

## From the Editor's Desk

### Research Publishing: The Unique Value of The Grounded Theory Review

A few weeks ago, I received an email from a colleague who had submitted a paper to a highly regarded, high impact journal. The study was well designed and well described as a classic grounded theory. As often happens, a peer reviewer for the journal was not familiar with the tenets and procedures of classic grounded theory. Since research methods, procedures, and language vary among the varieties of classic and remodeled grounded theory methods are not interchangeable with those of classic grounded theory, the peer reviewer's suggestion was inaccurate and inappropriate. Yet like many classic grounded theorists, the author needed to find a way to satisfy a reviewer who was unfamiliar with the specifics of the method. This is a tightrope that many classic grounded theorists walk—trying to appease poorly informed peer reviewers and journal editors while avoiding language that violates the major premises of classic grounded theory. This is never the case with The Grounded Theory Review.

Founded by Barney Glaser and supported by the Glaser family, the Grounded Theory Review is unique. It is the only journal that focuses solely on the original grounded theory method as first described by Glaser and Strauss (1967) and more fully developed by Glaser in *Theoretical Sensitivity* (1978), *Doing Grounded Theory* (1998), and more than 25 other publications in the subsequent years. The Grounded Theory Review is solely dedicated to and focused on the dissemination of classic grounded theories and classic grounded theory methodology. Submissions based upon all other research methods, including remodeled versions of grounded theory (such those of Charmaz, Strauss and Corbin, Birks and Mills, and Clarke) are excluded from publication in this journal. Current Grounded Theory Review peer reviewers are a highly select group of international expert grounded theorists, all of whom were taught the method by Barney Glaser. So, authors can be assured that well-designed and well-written classic grounded theories will be fairly and accurately reviewed by this journal's peer reviewers. Also, as they read the various theories and methodological papers published in the Review, readers and novice grounded theorists can discover what proper classic grounded theory looks like and gain clarity in a variety of methodological issues common to classic grounded theory.

The present issue of the Grounded Theory Review includes a combination of newly submitted papers, popular articles from past issues, and two especially compelling reprints from other sources. Glaser and Holton's (2005) paper, *Staying Open: The Use of Theoretical Codes in Grounded Theory* provides an explanation of theoretical codes, the element that binds concepts into explanatory grounded theories. It also includes a related paper by Nathaniel, *The Logic and Language of Classic Grounded Theory: Induction, Abduction, and Deduction*, which describes the three types of logic employed in grounded theory and explains how all three are necessary to develop a classic grounded theory. In their paper *Developing A Classic Grounded Theory Research Study Protocol: A Primer for Doctoral Students and Novice Researchers*, Vander Linden and Palmieri explain in detail strategies for writing protocols for grounded theory studies. This paper gives valuable advice to those who

are struggling to write research protocols following classic grounded theory precepts, while also satisfying advisors and committees who are unfamiliar with the method. In their paper, *Following Suit: Why Some Choose to Remodel the Grounded Theory Methodology in China*, Wang, Shi, Li, and Fei, provide a methodological discussion of the trend in China of investigators remodeling the grounded theory methodology in pursuit of their own personal and professional agendas. In *Building a Classic Grounded Theory: Some Reflections*, Yarwood-Ross and Kirsten reflect on using processes inherent within classic grounded theory methodology to build knowledge surrounding military personnel who experienced combat-related limb-loss from the Iraq and Afghanistan conflicts. Otteren and Gynnild present a compelling original grounded theory in *Remote Female Fixation: A Grounded Theory of Semi-Illegal Sharing of Nude Imagery Online*. Based on data gathered online from a global, anonymous community with a reputation for extensive sharing of nude images of young women, this theory helps explain the increasing presence of sexual abuse in digital environments. In another reprint of an original study, *Pluralistic Task Shifting for a More Timely Cancer Diagnosis: A Grounded Theory Study from a Primary Care Perspective*, Thulesius, et.al., present pluralistic task shifting as a conceptual summary of strategies needed to optimise the timeliness of cancer diagnosis. This theory proposes that timing is central to cancer diagnosis in that a timely diagnosis reduces expensive investigations, waiting times, and unnecessary costs. This issue also includes especially popular reprints from past issues of The Grounded Theory Review including *Surviving Situational Suffering: A Classic Grounded Theory Study of Post-Secondary Contingent Faculty Members in The United States* by Barry Chametzky, *The System was Blinking Red: Awareness Contexts and Disasters* by Vivian Martin, *A Novice Researcher's First Walk Through the Maze of Grounded Theory: Rationalization for Classical Grounded Theory* by Gary Evans, and *De-Shaming for Believability: A Grounded Theory of Physicians' Communication with Patients About Adherence to HIV Medication in San Francisco and Copenhagen* by Toke Barfod.

This issue is my last as the Editor. In early 2018, I received an email from Barney Glaser offering the position of Editor of The Grounded Theory Review. Although this was an honor, I hesitated, knowing it would be difficult to meet the high standards set by the previous editors and distinguished classic grounded theorists, Judith Holton and Astrid Gynnild. Today I am proud that we have been able to carry on the vision of Barney Glaser—to disseminate original classic grounded theories and methodological papers that describe and explain the method, unadulterated by revisionism and misinformation. Look for changes in the Grounded Theory Review in the near future. I am excited that the Review will take on a new look under the auspices of The Institute for Research and Theory Methodologies, led by Dr. Kara Vander Linden and with the guidance of the newly appointed Editor, Dr. Barry Chametzky. Since both Vander Linden and Chametzky are experienced classic grounded theorists, the sole focus of the Grounded Theory Review will remain faithful to the original vision to provide a source of examples of good classic grounded theory and explanatory methodological papers.

I bid farewell with one last thought. In these turbulent years of geopolitical conflict, ideological upheaval, pandemic recovery, and extreme climate events, opportunities for grounded theory studies abound. I challenge anyone interested in discovering new social-

psychological and social-structural processes to conduct and disseminate new classic grounded theories. As Barney Glaser said many times, "Just do it!"

Alvita Nathaniel, PhD  
Editor

### References

- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussion*. Sociology Press.
- Glaser, B. G., & Holton, J. A. (2005). Staying open: The use of theoretical codes in grounded theory. *The Grounded Theory Review: An International Journal*, 5(1).  
<https://groundedtheoryreview.com/2005/11/21/1487/>
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction.

## **Staying Open: The use of theoretical codes in grounded theory**

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### **Abstract**

Theoretical codes (TCs) are abstract models that emerge during the sorting and memoing stages of grounded theory (GT) analysis. They conceptualize the integration of substantive codes as hypotheses of a theory. In this article, I explore the importance of their emergence in the development of a grounded theory and I discuss the challenge of the researcher in staying open to their emergence and earned relevance rather than their preconceived forcing on the theory under development. I emphasize the importance of GT researchers developing theoretical sensitivity to a wide range of theoretical perspectives and their associated codes. It is a skill that all GT researchers can and should develop.

### **Introduction**

The full power of grounded theory comes with staying open to the emergent and to earned relevance when doing grounded theory (GT). This is especially so with regard to writing up a GT with emergent theoretical codes (TCs). Researchers seem to have the most trouble at this stage of the generating Process – sorting memos and writing up the theory with emergent TCs. Substantive coding comes comparatively easily and is exciting, giving the researcher the exhilarating feeling of discovery. Theoretical coding does not come easily as an emergent and has a beguiling mystique. As one PhD student emailed me: “theoretical codes and interchangeability of indicators were the two aspects of GT that I found the most difficult to comprehend.” (Holton email January 26, 2004). Another GT researcher writes, “The author of this current paper suggests that theoretical coding perhaps places the most demand upon the grounded theorist’s creativity” (Cutcliffe, 2000).

Theoretical codes are frequently left out of otherwise quite good GT papers, monographs, and dissertations. The novice GT researcher finds them hard to understand. This article begins the process of trouble shooting this problem by dealing with many facets of theoretical coding and will consider several sources of difficulty in using TCs. The goal is to help the GT researcher stay open to the nonforced, non-preconceived discovery of emergent TCs.

The reader may consider this article hard to understand unless he/she has read and studied my several former books. There will be some repetition of the ideas I have already written, but they will be in the service of offering new insights regarding TCs. Readers who are challenged in staying on a substantively abstract level of conceptualization may find this article even harder. Keeping researchers on an abstract or conceptual level is hard - especially for those in nursing, medicine, business and social work – since they are trained at the accurate description level. They tend to slip easily into a theoretical descriptive level as the trained style and practical considerations of their professional field take over.

Staying open to TCs will help maintain the substantively conceptual level required by GT and will increase its power.

This article is grounded in my origination of GT, in supervising many, many GT researches and dissertations, in reading many dissertations and GT monographs and in intense study of noted QDA methodology books. It is grounded in the hard study of the above caches. It is NOT a “think up” article. It is grounded in what is going on in GT research. The focus of this article, as is my many books, is to help researchers get GT research done – achieve GT products that receive the rewards of PhD degree and career moves. It is not an epistemological rhetorical wrestle that gets wordy and goes nowhere. People are doing GTs all over the world and GT methodology helps them achieve their product. Epistemological discussions are of no potential help to the actual doing of research. Rather, they can easily have the negative effects of sowing doubt in the emergence of categories and causing premature judgements of relevance.

As I have defined previously, “Theoretical codes conceptualize how the substantive codes of a research may relate to each other as hypotheses to be integrated into a theory. They, like substantive codes, are emergent: they weave the fractured story back together again. Without substantive codes they are empty abstractions.” (Glaser, 1978) TCs are abstract models, allowing the researcher to talk substantively of categories and properties while thinking conceptually. The important point is that the reader should develop a clear notion of their conscious use and relevance in generating theory. Then she/he can use, with theoretical sensitivity, an emergent theoretical code or codes to put a theory together. This consciousness can help in staying open. Reading my previous books will help achieve this abstract level. TC abstraction and use come with GT experience over many researches. It is part of the experiential growth of GT skill development. This abstraction avoids the flat, descriptive and often superficial presentations of QDA products.

### **Staying Open**

Staying open to the emergent, earned relevance of theoretical codes is the point of this article. Repetitions that come from sections in *Theoretical Sensitivity* and *Doing Grounded Theory* (Glaser, 1978, 1998) are in the service of this goal. Staying open to earned relevance means that theoretical codes are not to be forced by disciplines, supervisors or pet codes. Trusting to emergence and one’s own theoretical sensitivity is paramount.

For the researcher, staying open to earned relevance of TCs means being open to the fullest possible array of TCs. The researcher must learn and master sensitivity to as many TCs as possible. The more TCs the researcher learns, the more this requirement becomes moot. There are hundreds. The lists in *Theoretical Sensitivity* and *Doing Grounded Theory* (Glaser, 1978, 1998) offer the most frequently used and familiar ones, but they are a small list compared to the possible number of TCs to which one can be open by perusing the literature of many scientific fields.

GT is NOT a methodology guided by one theoretical perspective and its TCs. GT is a general method, based on a concept-indicator model that can use any TC derived from any

theoretical perspective. This theme is hard to sustain in actual research. It is not easy to stay open because of previous training, the tremendous grab of some TCs – e.g. basic social process – and the tendency to cling to a particular theoretical perspective and its attendant idols or great men—e.g. symbolic interaction. The researcher sees what he has been trained to see. Breaking out to being open takes time and is hard both personally and in a framed research context. I realize that what I am saying is easier said than done. But it can be done. Many do. The basic idea is to become open and sensitive to the emergent, earned relevance of TCs. The procedure is to stop preconceived forcing based on discipline, supervisors, pet codes, a “grande” perspective and unwarranted hunches.

### **Hard To Stay Open**

Staying open is not easy. It is hard. Most people attempt a GT research framed, or inculcated in a theoretical framework, either consciously or unawares. Perhaps it is hard to truly become open, but it is quite possible as GT procedures from start to finish are designed to open up the researcher and keep her/him open to the emergent and to earned relevance. When the researcher gets the point, GT procedures provide ways to perpetually suspend the frameworks of any forcing theoretical perspective in favour of what substantive and TCs emerge. Staying open then becomes relatively easy. Not knowing before the emergent becomes fun and discovery exciting.

Most GT researchers I have read to date get the staying open point easily for substantive coding, but not for TCs. They miss the point for TCs for failure to study them, thus not becoming sensitive to what TC might emerge. Rather, they use the TC of their theoretical perspective of trained origin. In restricting TCs to their field of origin, they miss possible emergent TCs by not being sensitive to a fuller array of them.

One normal block to staying open is to describe GT by a popular TC “as if” GT research always yields that TC. “I have often described grounded theory as an explanation of some underlying basic social process, and so I guess, in my mind, the development of a GT is really a qualitative causal modelling process” (Olsen email March 7, 2003, Institute for Qualitative Methodology). To be sure, basic social processes (BSPs) frequently emerge and are pervasive, but not always, as I clearly said in *Theoretical Sensitivity* (Glaser, 1978). In fact, in our now famous book, *Awareness of Dying*, the core category was a typology of dying expectations (Glaser & Strauss, 1965).

In *The Grounded Perspective II: Description’s Remodeling of Grounded Theory Methodology*, I detailed at length the remodeling of GT by the QDA methodologists (Glaser, 2003). GT has been used to “jargon up” QDA methodology and, in the bargain; TCs are caught up in the method mix jargon. QDA methodology stultifies GT. Staying open to a full array of sensitively emergent TCs is restricted to the author’s forced theoretical perspective, frequently symbolic interaction or systems theory. TCs become “assumed” by the framed researcher.

Staying open to whatever TC is relevant is the goal in my effort to extricate the forcing of TCs by the qualitative methodologists and their “grande” theoretical perspectives. There is

nothing wrong with using structural or symbolic interactional TCs if they earn relevance, but my effort is to stop the ascendant default remodelling caused by the routine forcing of TCs. I especially wish to stop, or at least curb, the use of a TC to remodel GT to another QDA method. For example, using Strauss's conditional matrix "as if" always relevant and irrespective is pure forcing. One reads of Strauss's conditional matrix everywhere in the QDA literature. Remember, GT is a general methodology than can use any data and therefore any TC.

Milliken and Schreiber argue for the generality of GT when they write about the epistemology of GT (Milliken & Schreiber, 2001). They say, "Epistemology has been defined more loosely in sociology to encompass the methods of scientific inquiry used to study knowledge. Thus, epistemology can be seen both as a philosophy of human knowing and how one learns about it. Inherent in different epistemologies are different assumptions and beliefs about the nature of know, of what can be known, and who can be the knower ". In applying these thoughts to GT, they say: "In contrast to quantitative methods, in which the researcher is the expert, in grounded theory the researcher defers to the experience of the participant, who has experience with the phenomenon of study. The researcher's job is to investigate the socially constructed meanings that form the participants' realities and the behaviors that flow from these meanings. That is, we want to know how they understand and act within their worlds. What can be known of the covert and overt behavior of participants is negotiated between the researcher and participant, toward a shared understanding. Clearly, in our view, the epistemology of grounded theory is steeped in symbolic interaction." (Milliken & Schreiber, 2001), p.180)

This view is patently wrong. It is pure QDA rhetoric in the quest of worrisome accuracy (Glaser, 2002). It neglects conceptualization. It uses a "grande" theoretical perspective and its TCs to define GT, thus denying that GT is a general method that can use any type of data and the TCs of any theoretical perspective. GT searches for the latent patterns in any type of data to articulate a grounded theory. Latent patterns are everywhere and all is data for GT including the use of any TC from whatever perspective. To be sure, interactionally constructed data exists BUT it only a piece or one type of the data used in GT studies. To be sure, GT as a general method picks up constructed data in many studies these days, but these researchers must transcend the data type to see the general use of GT methodology and enrich their research by using "all as data" (Glaser, 1998). GT does not need a "grande" epistemology, as such, to justify its use. It is based on a latent structure analysis approach using a conceptindicator model yielding emergent theoretical frameworks to which the researcher must stay open.

Two experienced grounded theorists express the staying open requirement well. Phyllis Stern says "theoretical coding...simply means applying a variety of analytic schemes to the data to enhance their abstraction" (Stern, 1980). Holly Skodol Wilson says, "Theoretical codes are the ways in which substantive codes and data they express are interrelated. There are innumerable families of theoretical codes. All are ways of relating variables theoretically. I attempted to discover multiple and varied relationships between and among concepts. Such an approach is designed to yield molecular rather than linear theoretical models". (Skodol Wilson, 1977). Thus, the true nature of TCs has been around for many

years and cannot be allowed to be remodeled by a single theoretical perspective as others, especially the QDA methodologists, would try.

Theoretical codes come from all fields and their theoretical perspectives, whether social psychology, sociology, philosophy, organizational theory, economics, political science, history, biochemistry, etc. Staying open to TCs from these fields is very enriching of GT. For example, the random walk TC from biochemistry is very useful in GT. Conjunctural causation from political science is an eye opener for GT.

Staying open to what can emerge can be turned in on itself, however, "as if" to be open somehow cannot be based on the researcher's ability to suspend knowledge. This inability is seen as routine and unavoidable and to be expected of expert knowledge. Katherine May argues that expert knowledge in qualitative research consists of an exquisitely tuned capacity to know where to look and the ability to ferret out similarities and differences based on experience. Although entering the field with as open a mind as possible has advantages, she contends that her experience in the health care arena was an undeniable asset. She says "expert analysts are virtually always informed by extant knowledge and use this knowledge as if it were another informant" (May, 1994). Thus, her view is that staying open is not possible for the learned and that, alternatively, experienced preconceptions are useful. Thus she implies that experienced researchers get formed in their field and cannot transcend their experienced view. They see it everywhere, rather than staying open. I say not so! Experienced people are more able to suspend their knowledge of a literature and research field based on their skilled, competent research ability to stay in control of perceptions and thereby stay open. They can spot preconceptions both substantively and for TCs quite easily, since they are more aware (Morse, 1994). While it is easy for the novice researcher to be open due to lack of knowledge (Glaser, 2003), it can be just as easy for the experienced researcher - if not more so - based on awareness of more subtle forcing.

### **Learning TCs**

By now the reader may be throwing up his/her hands and feeling that she/he cannot stay open; that it is too hard to leave the stability, comfort and safety of the cherished, learned and trusted TCs of their field. Not so! They are not to be given up. They are to be extended by learning more TCs, by being sensitive to these and then letting earned relevance dictates their use. Staying open to emergent TCs requires learning as many as possible so the researcher is sensitive to what may earn relevance.

First of all, the researcher should study TCs beyond the boundaries of his current discipline and keep studying them. It never ends. There are so many. Learn as many as possible. The possibilities are endless. As Hans Thulesius wrote me, "Theoretical codes are tricky and I have more to learn there for sure". (Thulesius email, December 14, 2002). He is open to the endless task and its possible difficulties.

Start with the TCs I have listed in *Theoretical Sensitivity* and in *Doing Grounded Theory* (Glaser, 1978, 1998). They are exciting to learn because of their abstract view of data. Take time to assimilate them when they seem difficult to grasp quickly. The wider the array of



TCs that one learns, the less the tendency to force a pet or discipline TC on a substantive theory and the easier it is to stay open and sensitive to the emergent.

The excitement of learning TCs is well put by Walter Fernandez when he says, quite rightly, "Theoretical coding conceptualizes how the substantive codes are interrelated by generating hypotheses that are then integrated into a theory. The grounded integration of concepts is a flexible activity that provides a broad picture and new perspectives. The theoretical flexibility, however, must remain grounded on data. The concept of flexibility implies theoretical sensitivity to a number of possible coding paradigms, or coding families, consciously avoiding over-focusing on one possible explanation. Glaser (1978, 1998) provides a comprehensive (but not definitive) list of code families allowing for this flexibility" (Fernandez, 2003). Fernandez then provides his reader with a two-page chart of 26 TC families. Each family includes several TCs. The list is taken from my books. Being sensitive to all of these possible TCs immensely increases the researcher's ability to stay open. Staying open to the emergent is what Fernandez means by "flexibility", while he insists on earned relevance.

The more TCs a researcher learns, the less the tendency to derail a GT into a routine QDA by diluting the GT with a pet or discipline TC - e.g., its all constructed interaction or the conditional matrix - which is so, so wrong (Glaser, 2003). There is no argument for the routine discipline use of a TC for, by consequence, it closes staying open. Stern and Schreiber say, the researcher using GT needs to exercise care to avoid a departure from the intent of the authors who developed it, Glaser and Strauss. In short, there are a number of variations in doing GT, all of which are acceptable. On the other hand, there are a lot of wrong ways of doing it". (Schreiber & Stern, 2001)

Imposing TCs is a wrong way of doing GT. Earned relevance of one or a mix of TCs is the acceptable way. There is no "for or against" argument for the discipline TCs as they are just some of many that may emerge. This is the GT procedure: Let TCs emerge in mature memos and in sorting. Do not worry about results and remember - no GT is better than the skill development of the researcher and, in the bargain, no TC is better than what the researcher is sensitive to - unless it is forced. TCs, like substantive codes, are a result of the researcher's learning curve.

The TC learning curve requires the study of many fields and their theoretical perspectives. In *Doing Grounded Theory*, I said, "the fact that many do not use or understand TCs simply means that they should start learning them. One reads theories in any field and tries to figure out the theoretical models being used. It is a fun exercise. It is a challenge to penetrate the patterns of latent logic in other's writings. It makes the researcher sensitive to many codes and how they are used. He or she should take the time it takes to understand as many theoretical codes as possible by reading research literature also. This is a very important part of developing theoretical sensitivity" (Glaser, 1998). Skimming and dipping in papers for TCs from other fields is fun and easy. They pop up. Let me give some examples.

