

The Compatibility between Grounded Theory and Library Practitioner Research Problems

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Abstract: The selection of an appropriate research methodology is an important step in any research project. This article argues that the Grounded Theory (GT) methodology is compatible with the values and research interests of the library and information science (LIS) research community. Compatibilities are identified between librarianship and Grounded Theory along five themes. These themes are (1) the relationship between librarianship's interdisciplinary nature and GT's theoretical neutrality; (2) librarianship's client-centeredness and GT's focus on participants' main concern; (3) the connection between evidence based library and information practice and GT's inductive focus on grounding results in data, (4) the complexity of problems in librarianship, and (5) the need for generalizability of findings across various types of library environments. These compatibilities should lead researchers about to investigate academic or practitioner research projects in the LIS field to consider this methodology as a viable research option.

Keywords: Grounded Theory, Interdisciplinary, Participant Focus, Induction, Methodology Selection

1. Introduction

Certain research questions lend themselves to particular methodologies and the selected methodology will impact the way that research questions are explored. Just as no one book should be recommended to every library patron, no research methodology is appropriate for every researcher or every research question. A researcher's own preferences in terms of their perceptions of truth or the nature of reality, a preference for qualitative or quantitative data collection and analysis, degree of comfort with ambiguity, and substantive subject areas of interest may predispose them toward certain types of research questions and research methodologies. Likewise certain methodologies are a better fit for particular types of research questions. Finding the right match for both the research and the question is an essential early step in any research project,

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whether that project is on a large or a small scale. The purpose of this paper is to describe one methodology available to library and information science (LIS) researchers which may be compatible with not only the types of problems faced by the LIS practitioner community but also the service philosophies incorporated in librarianship. That methodology is Grounded Theory (GT). This paper will first describe the key characteristics of the Grounded Theory methodology and describe some conditions for its use relating to researcher and research question characteristics. Next, the compatibility between librarianship and Grounded Theory will be outlined. This analysis will describe the topics of the relationship between librarianship's interdisciplinary nature and GT's theoretical neutrality; librarianship's client-centeredness and GT's focus on participants' main concern; the connection between evidence based library and information practice and GT's inductive focus on grounding results in data, the complexity of problems in librarianship, and the need for generalizability of findings across various types of library environments. Finally, several examples of GT research projects focused on topics of interest to library practitioners will be outlined.

2. The Grounded Theory Methodology

Grounded Theory is an inductive research methodology that was designed to produce a new theory which is "grounded" in data (Glaser and Strauss, 1967; Glaser, 1978; Glaser, 1998). There are several permutations of grounded theory. The best known options for Grounded Theory are the Classic Grounded Theory approach (as defined in Glaser and Strauss's 1967 work and expanded by Glaser), the Straussian Grounded Theory (developed by Juliet Corbin and Anselm Strauss), Constructivist Grounded Theory (developed by Charmaz), and a combination approach that borrows components from several of these versions (Cooney, 2010). It is important for researchers to investigate these options and determine which permutation best suits their research question and methodological preferences. The various versions of grounded theory have each offered criticisms of the others (see for example Zarif, 2012; Storberg-Walker, 2007; Breckenridge, Jones, Elliott & Nicol, 2012; Cooney, 2010). In particular, the issue of theoretical framework and how the researcher perceives the positivist-constructivist debate will be essential not only when communicating one's work to the grounded theory community but also to the larger research world. No matter which permutation of grounded theory an author elects to use, there are several key aspects of this methodology that must be applied. These are induction, theoretical sampling, constant comparison, memo writing, theoretical saturation, and theory development. Brief descriptions of each of these Grounded Theory components follow which are based on the Classic Grounded Theory model as initially developed by Glaser and Strauss and expanded by Glaser.

Induction

Grounded theory is an inductive approach to research. Inductive approaches start with an examination of data and create a theory from that data which

reflects the complexities of the phenomena under investigation as they occur in the real world. This is the exact opposite of the deductive approach to research in which researchers develop theories and then gather data to either confirm or disconfirm their hypotheses. The grounded theory methodology takes its name for the central idea that theories should be grounded in data. This inductive core has shaped all of the other characteristics of grounded theory.

