

Developing a Classic Grounded Theory Research Study Protocol:

A Primer for Doctoral Students and Novice Researchers

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Abstract

The research study protocol is a roadmap for conducting research systematically, efficiently, and ethically. While protocols have standard components, a classic grounded theory protocol differs in its methods, including processes and procedures, because of the uniqueness of the methodology. A classic grounded theory protocol commonly contains the following: (1) introduction to the topic; (2) purpose of the study with the research question; (3) detailed description of the research methods, including data collection and analysis; and (4) procedures to demonstrate the ethical conduct of human participant research. Based on a review of grounded theory methodological literature, the current article describes an approach for developing a research protocol that maintains grounded theory research integrity while adhering to institutional and funding requirements. A properly written study protocol is essential for maintaining methodological fidelity, avoiding method slurring, and unintended remodeling in classic grounded theory.

Keywords: Classic Grounded Theory, Study Protocol, Theoretical Sampling, Data Collection, Constant Comparative Method of Analysis, Theory Development.

The rapid advancement of qualitative research across the disciplines, described as the “crest of a wave” (Morse, 1994, p. 139), resulted in methodological approaches being considered a unified field for the purpose of critical appraisal (Dixon-Woods et al., 2004). For this reason, aspects of qualitative research, including trustworthiness and rigor, continue to be debated among scholars because of the epistemological differences of the methodologies (Garside, 2014). Even though some methodologists disagree, grounded theory is commonly classified as a qualitative methodology, but this does not mean that a grounded theory uses the same processes and procedures as other methodologies. Since each methodology has procedures to demonstrate rigor and techniques to establish trustworthiness (Vander Linden & Palmieri, 2021), a compre-

hensive research proposal and the briefer research study protocol are essential to identify, describe, explain, and justify the plan for conducting research using grounded theory.

Qualitative research designs are emergent in nature. As such, research is conducted by design rather than designed while being conducted (Sandelowski et al., 1989). The design is prospectively described in the research proposal, a comprehensive document to justify a thesis or dissertation, support a planned research study, and obtain funding for research (Lusk, 2004). Research proposals across research designs are developed with similar sections including the cover page, abstract, introduction, review of the literature, research problem and research questions, research purpose and objectives, research paradigm, research design, research method, ethical considerations, dissemination plan, budget, and supporting appendices (Klopper, 2008). Since "process is outcome" (Sandelowski & Barroso, 2003, p. 781) in methodological studies, the comprehensive research proposal is distilled into a research study protocol that provides a clear, concise, and detailed plan to carry out the study. A good quality research study protocol should be able to justify the research, answer the research question, achieve the study objectives, provide enough details about the methods to replicate the study, and demonstrate the ethical treatment of human participants.

A research study protocol, often referred to as the study protocol, is the roadmap for researchers to conduct their study systematically, efficiently, and ethically. A classic grounded theory protocol differs in some areas because of its unique aspects of the methodology (Xie, 2009). Despite variations in content caused by institutional requirements, a classic grounded theory protocol commonly contains the following areas: (1) introduction to the topic with the background and significance; (2) purpose of the study with the research question; (3) detailed description of the research methods with the study design, including data collection and analysis procedures; and (4) procedures to demonstrate the ethical conduct of research. The current article provides a detailed description of the classic grounded theory protocol to guide researchers when developing a research protocol that maintains grounded theory research integrity while adhering to institutional and funding requirements.

The current article is important for understanding how to maintain methodological fidelity (Vander Linden & Palmieri, 2021) when writing a study protocol for classic grounded theory which is sometimes also called Glaserian grounded theory. When developing the study protocol, the researchers need to clearly state the methodology in alignment with the methods, including the processes and procedures. Mixing methods from the different grounded theory approaches can result in *method slurring* (Baker et al., 1992) and the unintended remodeling of classic grounded theory (Glaser & Holton, 2004).

Protocol Part 1: Introduction and Background

A study protocol typically begins with an introduction and background that provide information about the research topic, problem, or phenomenon to be studied; the significance of the proposed study; and a review of relevant literature, including theoretical and empirical work. This section provides researchers an opportunity to provide the rationale and significance for the study, and to clearly state why the study should receive ethical approval or funding. The introduction begins by describing the general subject area of interest and advances in detail to present the specific area of research. The background further advances the introduction with

detailed information essential to support the proposed research.