In perusing a biochemical paper, I came upon the “random walk” model. This means all variables are in unorganized flux until one crucial variable is introduced and then, all of a sudden, all the variables fall into stable organization. This is highly applicable to social life and action. People mixing around and visiting in all directions before a meeting, suddenly come to order when a host, teacher, or lecturer appears. It happens in fancy seminars, courts, staff meetings, and in kindergarten classes. In some cases, a gavel is pounded and “come to order” is announced. The formal and sentimental order of the occasion is produced almost immediately.

Another powerful TC that comes from economics is “amplifying casual looping.” This is part of the interaction of effects family. As consequences become continually causes and causes continually consequences, one sees either worsening progressions or escalating severity. This applies to spousal power abuse or authority power abuse as the abuse gets worse. It applies to increasing organizational failure. It applies to falling in love. I am sure the reader can now see more possible applications. Causal looping amplified in either direction - positive or negative. This TC integrates substantive codes nicely, when it emerges. It applies to the bullying self-socialization phenomenon that we saw in the Columbine massacre (Gisburne, 2003). For additional economic models, see Frederic S. Lee, “Theory Creation and the Methodological Foundation of Post Keynesian Economics” (Lee, 2002). Lee focuses on repeatable causation and mechanisms thereof.

Yet another powerful TC – “conjunctural causation” comes from political science. Ragin (1987) explains it clearly: “The other characteristic form of the problem of order-in-complexity concerns the difficulty involved in assessing causal complexity, especially multiple conjunctural causation. When an outcome results from several different combinations of conditions, it is not easy to identify the decisive causal combinations across a range of cases, especially when the patterns are confounded”. The problem is not to specify a single causal – consequence model using Strauss’s conditional matrix. The problem is to determine the character of more complex causal models that exist in the substantive data. And many causes may not be relevant; only high impact causes have earned relevance.

My three examples show how complex causal models that emerge can provide integration of substantive codes that go far beyond simple causation that is forced “as appropriate”. The reader will find it fun to skim theories from other fields to pick up their TCs and thereby open themselves up to many TCs, assimilating and becoming sensitive to their particular meaning. The more this is done, the more the researcher will have the realization that the number of TCs is endless and yet to be named and that staying open and sensitive to whatever TC emerges is the only way to do GT. In the alternative, it is a pure shut down to remodel GT by saying it has only one theoretical perspective. This learning approach to TCs solves the problem that Marjorie MacDonald neatly articulates – the almost total absence of theoretical codes in current nursing GT research due to a lack of integrating the macro and micro levels of social action (Schreiber & Stern, 2001).

## **TCs are Slippery**

As I have said above, theoretical coding is the least understood aspect of generating GT. When GT is used merely as a legitimating jargon to QDA, then of course, understanding TCs is a moot issue. But when the researcher is genuinely trying to do GT, the first confusion is the general idea of theoretical coding of the data for substantive categories and TC models with TCs. This is an unfortunate terminological confusion. Both types of codes emerge in memos. They occur in mixes, and TC mixes are often the integrative picture that fits and works. For example, a causal model can easily be mixed with a zone of tolerance and two outside cutting points. Learning TCs emphasizes the earned relevance of these mixes as they model substantive codes. The possibilities are not as infinite as it might seem; they are grounded empirically.

Unlike substantive codes, the underlying “groundedness” of a TC is less clear, since they are abstract models of integration based on best fit. Their fit is not as underlying tight with the data as a substantive code. Their organization of a theory is not wrong so much as variable, for an abstract level can have alternatives; whereas the grounding comes out in the work, fit and relevance of substantive codes. This “slipperiness” often results in confusion, depression and anxiety over non-emergence or the best way of integrating. Commitment to one model is seen as “dangerous”. Of course, best fit is required in TC emergence, but given the ready modification of a GT in the hands of others, the TC model can easily get adjusted, changed or corrected. The slipperiness of abstract TCs is a power. Using a theoretical code is not dangerous; it formulates the confusion around putting the GT into writing. This is why forcing a TC is often a tendency and a premature way out of the confusion of waiting and working for the TC of earned relevance. It is best to let the TC emerge. Forcing leads to familiarity within a discipline but also to irrelevancies. For example, every GT is not a BSP (basic social process) and, rich as this TC is, forcing stages on a theory can dilute its fit, work and relevance.

The goal of a GT researcher is to develop a repertoire of as many theoretical codes as possible. There could be hundreds. The more theoretical codes the researcher learns, the more she/he has the variability of seeing them emerge and fitting them to the theory. They empower an ability to generate theory and keep its conceptual level.

### **Theoretical Coding: Substantive Codes vs. Theoretical Codes**

To revisit what I have been saying: “If and when the researcher gets beyond substantive coding and a full memo bank, he begins to sort and then he will use emergent theoretical codes, explicit or implicit, to integrate his theory.” However, “there is confusion between substantive codes and TCs among some researchers” (Glaser, 1998). Needless to say, substantive codes are the categories and properties of the theory that emerges from and conceptually images the substantive area being researched. They are used to build the conceptual theory, but are not theoretical codes. This is a bit confusing to some, especially those with little or no theoretical training.

In contrast, theoretical codes implicitly conceptualize how the substantive codes will relate to each other as a modeled, interrelated, multivariate hypothesis in accounting for resolving the main concern. They are emergent and weave the fractured substantive story turned into substantive concepts - back into an organized theory. They provide the models for theory generation and emerge during later coding, memoing and especially in sorting. Theoretical codes must also pattern out to be verified and provide grounded integration.

“Without substantive codes, theoretical codes are empty abstractions; but substantive codes can be related without theoretical codes. The result, however, is usually confused, theoretically unclear, and/or typically connected by descriptive topics but going nowhere theoretically. It is the interaction between substantive and theoretical coding which characterizes GT as an analytic inductive research methodology rather than conceptual journalism” (Glaser, 1998), p.164). This statement is simple enough to say but leads to confusion in many ways. Everyone understands substantive coding, but TCs, and how to code for them, are not well understood. TCs are confused with substantive codes on a conceptual level, by similar words, in mixing, and in research action, calling it theoretical coding for both types of codes, and just missing the TC involved.

Everyone loves and understands the constant comparative method for generating substantive categories and their properties. Their discovery produces a high with tremendous grab for the researcher. As one researcher wrote me, “your phrase ‘fluctuating networks’ has really grabbed my attention. Thanks for these little flashes of brilliance” (Holton email June 9, 2003). But this joy and grab is not so for TCs, except for perhaps discovery of a BSP. TCs are often ignored; left implicit or just plain missed and not understood. Researchers generate categories naming latent patterns all the time. The patterns are about social action and recognized in life by the naming with a category. The same researchers often do not systematically generate TCs except to mumble at times cause, consequence or process. The reason is simple. Substantive categories grab by denoting recognizable patterns whereas TCs seldom have this grab since they denote abstract models that are usually implicit in the theory, not consciously used and seldom explicitly mentioned. Another source of mentioning a TC nonpurposely occurs when it is virtually the same as the substantive category, such a balancing or process.

Thus, it is clear that substantive and theoretical codes are on a different conceptual level of abstraction and TCs are a more abstract level since they model the integration of substantive concepts. Thus, substantive codes and theoretical codes not only differ in abstract level but in kind. Substantive codes refer to latent patterns and TCs refer to models. However, many confuse the two types of codes in different ways by mixes that take figuring out.

First, TCs are confused with core variable in many writings. A core variable may be TC'd but it is not the core. For example, becoming or cultivating may be a core substantive code and they are basic social processes; but the basic social process is not the core. It is just a TC that models the substantive code. Jan Morse clearly makes this confusion when she says, “The theory (GT) is ...usually organized around a central theme (basic social processes or core variable/categories). Can the theory have two or more competing major basic

processes or major core variables/categories? Perhaps, but this is rarely seen. The basic social process or core variables/categories appear to serve the purpose of focusing the researcher...." (Schreiber & Stern, 2001). Clearly, she confuses the model with the substantive.

Morse also, in the above citation, confuses the level of GT by mixing the substantive with the theoretical code. She says, "The theory is usually categorized as mid-range" to paraphrase Merton's notion of middle range. This is patently incorrect. A GT can be generated at any level varying from a very specific grounding to the general implications of a substantive theory to high level formal theory. For example (and there are many), a very grounded theory of cautionary control generated in the study of dentists dealing with HIV patients has much general application to cautionary control in all dentistry and medicine. Indeed, it can be turned into a high level formal theory dealing with cautionary control policy and action in all of society as it seeks to protect its citizens. In short, it is up to the researcher to choose the level of his GT. But to be sure, increasing the level of a GT does not just come by forcing a TC on it like "conceptualization" a - popular QDA strategy these days.

Ian Dey offers another "authoritative" but confusing description of theoretical and substantive codes (Dey, 1999). I say "authoritative" as Dey talks with nothing but self-styled authority. The reader can, if he wishes, figure out the confusion. I offer it merely as another example: "First, the distinction between substantive and theoretical coding is not very clear. Glaser presents theoretical coding as "implicit" in substantive coding; suggesting that in doing the latter, one is inevitably engaged in the former. He presents theoretical coding itself as a separate activity - that of relating the substantive categories. One question this raises is whether categories at some level can be identified which do not already involve some theoretical elements, for example, such as causation, process, degree and soon. Do categories "stand by themselves" or are they not always part of a broader concretization that already implies relationship among the categories?" (Dey, 1999, p.108) He then asks two questions about theoretical coding. "Is theoretical coding an aspect of substantive coding or a separate activity?" and "How do we select among theoretical codes that all fit the data?"

These comments by Dey are too descriptive, in which in pure data everything is involved at once. GT abstracts out of data substantive categories and theoretical codes separately. On the abstract level, the two types of codes are quite different. Also, since he is descriptive and not following GT procedures, he does not know about sorting and how by sorting a TC emerges that integrates. Dey asks the question, "Do processes divide naturally into stages, or is this rather a construct used by the analyst to order events?" It is not either/or. It is empirically both or only one source of a process may emerge. If a few TCs emerge, they can be mixed or the researcher can choose the one he thinks best articulates the theory. It is his autonomy to choose which of the emergent and further, it is just conceptual theory that can be modified, not QDA accurate description with its concern for worrisome accuracy. At least the theory is grounded as best possible, NOT conjectured out of a fertile, reifying mind.

In sum, Dey is not aware of the abstract nature of GT, being firmly entrenched in the QDA methodology. Therefore, his ability to discuss GT issues is nil, since it is on the descriptive level. He has no sense of GT abstraction. He is using GT jargon on the data level of description, leading to multiple views and worrisome accuracy and this "allows" him to doubt GT as a method. This article and my many books on the GT perspective easily allow us to discount his binary analysis (good vs. bad) as not relevant to GT as an abstracting methodology. His work is a classic case of remodeling GT to a QDA method. On the abstract level, the distinction between substantive coding and theoretical coding (modeling) is easy. On the descriptive level, the distinctions are easily muddled.

### **Are TCs Necessary?**

The answer is "no", but a GT is best when they are used. TCs help. TCs are always implicitly there even when not consciously used. But a GT will appear more plausible, more relevant and more enhanced when integrated and modelled by an emergent TC. The hypotheses will be clearer and stand in relief. TCs avoid the superficiality of QDA methods. Using a TC at the later stages of memoing makes generating substantive categories and their properties easier and the resulting theory more complex and multivariate. TCs are always latent in the substantive coding, but being sensitive to enough TCs to see one emerge helps theoretical sampling, theoretical saturation, delimiting the theory and reaching theoretical completeness because the TC becomes an emergent guiding framework.

Of course, the researcher can analyze without an emerging TC framework, but it is harder. Applying the emerging TC framework is of great help in the ensuing analysis. Actually, it is hard not to apply a TC framework but be cautious. The TC must emerge and not be forced. Categories and their properties emerge easier when one can see their relation to other categories within a framework. Then, memoing on the relations between categories becomes easier also as the memos capture the theory with a TC model.

In conclusion, while not necessary, the need for a TC is great in generating a GT. It is easy, by prior training, to force one on the theory as a framing tendency. I can only counsel to let it emerge. For example, every study is NOT a BSP. John Cutcliffe says this clearly, if somewhat over strongly: "Few would argue that substantive coding is an integral part of data analysis within grounded theory, but if the intellectual rigor halts at substantive coding then it is debatable that the researcher used a grounded theory methodology. The author of the current paper would argue not. Glaser (1978) argues that it is the theoretical coding, the conceptualization of how the substantive codes may relate to each other as hypotheses, which enable the substantive codes to be integrated into a theory. It is the theoretical coding that can provide the full rich understanding of the social processes and human interactions that are being studied. The author of this current paper suggests that theoretical coding perhaps places the most demand upon the grounded theorist's sensitivity. Further, it is perhaps theoretical coding and the postulating of previously undiscovered or unarticulated links that enable the development of the theory." (Cutcliffe, 2000) As I said, his statement is a bit zealous, but its promise is correct. Staying open to emergent TCs is important, if not totally necessary.

### Reference List

- Cutcliffe, J. R. (2000). Methodological issues in grounded theory. *Journal of Advanced Nursing*, 31(6), 1476-1484.
- Dey, I. (1999). *Grounding grounded theory: guidelines for qualitative inquiry*. San Diego, CA: Academic Press.
- Fernandez, W. D. (2003). *Metateams in Major Information Technology Projects; a grounded theory on conflict, trust, communication and cost*. Unpublished Doctor of Philosophy, Queensland University of Technology.
- Gisburne, J. M. (2003). *The applicability of the Misomodel to youth violence and the interpretations of dangerousness*. Unpublished PhD, University of Nebraska, Lincoln, NB.
- Glaser, B. G. (1964). *Organizational Scientists: Their professional careers*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1978). *Theoretical sensitivity: advances in the methodology of grounded theory*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.
- Glaser, B. G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), Article 3.
- Glaser, B. G. (2003). *The grounded theory perspective II: Description's remodeling of grounded theory methodology*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1965). *Awareness of Dying*. Chicago: Aldine Publishing Company.
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Hawthorne, NY: Aldine de Gruyter.
- Glaser, B. G., & Strauss, A. L. (1971). *Status Passage*. Chicago: Aldine Atherton Inc.
- Glaser, B. G., & Strauss, A. L. (1974). *Time for Dying*. Mill Valley, CA: Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1975). *Chronic Illness and the Quality of Life*. Mill Valley, CA: Sociology Press.
- Lee, F. S. (2002). *Theory creation and the methodological foundation of post Keynesian economics (Working Paper)*. Kansas City: Department of Economics, University of Missouri.

May, K. (1994). The case for magic in method. In J. Morse (Ed.), *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage.

Milliken, P. J., & Schreiber, R. S. (2001). Can you "do" grounded theory without symbolic interactionism? In R. S. Schreiber & P. N. Stern (Eds.), *Using grounded theory in nursing* (pp. 177-190). New York: Springer.

Morse, J. (Ed.). (1994). *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage.

Ragin, C. C. (1987). *The comparative method: Moving beyond qualitative and quantitative strategies*. University of California Press.

Schreiber, R. S., & Stern, P. N. (Eds.). (2001). *Using grounded theory in nursing*. New York: Springer Publishing Company.

Skodol Wilson, H. (1977). *Nursing Research*, 26, 103.

Stern, P. N. (1980). *Grounded Theory Methodology; its uses and processes*. *Image*, 23.



## **The Logic and Language of Classic Grounded Theory: Induction, Abduction, and Deduction**

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### **Abstract**

Although it is not clearly understood by many, classic grounded theory utilizes deduction, induction, and abduction as the necessary logic functions of the research process. Glaser's described the forms of logic—induction, abduction, and deduction—but referred to them as *conceptualization*, *theoretical coding*, and *theoretical sampling*. Induction begins with data and produces concepts, which are the building blocks of grounded theory. Employing abduction, the analyst infers relationships among the concepts to develop interrelated hypotheses. Deduction is used to gather data to fill in the gaps and produce an explanatory theory. Each type of logic is indispensable to classic grounded theory method. The purpose of this methodological paper is to briefly describe the process and product of each type of logic as applied to the language and procedures of classic grounded theory.

**Keywords:** grounded theory, research logic, abduction

### **Introduction**

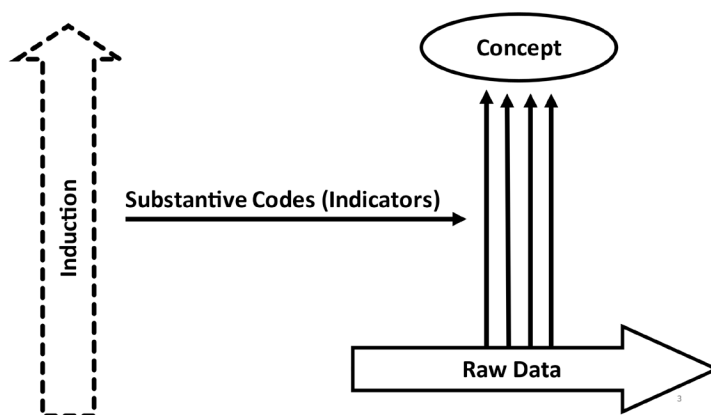
Classic grounded theory is a rigorous method of inquiry that depends upon all three forms of research logic: induction, abduction, and deduction. Deduction and induction, particularly, are common to most other research methods. However, they are used differently and in a different order in classic grounded theory. Noted for developing his own language to describe the grounded theory process, Glaser used the term *conceptualization* to refer to the process of induction, *theoretical coding* to refer to the process of abduction, and *theoretical sampling* to refer to the process of deduction. The purpose of this methodological paper is to describe how the three forms of logic work together to produce a classic grounded theory.

### **The Logic of Induction: Conceptualization**

Induction is always the first step of grounded theory analysis. Inductive research consists of reasoning from particular facts observed in the data to more abstract general principles. In classic grounded theory this occurs when the investigator codes and analyzes the raw data from one case, compares it with codes and data from another (or other)

case(s), identifies the common bits in the data (*indicators*), clusters the indicators together to define a concept, and writes conceptual memos (Glaser, 1978, 1998; Glaser & Strauss, 1967). Coding raw data produces what Glaser calls *substantive codes*. The word *substantive* in grounded theory refers to some human experience that has an existence in real life as perceived and communicated by study participants. The grounded theorist collects and examines the raw data and uses the logic of induction to identify substantive codes and then to compare further cases and logically cluster them together to indicate concepts, which are a higher level of abstraction (Fig. 1).

Figure 1: The Process of Induction in Classic Grounded Theory



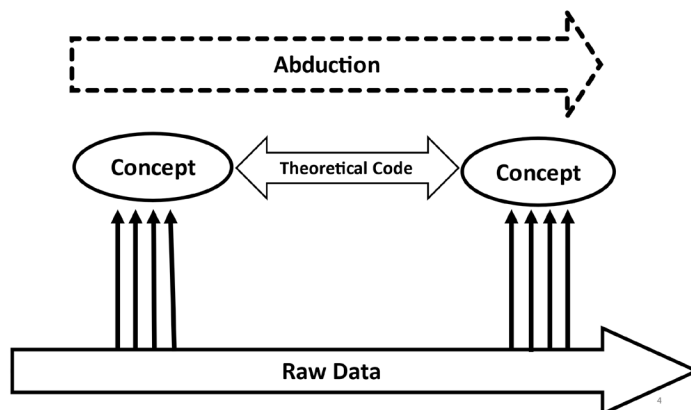
Thus, unlike other research methods, the foundational process of classic grounded theory is conceptualization, which is grounded in empirical data and clarified through the process of constant comparison. In fact, even before the publication of *The Discovery of Grounded Theory* (Glaser & Strauss, 1967), Glaser (1965) coined the phrase *constant comparative method*, which he proposed as a key intellectual strategy of grounded theory analysis. Through constant comparison, indicators are clustered by similarity. Concepts emerge as the analyst goes back and forth in an iterative process constantly comparing the empiric data and writing conceptual memos (Glaser, 1965, 1998). This method increases formal abstraction and corrects for poor data as it brings each concept into closer grounding (Glaser, 1965, 1998, 1999). Abstract concepts derived from empirical data in this way form the building blocks of theory. Procedures of the method move from data collection and conceptualization to abduction.

### The Logic of Abduction: Theoretical Coding

Abduction is the type of explanatory reasoning that creates theory. Through inference, abduction connects the dots to arrive at the best explanation. This process is ubiquitous in daily life and is fundamental to grounded theory. First described by Charles Sanders Peirce as a facet of the scientific method, abduction is the process by which consideration of the facts suggests hypotheses (Peirce, 1901/1992, p. 106). Glaser and Peirce both valued abduction as a means to discover new knowledge (Glaser, 1978; Peirce, 1901/1992). Glaser used the phrase *theoretical coding* when referring to the abductive process. Unlike other research methods that identify and describe themes, abduction

(through theoretical coding) moves grounded theory further, producing abstract and explanatory integrated hypotheses.