Theoretical Sampling

Theoretical sampling is one of the central components of grounded theory. In theoretical sampling, data are collected in parallel with data analysis and continue to be collected until coding categories are saturated (aka “theoretical saturation”) (Zarif, 2012; Glaser, 2012; Boychuck Duchscher & Morgan, 2004). The sample that is collected is determined by the theory (Suddaby, 2006), rather than by a determination that it be representative of a given population. This approach is a departure from traditional sampling procedures, as

“theoretical sampling violates the ideal of hypothesis testing in that the direction of new data collection is determined, not by a priori hypotheses, but by ongoing interpretation of data and emerging conceptual categories” (Suddaby, 2006:624).

Because the theory is driven by the data, the grounded theorist cannot determine which demographic variables will have an impact on the development of the theory and therefore will not make assumptions about the relevance of any of them prior to analysis (Roderick, 2009). Breckenridge and Jones (2009) argued that the systemic nature of theoretical sampling allows grounded theory “to transcend the descriptive level typical of qualitative research” (2009:121).

Constant Comparison

Constant comparison involves the continual examination of incidents with other incidents gathered in the course of a study. Every new incident, every bit of data that emerges is checked in relation to the emerging theory. Constant comparison helps guard against “nongrounded ideas occurring from personal biases, personal experiences of an idiosyncratic nature, logical conjecture or deductions, received preconceptions and so forth” (Glaser, 1998:182). This method allows for category generation and expansion and “discovers the latent pattern in the multiple participants’ words” (Glaser, 2012:29).

Memo Writing

Memo-writing is an essential part of the grounded theory research process. Memos can serve a variety of purposes throughout the research process. From a procedural perspective provide value to reviewers and evaluators of the research project in that they record the methodological and analytical decisions of the researcher (Cooney, 2011). Memos should be written throughout the grounded theory research process, carefully organized, and frequently referenced. The writing and sorting of memos are essential steps in the development of a theory:

“Sorting is the last stage of the grounded theory process that challenges the researcher’s creativity. In fact it is the epitome of the theory generation process. Writing is merely a write up of the sorting piles. Sorting a rich volume of memos into an integrated theory is the culmination of months of conceptual buildup” (Glaser, 1998:187)

Theoretical Saturation

When conducting a grounded theory study, researchers continue to gather data until theoretical saturation is achieved. “Theoretical saturation of a category occurs when in coding and analyzing both no new properties emerge and the same properties continually emerge as one goes through the full extent of the data” (Glaser, 1978:53). Determining when saturation has occurred is one of the most significant challenges of grounded theory research and misidentifying this point and ceasing data collection early is a common pitfall of this methodology (Suddaby, 2006).

Theory Development

A final characteristic of grounded theory that applies to all variations of this methodology is that grounded theory studies are meant to produce a new theory. There is some debate over what constitutes a theory. Glaser and Strauss describe two types of theories: substantive theories and formal theories. They define a substantive theory as one “developed for a substantive, or empirical, area of sociological inquiry” and a formal theory as one “developed for a formal, or conceptual, area of sociological inquiry” (Glaser & Strauss, 1967:32). They connect the two by stating that “substantive theory is a strategic link in the formulation and generation of grounded formal theory” (1967: 79). They argue that a formal theory can be developed directly from the data, but that it is usually necessary to first develop a substantive theory.

3. When to Use Grounded Theory

There are several conditions that support the adaptation of the Grounded Theory methodology that can be categorized as researcher or research question characteristics. If these characteristics are not met, then a researcher would be better served by selecting a different methodology for their research project. These researcher and research question characteristics are described below.