Several foundational tenets of classic grounded theory may pose a challenge for researchers when writing the introduction and background. Three tenets for focus in this part of the protocol are selecting a topic, not a problem (Glaser, 1992, 2021; Simmons, 2022); limiting preconceptions (Glaser, 2012, 2013a; Glaser & Strauss, 1967); and avoiding a preliminary literature review (Christiansen, 2011; Glaser, 1978, 1998; Nathaniel, 2006, 2022). These tenets limit what can be written in the research topic, study significance, and background section of the study protocol.

When beginning a classic grounded theory, a researcher should begin with a general topic area rather than a predetermined research problem defined from the literature or professional practice. Glaser (1998) stated, "It is about time that researchers study the problem that exists for the participants in the area, not what is supposed to exist or what a professional says is important" (p. 116). Thus, within a grounded theory study, the research begins without a predetermined problem which allows it to be discovered through the data analysis. A predetermined research problem is considered a form of preconception, and within classic grounded theory, preconceptions need to be limited for researchers to remain open to what is in the data. In the case of classic grounded theory, preconceptions can dictate a biased view of the data (Glaser, 2012) similar to the bias that threatens reliability and validity in other approaches to qualitative research (Morse et al., 2002).

Limiting preconceptions is another fundamental tenet of classic grounded theory. In referencing his earlier works, Glaser (2012) stated,

I have said over and over in my many writings that the researcher should not preconceive in doing GT [grounded theory] research: 1. the general problem, 2. the specific participants problem, 3. what received concepts will explain the current behavior, 4. what theoretical code will integrate the theory, and 5. what theoretical perspective applies. The rule is to let these areas emerge. Discover them. (para. 6)

One way to limit preconceptions is to avoid a preliminary literature review of the topic area. Glaser (1998) provided the following six specific reasons for avoiding a preliminary literature review of the topic area: the risk of becoming distracted by concepts that are not relevant to the data, the possibility of identifying problems that are not relevant to the people in the area of study, the potential for speculative interpretations to find their way into the grounded theory, the risk of being discouraged by the work of prominent academics, the risk of the theory sounding too much like the language used in the field rather than what is discovered through data analysis, and the uncertainty about which literature is relevant until the theory has been developed through data analysis. Importantly, the literature is not entirely avoided in a grounded theory study. Instead, Glaser (2006) encouraged researchers to read extensively outside the research area. Literature relevant to the study is used at later stages in the research process (Glaser, 2001).

Avoiding a preliminary literature review is the tenet that has the most influence on researchers who are trying to write an introduction to the research topic, problem, or phenomenon to be studied; the significance of the proposed study; and a review of relevant theory and empirical work in this section of the study protocol. Ideally, the researcher will introduce the topic

briefly and state what attracted them to the topic area (Glaser, 1998). Then, the researcher should explain why more cannot be said using the three tenets mentioned above. However, this approach may not fulfill institutional or funding requirements or ethical approval processes (Guthrie & Lowe, 2011). In those instances, Glaser advised researchers to do the literature review (Glaser, 2001, 2002) to fulfill the institutional requirements “because without it, the research would not be possible” (Nathaniel, 2022, p. 35).

The key point about preconceptions is researchers need to limit exposure to external concepts that can influence the emergence of the theory. Further, Glaser (2013a) argued, “highly trained people well formed in their field find it hard to transcend their experienced view. They see it everywhere rather than staying open, however much they pretend to be open” (p. 22). For the literature review, Nathaniel (2022) provided a systematic guide for the use of extant literature, explaining what, how, why, and when to review the literature in classic grounded theory. This guidance is useful for effectively stating the significance of the research when describing the purpose of the study.

Protocol Part 2: Purpose of the Study and Research Question

Purpose of the Study

The next section of the protocol explains the purpose of the study. A classic grounded theory protocol should always include the development of a theory as part of the purpose of the study. This is important because the research design selected for a study should match the research question and purpose of the study. Classic grounded theory is one of the only research methods that is specifically designed to systematically develop theory from data analysis (Glaser, 1978, 1998; Glaser & Strauss, 1967). Thus, including the purpose for generating theory helps to justify the use of classic grounded theory as the approach for the study.