Figure 2: Abduction Infers Relationships Among Concepts



In grounded theory, after concepts emerge the theorist begins to see how the concepts are interrelated (Fig. 2). Each theoretical code suggests a relationship between concepts. Two concepts and their theoretical code becomes a tentative hypothesis. Perhaps the concepts occur in serial order (a relationship), or one causes another to occur, or one concept forms a critical juncture, interrupting the stage before it. Glaser provided many examples of possible theoretical codes in *Theoretical Sensitivity* (Glaser, 1978, pp. 74-82) and further in *Doing Grounded Theory* (Glaser, 1998, pp. 163-145). For example, the theorist may infer from the data that one concept predictably leads to a second concept. The analyst in this example can infer that two concepts are stages, which occur in a certain order. The recognition of that temporal relationship (one stage occurring before the other) forms a tentative hypothesis in this example. Minor concepts may be connected to major concepts in the form, for example, of properties, conditions, or dimensions (all of which are possible theoretical codes). The researcher continues with the analytic process and through abduction (theoretical coding) eventually connects all the hypotheses into a fully integrated theory. Abduction in classic grounded theory makes its start from the concepts and concludes with a theory. It sets classic grounded theory apart from other research methods. Glaser (1998) pointed this out when he wrote, "Without substantive codes, theoretical codes are empty abstractions" (p. 164) and substantive codes without theoretical codes result in confusion that goes nowhere. He wrote further, "It is the interaction between substantive and theoretical coding which characterizes grounded theory [as] an analytic inductive research methodology" (p. 164).

Theoretical codes may be obscure in some theories. Rather than a theory having no theoretical codes, Glaser pointed out that the codes may be implicit. For example, theoretical codes are often implied in a taxonomy. The relationship among categories may be inferred by their position in the taxonomy, perhaps in terms of time or space dimensions. For example, Glaser and Strauss's (1965) *Temporal aspects of dying as a non-scheduled status passage* is a taxonomy. In other instances, theoretical codes can be difficult for a reader to tease out, even in an excellent grounded theory, if the theory includes an

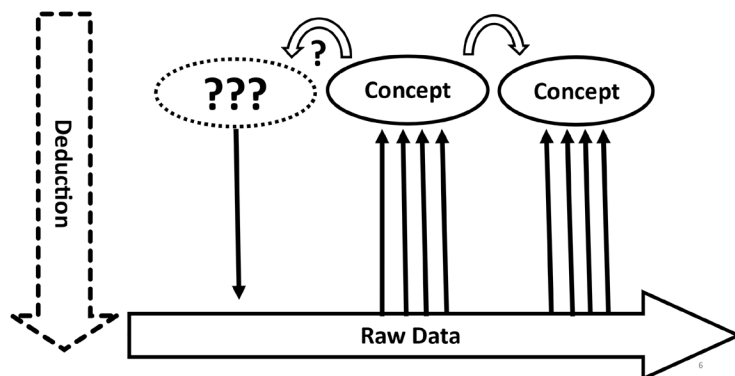
integration of conceptual and descriptive narrative (Glaser, 2005). Nevertheless, theoretical codes, whether obvious or obscure, are one of the main elements that characterize classic grounded theory.

So, as analysis continues and because classic grounded theory begins with no preconceived problem, the combination of conceptualization and theoretical coding (induction and abduction) will begin to reveal a theory—one that may not be entirely complete. At this point, the investigator moves back to the data using a deductive process that Glaser called *theoretical sampling*.

### The Logic of Deduction: Theoretical Sampling

In classic grounded theory, deduction serves to complete a theory. Classic grounded theories emerge from the data, so unlike other methods that use deduction to verify a preconceived theory or hypothesis, deduction in grounded theory is not determined in advance of a study. With the grounded theory approach, the investigator constructs the theoretical framework out of the data. As a grounded theory begins to emerge through the processes of induction and abduction, the investigator will recognize gaps in the theory and make inferences about the proper direction of subsequent data gathering. Glaser proposed that deduction guides the researcher back to locations and comparative groups in the field to discover more ideas and connections from data. According to Glaser (1978), “Deductive work in grounded theory is used to derive ... where to go next for which comparative group or subgroup, in order to sample for more data to generate the theory” (p. 37). Thus, deduction points to the most appropriate avenue for further investigation and subsequently fills gaps in a theory (Fig. 3).

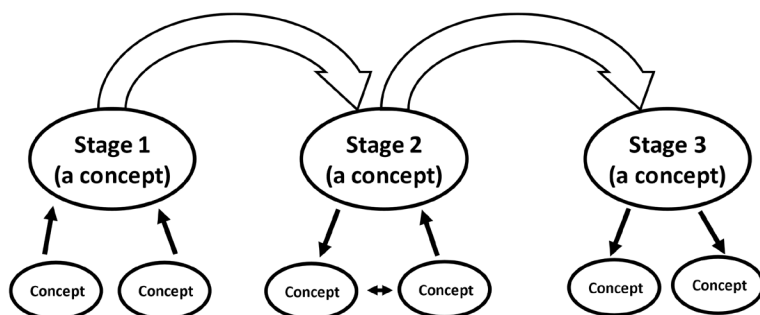
Figure 3: Deduction Fills Gaps



Unlike research methods that rely primarily on deduction, in classic grounded theory deduction “is in the service of further induction” (Glaser, 1978, p. 38). Thus, deduction via theoretical sampling is used to discover a fully integrated explanatory theory and to uncover data that otherwise might be overlooked. As noted above, the researcher continues with the analytic process of induction, abduction, and deduction to eventually connect all the hypotheses into a fully integrated theory. Figure 4 is an example of what the structure of a

fully integrated theory might look like. Although Glaser objected to reliance on models to illustrate theories, the model in Figure 4 depicts a hypothetical three-stage theory with sub-concepts (such as properties or dimensions) and their directional relationships, which would be further named, defined, and described in the theory's narrative. Relationships between concepts form a theory's hypotheses. For example, if asked, the theorist could name at least nine separate hypotheses (count the arrows) in a theory similar to the Figure 4 model.

Figure 4: Sample Model Depicting Hierarchical Concepts and Their Theoretical Relationships



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## Conclusion

Classic grounded theory as described by Glaser and Strauss (1967) and Glaser (1965, 1978, 1992, 1998, 2002, 2005, 2014) utilizes deduction, induction, and abduction as iterative components of the research process. Glaser's terms *conceptualization*, *theoretical coding*, and *theoretical sampling* reflect the more familiar terms for the three types of research logic: induction, abduction, and deduction. Induction begins with data and produces concepts, which are the building blocks of grounded theory. Employing abduction, the analyst infers relationships among the concepts to develop interrelated hypotheses. Deduction is used to gather data to fill in the gaps and produce an explanatory theory. Each type of logic is indispensable to classic grounded theory method.

## References

- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social problems*, 12(4), 436-445.
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs forcing*. Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussion*. Sociology Press.

- Glaser, B. G. (1999). The future of grounded theory [serial online]. *Qualitative Health Research*, 9(6), 10.
- Glaser, B. G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 1-31.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Sociology Press.
- Glaser, B. G. (2014). *Memoing: A vital grounded theory procedure*. Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1965). Temporal aspects of dying as a non-scheduled status passage. *American Journal of Sociology*, 71, 48-59.  
[http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list\\_uids=14336667](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=14336667)
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction.
- Peirce, C. S. (1901/1992). On the logic of drawing history from ancient documents. In N. Houser & C. Kloesel (Eds.), *The Essential Peirce: Selected Philosophical Writings* (Vol. 2). Indiana University Press.

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## **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.

## References

- Adashi, E. Y., Walters, L. B., & Menikoff, J. A. (2018). The Belmont Report at 40: Reckoning with time. *American Journal of Public Health, 108*(10), 1345-1348.  
<https://doi.org/10.2105/ajph.2018.304580>
- Aldiabat, K. M., & Le Navenec, C. (2018). Data saturation: The mysterious step in grounded theory method. *The Qualitative Report, 23*(1), 245-261.  
<https://doi.org/10.46743/2160-3715/2018.2994>
- Allen, R. E. S., & Wiles, J. L. (2016). A rose by any other name: Participants choosing research pseudonyms. *Qualitative Research in Psychology, 13*(2), 149-165.  
<https://doi.org/10.1080/14780887.2015.1133746>
- Baker, C., Wuest, J., & Stern, P. N. (1992). Method slurring: The grounded theory/phenomenology example. *Journal of Advanced Nursing, 17*(11), 1355-1360.  
<https://doi.org/10.1111/j.1365-2648.1992.tb01859.x>
- Bowen, G. A. (2008). Naturalistic inquiry and the saturation concept: A research note. *Qualitative Research, 8*, 137-152. <https://doi.org/10.1177/1468794107085301>

- Chametzky, B. (2022). Coding in classic grounded theory: I've done an interview; Now what? *Grounded Theory Review*, 21(2), 22-32. <https://doi.org/10.4236/sm.2016.64014>
- Chametzky, B. (2023). Writing memos: A vital classic grounded theory task. *European Journal of Humanities and Social Sciences*, 3(1), 39-43. <https://doi.org/10.24018/ejsocial.2023.3.1.377>
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. SAGE Publishing. <https://us.sagepub.com/en-us/nam/constructing-grounded-theory/book235960>
- Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis* (2 ed.). SAGE Publications.
- Charmaz, K., & Belgrave, L. L. (2012). Qualitative interviewing and grounded theory analysis. In J. F. Gubrium, J. A. Holstein, & A. B. Marvasti (Eds.), *The SAGE handbook of interview research: The complexity of the craft* (2 ed., pp. 347-366). SAGE Publications. <https://doi.org/10.4135/9781452218403>
- Charmaz, K., & Thornberg, R. (2021). The pursuit of quality in grounded theory. *Qualitative Research in Psychology*, 18(3), 305-327. <https://doi.org/10.1080/14780887.2020.1780357>
- Chenitz, W. C., & Swanson, J. M. (1986). *From practice to grounded theory: Qualitative research in nursing*. Addison-Wesley Publishing Company.
- Christiansen, O. (2011). The literature review in classic grounded theory studies: A methodological note. *Grounded Theory Review*, 10(3), 21-25. <https://groundedtheoryreview.com/2011/12/20/the-literature-review-in-classic-grounded-theory-studies-a-methodological-note-2/>
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2017). *The SAGE handbook of qualitative research* (5 ed.). SAGE Publishing. <https://us.sagepub.com/en-us/nam/the-sage-handbook-of-qualitative-research/book242504>.
- Dixon-Woods, M., Shaw, R. L., Agarwal, S., & Smith, J. A. (2004). The problem of appraising qualitative research. *Quality and Safety in Health Care*, 13(3), 223-225. <https://doi.org/10.1136/qshc.2003.008714>
- Foley, G., & Timonen, V. (2015). Using grounded theory method to capture and analyze health care experiences. *Health Services Research*, 50(4), 1195-1210. <https://doi.org/10.1111/1475-6773.12275>
- Foley, G., Timonen, V., Conlon, C., & O'Dare, C. E. (2021). Interviewing as a vehicle for theoretical sampling in grounded theory. *International Journal of Qualitative Methods*, 20, 1609406920980957. <https://doi.org/10.1177/1609406920980957>
- Friese, S. (2012). *Qualitative data analysis with ATLAS.ti*. SAGE Publications.

- Garside, R. (2014). Should we appraise the quality of qualitative research reports for systematic reviews, and if so, how? *Innovation: The European Journal of Social Science Research*, 27(1), 67-79. <https://doi.org/10.1080/13511610.2013.777270>
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social Problems*, 12(4), 436-445. <https://doi.org/10.2307/798843>
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence versus forcing*. Sociological Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Sociology Press.
- Glaser, B. G. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 23-38. <https://doi.org/10.1177/160940690200100203>
- Glaser, B. G. (2006). Generalizing: The descriptive struggle. *Grounded Theory Review*, 6(1), 1-28. <https://groundedtheoryreview.com/2006/11/30/1330/>
- Glaser, B. G. (2008). The constant comparative method of qualitative analysis. 7(3). <http://groundedtheoryreview.com/2008/11/29/the-constant-comparative-method-of-qualitative-analysis-1/>
- Glaser, B. G. (2012). No preconception: The dictum. *The Grounded Theory Review*, 11(2). <http://groundedtheoryreview.com/2012/11/28/no-preconception-the-dictum/>
- Glaser, B. G. (2013a). *No preconceptions: The grounded theory dictum*. Sociology Press [https://www.sociologypress.com/books/classic\\_series/No\\_Preconceptions.htm](https://www.sociologypress.com/books/classic_series/No_Preconceptions.htm)
- Glaser, B. G. (2013b). Staying open: The use of theoretical codes in GT. *Grounded Theory Review*, 12(1), 3-8. <https://groundedtheoryreview.com/2013/06/22/staying-open-the-use-of-theoretical-codes-in-gt/>
- Glaser, B. G. (2014). *Memoing: A vital grounded theory procedure*. Sociology Press.
- Glaser, B. G. (2016). Grounded descriptions: A no no. *Grounded Theory Review*, 15(2), 3-7. <http://groundedtheoryreview.com/2016/12/19/grounded-description-no-no/>
- Glaser, B. G. (2021). Getting started. *Grounded Theory Review*, 20(1), 3-6. <https://groundedtheoryreview.com/2021/06/21/getting-started-3/>
- Glaser, B. G., & Holton, J. (2004). Remodeling grounded theory. *Qualitative Social Research Forum*, 5(2). <https://doi.org/10.17169/fqs-5.2.607>

- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine Publishing Company.
- Glaser, B. G., & Strauss, A. L. (2012). *Discovery of grounded theory: Strategies for qualitative research*. Aldine Transaction.
- Green, J., & Thorogood, N. (2018). *Qualitative methods for health research* (4 ed.). SAGE Publishing.  
<https://us.sagepub.com/en-us/nam/qualitative-methods-for-health-research/book254905>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82.  
<https://doi.org/10.1177/1525822X05279903>
- Guthrie, W., & Lowe, A. (2011). Getting through the PhD process using GT: A supervisor-researcher perspective. In V. B. Martin & A. Gynnild (Eds.), *Grounded theory: The philosophy, method, and works of Barney Glaser* (pp. 51-66). BrownWalker Press.
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2017). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 591-608. <https://doi.org/10.1177/1049732316665344>
- Holton, J. (2008). Grounded theory as a general research methodology. *Grounded Theory Review*, 7(2), 67-93.  
<https://groundedtheoryreview.com/2008/06/30/grounded-theory-as-a-general-research-methodology/>
- Holton, J. A. (2007). The coding process and its challenges. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 265-290). SAGE Publications.  
<https://doi.org/10.4135/9781848607941>
- Holton, J. A. (2010). The coding process and its challenges. *Grounded Theory Review*, 9(1), 21-40.  
<https://groundedtheoryreview.com/2010/04/02/the-coding-process-and-its-challenges/>
- Holton, J. A., & Walsh, I. (2017). *Classic grounded theory: Applications with qualitative and quantitative data*. SAGE Publishing.
- Klopper, H. (2008). The qualitative research proposal. *2008*, 31(4), 11.  
<https://doi.org/10.4102/curationis.v31i4.1062>
- Low, J. (2019). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus*, 52(2), 131-139. <https://doi.org/10.1080/00380237.2018.1544514>
- Lusk, S. L. (2004). Developing an outstanding grant application. *Western Journal of Nursing Research*, 26(3), 367-373. <https://doi.org/10.1177/0193945903261843>

- Morse, J. M. (1994). On the Crest of a Wave? *Qualitative Health Research*, 4(2), 139-141. <https://doi.org/10.1177/104973239400400201>
- Morse, J. M. (2015). "Data were saturated . . . ". *Qualitative Health Research*, 25(5), 587-588. <https://doi.org/10.1177/1049732315576699>
- Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 13-22. <https://doi.org/10.1177/160940690200100202>
- Morse, J. M., Bowers, B. J., & Charmaz, K. (2009). *Developing grounded theory: The second generation*. Routledge. <https://www.routledge.com/Developing-Grounded-Theory-The-Second-Generation-Revisited/Morse-Bowers-Charmaz-Clarke-Corbin-Porr-Stern/p/book/9781138049994>
- Nathaniel, A. K. (2006). Thoughts on the literature review and GT. *Grounded Theory Review*, 5(2/3), 35-41. <https://groundedtheoryreview.com/2006/06/30/1416/>
- Nathaniel, A. K. (2008). Eliciting spill: A methodological note. *Grounded Theory Review*, 7(1), 61-65. <https://groundedtheoryreview.com/2008/03/30/1063/>
- Nathaniel, A. K. (2022). When and how to use extant literature in classic grounded theory. *Grounded Theory Review*, 5(2), 35-41. <https://groundedtheoryreview.com/2022/12/31/when-and-how-to-use-extant-literature-in-classic-grounded-theory/>
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research*. Department of Health, Education, and Welfare. <https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>
- Office for Human Research Protections. (2021, March 10). *45 CFR 46*. <https://www.hhs.gov/ohrp/regulations-and-policy/regulations/45-cfr-46/index.html>
- Pritchard, I. A. (2021). Framework for the ethical conduct of research: The ethical principles of the Belmont Report. In *Handbook of research ethics in psychological science*. (pp. 3-21). American Psychological Association. <https://doi.org/10.1037/0000258-001>
- Riis, P. (2000). Perspectives on the fifth revision of the Declaration of Helsinki. *JAMA*, 284, 3045-3046. <https://doi.org/10.1001/jama.284.23.3045>
- Sandelowski, M., & Barroso, J. (2003). Writing the proposal for a qualitative research methodology project. *Qualitative Health Research*, 13(6), 781-820. <https://doi.org/10.1177/1049732303013006003>
- Sandelowski, M., Davis, D. H., & Harris, B. G. (1989). Artful design: Writing the proposal for research in the naturalist paradigm. *Research in Nursing & Health*, 12(2), 77-84. <https://doi.org/https://doi.org/10.1002/nur.4770120204>

- Scott, K. W., & Howell, D. (2008). Clarifying analysis and interpretation in grounded theory: Using a conditional relationship guide and reflective coding matrix. *International Journal of Qualitative Methods*, 7(2), 1-15. <https://doi.org/10.1177/160940690800700201>
- Shuster, E. (1997). Fifty years later: The significance of the Nuremberg Code. *New England Journal of Medicine*, 337(20), 1436-1440. <https://doi.org/10.1056/nejm199711133372006>
- Simmons, O. E. (2010). Is that a real theory or did you just make it up? Teaching classic grounded theory. *The Grounded Theory Review*, 9(2), 15-38. <http://groundedtheoryreview.com/2010/06/25/is-that-a-real-theory-or-did-you-just-make-it-up-teaching-classic-grounded-theory/>
- Simmons, O. E. (2022). *Experiencing grounded theory: A comprehensive guide to learning, doing, mentoring, teaching, and applying grounded theory*. BrownWalker Press. <http://www.brownwalker.com/book/159942634X>
- Strauss, A. L., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. SAGE Publications.
- Vander Linden, K. L., & Palmieri, P. A. (2021). Criteria for assessing a classic grounded theory study: A brief methodological review with minimum reporting recommendations. *Grounded Theory Review*, 20(2), 107-115. <https://groundedtheoryreview.com/2022/02/14/criteria-for-assessing-a-classic-grounded-theory-study-a-brief-methodological-review-with-minimum-reporting-recommendations/>
- Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The management of confidentiality and anonymity in social research. *International Journal of Social Research Methodology*, 11(5), 417-428. <https://doi.org/10.1080/13645570701622231>
- Wilson, C. B. (2013). An updated Declaration of Helsinki will provide more protection. *Nature Medicine*, 19(6), 664-664. <https://doi.org/10.1038/nm0613-664>
- Wimpenny, P., & Gass, J. (2000). Interviewing in phenomenology and grounded theory: Is there a difference? *Journal of Advanced Nursing*, 31(6), 1485-1492. <https://doi.org/10.1046/j.1365-2648.2000.01431.x>
- Xie, S. L. (2009). Striking a balance between program requirements and GT principles: Writing a compromised GT proposal. *Grounded Theory Review*, 8(2), 35-47. <https://groundedtheoryreview.com/2009/06/30/901/>

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## **Following suit: Why some choose to remodel the grounded theory methodology in China?**

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### **Abstract**

Given the rapid surge in the number of studies claiming the adoption and use of the grounded theory (GT) methodology in China over the past two decades or so, we can now confirm that virtually all studies haven't been at all conducted in accordance with the GT methodology including its variants, let alone the classic one extended by Glaser and Strauss (1967). We are fascinated by the behaviours of those who have chosen to remodel the original GT methodology (Glaser, 2003), a pattern of which is ascertained as "following suit." It explains the solution finding process in relation to their central concern of having their work legitimised. Three overlapping and yet, distinctive sub-dimensions of "following suit" have also been identified, which are named as "fitting-in," "window-dressing," and "pretexting". The notion of "following suit" has its general implications elsewhere and in other methods too, as we have also noticed. And we are alert to the probability that some may use the criterion of "modifiability" of GT (Glaser, 1978) as a pretext of remodelling the GT methodology in the pursuit of their own agendas.

**Keywords:** grounded theory, remodelling, China

### **Introduction and scene-setting**

In this methodological paper, which is the second instalment of "GT in China," we discuss the intriguing phenomenon of remodelling the GT methodology (Glaser, 2003) specifically in this country. We set out with the initial aim of documenting some disinformation with regards to GT, hoping that our fellow countrymen will be able to become more critical of the extant body of methods literature available. During the course of this joint exercise which will be progressing into the years to come by both experienced and novice researchers, a general pattern of "following suit" constituting three overlapping and yet, distinctive dimensions, to wit "fitting-in," "window-dressing," and "pretexting" has been identified in relation to the remodelling of the GT methodology (Glaser, 2003) as a direct result of our observations and analysis in China.