On the part of the researcher a comfort with ambiguity, ability to work through confusion, and a strong sense of research autonomy are essential characteristics. In describing the prerequisites for a successful Grounded Theory study, Zarif (2012) provided the following list:

- Tolerate confusion – there is no need to know a priori and no need to force the data;
- Tolerate regression – researchers might get briefly ‘lost’ before finding their way;

- Trust emerging data without worrying about justification – the data will provide the justification if the researcher adheres to the rigour of the method;
- Have someone to talk to – grounded theory demands moments of isolation to get deep in data analysis as well as moments of consultation and discussion;
- Be open to emerging evidence that may change the way the researcher thought about the subject matter, and be willing to act on the new evidence;
- Be able to conceptualise to drive theory from the data. This is perhaps the most important risk, as some people may experience difficulty conceptualising what is going on in the field; and
- Be creative in devising new ways of obtaining and handling data, combining the approaches of others, or using a tested approach in a different way (Zarif, 2012:976)

These characteristics are built into Glaser's writings on how to perform a Classic Grounded Theory study as well, as illustrated in his 2010 article on the future of grounded theory:

“The grounded theory researcher must have three important characteristics: an ability to conceptualize data, an ability to tolerate some confusion, and an ability to tolerate confusion's attendant regression. These attributes are necessary because they enable the researcher to wait for the conceptual sense making to emerge from the data.” (Glaser, 2010:4)

If a researcher prefers to use a highly mapped out and developed research methodology in which they will know in advance what their sample must include and what types of analysis will be needed to reach a statistically significant result, then they may find the Grounded Theory methodology discouraging. There are many questions that a researcher is simply unable to answer in the early phases of their study including many that researchers are accustomed to being able to answer to peers and supervisors including how much data you will need to collection, what research literature are you looking at, and what hypothesis are you trying to prove. If you feel a need to answer these questions – or if you try to answer these questions prematurely, then Grounded Theory is not the methodology for you. In Grounded Theory, the theory that is produced may feel far removed from the substantive area of study that the researcher entered into because the methodology strives to create a new theory that is grounded in data but conceptualizes that data beyond the level of people, place, or time (Glaser, 2009).

There are also certain types of research questions that will be better suited to the Grounded Theory methodology than others. As mentioned above, Grounded Theory is an inductive research methodology which aims to discover a theory

from the data obtained in the study. It is not a methodology which is meant to be used to test hypothesis:

“It is a waste of time testing and correcting or modifying an extant theory as the starting research goal. It is much richer, fuller and efficient with resources to first generate a theory for the area and then go to the literature to weave in by constant comparison any new data, which perforce corrects the theory in the literature, which may be relevant.” (Glaser, 2001:67)

If a researcher is strongly attached to a certain hypothesis about phenomenon that they have observed in a given area, then they may prefer to use a deductive research method to confirm or disprove that hypothesis rather than turning to Grounded Theory. Commitment to an existing hypothesis may actually lead to researcher bias violating the Grounded Theory tenant of theoretical sensitivity.

4. Compatibility between Librarianship and Grounded Theory

This section provided some cautions to students and researchers about researcher and research question characteristics that are not compatible with Grounded Theory. The following sections will provide examples of ways in which Grounded Theory does align with the values and research questions emanating from the library and information science fields. Five areas of compatibility between librarianship and Grounded Theory will be explored. They are the relationship between librarianship’s interdisciplinary nature and GT’s theoretical neutrality; librarianship’s client-centeredness and GT’s focus on participants’ main concern; the connection between evidence based library and information practice and GT’s inductive focus on grounding results in data, the complexity of problems in librarianship, and the need for generalizability of findings across various types of library environments.

Librarianship’s Interdisciplinary Nature and GT’s Theoretical Neutrality

Librarians have long been aware of the interdisciplinary of knowledge. Ashworth (1966) wrote

“Even then [1948] there was interplay of ideas, and information was slipping across the boundaries between disciplines. S.C. Bradford had noticed scatter even earlier. Any attempt to depict present-day intricate interrelations on a two-dimensional diagram would probably be doomed to failure. Modern knowledge is becoming increasingly interdisciplinary in character, and no longer fits anything like so well as it did into the neat, watertight compartments of classification schemes.” (Ashworth, 1966:153)

He further stated that:

“The librarian should also be able to perceive which items of knowledge might profitably be combined even though they may exist in disciplines far apart, even though he will not himself combine them or discover their full potentialities.” (Ashworth, 1966:155)

Librarians have observed the ability to create or support the creation of new knowledge through the combination of research produced across disciplines through their work in collection development and cataloguing. They have also discovered the relevance of exploring work from different disciplines in their research work. Library researchers have cited theories that have originated in fields such as psychology, sociology, computer science, history, management, linguistics, education, and countless others to build a body of knowledge for researchers and practitioners.