Research Question

The next section of the protocol articulates the research question(s). Classic grounded theory is not required to have a research question, but most include one because they are often required by institutional or funding guidelines. According to Glaser (2021), “the research question in a grounded theory study is not a statement that identifies the phenomenon to be studied” (p. 10). For this reason, the research question for classic grounded theory should be broadly worded, so both the problem and the theory that explains the pattern of behavior used to resolve the problem can emerge from the data. Vander Linden and Palmieri (2021) provided an example of such a question for a study on infertility as “what is the main concern (issues, problem) for people who are living with infertility, and how do they resolve this concern (issues, problem)?” (p. 109). However, a hypothesis should never be stated in a classic grounded theory protocol. When explaining the historical roots of grounded theory, Glaser (2021) stated, “One aspect of GT [grounded theory] was to stop hypothesis testing that was irrelevant and drew on conjectural theory explanations” (p. 3). Instead, grounded theory provides researchers with a rigorous methodological process for collecting and analyzing data that generates a theory grounded in data.

Protocol Part 3: Research Methods

The research methods section of the protocol is critically important because the research design elements specific to classic grounded theory must be described in sufficient detail to be a roadmap for researchers to conduct the study and to establish the universal concepts of trustworthiness and rigor (Charmaz & Thornberg, 2021). This section provides information about each of the following elements: study design, sampling, and data collection and analysis. In the next subsections, each area is discussed specific to conducting a classic grounded theory.

Study Design

Study protocols need to clearly articulate the study design and the rationale for selection (Denzin & Lincoln, 2017). When writing a grounded theory protocol, it is not enough to say the study will use grounded theory. Researchers must also clearly identify the grounded theory approach being used and the rationale for its selection (Vander Linden & Palmieri, 2021). The most prominent grounded theory approaches are classic (Glaser, 1978, 1992; Glaser & Strauss, 1967), interactionist/Straussian (Strauss & Corbin, 1990), and constructivist/Charmazian (Charmaz, 2006, 2014). While the approaches may initially appear similar, each has unique characteristics (Vander Linden & Palmieri, 2021) that affect research design decisions and study implementation.

Institutional, funding, or publication requirements may require an epistemological rationale for the methodological approach (Morse et al., 2009). Nathaniel (2022) explained that given the controversial nature of the philosophical foundations of classic grounded theory, researchers have three basic options when an epistemological rationale is required.

The first option is to present the researcher's own worldview as the foundation of the research study. . . . A second option is to adopt a formal theory of science that includes inductive logic . . . as a philosophical foundation for the method. . . . The third option is to select symbolic interactionism as the philosophical foundation of the method. (p. 42)

According to Nathaniel (2022), Glaser denied a specific foundation for grounded theory but recognized symbolic interactionism could serve as a sensitizing agent for the research. In this case, however, the literature review should use primary sources to describe the elements that affect the research process. Regardless of the option selected by the researcher, the study protocol should align with the selected grounded theory approach. Any methodological deviation(s) from the selected approach should be clearly explained and appropriately justified. This allows the researcher to specify and justify modifications made to the implementation of the methods because of constraints and limitations in the specific study rather than the unintended remodeling of classic grounded theory into a different research methodology.

Sampling

A study protocol includes a brief description of the population to be studied. In classic grounded theory, the population to be studied is individuals who have firsthand knowledge and experience from various perspectives in the topic area (Nathaniel, 2008). If the study protocol includes vulnerable participants, additional safeguards need to be described that will protect the rights and well-being of these participants.

The protocol should also include a list of the eligibility criteria for inclusion and exclusion from the study. For classic grounded theory, the eligibility criteria are often very general. For example, inclusion criteria may be anyone who has direct experience within the topic area, and exclusion criteria may be anyone who does not have direct experience within the topic area. It is also possible for the population and eligibility criteria to change over time since the sampling strategy used in grounded theory is theoretical sampling.