The focus of this paper is placed explicitly upon the remodelling of the GT methodology (Glaser, 2003) which we have been observing over the years in China. Thus, the purpose is to highlight the central concern of those who have opted to re-configure the methodology and the behavioural pattern surrounding the very concern of getting one's work legitimised. We are convinced that our work contributes to the general body of knowledge as far as GT is concerned, by digging deep into the arguments for and against the remodelling of GT from this part of the world. It is worth emphasising at the outset that this methodological paper itself has never been intended to be a product of a GT study, a point of which we would like to make clear for not misleading the readers in any shape or form. Furthermore, we have written this paper deliberately in a style as it is, the novice GT researchers can, therefore, be able to compare this paper with other ones that have claimed the use of GT including its variants.

In this particular methodological discussion on remodelling, we have intentionally engaged with two novices (i.e. Li & Shi) who are in the process of doing their own GT studies for the master's and doctoral dissertations, respectively. Given that the GT methodology itself is a motivational package (Glaser, 1998), we trust that their participation in the discussions and contribution, however teeny-weeny, to the actual writing of this paper has somewhat planted the seeds (Glaser, 1998) in the young generation here.

We would like to begin by stating our own methodological stance in terms of what grounded theory is and is not. "*Grounded theory is a general methodology for generating theory*" (Glaser, 1978, p.164, emphasis in original). It is not a qualitative methodology, nor a quantitative one, since it "systematically relate[s] qualitative and quantitative research to obtain the best of both methods for generating grounded theory" (Glaser & Strauss, 1967, p. 261). Undeniably, it has been GT's methodological position since its very conception and origination. As part of the scene-setting, we would also like to re-iterate that Glaser and Strauss's (1967) "principal aim is to stimulate other theorists to codify and publish their *own* methods for generating theory." (p. 8, emphasis in original) Given that, we find Charmaz's (2006) notion of "grounded theory ethnography" (p. 22) deeply worrying, as the fundamental principles of the original GT methodology (Glaser & Strauss, 1967) haven't been adhered to in her attempt to re-configure the GT methodology. By the same token, we welcome Corbin's own admission concerning the changes in grounded theory. She has indeed acknowledged the fact that "[t]hroughout the years, what was initially grounded theory has evolved into many different approaches to building theory grounded in data" (Corbin & Strauss, 2008, p. viii). In other words, these "different approaches to building theory grounded in data" (p. viii) are not necessarily the original GT methodology that we are able to identify ourselves with. Having said that, we would like to recognize Strauss's contribution to the origination of the methodology (Glaser, 1991) as well as Strauss's (1987) own confession that in "his" grounded theory style concerning its "main elements" (p. 22), "research phases and the operations" (p. 23), and "[b]asic operations" (p. 25), he "reproduced almost wholly from Barney Glaser's *Theoretical Sensitivity*, 1978, with some editing and supplementation. . . . For more detailed statement of these technical aspects of the grounded theory mode of analysis, readers are advised to consult *Theoretical Sensitivity*." (p. 22)

## **The notion of "following suit" and its dimensions**

### **Definition of "following suit"**

The notion of "following suit" represents an overall pattern of behaviour arising from our observations and analysis in nearly two decades that a massive proportion of researchers in China have decided to adhere to the non-GT practices at varying degrees, despite the fact that they all have claimed the adoption and use of GT (including its variants). It is also apparent to us that there is a wide spectrum of awarenesses relating to their choices of GT,

ranging from not knowing anything at all about GT to consciously pursuing the agendas contrary to GT. The notion of “following suit” and its dimensions (i.e. fitting-in, window-dressing and pretexting) are all directed towards the legitimisation of their work, which is a central concern of those we have watched.

### **Fitting-in**

“Fitting-in” refers to the sub-behavioural pattern of “following suit.” By “fitting-in,” it is meant that some have intended to comply with the existing practices in their respective research fields. Knowingly or unknowingly, these practices have nevertheless departed significantly from the original GT methodology. For instance, some have consciously opted for the remodelled versions of GT, given that these variants (e.g. Strauss/Corbin) are the most, if not the only, accepted ones in their own academic circles. Likewise, some prefer to use the qualitative data analysis software in their studies simply because failing to do so is at odds with the popular practice of their colleagues’. On a more general level, the widely-held view that “GT is a qualitative method” reinforces the “fitting-in” or vice versa, leaving it largely unchallenged on the part of the researcher.

We appreciate the fact that some colleagues do have reservations about adopting the full GT methodology originated by Glaser and Strauss (1967) and articulated by Glaser over the past 50 years or so. And we are grateful that they have indeed made it explicitly clear to us, choosing and using the remodelled GT (i.e., Strauss & Corbin, 1990) actually serves them favourably otherwise. This means they are able to get their academic qualifications and subsequently, jobs, not “rocking the boat” within their academic circles, etc. Otherwise, they would risk losing virtually everything and have to deal with a bleak prospect largely on their own. Put simply, the cost of adopting and using the original GT methodology in its entirety is too high for those unformed researchers, especially in some academic circles in which the remodelled GT has been adopted for quite some time. And unsurprisingly, challenging the status quo comes with a heavy price tag and specifically, the likely consequences of being alienated, marginalised and in some cases that we are aware of, bullied.

A classic example of fitting-in is thus the adoption of qualitative data analysis software. Odd enough, many researchers have learnt the use of the software prior to the GT methodology itself or any other methods. This means that the actual contents in those software tools dictate the breadth and depth of one’s knowledge of his or her method in-use. It has been realised over time that the developer of qualitative data analysis software does not actually know the original GT, to say the least. And for those novice researchers who have chosen to use the software anyway, it is reckoned that it is time saving, easy to manage, convenient and the fact that everyone else is using it. The mainstream view that GT is a qualitative research method and therefore, qualitative data analysis software is an indispensable part of the former, also plays a role in influencing the use of the software for enhancing rigour which qualitative research often lacks. It is also believed that some academic journals and their reviewers may have a preference towards the use of qualitative data analysis software, encouraging the prospective authors to adopt and use the software as a result.

An extraordinary scene with regards to “fitting-in” which is unique outside the English-speaking world, is the role of this popular belief it plays in translating the GT text (i.e., “Discovery of Grounded Theory” [Glaser & Strauss, 1967] Routledge edition). According to a recent analysis carried out by WANG Chunfeng (personal communications, Jan. 10th 2023), a PhD candidate in Nursing, of the Chinese translation of the text, the original GT methodology extended by Glaser and Strauss (1967) has been, in this case, distorted and mis-interpreted. And the fact that both terms “qualitative analysis” and “qualitative research” have been used

interchangeably in the Chinese translation, disregarding the originality of the English text, is indeed a serious cause of concern in itself. On numerous occasions, the phrase “qualitative analysis” has been replaced by “qualitative research” in the Chinese text. Furthermore, Glaser and Strauss’s (1967) notion of “systematically relat[ing] qualitative and quantitative research to obtain the best of both methods for generating grounded theory” (p. 261) has been twisted as “obtaining two best methods for generating grounded theory,” implying one GT method for qualitative research and another one for quantitative research. All these instances indicate the Chinese attempt, similar to that of Bryant and Charmaz’s (2007), of fitting the GT methodology into the view that “GTM is a qualitative research method” (p. 26).

### **Window-dressing**

Window-dressing encapsulates another sub-behavioural pattern in which some researchers have deliberately disguised their work as GT that are in effect, irrelevant to GT whatsoever. The case of window-dressing is upsetting, given the severity of it in China in particular. As we have investigated, nearly all studies under the disguise of GT and its variants (e.g. Strauss/Corbin and Charmaz) haven’t been at all conducted in line with their claimed GT variants, let alone the classic one of Glaser’s.

One form of window-dressing is the mere adoption and use of the term “grounded theory” itself. One of our colleagues, Dr. TAN Fuqiang, a researcher in creative industries, has pointed out that all what they have been pursuing is just the “skin” (i.e. the term itself) of grounded theory (personal communications, Nov. 4th, 2022). He has also further elaborated on his observation that the mere adoption and use of the term “grounded theory” by some researchers is in essence, a way of competing for fame in academic publishing. In so doing, they believe that it would make their publications appear to be more novel, sophisticated, scholarly, hence more publishable and citable. (personal communications, Jan. 3rd, 2023)

Another form of window-dressing is the use of coding procedures singularly in their adoption of the remodelled GT (e.g. Strauss/Corbin). As we have found out in our analysis, other research procedures (e.g. theoretical sampling) are in actuality, non-existent in virtually all studies in China, despite of their claims to the contrary.

And the most extreme form of window-dressing is academic misconduct including plagiarism in this rat race. The entire research into pain experience which was, in actuality, a study of Corbin & Strauss’s (2008), has been plagiarised by the Chinese.

### **Pretexting**

In the English-speaking world, there exists the methods literature which actively promotes and encourages the remodelling and the selective use of the GT methodology. And as far as the Chinese are concerned, we have watched some incredible episodes here in which some have, in turn, cited this particular segment of the literature in English as a pretext of legitimising their own mis-using and abusing of GT. The notion of “pretexting” captures this noteworthy aspect of “following suit.”

The Gioia methodology (Gioia, Corley & Hamilton, 2012) is one of the English sources cited by the Chinese. Gioia et al. (2012) claimed that they had come up with a methodology and named it using the last name of the first author, Gioia. It is particularly entertaining to contemplate that the Gioia methodology is “a systematic approach to new concept development and grounded theory articulation” (p. 15), and yet “[t]hroughout the research process, we work to adhere to Glaser and Strauss’s (1967) guidelines for conducting *proper* grounded theory research” (p.28, emphasis added). One of Gioia’s colleagues, Corley (2015)

later contradicted himself by openly opposing the idea of “strictly adhering to the original ideas extended by Glaser & Strauss (1967)” (p.600). Having said that, the Chinese (e.g. He & Liu, 2022) then turned a blind eye to the contradictions in the arguments made by Gioia et al., (2012) and Corley (2015) and subsequently cited Corley (2015) to substantiate their insistence on not having to follow the original GT methodology created by Glaser and Strauss (1967). He and Liu (2022) further argued that “modifications and renewals” (p. 1277) were therefore even desirable, having been prompted by Corley (2015).

It is also worth sharing that another colleague of ours, Dr. GAN Tian (personal communications, Sept. 25th, 2022) has detected the fallacy of pragmatism (Creswell, 2014), a popular school of thought among the Chinese, which suggests the free choice of techniques and procedures researchers make (Creswell, 2014). As far as grounded theory is concerned, Creswell (2014) has completely disregarded the original text (Glaser & Strauss, 1967) and the fact of grounded theory as a methodological package in its entirety (McCallin, 2003), citing that “In GT, I side with the more structured approach of Strauss and Corbin (1990) rather than the less structured Glaser, who has become an outspoken critic of Strauss in recent years (see Glaser 1992)” (Glaser, 2003, p. 157).

In this joint research exercise, we have also challenged, subsequent to our previous investigation (Chen et al., 2022) into Bryant’s (2019) misinterpretation of theoretical coding, Charmaz’s (2006) notion of grounded theory ethnography and her assertion that “[i]n their original statement of the method, Glaser and Strauss (1967) invited their readers to use grounded theory strategies flexibly in their own way” (p. 9). With regard to the list of questions raised by Charmaz and her colleagues (Morse et al., 2009) in their quest to change the GT methodology, the Chinese (e.g. Jia & Heng, 2020) have yet again been unquestioning with regards to the GT literature in English, citing Charmaz and her colleagues’ (Morse et al., 2009) list of questions, in addition to Suddaby’s (2006) mingling of the original GT methodology with its remodelled variants, as a licence to distort the GT methodology on their part. The myriad of distortions on the part of the Chinese (e.g. Jia & Heng, 2016) include unsurprisingly, their insistence of only using the primary data in GT studies, doing the sampling in a non-theoretical sampling style, and so on and so forth.

### **Discussions and concluding thoughts**

On the very subject of remodelling (Glaser, 2003), we are particularly cautious of, and quite frankly, very much against any attempt to change the methodology for which all of us have fought so hard in our respective fields and studies. The principle we uphold is that any changes proposed to modify the GT methodology itself have to be kept in line with the tenets of the methodology originated by Glaser and Strauss (1967). Unfortunately, as we have all observed, this hasn’t at all been the case. In a nutshell, our perspective is whether or not it might be subject to any further changes or modifications is a question of maintaining authenticity and originality of the GT methodology. And to be totally honest, we are highly alert to the possibility that some with various agendas may use the criterion of “modifiability” in the GT methodology (Glaser, 1978) as a pretext of changing it in their own directions.

Given our training in and insistence on adopting the original GT methodology extended by Glaser & Strauss (1967) and subsequently explicated by Glaser (1978), we have been at times falsely accused of not being equally critical especially of Glaser’s writings. On the contrary, we have constantly encouraged ourselves and others to critically scrutinise the writings of Glaser’s. One of the authors (LI) has done so precisely. Let’s hear what she had to say: “In the book “Basics of Grounded Theory Analysis: Emergence vs Forcing,” Glaser (1992) touched upon the generation of categories by suggesting “comparing incident to incident and/or to concepts” (p. 40). Whereas in “Theoretical Sensitivity,” Glaser (1978) suggested

comparing indicator to indicator and indicator to concept. "Theoretical Sensitivity" (Glaser, 1978) was written before "Basics of Grounded Theory Analysis: Emergence vs Forcing" (Glaser, 1992). Why Glaser changed the term 'indicator' to 'incident'? I am a bit confused" (personal communications, June. 8th, 2022). She was then re-directed to another paper written by Glaser (1965) and came back subsequently, sharing with us that: "I have recently finished reading Glaser's (1965) paper on constant comparative method and re-read Chapter 4 of 'Theoretical Sensitivity'. It seems that I now have a better understanding of the question I put forward before . . ." (personal communications, Aug. 26th, 2022). We have therefore agreed with LI on her own research and analysis and felt hugely excited by the mere fact that she had been critical of Glaser's (1978, 1992) texts and then sought explanations in her self-directed learning of GT.

Having said that, there is an abundant amount of GT literature out there and it is exceedingly challenging for novice researchers to evaluate these materials, regardless of the language(s) in-use. Through our observations over these years, we have witnessed some degree of blind acceptance of GT materials on the part of the researchers. By analysing the behavioural pattern of "following suit" and its three dimensions from the data we have collected in China, we have contributed to the general methodological discussion concerning the remodelling of the GT methodology (Glaser, 2003), i.e. non-adherence to the GT practices. The notion of "following suit" and its dimensions have general implications, as we have observed in other parts of the world and in other methods. Researchers elsewhere too have opted for the lack of adherence of the GT practices originated by Glaser and Strauss (1967) for an array of reasons including the absence of critical skills on their own part and the dictates of others in this field. To summarize, our stance has been consistently firm throughout the years with regards to the learning and using of the GT methodology. One has to read the methods literature only in English first (whether one likes it or not, English is the working language internationally), has sound knowledge of the original GT methodology vis-a-vis any changes proposed subsequently, and more crucially, learns the GT methodology by actually doing it him/herself (Glaser, 1998) simultaneously. On top of those, one may also have to consider whether one's area of research (including the problem area) dictates his or her choice of the method or vice versa. It goes without saying that the adoption of the original GT methodology of one's own choosing in any given research project does require faith, people skills and guts, since the strict adherence to the methodology originated by Glaser and Strauss (1967) may distress lots of colleagues unintentionally.

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## **References**

Bryant, A. (2019). Senior editor's introduction. In: A. Bryant & K. Charmaz (Eds.), *The Sage handbook of current developments in grounded theory* (2<sup>nd</sup> ed., pp. xxv-xxvii). Sage.



- Bryant, A. & Charmaz, K. (2007). Grounded theory research: Methods and practices. In: A. Bryant & K. Charmaz (Eds.), *The Sage handbook of grounded theory* (pp. 1-28). Sage.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.
- Chen, Y., Feng, Y., Wang, Y. & Fei, F. (2022). Becoming independent: The life-changing experiences of GT researchers in China, *Grounded Theory Review*, 21(2), 16-21.
- Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*, 3rd ed. Sage.
- Corley, K. G. (2015). A commentary on "what grounded theory is ...": Engaging a phenomenon from the perspective of those living it. *Organizational Research Methods*, 18(4), 600-605.
- Creswell, J. W. (2014). *Research design: Qualitative and quantitative, and mixed methods approaches*, 4th ed. Sage.
- Gioia, D. A., Corley, K. G. & Hamilton, A. L. (2012), Seeking qualitative rigor in inductive research: notes on the Gioia Methodology, *Organizational Research Methods*, 16(1), 15-31.
- Glaser, B. G. (1965). The constant comparative method of qualitative analysis, *Social Problems*, 12(4), 436-445
- Glaser, B. G. (1978). *Theoretical sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. (1991). In honor of Anselm Strauss: Collaboration, In: Maines, D. R. (ed.) *Social organisation and social process: Essays in honour of Anselm Strauss*. Aldine de Gruyter, 11-16.
- Glaser, B. G. (1992). *Basics of grounded theory analysis: Emergence vs. forcing*. Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.
- Glaser, B. G. (2003). *The grounded theory perspective II: Description's remodeling of grounded theory*. Sociology Press.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.
- He, M. & Liu, D. (2022) Application of grounded theory: Misconceptions and strategies, *Journal of Psychological Science*, 45(5), 1273-1279. 何木叶、刘电芝 (2022) 扎根理论的运用：误区与策略，*心理科学*，45(5)，1273-1279。
- Jia, X. & Heng, L. (2016) Research on the paradigm of Chinese indigenous management theory building bases on grounded spirit, *Chinese Journal of Management*, 13(3), 336-346. 贾旭东、衡量 (2016) 基于“扎根精神”的中国本土管理理论构建范式初探，*管理学报*，13(3)，336-346。

- Jia, X. & Heng, L. (2020) The "jungle", history, and approach road of the grounded theory, *Science Research Management*, 41(5), 151-163. 贾旭东、衡量 (2020) 扎根理论的“丛林”、过往与进路, 科研管理, 41 ( 5 ) , 151-163。
- McCallin, A. M. (2003). Designing a grounded theory study: some practicalities, *Nursing in Critical Care*, 8(5), 203-208.
- Morse J. M., Stern P. N., Corbin J., Bowers B., Charmaz K., Clarke A. E. (2009). *Developing grounded theory: The second generation*. Left Coast Press.
- Strauss, A. (1987). *Qualitative analysis for social scientists*. Cambridge University Press.
- Strauss, A. and Corbin, J. (1990). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.
- Suddaby, R. (2006). From the editors: what grounded theory is not, *Academy of Management Journal*, 49(4), 633-642.

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## Building a Classic Grounded Theory: Some Reflections

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### Abstract

This article focuses on some of our reflections of using processes inherent within classic grounded theory methodology to build knowledge surrounding military personnel who experienced combat-related limb-loss from the Iraq and Afghanistan conflicts. We conclude that instead of adding to the issue of mixing different grounded theory perspectives, researchers should instead follow guidance from one approach to avoid becoming perplexed as each strand produces a different product. This article provides our own philosophy and compatibility with a classic grounded theory approach, and we encourage researchers to capitalise on the wealth of exemplar theories within the Grounded Theory Review journal and to engage with Barney Glaser's books.

**Keywords:** Classic Grounded Theory, Grounded Theory, Combat-Related Limb-Loss, Military Trauma, Combat-Trauma.

### Introduction

Classic grounded theory methodology can be embraced by both quantitative and qualitative researchers (Glaser, 1998, 2008), however in nursing research it has tended to be used for its power in generating knowledge using a qualitative approach to build theories that are discovered or constructed from the data (Glaser 1998; Chun Tie et al., 2019). Specifically, nursing researchers have tended to embrace grounded theory to study areas relating to clinical practice or education (See for example Li et al., 2015 and McCallin, 2011). As a nurse, I (the first author will be referred to in the first person in the article to show that this article is based on his doctoral work) had a prior interest in the effects of amputation on people's wellbeing, and spending part of my youth as a military child, this interest expanded to understanding the psychosocial impact of combat-related limb-loss on military personnels' physical and mental health. I focused specifically on military personnel from the Iraq and Afghanistan conflicts as there was little insight available in the extant literature for this group of people.

Grounded Theory is, arguably, one of the most misunderstood and misinterpreted methodologies (Olshansky, 2015). Specifically, Timonen et al. (2018) argued that the lack

of understanding often existing among researchers relates to the core processes of grounded theory; for example, confusing the general ideas of saturation in qualitative research with that of theoretical saturation (a core tenet of grounded theory), which leads to researchers applying procedures thus making it more difficult to facilitate a grounded theory product. Bryant (2021) also reinforced the misunderstanding that often occurs when researchers may not be aware of the methodology's inherent sampling procedures, where data collection begins purposively followed by theoretical sampling. Ultimately, I chose to adopt a classic grounded theory (CGT) approach and this article provides our tussles with some aspects relating to the methodology and uses a reflective style of writing that may prove to be useful to other researchers contemplating the use of CGT in their own research endeavours.

Our journey began reading the SAGE Handbook of Grounded Theory (Bryant & Charmaz, 2007) that provided us with the perspectives and uses of the methodology across disciplines. However, it was overt that there were also various approaches to doing grounded theory research, and further exploration of the extant literature led us to a plethora of critical research available that discussed the different "strands" of GT. We read the contentious issues surrounding the methodology, but importantly, a seminal piece of work that settled our own decision-making around GT as whole was written by Glaser (2014) that concluded "GT methods are just different, not better or worse" (p. 3). However, one does need to engage with the GT debates to align themselves with a set of ideological assumptions that includes philosophical standpoints.