Grounded Theory allows the researcher to cross disciplinary boundaries. Grounded Theory researchers do not restrict their theories to the confines of any particular discipline. They develop a theory that is grounded in the data that they collect in their study and then explore literature that reflects the themes that emerge from their data. The data provides researchers with entry points into a wide range of research fields.

Librarianship’s Client-Centeredness and GT’s Focus on Participants’ Main Concern

An emphasis on client-centeredness and customer service has long been a hallmark of librarianship. This focus has shaped the work that is done by librarians in all types of libraries and is the guiding principle behind library outreach activities. It is also incorporated into some of the values of the profession which have been articulated by several library associations. The American Library Association, for example lists service among its professional values (American Library Association, 2004) and the Canadian Association of Professional Librarians lists “respecting different views and individual expertise” (Canadian Association of Professional Librarians, 2012) among their values. There is an emphasis in librarianship to put the needs of the library user at the forefront and to build collections and services that reflect those needs.

This client-centered focus is compatible with the Grounded Theory approach. It is a rejection of the development of theories based on the beliefs of the researcher, instead focusing theory development on the main concerns of the participants:

“...the researcher remains open to exploring a substantive area and allowing the concerns of those actively engaged therein to guide the emergence of a core issue. The conceptualization of this main concern and the multivariate responses to its continued resolution emerge as a

latent pattern of social behaviour that forms the basis for the articulation of a grounded theory. "(Halton, 2009:37-38)

In other words, it is the main concern of the participants rather than the main concern of the researcher (such as testing a particular hypothesis or advancing a 'pet theory') that guide theoretical sampling and constant comparison in Grounded Theory studies:

"The goal of grounded theory is to generate a theory that accounts for the patterns of their behavior which are relevant and problematic for the participants. The core category is that pattern of behavior which is most related to all the other categories and their properties in the theory which explain how the participants resolve their main concern" (Glaser, 1998:117)

The Connection between Evidence Based Library and Information Practice and GT's Inductive Focus

Evidence based library and information practice has become an important paradigm for library decision-making makers concerned about optimizing their resources and providing evidentiary support for their collection and service delivery decisions. Evidence based practice originated in medicine and has spread into a range of other field, entering the library and information science world through health librarianship. It is generally defined as a means of improving a profession through the incorporation of research into daily practice (Gillespie, 2014, p. 5). The practicing library and information science professional may have little time to conduct research or gather the evidence needed to support their decision making processes. They can ill afford to dedicate time to conducting a study that misses the main concern of their library users.

The Grounded Theory approach is inductive, and therefore, by its very nature 'grounded in data'. Any theories that emerge from a Grounded Theory study must be clearly linked to the data examined:

"Both substantive and formal theories must be grounded in data. Substantive theory faithful to the empirical situation cannot, we believe, be formulated merely by applying a few ideas from an established formal theory to the substantive area. To be sure one does out and studies an area with a particular sociological perspective, and with a focus, a general question, or a problem in mind. But he can (and we believe should) also study an area without any preconceived theory that dictates, prior to the research, "relevancies" in concepts and hypotheses." (Glaser & Strauss, 1967:33)

This grounding in data is linked to two of the key evaluation criteria for Grounded Theory studies: workability and fit. Workability refers to the degree

to which “the concepts and the way they are related into hypotheses sufficiently account for how the main concern of participants in a substantive area is continually resolved” (Glaser, 1998, p. 18). Fit asks “Does the concept adequately express the pattern in the data which it purports to conceptualize. Fit is continually sharpened by constant comparisons” (Glaser, 1998:18).