Sampling Strategy

A protocol also identifies and briefly explains the sampling strategy to be used. In grounded theory, theoretical sampling must be used to develop the concepts of the theory. Theoretical sampling is "the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyzes his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges" (Glaser & Strauss, 1967, p. 45). All the major approaches of grounded theory use theoretical sampling although the data analysis process varies with each approach (Charmaz & Belgrave, 2012). The researchers need to remember their role is that of "an active sampler of theoretically relevant data, not an ethnographer trying to get the fullest data on a group" (Glaser & Strauss, 1967, p. 58).

Sample Size

Typically, an estimate for the sample size is included in the study protocol. However, this can be difficult to estimate in a grounded theory because the size of the sample is dictated by theoretical saturation which is specific to grounded theory and remarkably different from saturation in other qualitative research methodologies defined as the point at which no new information emerges from the data analysis (Low, 2019). According to Glaser (2001), theoretical saturation is not merely seeing the same pattern repeatedly. Instead, Glaser (2001) noted, "it [theoretical saturation] is the conceptualization of comparisons of these incidents which yield different properties of the pattern, until no new properties of the pattern emerge" (p. 191).

When required to estimate a sample size for a ground theory, 9 to 30 participants (Green & Thorogood, 2018; Guest et al., 2006; Morse, 2015) is often noted as the range of participants necessary to achieve theoretical saturation. However, the sample size will depend on the study purpose, target population, and types and styles of coding (Hennink et al., 2017). Reaching theoretical saturation is a critical process to establish the trustworthiness and rigor of a grounded theory, especially since the lack of full saturation, or pseudo-saturation (Aldiabat & Le Navenec, 2018), may not completely raise the categories to a theoretical level. Furthermore, new data may not fit well into the emerged categories (Bowen, 2008), and the categories may appear loose and nonspecific rather than compressed and complete. Full saturation requires researchers to reflect on "the overall meaning of the entire category, and to compress it into a tight, concise, clarifying concept" (Scott & Howell, 2008, p. 7). This step results in the researcher capturing the theoretical meaning of the data as a category. For these reasons, theoretical sampling and saturation are integral to completing a classic grounded theory.

Data Collection and Analysis

The procedures for data collection and analysis should provide a detailed description of what types of data will be collected and how each type will be collected. This section should include how the privacy and confidentiality of participants will be maintained during data collection. Although rarely used in classic grounded theory, if deception or coercion will be used, this section should include a description of how it will be used, provide a rationale for why it is necessary, and explain debriefing procedures. Since classic grounded theory has a clearly delineated process of collecting and analyzing data, this section should address substantive coding (including open and selective coding), constant comparative method of analysis, memoing, sorting memos, identifying theoretical codes, generating a theoretical outline based on the sorting and theoretical codes, and writing up the theory. Although the current article provides a brief description with key resources for learning each step, Simmons (2022) clearly defined each step in the process of conducting a classic grounded theory.

Data Collection

As an integral part of collecting data in most qualitative paradigms, researchers use documents, interviews, and observation for data collection. For this reason, the protocol includes a description of any processes, procedures, and/or instruments used to collect data. While grounded theory can use qualitative and quantitative data (Holton & Walsh, 2017), qualitative data are most often collected through the use of unstructured, in-depth interviews and observations (Foley & Timonen, 2015; Foley et al., 2021; Nathaniel, 2008; Simmons, 2022). Unstructured, in-depth interviews use a grand tour, or spill question, followed by other questions that probe into the topics discussed by the participant.

Unstructured Interview. The unstructured interview for classic grounded theory has been described as informal because it reflects an everyday conversation with participants (Chenitz & Swanson, 1986). At the onset of the conversation, there is no group of interview questions previously developed from the literature (Foley & Timonen, 2015). Semi-structured and structured interview guides are not typical for classic grounded theory because they rely on a review of the literature and pre-existing concepts, which are considered preconceptions in classic grounded theory (Simmons, 2010).