### **What is the philosophy of classic grounded theory?**

In practice, Ash (2022) clearly identified his difficulties as a novice researcher using CGT in defending his doctoral work and being able to persuade others that CGT is sufficiently rigorous without discussing its philosophical assumptions. Moreover, Nathaniel (2011) highlighted the fact that neither Glaser nor Strauss discussed the method's philosophical underpinnings, which, consequently, has led to researchers debating and placing the methodology in a range of positions. For instance, scholars have sought to apply philosophical foundations based on the type of grounded theory approach adopted whilst also considering their own beliefs around how knowledge can and should be generated. Therefore, since its inception, grounded theory (GT) methodology continues to be debated and re-modelled, but three main variations are generally seen amongst the literature, which can generally be placed under the umbrella of: traditional/classic GT developed by Glaser (1978, 1998) evolved GT formulated by Strauss and Corbin (1990, 1998, 2014) and constructivist GT associated with (Charmaz, 2006,; 2014). A more recent version named transformational GT (Redman-MacLaren & Mills, 2015) has appeared in the literature combining grounded theory's systematic processes and participatory action research methodology, emphasising a critical realist ideology that seeks to move the focus from participants' actions to the involvement of underlying social structures and aims to promote positive social change (Goulding, 2017). This means that power in the research process is disentangled, and participants are viewed as co-researchers involved in all aspects of research design, data generation, analysis, and dissemination of research findings. Although there is a substantial amount of research promoting participant involvement in research, transformational GT as a modernist version of Glaser and Strauss' original intentions for the

methodology (and Glaser's significant amount books since the 1970s), has not received much discussion or critique in the wider literature.

The GT approaches can be somewhat confusing to researchers who are unfamiliar with grounded theory (Kenny & Fourie, 2014) and requires immersion in the extant literature to fully understand the philosophy and the different analytical procedures inherent in each approach. Scholars have attempted to label CGT across the spectrum as realist-positivist (Weed, 2016) critical realist (Holton & Walsh, 2017; Howard-Payne, 2016) and pragmatist (Nathaniel, 2011). Glaser (2005) refuted that grounded theory is entirely interpretivist and advocates that CGT is a *general* methodology that can use qualitative or quantitative data and can accommodate differing epistemological and ontological standpoints. However, criticism has been made at CGT for being objectivist and viewing the researcher as a passive and neutral observer who does not consider their impact on data analysis and interpretation (Bryant & Charmaz, 2007; Charmaz, 2008). However, Simmons (2006) argued that neutrality in CGT is in fact its advantage as the researcher seeks to avoid making assumptions about human action and adheres to a set of rigorous processes. Moreover, Glaser's original training in quantitative research, which was greatly influenced by a positivist epistemology might have had an impact on his teachings of GT about the need for an adherence to a set of systematic processes inherent within CGT methodology. Consequently, McCall and Edwards (2021) posited that the insistence on following the fundamental steps to formulate a classic grounded theory may be viewed as objectivist in nature.

Singh and Estefan (2018) summarised that CGT favours a researcher who believes that there is a reality to be discovered in substantive area of interest and can comprehend the reality, as well as having a strong affinity to allowing reality to emerge if the researcher seeks to minimise personal preconceptions and gives the data a chance to speak. Having read a significant amount of CGT literature, I was theoretically sensitive to the belief that the social world consists of patterns of behaviour, and I was in agreement with a critical realist perspective that truth was not the aim of my CGT study; it was more about providing plausible explanations for military personnels' behaviours (Breckenridge et al., 2012). Consequently, I focused on the commonalities that existed amongst the data that the men and women offered to me to further my understanding of what appeared to be of most importance to them. Moreover, I supported the belief that ontological and epistemological viewpoints could lead to me pre-framing the study or preconceiving what was really going on in the lives of military personnel by imposing a specific lens, or theoretical perspective on the data. I tussled with the debate in my own mind, and we settled with the notion of "subtle realism" as described by Hernandez and Andrews (2012) and Hammersley (1992) by accepting the relativist position that assumptions are a human construction but advocated reasonable confidence in knowledge claims rather than certainty.

### **What is and what is not classic grounded theory?**

Simmons (2022) argued that researchers using general qualitative data analysis techniques can have the tendency to use grounded theory terminology and Glaser (2009) refers to this as "jargonising" where researchers attempt to legitimise their research, when, for example, they do not follow the iterative nature of CGT principles. Moreover, Glaser (1999) added

that a classic grounded theory only exists when it has utilised the full “methodological package” (p. 836). Similarly, Lowe and Tossey (2017) wrote about how authors cite using CGT methodology in their studies, but have modified or mixed approaches e.g., combining qualitative data analysis procedures and GT. They explained further that this has led to the erosion of existing methods and procedures, causing confusion and advocate that writers should be more explicit with their research design (proposing that researchers define their methods as pseudo-GT). I was in a fortunate position at the start of my doctoral journey as I was invited to attend a CGT seminar in Ireland to present my research proposal as a trouble-shootee/novice. The leaders of the workshop were two fellows from the Grounded Theory institute who studied the method with Barney Glaser. This happened at a time when I was juggling different methodologies that could guide my research. I was offered advice and support about CGT methodology and how it was distinctly different to other versions of grounded theory, as the researcher focuses on uncovering the main concern of the population being studied and how this concern is continually being resolved or processed (Glaser, 1978, 1992, 1998). I found the methodology fascinating and my continued immersion in the literature enabled me to justify using CGT and focus on the purpose of the study, which was to develop a theory about the main concern (problem, issues) for military personnel living with combat-related limb-loss and the common behaviours that they used to resolve this concern (see Vander Linden, 2022). This met my initial aims of the PhD project, to build a theory based on these men and women’s lives, to understand what was problematic for them, and what they were actively doing to deal with their difficulties.

### **Grasping CGT processes**

The main difference I noted between CGT and other versions is that the researcher seeks to identify latent patterns of behaviour in the data through using the in-built processes of coding (open and selective), constant comparison, theoretical sampling, constant memoing and theoretical coding. In the beginning, the coding process was difficult, and I struggled consistently to collect and analyse data simultaneously. Stern (2009) indicated that a major issue with grounded theory studies is the inadequacy of data pertaining to small sample sizes, a lack of theoretical sampling (see Urquhart 2013) or the use of the constant comparative method (CCM). I found the CCM very useful to keep me focused on identifying possible relationships between different codes, concepts, and categories. For example, a pattern of behaviour emerged that linked acceptance with a property of tolerating powerlessness that showed how military personnel focused on their abilities rather than their deficits. This strategy enabled these men and women to work towards accepting the things that they could not control and come to terms with an altered life trajectory. Therefore, it was the CCM that also enabled us to become fixated on the commonalities in men and women’s behaviour that identified avenues for further data collection through theoretically sampling follow-up interviews and documentary research methods, to fill gaps in our understanding of the substantive area. For instance, some military personnel behaved in ways that hampered their rehabilitation by using emotion-focused strategies, such as denial and rumination. We discovered that these strategies were used to help them cope with their physical, psychological, and social losses, and further theoretical sampling (using more focused questions to participants) made us aware that giving themselves time was an important aspect of their journey towards accepting their new situation.

The most effective method of keeping track of participants' behaviours was using post-it notes on a whiteboard that gave us the freedom to move the notes around and we could start to visualise a theoretical structure. Identifying patterns in the data was not easy but reading *Getting out of the data* (Glaser, 2011) changed our thinking and affirmed that we were in a state of "data overwhelm" (Yarwood-Ross, 2019). We were not theorising to elucidate these men and women's main concern, and how they were processing or resolving this concern by figuring out the core category. After a period of re-focusing data collection and analysis, we discovered that these men and women had several concerns but *how to deal with their physical, psychological, and professional losses* encapsulated their primary issue and *facing losses* emerged as the best fit for how military personnel worked to process their main problem. Pinning down the main concern and the core category was uplifting as it allowed us to focus the grounded theory and provide its remit.

Glaser (2007) has consistently stated that "all is data" (p. 1) for conceptualisation meaning that interviews are not the only source of data available to a researcher and Morse and Niehaus (2009) indicated that observations and documents can be used to extend theory development. We re-evaluated the sources of data available to us and capitalised on documentary research methods that included autobiographies, documentaries, a theatrical play, YouTube videos and blogs. Coffey (2004) supported the use of autobiographical works (including documentary sources and videos) that can be considered as a rich data set to explore and analyse people's lives, and Mathias and Smith (2015) are noteworthy in their belief that autobiographies provide revealing intimate details from an individual's perspective. Also, from grounded theory's origins, Glaser and Strauss (1967) made it clear that "different kinds of data give the analyst different views or vantage points from which to understand a category and to develop its properties" (pp. 65-66) and this is further supported by the wider literature (Andrews et al. 2012; Gelling, 2011; Ralph et al., 2014). Therefore, we rationalised using documentary research methods by explaining that it provides insights that may not be readily available from another single data source. Nonetheless, it is important to point out that managing all the data available to me was difficult, so we made the decision to use interviews as primary data and the other sources to corroborate developing concepts through theoretical sampling.

### **The notions of preconception**

Limiting preconceptions can be hard to grasp for novice researchers using the CGT method, but it requires them to be acutely aware of any form of preconception that might occur at the start, during and end of a study. Moreover, Glaser (2002) has promoted in his life-long teachings of the classic method that having faith in the methodology is required, and it is but one way of doing research amongst many other different methodologies available to guide a project. Therefore, the researcher needs to make their own methodological decisions about whether CGT can fulfil the aims and objectives of their intended study.

Researchers may hold some assumptions about how to conduct research that may stem from their clinical background or training in research methods. Holton and Walsh (2017) explained that these can be an issue when conducting CGT research, as the focus is heavily placed on allowing the emergence of knowledge discovery rather than shoehorning

the theory into what ought to be found in field of study. Preconceptions may also relate to prior understandings about research design leading to the perception that CGT methodology is “unscientific” (Levers, 2013, p. 1) due to its general focus on building theory mainly from qualitative data, coupled with a limited awareness of the approach’s mechanisms and goals.

The question that arose in my mind is: Can researchers with a strong background in the topic of interest use CGT and how does a researcher minimise their preconceptions? I was fortunate because I had little experience around combat-related limb-loss but I did have considerable knowledge of disease-related limb-loss through my work as a nurse. I questioned whether my assumptions would get in the way of me using CGT, so I turned to the literature for guidance. Authors have suggested that researchers who are steeped in understanding their field do have the option of using an alternative methodology, but the CGT approach can be adopted if the researcher is willing to minimise the impact of their preconceptions through focusing on meanings from the data (Chalmers, 2018; Glaser, 2012). This is highly achievable as CGT’s in-built processes i.e., coding, constant comparison, memoing and theoretical sampling are purposely used to avoid pre-empting what is the concern of the participants in the study. Again, it is more the case that researchers need to “let go” of their desire to know in advance what is going on in the field and trust in emergence (Artinian, 2009; Glaser, 1978, 1998; Tossy et al., Brown, and Lowe 2017). However, trusting in emergence has been criticised by (Charmaz, 2008) for assuming that the analytical process will “magically generate ideas” (p. 159) and that the concepts built do not allow interpretation.

However, one way to reduce subjective bias in a CGT project is through a researcher increasing their theoretical sensitivity which is a term originally put forward in Glaser’s *Discovery of grounded theory* book in 1967 as the moments where one can notice important data segments in the developing theory (Chun Tie et al., 2019). Strategies to build upon theoretical sensitivity by comparing the concepts/categories that have been generated against relevant literature, ensuring that the researcher’s theory guides the direction of the literature reviewing process (see Hoare et al., Mills, and Francis 2012). In this way, the literature becomes another source of data to strengthen the emerging theory.

Second, space to demonstrate continuous reflexivity in the study is essential through the process of theoretical memoing as a means for the researcher to document their inklings about the possible connections between incidents, codes, properties, and categories (Chametzky, 2013). In my study, I think I benefitted most from memoing as the freedom gave me room to offload a brain full of coding and I would often write memos that may only be a couple of sentences, to ones that were several pages long. I often used diagramming to try and draw the connections in my analysis and would also write memos that provided an audit trail of the methodological decisions I had made, demonstrating an element of reflexivity. I called the connections between codes “light bulb moments” as they often appeared at the most inconvenient of times, such as when trying to get to sleep or when busy grocery shopping. I cannot overestimate the importance of carrying a notebook and pen wherever you go as you do not want to miss a moment of insight in your analytical thinking. Consequently, memoing facilitated movement of military personnels’ individual stories to understanding more about their patterns of behaviour beyond description to a more abstract level of conceptualisation (Lehane, 2019). Methodological memoing also

demonstrated the quality of the grounded theory through the audit trail of decisions we had made throughout the research. Mohajan and Mohajan (2022) supported this move for researchers to show an element of reflexivity and critical thinking skills.

Finally, another important point for theoretical memoing was to ensure that they were titled and dated as a means to capture the ideas and reflections chronologically, so that future sorting of the memos into a theory was less problematic and provided a storyline of the emerging insights. I found that memoing provided me with such freedom to write whatever came into my mind at that time in a creative manner. Memos explained aspects of a concept/category but also figured out the properties, connections, and relationships between them to understand more about military personnels' latent patterns of behaviour.

### **Where did the extant literature fit into the grounded theory process?**

Engaging with the literature using GT methodology is contested. The usual way of carrying out a study is to undertake an initial literature review to discover a gap in understanding to formulate research questions and contribute *new* knowledge to the field (Konecki, 2018). I tussled with debate surrounding the role of literature in a grounded theory study (Nathaniel, 2019; Yarwood-Ross and Jack, 2015) and found that it is a common misconception that the literature is completely ignored in a CGT study and the need to withhold engagement is to allow the researcher to focus on knowledge generation from the incoming data. Moreover, from a CGT perspective, engaging with literature on the phenomenon of interest is avoided as it is viewed as a source of preconception (Glaser, 1998) and the researcher should wait until the main concern and core category are discovered. This allows an element of creativity in the methodology and reiterates that the key factor is the *timing* of the literature review, which ensures that key existing literature is compared with the researcher's developing grounded theory. Another resolution to this contentious issue is to conduct what Urquhart (2013) and called a "non-committal literature review" (p. 29) to become informed about theories and concepts but avoiding an in-depth deep dive into the knowledge base, ensuring that it is the researcher's developing theory that defines the relevance of the initial literature review. In doing so, researchers can avoid forcing extant theoretical ideas into the analysis that do not fit with the emerging theory. I was fortunate to discover during my scan of the existing literature that the area of combat-related limb-loss in the Iraq and Afghanistan conflicts was relatively under-researched from a qualitative viewpoint. This was advantageous as Weerawardena and Sullivan Mort (2006, p.22) advised that grounded theory is useful when studying "uncharted waters" (p. 22) or gaining a new perspective, which enabled me to justify my research area that warranted further investigation. As previously stated, a traditional literature review will enable a student to state research question(s), however, I learnt from a very early stage through reading Glaser's (1998) book *Doing grounded theory: Issues and discussions* that unlike other qualitative approaches (including other remodelled versions of GT), a CGT study enters the field with a research *interest* as opposed to a defined research question(s). Other scholars support this way of conducting research to avoid masking what is really occurring in participants' lives (Nathaniel, 2019). Classic grounded theory starts with open questions to allow participants the chance to tell their stories with as few interruptions and assumptions as possible on the part of the researcher. Therefore, in avoiding the literature

(as far as possible) and keeping my preconceptions to a minimum helped to avoid influencing what mattered to military personnel.

I remember a time when a colleague asked me: “if you don’t know what you’re looking for in a study, how can you be sure you will find something novel?” I pondered this question for some time but trusted the notion that through using CGT principles, I could at the very least provide a fresh perspective in the substantive area. Literature pertaining to military personnel with combat-related limb-loss have tended to research a particular angle e.g., Jeppsen et al., Wood, and Holyoak (2019) focused specifically on finding out about “resilience” and Keeling et al. (2023) concentrated on body image. Although these factors may be important, my study did not aim to find out *in advance* what may be the main issues for veterans. Therefore, I did not have defined research questions, and simply had nothing more than a general interest in the experience of combat-related limb-loss, which ultimately led to initial interviews being very broad and unstructured. I entered the field with grand tour questions (Olson 2006; Simmons, 2022) such as: “how are you?” and “are you able to tell me your experiences of combat-related limb-loss?” that gave men and women control of their interviews and an opportunity for free speech. This strategy aimed to ensure that the conversations with them were relevant.

### **Saturating the data**

Saturation in qualitative research more broadly denotes a point where the researcher can halt further data collection. It is usually a judgment call when a researcher can demonstrate data adequacy meaning that more sampling will not generate further insight (Yang et al., Lidong, and Zhang 2022). More specifically, Morse et al. (2014) supported the notion of data redundancy and repetition, but Low (2016, p.132) identified different types of saturation that exists in the literature: data saturation, thematic saturation, and theoretical saturation, but advocates a pragmatic approach that allows a practical assessment of when saturation is reached and avoids the idealistic beliefs that it is a position where no new insights are discovered.

A question which often evokes some anxiety and difficulty for researchers relates to question of how many qualitative interviews are enough to warrant claims of reaching saturation? It is problematic, but considered essential for calculating sample sizes, however O’Reilly and Parker (2013) added that the decision regarding saturation is most definitely contested. In an unpublished report written to support undergraduate and postgraduate students, Baker and Edwards (2012) highlighted the students’ constant need for advice on the *number* of interviews required, but question whether it is appropriate epistemologically to define set sample sizes. The authors did expand on this indicating that sampling may be driven by elements such as theoretical perspective, subject discipline, time and resources, and other practicalities such as funding and ethical committee requirements. Several articles have discussed saturation with a critical lens (Hennink & and Kaiser, 2022; Leese et al., 2021; Sebele, 2020) but Townsend (2013) and Majid et al. (2018) argued that there is little guidelines or explicit advice available for researchers to use in identifying when saturation occurs. Similarly, (Aldiabat and le Navenec (2018) recognised that the most pressing issue for novice researchers relates to them demonstrating the achievement of saturation, which impacts on the trustworthiness of their findings. Also, Fusch and Lawrence (2015) confirmed



that the quality of a study is affected by the degree of saturation which seeks to improve validity and rigour (Sebele, 2020), but Saunders et al. (2017) posited that it is a concept that is used inconsistently amongst qualitative research. Therefore, the definition of saturation does not seem to be the issue, but a common agreement exists among scholars that researchers need to explicate the processes that took place to reach saturation.

In my study, I sought to demonstrate rigour by arguing that it is the very nature of engaging in the systematic processes of building a grounded theory shows a degree of rigour and validity i.e., coding, theoretical sampling, theoretical saturation, memoing and constant comparative analysis, and ensured I explained these steps and how they were used in my thesis (vander Linden, 2022). Nevertheless, Mwitwa (2022) conducted a recent systematic review has discovered five key factors that drive decisions surrounding saturation i.e., pre-determined codes and themes, sample size, relevancy of research participants, number of research methods and the length of interviews, which should be considered by researchers when designing their study. Moreover, what is recognisable is that reaching saturation in a qualitative study is variable, where Guest et al., Bunce, and Johnson (2006) indicated that a sample of 6-12 participants would be suffice for qualitative research, however (Hennink et al., Kaiser, and Marconi (2016, p.1) suggested that saturation could be achieved between 16-24 interviews when researchers “understand it all” (p. 1). Moreover, a more current review of the literature carried out by Hennink and Kaiser (2022) found that it took authors between 9 and 17 interviews to indicate saturation. These findings can help researchers when being asked to justify their sample sizes, but one can never be completely sure, as different interviews may shed differing levels of data richness into a phenomenon of interest, which may or may not be indicative of the sampling decisions made in research proposals. More importantly, Charmaz (2006, p.114) made the important point that small scale studies that declare saturation early in the study should examine their “thoroughness . . . and rigor of their analyses” (p. 114) especially if they make claims about such things as human nature or declare theory contrary to extant literature.

There is an important but subtle difference in the terminology of saturation in CGT compared to its use in general qualitative research as the researcher strives for what is known as theoretical saturation (See Morse, 2004) when “no new incidents/properties of a specific category have been discovered” (Glaser, 1969, p. 223). More recently, scholars have extended the meaning of theoretical saturation to indicate a point where theoretical sampling has deepened the generated concepts and are sufficient to support the generated theory (Moura et al., 2021). This understanding allowed me the opportunity to focus on *filling gaps* in my emerging theory and have an awareness of when to cease collecting further data. Having thought about saturation in finer detail, I could also relate to the idea of theoretical *sufficiency* that has gained traction in the wider literature giving preference to combining the rigour of the researcher’s analysis and the richness of the data rather than claiming saturation objectively (LaDonna et al., Artino, and Balmer 2021).

Our study focused on the depth of data available to us as opposed to a very large sample size. This was favourable as it was difficult to collect a significant amount of data through interviews, which may have been heavily affected by the sensitive nature of the substantive area. In truth, I was uncertain about discovering a clear point of saturation in

my study but understood that there needed to be sufficient evidence for ceasing sampling. This is where the totality of CGT principles proved to be invaluable as we demonstrated that adhering to a rigorous set of methodological processes facilitated the construction of a theory that was rooted in military personnels' accounts and conceptualised on a behavioural level. Moreover, by following the steps inherent in CGT, we reached a point towards the end of the research project where we stopped data collection as there were no new incoming insights that were relevant to the core category or emerging theory (Chen and & Boore, 2009).

However, most importantly, theoretical saturation is in itself purely *theoretical*, so we agreed that a grounded theory is always *modifiable*, meaning that new incoming data after the study has been completed does have the potential to add new theoretical insights to the developing theoretical framework (Holton and & Walsh, 2017). Therefore, further grounded theory work with veterans could result in the formation of different theories that describe many different main concerns and their resolutions.

