND BACKGROUND

Unlike its name would imply, grounded theory is *not* a specific theory of social science that describes or predicts the social behavior of human actors. Rather the term "grounded theory" describes a genre of social scientific theory (specifically, theory derived from data) as well as the methodology for the development of such theory. "Grounded theory development (Glaser & Strauss, 1967; Miles & Huberman, 1984) is a methodology that helps researchers conduct natural observations" for the purpose of discovering emergent insights that can lead to the development of new theory of social behavior (O'Conner, Rice, Peters, & Veryzer, 2003, p. 353). Grounded theory research allows scholars to develop a basic understanding of a phenomenon through allowing informants' understandings to emerge from their accounts.

Grounded theory is perhaps the most commonly cited theoretical paradigm in qualitative research on human interactions surrounding

virtual work. Founded as a practical approach to both theory development and data analysis, grounded theory has become a widely used and often misunderstood paradigm (Suddaby, 2006). Its techniques are complex and its principles cannot be readily understood by a casual reader of research reports. The purpose of this chapter is twofold: (a) to explain grounded theory in sufficient detail for readers to understand and critically read grounded theory research as well as (b) to offer a preliminary understanding of grounded theory's purpose and methods so that readers can decide whether to employ a grounded theory approach in their own line of research.

A theory is simply a description of how a phenomenon works. For example, Bandura's (1977) social learning theory describes how individuals learn appropriate social behavior by observing the behavior of others in their social milieu. Social scientific theory describes how human beings think and behave; these detailed descriptions, coupled with rigorous scientific testing of the descriptions, allows for predictions about human behavior. The more valid the theory, the more accurate its descriptions and predictions.

What then is the relationship between theory and research? These two scientific enterprises, theorizing and researching, exist in an on-going symbiotic relationship such that each depends upon and influences the other. A reasonable theory prompts testing; the results of scientific testing prompt revisions and refinement of theory, which in turn prompts further testing. Thus, a good theory is perhaps the most valuable tool at the researcher's disposal, as it can provide guidance in understanding the phenomenon under study and point to the next area ripe for research.

Social science researchers use theory in basically three ways: via deductive reasoning, inductive reasoning, and a combination of deductive and inductive reasoning. Each is described in more detail below. Researchers employ deduc-

tive reasoning in the classic scientific endeavor of testing a theory, often described as positivist thinking. The researcher selects an existing theory and uses a recognized scientific research protocol to test if the identified theory offers a reasonable explanation for the phenomenon under study. Typically, the scientific protocol involves the use of empirical research methods, such as a survey or experiment, yielding numerical data subjected to statistical analysis. For example, Staples and Webster (2007) tested social cognitive theory (Bandura, 2001) by surveying virtual team members; the researchers documented the influence of colleagues' perceptions of effectiveness on team members' own perceived self-efficacy; they analyzed their data using statistical analyses.

Conversely, the researcher can employ inductive reasoning by collecting data and allowing an explanation of the phenomenon under study to emerge from the data. That is, he/she can reason from multiple specific data points to a more general theory about how the phenomenon works. Theories that emerge from data are often described as organic because they are grounded in data. For example, Thompson-Hayes, Gibson, Scott, and Webb (2009) interviewed 20 professors in a variety of disciplines about their online consultations with colleagues around the U. S. Their thematic analysis revealed four dialectical tensions (an interplay of opposing and contradictory forces typically resolved through communication) in such interactions: relational connection and personal autonomy, creativity and the mundane, task and socio-emotional goals, as well as novelty and efficacy.

What then is the place of *grounded theory* in this dichotomy of deductive versus inductive reasoning? Grounded theory offers a third alternative; it uses both kinds of reasoning, first inductive reasoning and then deductive reasoning, to develop detailed, original theories. This "grounded" process of theory development em-

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