The interview aids in the "process of discovery" for classic grounded theory instead of being the vehicle for a "journey of co-construction" for the constructivist approach (Foley et al., 2021). Classic grounded theory interviews begin with a single grand tour question (Simmons, 2010) because the researchers want to listen to participants recount their stories (Glaser & Strauss, 1967). In contrast, the constructivist approach is an "intensive interview" with a "directed conversation" where the "interviewer can shift the conversation and follow hunches" (Charmaz, 2006, pp. 25-26).

Grand Tour Question. For the interview process to maintain methodological fidelity for a classic grounded theory (Vander Linden & Palmieri, 2021), the unstructured interview begins with a grand tour question followed by probing and clarifying questions to explore aspects of the participant's story relevant to generating the theory (Glaser, 1998; Simmons, 2010). According

to Glaser (2021), the “interview questions have to relate directly to what the interview is about empirically, so the researcher maximizes the acquisition of non-forced data” (p. 10).

The grand tour question is broadly worded to allow the participant to speak about whatever is most relevant to them about the topic area without the researcher directing the response (Nathaniel, 2008; Simmons, 2010, 2022). The probing questions should also be as open as possible to avoid leading the participant. Since there is only one interview question, interview guides are not needed. If one is required, the researchers simply list the one question and may state that probing questions, such as “can you tell me more about that,” will be used.

With the advancement of the interview process, “theoretical sampling based upon the emerging theory brings a sharper focus to subsequent interviews” (Wimpenny & Gass, 2000, p. 1487). With each subsequent interview, the researchers work to theoretically saturate specific aspects of the emerging theory. Theoretical saturation requires the development of new interview questions focused on the concepts emerging from the data. These questions are narrower in focus than the original grand tour question but still worded broadly to encourage participants to openly share their experiences (Simmons, 2022; Vander Linden & Palmieri, 2021). This process continues forward until theoretical saturation is achieved.

Data Analysis

Most research methods use a sequential approach to data collection and analysis. However, in grounded theory, data analysis begins with the initial data collection. Data collection and analysis are a concurrent process undertaken in a cyclical pattern guided by theoretical sampling, coding, and constant comparative method of analysis until the theory emerges (Glaser, 1965; Glaser & Strauss, 1967). For this reason Glaser and Strauss (1967) stated the data collection and analysis should “blur and intertwine continually, from the beginning of an investigation to its end” (p. 43).

Substantive Coding. Substantive coding consists of open and selective coding (Glaser, 1978). As soon as the initial data is collected, the researcher begins open coding, which involves looking at the data for chunks of text that may indicate a theoretical pattern and assigning them a name. The pattern is called a concept and the name given to it is a code. Initially, the researcher is looking for anything and everything that might indicate a concept in the data. However, open coding is replaced by selective coding once the core concept is discovered (Glaser, 1978). Glaser and Strauss (1967) and subsequently Glaser (1978, 1998) used the terms core concept, core variable, and core category interchangeably. Selective coding is coding for concepts related to the core concept. The core concept is the central pattern of behavior that explains how people are trying to address their main issue or concern. This core concept accounts for most of the variation in the data and is central to most, if not all, the concepts emerging from the data analysis. Coding and the constant comparative method of analysis leads to discovery of the core concept (Glaser, 1978, 1998, 2016; Glaser & Holton, 2004; Holton, 2010; Simmons, 2022).

Constant Comparative Method. The constant comparative method of analysis (Glaser, 1965, 2008; Glaser & Strauss, 1967) is the method of data analysis used in grounded theory and is central to theory generation. The method involves comparing the chunks of data to each other to develop the theoretical concepts being discovered in the data (Glaser, 2008). Initially, chunks

of coded data are compared to other chunks of coded data leading to the development of concepts. Subsequently, data are compared to the emerging concepts. Finally, concepts that have emerged are compared to each other to identify the relationships. As the researcher engages in these comparisons, concepts and their relationships are identified and developed based on the data and then recorded in memos (Chametzky, 2022; Glaser, 1965, 1998, 2016; Glaser & Holton, 2004; Holton, 2010; Simmons, 2022). As a salient feature for theoretical saturation (Glaser, 2008; Low, 2019), the constant comparative method of analysis “combines systematic data collection, coding, and analysis with theoretical sampling in order to generate theory that is integrated, close to the data, and expressed in a form clear enough for further testing” (Bowen, 2008, p. 280).