### **Turning our attention to theoretical coding**

Once major categories/concepts are formulated, it is time for a researcher to turn their attention toward theoretical coding, however, despite this process being highly valuable to a CGT study, applying a theoretical code(s) is not mandatory as there are a plethora of effective studies that do not have them (Chametzky, 2016). Nevertheless, those that do have theoretical codes often result in the discovery of a basic social process (BSP), which in CGT terms can be defined as "fundamental patterns in the organization of social behavior as it occurs over time" (Glaser, 1978, p. 106). Examples of CGT studies that focus on a BSP are: "Finessing Incivility" surrounding the professional socialisation of student nurses (Thomas et al., Jinks, and Jack 2015); "Positioning," which focused on nurse researchers employed in clinical practice research positions (Berthelsen, 2020) and "Economising Learning," that explained how registered nurses balanced limited resources to maintain their competency (Rees et al., Farley, and Moloney 2021). However, an important point to remember is that Glaser (2005, p.2) further added that not all CGT's have the theoretical code of a 'process' but those that do have "two or more clear emergent stages" (p. 2). It is important to remember that the application of a theoretical code allows the researcher to integrate the substantive theory and ultimately defines the link between the main concern of the participants, the core category (how the main concern is being resolved or processed) and other major categories/concepts (Hernandez, 2009). Glaser (1992) has suggested 18 different coding families that include: the six Cs (e.g., causes, contexts, and consequences), the degree family (e.g., extent, level, or intensity) and strategy family (e.g., tactics, techniques, and mechanisms). Theoretical codes from the process family are usually immediately recognisable to nursing researchers when participants speak about changing over time or experiencing phases or transitions (Hernandez, 2009; Qureshi and & Ünlü, 2020)). I have found through talking to many classic grounded theorists that deciding upon the theoretical code that best fits and organises the developing theory can be problematic and is perhaps the hardest part of CGT as the researcher needs to avoid *forcing* a theoretical code on to the data. My research finished with the theoretical code of a process that involved three interlinked stages consisting of dealing with uncertainty, acceptance and finding meaning, that explained military personnels' behaviours and how they faced their

losses (core category). Each stage focused on explaining connections between the emerging categories and their properties (Shannak and Aldmour, 2009). For example, the dealing with uncertainty category included properties such as fearing the worst, being altruistic, questioning relationships, disconnecting from comrades, making social comparisons, competing and humour. As one can visualise, I benefitted greatly by naming properties using gerunds as they represented implicit and explicit action (Russell, 2014) as well as movement over time.

### Conclusion

This article demonstrates some of our reflections on using CGT methodology to build a substantive theory of combat-related limb-loss by adhering to the steps discussed in Glaser's books and by reading articles published in the *Grounded Theory Review* journal. Therefore, we support Simmons (2022) who made the important point that a researcher who prepares themselves in advance by reading the literature pertaining to CGT will likely have a less problematic journey using the method. However, we intend to make an important recommendation to fellow researchers to only immerse themselves in the literature relating to the stage that they are at in their research journey e.g., exploring philosophical standpoints to discuss your positionality or navigating the advice relating to using CGT to develop your research proposal, as this will help avoid becoming overwhelmed by what is required in doing CGT methodology.

### References

- Aldiabat, K. M., & le Navenec, C.-L. (2018). Data saturation: The mysterious step in grounded theory methodology. *The Qualitative Report*, 23(1), 245–261.
- Andrews, L., Higgins, A., Waring Andrews, M., & Lalor, J. G. (2012). Classic grounded theory to analyse secondary data: Reality and reflections. *Grounded Theory Review*, 11(1), 12–26.
- Artinian, B. (2009). An overview of Glaserian grounded theory. In B. Artinian, T. Giske, & P. Cone (Eds.), *Glaserian grounded theory in nursing research: Trusting emergence*. Springer.
- Ash, D. P. (2022). The importance of epistemology when defending a doctoral thesis: The research philosophical nature of classic grounded theory. *Grounded Theory Review*, 21(1), 85–91.
- Baker, S. E., & Edwards, R. (2012, January 11). *How many qualitative interviews is enough*. National Centre for Research Methods. [https://eprints.ncrm.ac.uk/id/eprint/2273/4/how\\_many\\_interviews.pdf](https://eprints.ncrm.ac.uk/id/eprint/2273/4/how_many_interviews.pdf)
- Berthelsen, C. (2020). A classic grounded theory on nurse researchers employed in clinical practice research positions. *Grounded Theory Review*, 19(1), 65–80.
- Breckenridge, J. P., Jones, D., Elliott, I., & Nicol, M. (2012). Choosing a methodological path: Reflections on the constructivist turn. *Grounded Theory Review*, 11(1), 64–71.

- Bryant, A. (2021). Continual Permutations of Misunderstanding: The Curious Incidents of the Grounded Theory Method. *Qualitative Inquiry*, 27(3–4), 397–411.  
<https://doi.org/10.1177/1077800420920663>
- Bryant, A., & Charmaz, C. (2007). *The SAGE handbook of grounded theory*. Sage Publications.
- Chalmers, C. (2018). *A classic grounded theory study exploring the perceptions of stress for people who have experienced a transient ischaemic attack* [Doctoral Dissertation]. University of Stirling.
- Chametzky, B. (2013). Generalizability and offsetting the affective filter. *Grounded Theory Review*, 2.  
[https://groundedtheoryreview.com/wp-content/uploads/2014/03/1202\\_01.pdf](https://groundedtheoryreview.com/wp-content/uploads/2014/03/1202_01.pdf)
- Chametzky, B. (2016). Coding in classic grounded theory: I've done an interview, now what? *Sociology Mind*, 6, 163–172.
- Charmaz, K. (2006). *Constructing grounded theory* (1st edition). Sage Publications.
- Charmaz, K. (2008). Grounded as an emergent method. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of Emergent Methods*. The Guildford Press.
- Charmaz, K. (2014). *Constructing grounded theory* (2nd edition). Sage Publications.
- Chen, H., & Boore, J. (2009). Using synthesised technique for grounded theory in nursing research. *Journal of Clinical Nursing*, 18, 2251–2260.
- Chun Tie, Y., Birks, M., & Francis, K. (2019). Grounded theory research: A design framework for novice researchers. *Sage Open Medicine*, 7, 1–8.
- Coffey, A. (2004). Autobiography. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The SAGE encyclopedia of social science research methods*. Sage Publications.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research* (4th edition). Sage Publications.
- Fusch, P. I., & Lawrence, L. R. (2015). Are we there yet? Data saturation in qualitative research. *Qualitative Report*, 20(9), 1408–1416.
- Gelling, L. (2011). What is the different between grounded theory and phenomenology. *Nursing Times*, 107(4), 25.
- Glaser, B. (1978). *Theoretical Sensitivity: Advances in the methodology of grounded theory*. Sociology Press.
- Glaser, B. (1992). *Emergence vs forcing: Basis of grounded theory analysis*. Sociology Press.
- Glaser, B. G. (1998). *Doing Grounded Theory – Issues and Discussions*. Sociology Press.
- Glaser, B. G. (1999). Keynote address from the fourth annual qualitative health research conference: The future of grounded theory. *Qualitative Health Research*, 9(6), 836–845.
- Glaser B. (2002). Conceptualization: On theory and theorizing using grounded theory. *International Journal of Qualitative Methods*, 1(2), 23–38.
- Glaser, B. G. (2005). *The grounded theory perspective III: Theoretical coding*. Sociology Press.

- Glaser, B. G. (2007). All is Data. *Grounded Theory Review*, 6(2), 1–22.
- Glaser, B. G. (2008). *Doing quantitative grounded theory*. Sociology Press.
- Glaser, B. G. (2009). *Jargonizing: Using the grounded theory vocabulary*. Sociology Press.
- Glaser, B. G. (2011). *Getting out of the data – grounded theory conceptualization*. Sociology Press.
- Glaser, B. G. (2012). *Basics of grounded theory analysis: Emergence versus forcing*. Sociology Press.
- Glaser, B.G. (2014). Choosing grounded theory. *Grounded Theory Review*, 13(2), 3–19.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory – Strategies for qualitative research*. Routledge.
- Goulding, C. (2017). Navigating the complexities of grounded theory research in advertising. *Journal of Advertising*, 46(1), 61–70. <https://doi.org/10.1080/00913367.2017.1281775>
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *SAGE Field Methods*, 18(1), 59–82.
- Hammersley, M. (1992). *What's wrong with ethnography?* Routledge.
- Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: a systematic review of empirical tests. *Social Science and Medicine*, 292(6), 1-10.
- Hennink, M. M., Kaiser, B., & Marconi, V. (2016). Code saturation versus meaning saturation: How many interviews are enough? *Qualitative Health Research*, 27(4), 1–8.
- Hernandez, C. A. (2009). Theoretical coding in grounded theory methodology. *Grounded Theory Review*, 8(3), 51–59.
- Hernandez, C. A., & Andrews, T. (2012). Commentary on "constructing new theory for identifying students with emotional disturbance. *Grounded Theory Review*, 1(11), 59–63.
- Hoare, K. J., Mills, J., & Francis, F. (2012). Dancing with data: An example of acquiring theoretical sensitivity in a grounded theory study. *International Journal of Nursing Practice*, 18(3), 240–245.
- Holton, J. A., & Walsh, I. (2017). *Classic grounded theory: Applications with qualitative and quantitative data*. Sage Publications.
- Howard-Payne, L. (2016). Glaser or Strauss? Considerations for selecting a grounded theory study. *South African Journal of Psychology*, 46(1), 50–62.
- Jeppsen, J. M. C., Wood, D. S., & Holyoak, K. B. (2019). Veteran resilience following combat-related amputation. *Journal of Military, Veteran and Family Health*, 5(2), 60–66. <https://doi.org/10.3138/jmvfh.2018-0053>
- Keeling, M., Williamson, H., Williams, V. S., Kiff, J., Evans, S., Murphy, D., & Harcourt, D. (2023). Body image and psychosocial well-being among UK military personnel and veterans who sustained appearance-altering conflict injuries. *Military Psychology*, 35(1), 12–26. <https://doi.org/10.1080/08995605.2022.2058302>

- Kenny, M., & Fourie, R. (2014). Tracing the history of grounded theory methodology from formation to fragmentation. *Qualitative Report, 19*(52), 1–9.
- Konecki, K. T. (2018). Classic grounded theory - The latest version. *Symbolic Interaction, 41*(4), 547–564.
- LaDonna, K. A., Artino, A. R., & Balmer, D. F. (2021). Beyond the guise of saturation: Rigor and qualitative interview data. *Journal of Graduate Medical Education, 13*(5), 607–611.
- Leese, J., Li, L., Nimmon, L., & Townsend, A. (2021). Moving beyond “until saturation was reached”: Critically examining how saturation is used and reported in qualitative research. *Arthritis Care and Research, 73*(9), 1225–1227.
- Lehane, O. (2019). *A journey through classic grounded theory: Exploring the work of grassroots violence prevention practitioners*. SAGE Publications Ltd. <https://doi.org/10.4135/9781526477224>
- Levers, M. J. D. (2013). Philosophical paradigms, grounded theory, and perspectives on emergence. *Sage Open, 3*(3), 1–6.
- Li, Y., Turale, S., Stone, T., & Petrini, M. (2015). A grounded theory study of ‘turning into a strong nurse’: Earthquake experiences and perspectives on disaster nursing education. *Nurse Education Today, 35*, e43–e49.
- Low, J. (2016). A pragmatic definition of the concept of theoretical saturation. *Sociological Focus, 52*(2), 131–139.
- Lowe, A., & Tossey, T. (2017). A set of principles for doing and evaluating classic grounded theory research in information systems. In T. Tossey (Ed.), *Information Technology Integration for Socio-Economic Development*. Information Science Reference.
- Majid, M. A. A., Othman, M., Mohamad, S., & Lim, S. A. H. (2018). Achieving data saturation: Evidence from a qualitative study of job satisfaction. *Social and Management Research Journal, 15*(2), 66–77.
- Mathias, B. D., & Smith, A. D. (2015). Autobiographies in organizational research: Using leaders’ life stories in a triangulated research design. *Organizational Research Methods, 19*(2), 204–230.
- McCall, C., & Edwards, C. (2021). New perspectives for implementing grounded theory. *Studies in Engineering Education, 1*(2), 93–107.
- McCallin. (2011). Moderated guiding: A grounded theory of nursing practice in end-of-life care. *Journal of Clinical Nursing, 20*(15–16), 2325–2333.
- Mohajan, D., & Mohajan, H. K. (2022). Memo writing procedures in grounded theory research methodology. *Studies in Social Science & Humanities, 1*(4), 10–18.  
<https://doi.org/10.56397/sssh.2022.11.02>
- Morse, J. M. (2004). Theoretical saturation. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The Sage encyclopedia of social science research methods*. Sage Publications.
- Morse, J. M., & Niehaus, L. (2009). *Mixed method design: Principles and procedures*. Left Coast Press.

- Morse, W. C., Wayde, C., Lowery, D. R., & Steury, T. (2014). Exploring saturation of themes and spatial locations in qualitative public participation geographic information systems research. *Society & Natural Resources*, 27(5), 557–571.
- Moura, C. O., Silva, I. R., Santos, K. A., Crespo, M. C. A., & Silva, M. M. (2021). Methodological path to reach the degree of saturation in qualitative research: grounded theory. *Revisita Brasileira de Enfermagem*, 75(2), e20201379.
- Mwitwa, K. (2022). Factors affecting data saturation in qualitative studies. *International Journal of Research in Business and Social Science*, 11(4), 414420.
- Nathaniel, A. (2019). How classic grounded theorists teach the method. *Grounded Theory Review*, 18(1), 13–25.
- Nathaniel, A. K. (2011). An integrated philosophical framework that fits grounded theory. In V. B. Martin & A. Gynnild (Eds.), *Grounded Theory - The philosophy, method, and work of Barney Glaser*. BrownWalker Press.
- Olson, M. (2006). *Driven succeeding - the serpentine path of adult learning: A grounded action study in adult education* [Doctoral Dissertation]. Fielding Graduate University.
- O'Reilly, M., & Parker, N. (2013). Unsatisfactory saturation: A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, 13(2), 190–197.
- Qureshi, H. A., & Ünlü, Z. (2020). Beyond the paradigm conflicts: A four-step coding instrument for grounded theory. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406920928188>
- Ralph, N., Birks, M., & Chapman, Y. (2014). Contextual positioning: Using documents as extant data in grounded theory research. *SAGE Open*, July-September 1–7.
- Redman-MacLaren, M., & Mills, J. (2015). Transformational grounded theory, voice and action. *International Journal of Qualitative Research*, 14(3), 1–12.
- Rees, S., Farley, H., & Moloney, C. (2021). How registered nurses balance limited resources in order to maintain competence: a grounded theory study. *BMC Nursing*, 20(176).
- Russell, A. (2014). A comment on gerunds: Realizing the researcher's process. *Grounded Theory Review*, 13(2), 43–46.
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., & Jinks, C. (2017). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality and Quantity*, 52(4), 1893–1907.
- Sebele, M. F. Y. (2020). Saturation controversy in qualitative research: complexities and underlying assumptions. A literature Review. *Cogent Social Sciences*, 6(1838706). <https://doi.org/10.1080/23311886.2020.1838706>
- Shannak, R., & Aldhmour, F. (2009). Grounded theory as a methodology for theory generation in information systems research. *European Journal of Economics, Finance and Administrative Sciences*, 15, 32–50.

- Simmons, O. E. (2006). Some professional and personal notes on research methods, systems theory, and grounded action. *The Journal of New Paradigm Research*, 62(7), 481490.
- Simmons, O. E. (2022). *Experiencing grounded theory – A comprehensive guide to learning, doing, mentoring, teaching and applying grounded theory*. BrownWalker Press.
- Singh, S., & Estefan, A. (2018). Selecting a grounded theory approach for nursing research. *Qualitative Nursing Research*, 5, 1–9.
- Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage Publications.
- Strauss, A. L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd edition). Sage Publications.
- Thomas, J., Jinks, A. M., & Jack, B. A. (2015). Finessing incivility: The professional socialisation of student nurses' first clinical placement, a grounded theory. *Nurse Education Today*, 35(12), e4–e9.
- Timonen, V., Foley, G., & Conlon, C. (2018). Challenges when using grounded theory: A pragmatic introduction to doing GT research. *International Journal of Qualitative Methods*, 17(1).  
<https://doi.org/10.1177/1609406918758086>
- Tossy, T., Brown, I. T. J., & Lowe, A. (2017). Doing classic grounded theory research in information systems. In T. Tossy (Ed.), *Doing Classic Grounded Theory Research in Information Systems: Trust in Emergence*. Information Science Reference.
- Townsend, K. (2013). Saturation and run off: how many interviews are required in qualitative research? *Human Resource Management*.
- Urquhart, C. (2013). *Grounded theory for qualitative research – A practical guide*. Sage Publications.
- vander Linden, K. L. (2022). Criteria for assessing a classic grounded theory study: A brief methodological review with minimum reporting recommendations. *Grounded Theory Review*, 20(2), 107–115.
- Weed, M. (2016). Capturing the essence of grounded theory: the importance of understanding commonalities and variants. *Qualitative Research in Sport, Exercise and Health*, 9(1), 149–156.
- Weerawardena, J., & Sullivan Mort, G. (2006). Investigating social entrepreneurship: A multidimensional model. *Journal of World Business*, 41(1), 21–35.
- Yang, L., Lidong, Q. I., & Zhang, B. (2022). Concepts and evaluation of saturation in qualitative research. *Advances in Psychological Science*, 30(3), 511–521.
- Yarwood-Ross, L. (2019). *Facing losses in combat-related limb-loss: A classic grounded Theory study* [Doctoral Dissertation]. Manchester Metropolitan University.
- Yarwood-Ross, L., & Jack, K. (2015). Using extant literature in a grounded theory study: A personal account. *Nurse Researcher*, 22(4), 18–24.

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## Remote Female Fixation—A Grounded Theory on Semi-Illegal Sharing of Nude Imagery Online<sup>1</sup>

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### Abstract

In this article, we present the classic grounded theory of remote female fixation, which provides new knowledge on the illegal sharing of sexualized images of young girls in networked communities on the internet. This sharing occurs without consent and usually without the girls even knowing about it. In the study, we identified the main concern and action strategies of the anonymous users of a large online forum for the sharing of nude images. The data were gathered from 20 different online comment sections of the Norwegian branch of a global, anonymous community with a reputation for extensive sharing of nude images of young women. By carefully analyzing the data, we found that the forum's users had an ongoing need to master their own female fixations, which they satisfied through the process of remote female fixation. In this process, forum users engaged in the following four interdependent strategies: *continuous competition*, *loyalty-based inclusion*, *irregular rewarding*, and *tactical negotiation*. By identifying the forum users' shared concern, this theory may help explain the increasing presence of sexual abuse in digital environments.

**Key words:** grounded theory methodology; networked community; non-consensual nude image sharing; digital sexual abuse; gameplay; patterns of behavior; digital media

### Introduction

Young women continuously experience different types of systematic, sexualized violence and abuse in cyberspace. In a report on women's rights and gender equality commissioned by the European Parliament (2018) it was shown that 20 percent of young women in the European Union have experienced hypersexual harassment. The Nordic Gender Equality Fund noted that the sharing of non-consensual nude images occurs frequently and is a gendered problem with serious consequences for the affected individuals (KUN, 2017). According to data on non-consensual pornography among adults in the United States,

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higher rates of victimization and lower rates of perpetration had been reported for women than for men, underlining the fact that nude image sharing is a gendered sexual problem (Ruvalcaba & Eaton, 2020).

Our inspection was inspired by the presence of conflicting or opposing views and actions on sexual harassment in the public sphere. In 2016, people in many countries began speaking out against sexual harassment through the international #MeToo movement. In the media, the unified public condemnation of harassment and violence against women was absolute. At the same time, the Norwegian authorities uncovered a massive international, digital network of pedophiles for sharing illegal images and videos of children on the internet. The global debate also brought to light several online and semi-illegal platforms for the sharing of nude images. The public disapproval of such behavior increased, and there were no opposing voices in the Norwegian public discourse. The image sharers themselves remained invisible, causing much speculation as to who they were, what their motivations might have been, and what their practices were. The aim of our study, in which we investigated the actual image sharers and their practices, was thus to contribute new knowledge to society's understanding of the people who share illicit images.

Most research on digital criminal violations against women, both in the Norwegian and the international context, is focused on nude image sharing in relation to the victims and their experiences (Ruvalcaba & Eaton, 2020), definitions of revenge porn (Stroud, 2014), or legal and educational aspects to do with crime prevention and the criminalization of non-consensual image sharing (Kinge, 2017; Krieger, 2017; Rønning, 2018; Skavlan & Viste 2018; Yar & Drew, 2019). However, only in a few inquiries the perpetrators' motivations or actions had been investigated, which means that the people behind the nude image sharing remain largely unresearched. Research projects on forum user typically are concerned with the normative or moral perspectives of nude image sharing—for example, Stroud (2014) wrote about the "Growing Plague of Revenge Porn."

Investigating non-consensual nude image sharing and its agents is both complex and controversial as well as ethically and methodically challenging. The many privacy issues involved in getting access to such a topic may partly explain why very few, if any, researchers have analyzed the practices of image sharers. In our approach we addressed this research gap by demonstrating how grounded theory methodology (GTM) can be used to solve the problematic issues and avoid the ethical pitfalls that arise for researchers working with difficult, illegal, and unavailable research objects.