A word of caution must, however, be given to researchers hoping to use Grounded Theory as a means of directly informing evidence-based practice. Glaser (2009) wrote

“The recent surge to produce evidence-based practice remodels classical GT down to the descriptive level of QDA. This brings henceforth to GT all the problems of worrisome accuracy of data, data doubts and data audit or member checks, which do not apply to classical GT.” (Glaser, 2009:15-16)

This means that the methodology of a Grounded Theory study should not be altered to reflect the evaluation criteria of other types of qualitative studies. Researchers should also be aware that the main concern of participants that is discovered in a grounded theory study may prove surprising and may move the research in unanticipated directions.

The Complexity of Problems in Librarianship

The problems that concern librarians tend to be complex and to involve a large number of potential variables which may be difficult to control. These “real world” research problems which seek to explore ways in which libraries can deliver programs and services to various populations include variables such as population characteristics, information resource characteristics, technological variables, and other factors. The complexity of these problems may challenge library researchers in determining where to start their research. When they begin reading about the types of challenges they face in their institutions, they may encounter literature review problems that fall on either sides of a spectrum: first, they may discover that nothing has been written on the specific problem or population of interest or second, they may discover that an abundance has been written, but not of it is directly tailored to the problem that they are investigating, leading them to wonder at its relevance.

Grounded Theory can help librarians to research these types of problems. First, the method reverses the order of data collection and the literature review relative to other research methodologies, by guiding researchers to look at literature after they have discovered themes in the data. This prevents researchers from being led down research or theoretical roads that are irrelevant to their participants’ main concern. Second, Grounded Theory’s focus on discovering participants’ main concern provides a way for researchers to manage research on complex problems:

“Grounded theory is uniquely suited to this task of discovering the basic core category (which is usually, but not necessarily, a basic social process). Stated another way, the core category shows the continual multivariate processing of what is going on to relieve the participants’ main concern. It lays bare the truth in areas of stakeful myths which becomes a toehold toward change.” (Glaser, 1998:36)

Transferability of Findings across Various Types of Library Environments

A final point of compatibility between librarianship and Grounded Theory is the ability to transfer findings across various types of environments. Librarianship is a highly heterogeneous profession. The types of clients, materials, tasks, and concerns of librarians across public, academic, school, and special libraries differ dramatically – and the differences are expanded when the concerns and practices of related information science fields such as records management, information management, and information organization disciplines such as information architecture, taxonomy development and search-engine design are also considered. In spite of the differences between the daily tasks of practitioners in all of these areas, there are some common cores. All of these jobs or work settings are focused on providing access to information and consider the impact that various ways of organizing and presenting that information will have on that information’s retrieval and use.

A piece of research that places too much emphasis on the characteristics of a particular situation or user population may be of limited interest to the broader LIS community. Research that transcends the particular unit of study or substantive population and conceptualizes the processes that participants are undertaking to resolve their main concern, however, may be applicable across a wide range of situations:

“Grounded theory generates general, conceptual problems, not problems of an aggregate or unit. Any special unit may simply embody an instance of the problem, as the continual resolution is applied to it. It is not solely and particularly a property of the unit, hence limited only to it. Grounded theory has conceptual generability, not unit generality” (Glaser, 1998:125)

Using Grounded Theory may therefore help library researchers to generate theories that contribute to the LIS body of knowledge rather than just seeking to solve a single, particular practitioner problem.

5. Conclusions

This paper was written on the premise that the Grounded Theory methodology is compatible with both the problems and characteristics of librarianship, making it a potentially viable option for researchers investigating issues of practical concern to librarians and those interested in contributing to the larger

LIS body of knowledge. Compatibilities are identified between librarianship and Grounded Theory along five themes. These themes are (1) the relationship between librarianship's interdisciplinary nature and GT's theoretical neutrality; (2) librarianship's client-centeredness and GT's focus on participants' main concern; (3) librarianship's emphasis on evidence-based practice and GT's inductive focus on grounding results in data, (4) the complexity of problems in librarianship, and (5) the need for generalizability of findings across various types of library environments. Although this article does not suggest that Grounded Theory is the best fit for every LIS research problem or every LIS researcher, its compatibility with what LIS researchers and practitioners wish to achieve is strong enough that it should be considered by LIS students or researchers about to undertake a research project.

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