Memoing. Memos are the written theoretical ideas that occur to the researcher during coding and the constant comparative method of analysis. Memos are conceptual; they do not describe or summarize the data. Through memoing, the researcher captures the development of the concepts and records their relationships with other concepts. Glaser and Holton (2004) stated,

Memos help the analyst to raise the data to a conceptual level and develop the properties of each category that begin to define them operationally. Memos present hypotheses about connections between categories and/or their properties and begin to integrate these connections with clusters of other categories to generate the theory. (para. 62)

The memos accumulate as a continuously flowing written record of ideas about the concepts derived from the data (Aldiabat & Le Navenec, 2018). As the researcher begins to reach theoretical saturation, memos can begin to be sorted (Chametzky, 2022; Glaser, 1978, 1998; Glaser & Holton, 2004; Holton, 2010; Simmons, 2022).

Sorting. Memos are sorted, not data (Glaser, 2014). As such, researchers begin to sort all the written memos into categories, often generating more memos as the relationships between and among the categories become more apparent (Glaser, 2014; Holton, 2008; Simmons, 2022). Although researchers are often tempted to skip this step, doing so hinders the conceptual integration of the emerging theory (Holton, 2007; Simmons, 2022). Through sorting, the researcher discovers the overarching structure that best organizes the theory. This structure is called a theoretical code (Glaser, 2013b; Holton, 2010).

Theoretical Codes. According to Glaser (2013b), theoretical codes “are the abstract models that emerge during the sorting of mature memos into a potential substantive theory. They conceptualize the integration of substantive codes into hypotheses of a substantive theory” (p. 3). As the researcher sorts memos and discovers theoretical codes to help organize and present the theory, a theoretical outline is developed, and memos are sorted into it, leading to the first rough draft of the theory (Chametzky, 2022, 2023; Glaser, 2013b, 2014; Simmons, 2022).

Theory Development. The first draft of the theory is then edited into a fully integrated theory that explains the main concern or issue of the people within the topic area and the patterns of behavior they use to try to address this main concern or issue (Glaser & Strauss, 2012). At this point, relevant examples and literature are carefully integrated into the theory to support but not distract from the theory (Glaser & Strauss, 2012; Holton & Walsh, 2017; Simmons, 2022). The

finished ground theory should have explanatory power and be a close fit to the data; it should also be useful, dense, durable, and modifiable (Glaser, 1978, 1992; Glaser & Strauss, 1967).

Protocol Part 4: Ethical Considerations

Before recruiting participants for data collection, the research study protocol must be reviewed and approved by an ethics review board. All research involving human participants must adhere to three fundamental ethical principles: respect for persons, beneficence, and justice (Riis, 2000). Respect for persons requires researchers to acknowledge the autonomy of individuals and to protect people with diminished autonomy, such as children or people with cognitive impairments. Informed consent is a key component for respecting persons. Beneficence requires that research be conducted in a manner that maximizes benefits to participants and minimizes potential harm. Justice requires researchers to ensure the benefits and burdens of the research are distributed fairly and that vulnerable populations are not exploited.

Internationally, the Declaration of Helsinki established the principles for research involving human participants, including ethics committee review of human participant research and informed consent (Wilson, 2013). In the United States, the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) legally codified a comprehensive framework for ethical research with human participants (Adashi et al., 2018), emphasizing the importance of informed consent, minimizing harm, and ensuring fairness and justice (Pritchard, 2021). Much of the information outlined in the research protocol is included in the research ethics application. Simmons (2022) provided additional guidance for responding to questions about classic grounded theory that may arise during the ethics committee review.

Risks and Benefits

A protocol includes a discussion of the risks and benefits of participation in the study. Risks may include physical, psychological, economic, legal concerns, loss of privacy, or breach in confidentiality. The protocol should explain how risks will be minimized. This section also discusses the potential benefits to the research participants and society. Importantly, grounded theories explain behaviors that are being used within the topic area, not what the literature, researcher, or anyone else thinks should be happening within the topic area. More specifically, grounded theories are about what is happening, not what should be happening (Simmons, 2022). Thus, the researchers should not claim that the theory will provide benefits that are not in line with what grounded theory produces.