First, we will elaborate on the methodological problems that we had to solve when exploring a sensitive topic (Section 2). Then, we will present the theory of remote female fixation (Section 3). Afterwards, we will discuss the theory in relation to existing literature and research (Section 4). Finally, we will present the implications and suggestions for further use of the developed theory (Section 5) before offering concluding remarks (Section 6).

## Data and Choice of Method

The object of this study was the Norwegian branch of a global, anonymous image-sharing forum. This forum was one of many anonymous online communities infamous for the illegal sharing of nude images of young women. Due to the hidden identities and the varying activity of the individual sharers, the total number of people who participated in the forum's activities was unknown.

We soon realized that the issue of non-consensual nude image sharing on online forums posed significant problems in terms of the research object, process and method. As LEGEWIE and NASSAUER (2018) noted, international codes of research ethics urge scholars to conduct studies of illegal behavior that could benefit society, even if such studies involve ethical concerns. When not resulting in the avoidance of ethically problematic subjects, such ambiguous research guidelines create higher ethical standards for scientific projects. Because of the sensitive nature of our project, specific guidelines for privacy were needed for us to be able to conduct research on non-consensual image sharers online. The research proposal was reviewed and approved by the Norwegian Centre for Research Data (NSD), which assesses whether a research project meets the requirements of the General Data Protection Regulation (GDPR) as described in the EU Charter of Fundamental Rights.

To successfully conduct a research project that could harm or expose vulnerable individuals, users, or third parties, personal or individual data cannot be processed in any way (Norwegian National Research Ethics Committees, 2016). From a research perspective, the easiest way to do it with an adequate level of protection for both victims and participants was to analyze the users' online communication with each other, without performing qualitative interviews with the users and without saving any personal data or identifiable information. In this way, the investigation could take place without needing further approval from the NSD. Due to the privacy requirements, the criteria for gathering the data were limited to the communications of the online forum itself, leading to an analysis of 20 different discussions between users.

We chose classic GTM (Glaser & Strauss, 1967) because it allowed us to explore and capture the practices and strategies of the users who share nude images online. GTM allowed protecting both the victims and the participants and provided a detailed and specific methodological approach and tools. Classic GTM was applied as the methodology's "all is data" approach (Glaser, 2001, 2002) allows the researcher to investigate human interactions and behavioral patterns in otherwise inaccessible substantive areas. Even if little was known about the forum's users, the method allowed us to analyze the users' problems and processes by constantly comparing documents in the form of message exchanges and posts on the online forum. Therefore, GTM worked well for observing the forum users' communication and actions at a distance, effectively dismissing any need for conducting qualitative interviews with the research subject. The users operated beyond the public sphere for various reasons, and when a researcher enters their realm, there arises the possibility of offending or scaring off the subjects. As Pawelz (2017) wrote, when studying hard-to-reach populations, cultural differences with and possible distrust of the researchers have a direct impact on the choice of methods. In conflictual cases, using an

observational approach can be the best choice. According to Nørskov and Rask (2011), the most desirable scenario for collecting data in an online community would involve the researcher as a "complete observer" (§4). When the researcher acts as what NØRSKOV and RASK termed a complete observer, the possibility of influencing the community is avoided, which, in turn, can strengthen the dependability of the analysis.

GTM made it possible to conceptualize behavioral patterns while simultaneously securing an openness to the material by avoiding existing hypotheses on and ethical or moral assessments of the users' actions. As the co-originator of GTM Barney Glaser put it, "The emphasis is on behavioral patterns, not personal patterns" (1978, p.69). The users' illegal activities on the forum were ethically challenging to follow and made it extremely important to analyze the data on neutral grounds. GTM ensured that the users' actions were the main focus when performing the analysis, minimizing personal, social, and cultural convictions and biases.

To satisfy both the ethical and the data protection requirements, the research design excluded interviews with forum users. No personal data or identifying information was processed in any way; instead, data collection was limited to the messages posted publicly on the online forum. Ethical and data protection requirements also precluded a research design involving rich description because of the risk of unwittingly including identifying information. The ethical and privacy requirements demanded that we select a research method that would enable analyzing the forum posts while protecting the forum users and the individuals captured and exposed in the images. As the conceptualizations provided by grounded theories are abstract of time, place, and people (Glaser, 1978, 1998, 2002; Glaser & Strauss, 1967), no specific person can be identified from the theory developed.

Furthermore, given the lack of relevant literature, it was important that the chosen approach would enable bringing to light users' issues and processes. The classic GTM (e.g., Glaser, 1998, 2001, 2002) satisfies this requirement because, as an inductive-deductive method, it was designed to understand the main concern of the participants of a substantive area and how these concerns are resolved or processed. The research procedures that focus on conceptualizing behavior patterns in the substantive area—rather than the personal patterns of participants (GLASER, 1978, 2001, 2002)—minimize the role of social and cultural convictions by focusing the analysis on what the subjects are actually doing.

### **Data collection**

The data were collected by following 20 different topics on the discussion board of the Norwegian branch of the global image-sharing forum. The discussion threads, which received posts from more than 100 participants, were studied over a period of eight months and analyzed in accordance with the tenets of GTM. The data collection was limited to the posts provided by the forum's active users. The only inclusion criterion for selecting a discussion was the users' Norwegian origin. Each thread was of a different length, had a different mix of participants, and involved different types of content. The number of images shared in each post ranged from two to several dozens. The individual comments on the images varied greatly in terms of length, from single words or short phrases to lengthy discussions. The active participants appeared to be based in the Norwegian cities of Oslo, Bergen, Trondheim, and Stavanger. The forum's passive users could not be analyzed due to

the absence of posts. Therefore, the number of inactive or passive users is not known. Data were mainly captured via field notes, including observational notes on a user's messages and how they related to the accompanying images; known as "baseline" data, such untreated and easily available material conveys spontaneous reactions (Gynnild, 2014).

As pointed out by Glaser and Strauss (1967), GTM's data collection aims to reveal as many traits and nuances in the material as possible. In accordance with GTM procedures, the data collection was substantial in the beginning and naturally decreased with continuous collection as analysis progressed and no new variables or attributes emerged. After 16 discussion threads had been analyzed, almost no new traits emerged in the material. In retrospect, the data collection was less demanding than the ongoing analysis. To avoid the researchers being overwhelmed in the process, the data were collected in short intervals over a long period of time. This created a distance from the data, supporting the research efforts to remain objective and alert to the nuances of the data being analyzed.

### **Data analysis**

The classic GTM is powerful because it enables researchers to retain control in a chaotic research environment and to successfully provide new knowledge. When developing the grounded theory of remote female fixation, we followed the tenets of classic GTM by constantly alternating between the different stages of the process—that is, between systematic data collection, analysis of the material, and the development of conceptual categories, properties, and dimensions and the write-up. This carefully constructed approach to managing the data was crucial to succeed at building a new theory. The switching between the steps of open and selective coding, memoing, sorting, and theoretical sampling allowed new insights to emerge during theory development. Writing memos helped capture what Glaser (1978, p.83) called "the frontier of the analyst's thinking." Memo-writing also enabled easy access to the different phases of classic GTM during the demanding and time-consuming analysis, which Glaser (1998, p.225) referred to as a "delayed action phenomenon." It took time to lift the descriptions of the users' actions to an abstract, theoretical level. Throughout the research process, we found it helpful to reread the grounded theory literature to make sure that the theory in development was in line with classical GTM procedures.

During the open coding stage, the material was read line by line. Each incident noticed in the data was compared, conceptualized, and assigned a code. Clusters of incidents sharing common traits and attributes coalesced, and the codes grew into concepts. This process of constant comparison eventually illuminated the forum's users' main concern and marked the start of theoretical sampling and the selective coding stage. As the analysis progressed, the data relevant to the core category were highlighted by removing the material that was less relevant to how the subjects resolved their concern. The remaining concepts were sorted according to the categories and their constitutive properties, which eventually led to theoretical saturation and a fully grounded theory of remote female fixation.

## The Theory of Remote Female Fixation

The main concern of the anonymous forum users is to manage, control, and negotiate their distant fixation on female nudity. To process their main concern, the users anonymously engage in collective sharing activities online. However, as users participate in the nude-image-sharing forum, their focus on women intensifies, as does their need to process their fixation. The anonymous nude-image-sharing behavior thus reinforces the users' fixation, creating what seems to be an endless game, where the only solution is to share more images. The options for handling the dependency remotely, via online means, are crucial to keeping the game going and reveal what would otherwise go on in real life, namely peeping.

The core category of remote female fixation shows that nude image sharing resembles a continuous virtual game consisting of four game strategies that the users must apply in order to play. These strategies are *constant competition*, *loyalty-based inclusion*, *irregular rewarding*, and *tactical negotiation*. These mutually dependent strategies ensure the continuous distribution of nude images on the online forum and are crucial for users to participate in the game. A user's action in the game immediately creates the need for further action. In this way, the game is perpetual and structured by the underlying causes and consequences that the participation in the game creates. A user's action creates a set of circumstances, which, in turn, entangle all users in a behavioral pattern and maintain the use of the different strategies for image sharing.

### Strategy 1: Constant Competition

Most online games consist of two or more players competing in some way. However, constant competition focuses on the tasks that the users must engage in when playing the image-sharing game. Users work collectively to solve tasks, with varying results. The strategy of constant competition comprises the following five behavior elements: *collective chasing*, *sexualized networking*, *capitalizing*, *winning*, and *continuous play*. Together, these elements ensure the game's endless nature: the completion of a task results in a new task, once more bringing the user back to the game's entry level. This strategy means that the game is constant, endless, and only restricted by the users themselves.

#### **Collective chasing**

The purpose of the image-sharing forum is to share nude imagery, and, from the start, the users unite to find and make nude images available for sharing. Forum users share information about where to find photos of girls on social media, and the more players there are, the easier the hunt, which, in turn, provides faster and better results for the individual player. Working together in this way guarantees the kind of result for each user that would be difficult to achieve for the lone ranger. Collective chasing is made possible through user anonymity, which disconnects the user from their public identity.

#### **Sexualized networking**

As the users work collectively to achieve their goals, networks of forum users are established. The greater the quality or the quantity of images that a player has, the more in demand the player will be, whereas players with fewer images will be automatically

positioned as less attractive. The strategy of sexualized networking is thus conditioned by a user's image capital and by intra-user relations that are mutually rewarding. Building a quality network helps a user to gain access to other networks with more exclusive images, granting access to more exclusive forums, websites, and conversations that are password protected. For instance, a user is often asked to share nude images to confirm their value before being invited to more secure forums or platforms. In the comments section, the players who cannot prove themselves as valuable often beg to be accepted.

### ***Capitalizing nudes***

Nude images are the forum's currency. To capitalizing the images, it is crucial that individual users join or expand networks and engage in image sharing. The primary means of increasing one's nude image capital is to have a lot of pictures, as image quality is subordinate to quantity. At the same time, the users favor fresh pictures of girls whose images have not been previously shared: the newer the images, the more valuable the capital. This exchange mechanism distinguishes anonymous nude image sharing from traditional pornography consumption, showing that the users' goal is to "undress" the women who are not already nude. Only by sharing private images of ordinary girls can the users achieve the goal of expanding the network.

### ***Winning***

The competition reaches its climax when the nude image is posted. In traditional games, victory consists of defeating an opponent or succeeding at a challenge. In this game, triumph is reflected in the terms with which users claim a win or conquer a position in relation to both the pictured girls and other players. The moment of climax is referred to using terms like "score," "wins," or "winning" in the comment section. Winning can only be achieved by active players and is associated with intense feelings of joy and a sense of community. These feelings are heightened by the quantity or quality of the nude images. The positive feelings experienced by the users are evidenced by the greatly increased number of comments after winning, all expressing triumph.

### ***Continuous play***

The rapid pace of life in the digital sphere makes competing in the game time dependent. Continuous play requires the player to be present on the forum at all times in order to gather images and compete in the game. As the images themselves are non-consensual and illegal there is always external pressure from public institutions, such as the police or the news media, to remove the images posted on the forum. The users are aware that the images can disappear at anytime, which makes ongoing participation crucial. The fear of missing out on important events, such as the sharing of prestigious images, is a constant trigger to the players. The fear of missing out can be real or imagined but is a persistent characteristic in terms of players' experiences of and motivations for participating in the game.



## **Strategy 2: Loyalty-based inclusion**

The second game strategy, loyalty-based inclusion relates to cooperation and partnership in obtaining and sharing nude images. The tacit contract between players must be maintained as each player is dependent on the other players. Different players can have varying interests, but loyalty-based inclusion requires each player to consider every team player's interest and to collect images to satisfy each interest. For instance, a player may provide a post on the forum stating that he is interested in girls born in 2002, from a specific town, preferably blonds. Another player might only be interested in what he describes as girls that appear perfect in social situations and are not expected to have nudes at all. Others might only be interested in the people they know personally. If the loyalty contract is broken, each player's situation worsens, and consistently ignoring the needs of others can eventually lead to exclusion from the network. Loyalty-based inclusion involves the following strategies: *sharing is caring*, *active demanding*, *image harvesting*, *image hoarding*, and *dynamic dispersal*.

### ***Sharing is caring***

Loyalty-based inclusion means that the users have accepted the satisfaction of other players' interests as being part of the game. This general attitude of sharing is caring impacts how the users communicate with each other and also influences the image sharing: when users share images, they care for each other. By caring about other players' interests, they reinforce an image-sharing culture whereby other players reciprocate the sharing, thus helping one another to process their main concern. For instance, when commenting on other users' posts, the users themselves use the term "sharing is caring" and tell others to share more. However, the main function of the care aspect, rather than being an affectionate or loving gesture, is to promote the sharing economy on the forum. Each player has to take responsibility and post images to maintain a steady flow of images.

### ***Active demanding***

The pattern of active demanding rests on loyalty-based inclusion ensuring that players comply with the needs of others. The users actively encourage the sharing of images and demand material from one another, taking advantage of the established frame of sharing is caring. In every comment section, users reinforce the message that all users must share images for everyone to acquire images and that this is a precondition for sexualized networking. Active demanding keeps the nude-image-sharing machinery alive. The active demanding of images is accepted by all users and is therefore a legitimate action.

### ***Image harvesting***

The loyalty-based inclusion combined with the pressure generated by actively demanding images from each other result in changed image interests for the individual player. To continue participating in the game, the players gather images that depart from their own interests. At this point, all nude images become relevant to the player, and users

gather images that please others as well as themselves; in other words, players engage in image harvesting.

### ***Image hoarding***

Image hoarding increases a player's image capital. The rule of loyalty-based inclusion creates the need to acquire content to share. Supplying images to satisfy image demanding and the needs of others is only viable if users acquire and keep images. Image hoarding happens continuously during the game to satisfy one's own needs and those of the teammates. Such image solidarity ensures the width and scope of the gathered images, including every posted photo in the users' library of nudes. As the nude images are key to creating networks that lead to further expansion of a player's library, some users have rich and substantial collections. Some players noted that they had hoarded images over several years and from different countries, which increased the value of their image capital.

### ***Dynamic dispersal***

The last crucial characteristic of loyalty-based inclusion is the active and dynamic dispersal of images by each player. An established game requires users to share any material that might be of interest to as many players as possible. Dynamic dispersal explains why online images of nudes never disappear: the picture is published, saved repeatedly, and shared by several users on different networks, a process that continuously brings old photographs to life.

### **Strategy 3: Irregular rewarding**

The anonymous collective sharing of nude images has mixed outcomes for the users, resulting in irregular rewarding. When the competition is at its climax, the users can reap the rewards of the gaming situation. This situation is often described as a positive outcome, increasing the users' image capital and creating unity and affiliation. At the same time, lack of participation can generate negative responses toward less active users, ranging from offensive comments by fellow users to exclusion from the forum and other channels as well. This dynamic is important because the users operate between these extremes of positivity and negativity. An imbalance can be seen as a persistent state of stress that the less active users wish to resolve to boost their participation in the game. Irregular rewarding is composed of *collective correction*, *the disarming of women*, *emotional compensation* and *short-term profit*.

### ***Collective correction***

The first dimension of irregular rewarding is visible in the collective and unified treatment of those players who do not adhere to the rules. The users refer to themselves as "fam," which is short for family, drawing on the traditional understanding of shared family values and interests. By operating as a collective, the users create affiliation through shared action, an important aspect for the survival of all human life. This feeling of belonging is strongly experienced by the individuals who struggle economically, mentally, or socially or

feel marginalized due to their interests. For the forum users, the collective becomes highly important and users strive to participate and correct and remind one another of the importance of sharing nudes. The users who do not engage in the collective correction are barred from participation: for the suspended users, the rewards of game vanish, leaving them alone and unable to feed their fixation. Therefore, the users strive to participate and correct and remind each other of the importance of sharing nudes. The collective correction of behavior ensures that the sharing of images is maintained and simultaneously punishes users' lack of action. In this way, the collective correction of behavior regulates the quantity of the images posted. It also regulates the type of content shared—for example, by shutting down the users who post pictures of men and restating that the purpose of the forum is for nudes of young women only.

### ***The disarming of women***

The forum users' need to disarm women and to strip them of their real-life power over the users underpins the behavior of irregular rewarding. The data showed that the forum users did not care for the standard, readily available pornographic images. Rather, the images shared by users are often low-quality images of private individuals in personal situations and do not always depict sexual intimacy. Possessing the nude images themselves is not enough for the players; they also need to be able to identify the pictured individuals. For instance, when a picture is posted for the first time, they ask who, how old, relationship status, and other personal information about the woman in the image. Users also start by posting a woman's name, hometown, age, and occupation so that other player scan find her photos. What is central to the forum users is the possibility of undressing the women that they encounter in their daily lives and in society as a whole. The nude image becomes the object with which the users can acquire a sense of power; for the users, the depicted girls are associated with powerlessness. This is evidenced by the comments in which the users share intimate details about the women—for instance, saying that this woman has been a slut for several years and sharing stories from her life and laughing at them.

However, the sharing of nude images does not subordinate the girls to the players in real life, as most often the players want the girls to remain unaware that their images are being distributed. As the power is not visibly exercised in relation to the women, the disarming of women is limited to the users' own understanding of the situation on the forum. For the players, the power struggle is an internal battle to control their female fixation. The disarming of women enables the users to experience dominance and to refuse the experience of being subordinated to other players. In this way, the disarming of women shows how inextricably intertwined the female "body" becomes with female fixation.

### ***Emotional compensation***

Emotional compensation is another important dimension of irregular rewarding when playing the nude image game. The game enables players to not only modify their current emotions but to experience a broad range of emotions. Active participation can result in experiencing both positive and negative emotions: when players "win," they can experience positive emotions, such as happiness, cleansing, a sense of achievement, and a sense of

belonging; however, when players fail to achieve their goals, they experience more negative emotion. Players also experience a heightened sense of anticipation prior to, during, and after playing: the tension that is inherent in the uncertainty of image sharing can be alluring and motivate further participation. Importantly, the game offers the possibility to change or compensate for the emotions that a player feels. Both negative and positive emotions are strong motivators for action. The users can experience more of the desired emotions and change the unwanted ones. Furthermore, this means that different emotions can be a motivation for participating in the sharing of nudes. Therefore, the game enables emotional compensation that is independent of the users' varying initial emotions.

### ***Short-term profit***

The competitive nature and rapid pace of the game make the potential emotional outcome of playing short-lived. The users must participate constantly, victory is transient, the hunt for more images is ongoing, and the users constantly risk exclusion. As the users rely on the external tool of nude image sharing to master their female fixation instead of developing an internal cognitive tool, the game demands constant repetition to enable short-term profit. The users must continue to share nudes to manage their remote female fixation, which makes the game never-ending. The users' short-term profit thus creates the perpetual need for the users' constant participation to process their distant female fixation.

### **Strategy 4: Tactical negotiations**

A tactical negotiation is the negotiation between the users' interests and the consequences of acting upon them. In the game, the players are constantly evaluating what is going on as part of tactically negotiating the room in which they operate. Participation demands that the users accept each other and deconstruct the norms present in society. This is crucial as it allows boundless expression that goes against public discourse. Tactical negotiations are thus intended to ensure a safe and stable environment for the sharing of non-consensual nude images and comprise *risk calculation*, *interest legitimization*, *boundary extension*, and *freedom of expression*.

### ***Risk calculation***

Risk calculation involves users assessing the likelihood of being "caught" and making other participants aware of the various dangers involved in the activities. The risk of being exposed or punished for criminal actions lessens with each feature that enables safe participation. For example, anonymity is a key protection mechanism. Therefore, the degree and type of illegal material increase as users become more protected, which helps explain why the data studied is mainly considered to be in the "grey" area, with some of it illegal and some legal. After risk calculation, the users share images that cannot lead to severe punishment or imprisonment. The users depend on their combined efforts to remove the pictures of minors from the forum and from personal libraries to keep the forum away from the authorities' attention, thus securing future image sharing. Consequently, learning about the risks and avoiding the public's attention is an important part of the game. Risk calculation also impacts image hoarding because there is always a chance that the images will be removed due to external pressure.