Compensation and Incentives

If compensation or incentives will be provided to participants, the protocol needs to have a description of what they are and their approximate value (if no monetary compensation), how they will be distributed, and when they will be distributed. This information is included in all research study protocols, not only for grounded theory. The compensation or incentives should not over-incentivize participation in the study and should instead recognize the time, typically one or two hours, of the participant. Despite offering compensation or incentives, participation is always considered voluntary.

Data Management and Security Plan

Regardless of the research methodology, research study protocols provide a detailed description of the data security procedures, processes for confidentiality, and the responsible party. Data are any recorded information obtained for research, regardless of form or the media where it is recorded. The chain of custody at every stage of the data management and security process needs to be described in the protocol, including data capture, data coding, data sharing, data archiving, and data security. The data security process includes describing the procedures for data storage, either paper or digital; defining the researcher(s) responsible for maintaining data security and confidentiality; and identifying the point for data destruction.

Digital data should always be secured on a password protected computer with active virus protection software, and paper documents should be stored in a locked file cabinet or box in a secured room. When appropriate, participant pseudonyms should be used to de-identify all documents, paper or digital (Allen & Wiles, 2016). This strategy can protect participant confidentiality in case of accidental document disclosure (Wiles et al., 2008). The pseudonym is particularly salient for identifying data when researchers collaborate in data analysis using software packages, such as Atlas.ti (Friese, 2012). Because he believed software blocks the emergent process in data collection and analysis, Glaser was adamant about avoiding software. When software is used by a research team, only the primary investigator should have identifiable participant information. Any documents, paper or digital, with identifiable participant information must be stored in a separate location from the transcribed manuscripts. Finally, the procedures for when and how data will be destroyed often vary by institution policies. Minimally, federal regulations in the United States (45 CFR 46) require research records to be retained for 3 years after the completion of the research (Office for Human Research Protections, 2021)

Although there are no unique aspects for classic grounded theory that affect data management and security, study protocols need to also address the procedures for maintaining confidentiality during the transcription process, if transcription is used. Although Glaser (1998) discouraged transcribing interviews, there are times when it may be required. When transcription services are used to transcribe digital recordings of interviews for research, the service should provide a nondisclosure agreement describing confidentiality procedures and data security technology used for digital file transfers. Researchers should refer to the requirements of their institution when developing a plan for data management and security that aligns with the institutional review board expectations.

Informed Consent

According to Shuster (1997), the Nuremberg Code of 1946 established informed consent as the foundation for contemporary research ethics because "voluntary informed consent is absolutely essential" (p. 1436) for the ethical conduct of research with humans. Although informed consent is essential for conducting human participant research, the confidentiality of interviews in qualitative research can be improved by requesting a waiver of a written informed consent from the ethics committee. In these instances, the primary investigator can send the informed consent document by email to the participant for review before the interview. Then, the primary investigator can respond to any questions about the informed consent or the study by email or telecommunication. Finally, the informed consent can be recorded as part of the inter-

view using the pseudonym selected by the participant. In a minimal risk study, this process eliminates the signed informed consent document that identifies the participant.

Disclosures

The final elements often included in a study protocol are the disclosures, such as the conflict of interest statement and a statement about funding. A conflict of interest statement either states that there are no conflicts of interest or describes any potential sources of influence or perceived influence on study conduct and conclusions and how these will be managed. The protocol should also describe any sources of funding and other support and the role of funders in data collection, interpretation, and reporting, if applicable.

Conclusion

The current article identified essential elements to include in a classic grounded theory protocol. Despite the different approaches to grounded theory, classic grounded theory has distinctive methods specific to the introduction of the topic with background and significance; the purpose of the study with the research question; and a detailed description of the research methods with the study design, including data collection and analysis procedures. Further, specific components in the research method address the cyclical pattern of data collection and analysis that is guided by theoretical sampling, coding, and constant comparative method of analysis until a theoretically saturated theory emerges. Subtle variations in the criteria outlined in the current article may result in unintended remodeling of classic grounded theory as a different research methodology. The content of the study protocol needs to respect the integrity and rigor of classic grounded theory as a distinct research methodology.

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