### ***Interest legitimization***

For users to reach their goals, each user has to accept the needs of all other users and their respective image projects. This is achieved through advocacy and acceptance of different values. The players do not judge each other's actions nor ask for the reasons why nude images of a specific type are shared. This absence of judgment makes it possible for the individual users to express their interests, no matter what these interests may be. In this way, the players use each other to legitimize their projects, with each user being accepted and, in turn, accepting other players and their interests, which reinforces the sense of community. For instance, the only occasion when some users told another user to stop posting images involved the images of a boy. The users told the person posting them that they had respected said user's needs for a long time but that the other users could not relate to that specific project. They kindly asked him to stop and restated that women were the main target. The forum users knew that the content being shared was unlawful. However, within their community, non-consensual nude image sharing is not regarded as a serious infringement but as a legitimate way to process the users' female fixation.

### ***Boundary extension***

Compared to the traditional public sphere, the limits on the publication and deliberation of images within the network are almost nonexistent. Risk calculation seems to be the only means of setting limits for user behaviors. The users accept almost all content, with the exception of images of minors, so long as the user will not be caught. Between risk calculation and interest legitimization, the users expand the boundaries for action, thus ensuring the diversity of the posted material. Collective boundary extension exposes all users to a wide range of content, ranging from innocent to illegal. The moral standards associated with the ordinary public are discarded. As forum users engage in continuous efforts of boundary extension and interest legitimization, they become exposed to more and more challenging material, potentially fueling their female fixation.

Boundary extension may also impact a user's ability to empathize with the depicted girls. Moreover, displaying empathy for the depicted girls could be harmful to their own participation—for example, when participants discuss nude imagery, they typically focus on the negative stereotypes of women, applying derogatory terms such as "bitches," "whores," or "trash."

### ***Freedom of expression***

Tactical negotiations and risk calculation create a sphere in which the users can express themselves freely. The players can enact the parts of themselves that are not accepted by society. In this way, the forum offers the possibility of developing a character and interests that are not accepted in public. This freedom of expression allows a diversity of discourse and interests, creating a place where the only limit for speech is that there is no limit. The forum becomes a safe place in which the users can communicate by using alternative expressions to those found in public discourse, thus creating an arena for deliberation.

## Discussion

The goal of this study was to investigate the individuals who share non-consensual nude images online. The theory on remote female fixation that was developed contributes to our understanding of the issue by exploring patterns of human behavior. By conceptualizing the four strategies of constant competition, loyalty-based inclusion, irregular rewarding, and tactical negotiations, the theory illuminates the users' collective actions and shows why sexualized image sharing is a persistent and potentially growing social problem. Following the tenets of classic GTM we proposed the theory of remote female fixation based on the careful analysis of the data collected during the research process. As the theory is empirically derived, it reflects and explains what happens in the field; due to systematic and rigorous coding and concept development, the categories fit the data: "Grounded theory arrives at relevance, because it allows core problems and processes to emerge" (Glaser, 1978, p.5). By letting the data lead the way, without pressure from external or existing theories, we explained the users' main concern and how the concern is processed. Data-led methods are the most effective way of achieving relevance or validity when applying the classic GTM.

The theory of remote female fixation challenges existing literature and research in psychology and the social sciences. The theory also shows how identifying patterns of behavior rather than the effects of individual actions produces important knowledge that cannot be achieved by other means. The first relevant aspect of our theory involves the definition of non-consensual nude image sharing. Nude image sharing is mainly associated with what Stroud (2014, p.168) described as "the intentional embarrassment of identifiable individuals through posting of nude images online," known as revenge porn. Revenge porn is a widely used colloquial term that frames an individual's actions as motivated by hate or revenge, reducing their motivations and experience to those defined by existing moral assessments. By using grounded theory as a research method and, therefore, refraining from employing established terms and norms, we showed that the individuals' involved in nude image sharing experienced a whole spectrum of emotions that were distinct from revenge. By participating in the game of nude image sharing, the users could achieve different meaningful emotional states, such as joy, belonging, and a sense of achievement. The theory of remote female fixation reveals a complexity of user emotions and actions that so far have been absent in public discourse but are vital for the understanding of semi-illegal image sharing.

The theory of remote female fixation relates not only to existing literature on nude image sharing (Ruvalcaba & Eaton, 2020), revenge porn (Stroud, 2014), and educational studies on criminalization and non-consensual image sharing (Kinge, 2017; Krieger, 2017; Rønning, 2018; Skavlan & Viste 2018; Yar & Drew, 2019) but also to literature on game theory and addiction. Game theory supports the underlying logic that shows how the players interact strategically in the image-sharing game and how punishments and rewards can affect their actions (Syvertsen, 2016). Theories on addiction show that human motivational systems function to promote and control actions. West (2006) applied an understanding of addiction as having an abnormal focus and priority on a specific action. Following the theory of remote female fixation, the way the users process their female fixation is not in itself a sign of addiction; however, the categories and strategies the users apply may increase the

possibility of developing an addiction. The structural processes that influence how addictive a game can become include the pace of the game, the frequency of interactions and rewards, players' involvement, and the possibility of profit (Overå & Weihe, 2016; Skinner, 1963). The theory of remote female fixation shows that all these characteristics were present when the users shared non-consensual nude images.

It is also interesting to view the theory of remote female fixation in the context of counterpublics as elaborated by Fraser (2010). According to Fraser, counterpublics are alternative discursive arenas that exist in parallel to the established public spheres. Fraser suggested that stratified societies generate and structure social groups by means of a system of dominance and submission in the public sphere. The norm-based mechanisms of exclusion lead to the creation of counterpublics, in which subordinate groups can express oppositional or alternate identities, needs, or interests (ibid.). In regard to the theory of remote female fixation, the counterpublic that arises is explicitly anti-egalitarian, oppresses women, and is legally punishable, but the deliberative practice is, nonetheless, interesting. The theory shows that the users have created a safe space where all participants are accepted as long as they follow the established rules of the game. Neither disagreements nor emotions limited the deliberative practice as the users continued to rationally process their main concern together. The users established a counterpublic that assured freedom of speech, approaching the ideals of deliberation: a rational and open debate. In this way, the theory of remote female fixation also criticizes the function of the public sphere rather than the users themselves. The boundaries of the public sphere might be perceived as excluding citizens who do not conform to established norms of behavior. Therefore, the public sphere might prompt individuals to search for or establish alternative discursive arenas. The forum we studied was closed by the authorities towards the end of the research process, after several years of failed attempts to intervene.

### **Implications for Practice**

The dissemination of non-consensual nude images of young girls on anonymous online forums is a challenge for the modern digital society. Authorities face significant challenges in preventing the online sharing of non-consensual nude images and punishing the perpetrators. The theory of remote female fixation provides insights into the shadowy users who share nude images: the theory explains patterns of behavior shaped by the strategies that the users apply to process their main concern, providing valuable knowledge to those who wish to understand how and why the forum users acted the way they did. The theory further shows how nude images are disseminated and explains image hoarding and the creation of sexualized networks. The theory provides important insights into the users' personal gain and the emotional impact that an online forum for nude image sharing might have on its participants.

Furthermore, the theory of remote female fixation can be a tool to understand the complex and persistent nature of nude image sharing online. The theory may be useful to anyone working in the health, justice, or media professions. It has relevance for educational institutions wishing to increase the awareness of semi-illegal online activities among children, young adults, and professionals. By understanding those who share non-consensual nude images online it may be possible to facilitate an approach to the image-sharing issue in a viable way. The theory demonstrates the importance of studying people's

behavior rather than their interpreted experience and contributes to the evidence that classic GTM is suitable for handling a sensitive research topic. For the general public, the theory provides a perspective that focuses on action rather than moral convictions.

### Concluding Remarks

The theory of remote female fixation sheds light on a controversial issue in the new, digital environments that arise on the margins of traditional public discourse arenas. The theory indicates evolving movements in society regarding gender, sexuality, and equality that the dominant public has excluded or suppressed rather than deliberated.

When society deems certain voices as inherently wrong and criminalizes them, this can lead to the creation of anti-egalitarian counterpublics. These spaces that grow in the dark are seeded in the dysfunctional aspects of the experienced, uniform public sphere. In reality, the public contains more voices than what is presented in the media or elsewhere. By improving our understanding of what happens in the shadows of the public sphere, the theory of remote female fixation sheds new light on the hidden cultural conditions to do with gender in society.

### References

- European Parliament (2018). Cyber violence and hate speech online against women. Policy Department for Citizen's Rights and Constitutional Affairs, European Parliament, [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/604979/IPOL\\_STU\(2018\)604979\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/604979/IPOL_STU(2018)604979_EN.pdf)
- Fraser, N. (2010). Rethinking the public sphere: A contribution to the critique of actually existing democracy. In J. Gripsrud (Ed.), *The idea of the public sphere* (pp.127-149). Rowman & Littlefield.
- Glaser, B. G. (1978). *Theoretical sensitivity* (4th ed.). Sociology Press.
- Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.
- Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Sociology Press.
- Glaser, B. G. (2002). Constructivist grounded theory? *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, 3(3), Art. 12, <http://dx.doi.org/10.17169/fqs-3.3.825>
- Glaser, B. G. & Strauss, A. L. (1967). *The discovery of grounded theory*. Aldine Publishing.
- Gynnild, A. (2014). Introduksjon til grounded theory [Introduction to grounded theory]. In E. Hjaelmhult, T. Giske & M. Satinovic (Ed.s), *Innforing i grounded theory [Introductory grounded theory]* (pp.13-24) Akademika Forlag.
- Kinge, M. (2017). Seksuelt krenket i en digital verden [Sexually abused in a digital world]. Master's thesis, Criminology and Sociology of Law, University of Oslo, Norway, <https://www.duo.uio.no/bitstream/handle/10852/57531/1/Master-i-duomal-Marie.pdf>



- Krieger, M. A. (2017). Unpacking "sexting": A systematic review of nonconsensual sexting in legal, educational, and psychological literatures. *Trauma, Violence & Abuse, 18*(5), 593-601.
- KUN, Kvenréttindafélag Islands & Kvinderådet (2017). Online Violence Against Women in the Nordic Countries. Project report.  
[https://www.kun.no/uploads/7/2/2/3/72237499/2017\\_onlineviolence\\_web.pdf](https://www.kun.no/uploads/7/2/2/3/72237499/2017_onlineviolence_web.pdf)
- Legewie, N. & Nassauer, A. (2018). YouTube, Google, Facebook: 21<sup>st</sup> century online video research and research ethics. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 19*(3), Art. 32, <http://dx.doi.org/10.17169/fqs-19.3.3130>
- Nørskov, S. V. & Rask, M. (2011). Observation of online communities: A discussion of online and offline observer roles in studying development, cooperation and coordination in an open source software environment. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 12*(3), Art. 5, <http://dx.doi.org/10.17169/fqs-12.3.1567>
- Norwegian National Research Ethics Committees (2016). Forskningsetiske retningslinjer for samfunnsvitenskap, humaniora, juss og teologi [Research ethics guidelines for the social sciences, humanities, law and theology],  
<https://www.etikkom.no/forskningsetiske-retningslinjer/Samfunnsvitenskap-jus-og-humaniora/b.-hensyn-til-personer-5---18/>
- Overå, S. & Weihe, H. J. (Eds.) (2016). Spilleavhengighet [Gambling addiction]. Hertervig Forlag.
- Pawelz, J. (2017). Researching gangs: How to reach hard-to-reach populations and negotiate tricky issues in the field. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 19*(1), Art. 2, <http://dx.doi.org/10.17169/fqs-19.1.2878>
- Ruvalcaba, Y. & Eaton, A. A. (2020). Nonconsensual pornography among U.S. adults: Asexual scripts framework on victimization, perpetration, and health correlates for women and men. *Psychology of Violence, 10*(1), 68-78.
- Rønning, K. S. (2018). Forebygge nettovergrep. En kvalitativ studie om forebyggende undervisning [Preventing cyberbullying. A qualitative study in preventive education]. Master's thesis, criminology, Volda University College, Norway,  
<https://www.duo.uio.no/bitstream/handle/10852/57531/1/Master-i-duomal-Marie.pdf>
- Skavlan, T. E. & Viste, I. (2018). Mindreårige ungdom og deling av nakenbilder [Minors and the sharing of nude images]. Master's thesis, sociology of law, University of Oslo, Norway, [https://www.duo.uio.no/bitstream/handle/10852/63835/Viste-Ebbing\\_Master.pdf?sequence=1&isAllowed=y](https://www.duo.uio.no/bitstream/handle/10852/63835/Viste-Ebbing_Master.pdf?sequence=1&isAllowed=y)
- Skinner, B. F. (1963). Operant behavior. *American Psychologist, 18*(8), 503-515.
- Stroud, S. (2014). The dark side of the online self: A pragmatist critique of the growing plague of revenge porn. *Journal of Mass Media Ethics, 29*(3), 168-183.  
[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2471141](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2471141)

Syvvertsen, C. (2016). Spillteori [Game theory]. In S. Overå & H. J. Weihe (Eds.), *Spillavhengighet* [Gambling addiction]. Hertervig Forlag.

West, Robert (2006). *Theory of addiction*. Blackwell.

Yar, M. & Drew, J. (2019). Image-based abuse, non-consensual pornography, revenge porn: A study of criminalization and crime prevention in Australia and England & Wales. *International Journal of Cyber Criminology*, 13(2), 578-594.

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**Pluralistic Task Shifting for a More Timely Cancer Diagnosis:  
A Grounded Theory Study from a Primary Care Perspective.<sup>1</sup>**

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**Key words:** Cancer, diagnosis, primary care, grounded theory, screening, qualitative data

**Abstract**

**Objective:** To explore how cancer could be diagnosed in a more timely way. **Design:** Classic grounded theory analysis of primary care physicians' free text survey responses to: "How do you think the speed of diagnosis of cancer in primary care could be improved?" and secondary analysis of primary care physician interviews, survey responses, literature. **Setting:** Primary care in 20 European Örenäs Research Group countries. **Subjects:** Primary care physicians: 1352 survey respondents (2013-2016), 20 Spanish and 7 Swedish interviewees (2015-2019). **Main outcome measures:** Conceptual explanation of how to improve timeliness of cancer diagnosis. **Results:** *Pluralistic task shifting* is a grounded theory of a composite strategy. It includes *task sharing* - among nurses, physicians, nurse assistants, secretaries and patients - and *changing tasks* with cancer screening when appropriate or cancer fast-tracks to accelerate cancer case finding. A *pluralistic dialogue culture* of comprehensive collaboration and task redistribution is required for effective pluralistic task shifting. Pluralistic task shifting relies on *cognitive task shifting*, which includes learning more about slow analytic reasoning and fast automatic thinking initiated by pattern recognition; and *digital task shifting*, which by use of eHealth and telemedicine bridges time and place and improves power symmetry between patients, caregivers and clinicians. *Financial task shifting* that involves cost tracking followed by reallocation of funds is necessary for the restructuring and retraining required for successful pluralistic task shifting. A timely diagnosis reduces expensive investigations and waiting times. Also, late-stage cancers are costlier to treat than early stage cancers. Timing is central to cancer diagnosis: not too early to avoid overdiagnosis, and never too late. **Conclusions:** We present *pluralistic task shifting* as a conceptual summary of strategies needed to optimise the timeliness of cancer diagnosis.

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## Key Points

Cancer diagnosis is under-researched in primary care, especially theoretically. Thus, we analysed and conceptualised the field using classic grounded theory:

*Pluralistic task shifting* is a conceptual explanation of how the timeliness of cancer diagnosis could be improved, with data derived mostly from primary care physicians.

This includes *task sharing* and *changing tasks* including screening and cancer fast-tracks to accelerate cancer case finding, and requires *cognitive task shifting* emphasising learning, and *digital task shifting* involving the use of eHealth and telemedicine.

*Financial task shifting* with cost tracking and reallocation of funds is eventually necessary for successful pluralistic task shifting to happen.

## Introduction

Diagnosing cancer is heterogeneous, in that it depends on disease type, age, gender, socioeconomic and geographical context, and type of healthcare system (1-3). Some cancers, such as breast cancer, colorectal cancer and prostate cancer, may be detected by screening in an early asymptomatic phase of the disease (4). However, the majority of cancers are discovered by case finding: symptoms and signs of the cancer are assessed through consultations with health care professionals (5) and most cancer patients are first seen by a primary care physician (1,2).

Work-up of a cancer diagnosis often requires several different assessment methods, which may or may not include a physical examination (5). These are followed by technical procedures which include diagnostic imaging techniques and blood tests (2). A histological examination of body tissue or cells ultimately confirms the cancer diagnosis, except for some late-stage cancers, often in the elderly, which may only be discovered by diagnostic imaging or at autopsy (6).

Many countries have introduced fast-track systems for detecting cancer that are effective in improving case-finding if the symptoms and signs of patients meet specific fast-track criteria (3). Investigations for suspected cancer can in some countries be done by centralised or specialised diagnostic services that target many diagnoses simultaneously for those patients who do not meet fast-track criteria and where case finding fails (3,7,8).

The complexity of the cancer diagnostic pathway described above implies that there are many opportunities for error and delay. These many issues need to be resolved to optimise the work-up processes involved.

The purpose of this study was to analyse, from a primary care perspective, how the timeliness of cancer diagnosis could be enhanced. Since theories on care improvement are rare but encouraged (9), we present a grounded theory to provide conceptual hypotheses to explain how we may achieve a more timely diagnosis of cancer.

## Methods

### Data collection

We collected data mainly from surveys of European primary care physicians. Secondly we collected data from interviews with primary care physicians, from scientific literature data and from news articles and internet media.

We performed an online survey study of primary care physicians in 25 Örenäs Research Group centres in 20 countries between November 2015 and December 2016 (Bulgaria, Croatia, Denmark, England, Finland, France, Germany, Greece, Israel, Italy, Netherlands, Norway, Poland, Portugal, Romania, Scotland, Slovenia, Spain, Sweden and Switzerland).

The methodology and the development of the Örenäs Research Group survey is described elsewhere (3, 10). The overall response rate for the survey was 24.8%, ranging from 7.1%–65.6% between participating countries.

We also used data from an online survey by the International Cancer Benchmarking Partnership to Danish and Swedish primary care physicians in 2013 (translated from Danish by BST and from Swedish by HT) (11).

Data from a focus group interview study with Spanish primary care physicians in 2015 were also used (translated from Castilian by BOF) (12).

We further collected data from interviews with Swedish primary care physician researchers 2015–2019 who had participated in a detailed audit of the diagnostic process from electronic health records of six hundred patients diagnosed with bowel, lung, and urinary tract cancer (translated from Swedish by HT) (13).

The Spanish focus group data were transcribed from audio recordings, while the Swedish interview data were recorded in field notes. Scientific and popular literature on cancer diagnosis, including articles and comments from online sources, was also studied in the theory generation process. The scientific literature analysed in this study is given in the reference list.

### Subjects

**Primary care physicians.** The Örenäs Research Group survey qualitative data were retrieved from free text comments written by 1352 respondents from 20 European countries; free text comments in the International Cancer Benchmarking Partnership survey were written by 237 Danish and 165 Swedish respondents [11]; transcribed qualitative data from 20 Spanish focus group participants [12]; and qualitative data in field notes from seven Swedish individual interviews with primary care physicians [13] were also used as data for the analysis.

### Data analysis

Our analysis was inspired by classic grounded theory, which is the world's most cited behavioural research method with 137,065 Google Scholar citations for its seminal publication (29 June, 2021) (14).

We primarily analysed free text survey responses to: 'How do you think the speed of diagnosis of cancer in primary care could be improved?' Thus, a preformed question was the basis analysis, which in line with classic grounded theory where a starting point of the analysis should not be set in advance.

Secondary data analysis of survey data, focus group data and individual interview data was done by applying the same grounded theory procedures as in recent studies, following the classic grounded theory 'all is data' dictum (15-20). Classic grounded theory uses a mostly inductive approach to generate hypotheses that explains how participants in a studied area resolve their main concern. Grounded theory aims to generate conceptual theories presenting explanatory hypotheses that transcend cultural, temporal and contextual boundaries. Relevant and modifiable grounded theory concepts that work to explain what is going on should be able to fit in diverse settings and go beyond disciplinary and geographical borders (14,21-27).

A classic grounded theory research conceptualises 'what is going on' in the field of study by constantly comparing data during an iterative research process which involves open coding, memoing, theoretical sampling (data collection based on emerging hypotheses from the ongoing analysis), selective coding (coding and recoding particular data based on central concepts from the ongoing analysis), sorting (sorting memos according to relationships between concepts in the theory), re-sorting and then writing up the sorted memos into a working paper and eventually a publication (14,21-27).

Once the core category that explained what was going on in the data was generated, which in this study first was 'pluralistic retasking', but later renamed 'pluralistic task shifting', the analysis was delimited to the core category and related categories, and selective coding was done. Memoing, with the core category guiding the analytic work, then continued.

Following grounded theory rules, most of the conceptual literature was analysed at the end of the study (14,21-27).

The group of authors is multidisciplinary, comprising researchers in nursing (SH), social work and design (US), economic history (LH), and physician researchers (HT, DP, RH, TK, B O-F, ALN, BST, PV, MH). Our study was inspired by the concept of pluralistic dialogue, with numerous e-mail rounds, several telephone discussions and some face-to-face meetings knitting the group of authors together in the analytic process over a period of five years. This brought a collective intelligence perspective to the emergence of the theory (28).

A classic grounded theory study generates hypotheses for new theory based on thorough systematic analyses of large amounts of data, both empirical and interpreted, quantitative as well as qualitative. The quality of a classic grounded theory may be tried against the principles of 'fit', 'work', 'relevance' and 'modifiability' set forth by Glaser and Strauss (14) and Glaser (21-27). 'Fit' has to do with how closely concepts fit the incidents they are representing. Achieving fit requires rigorous adherence to the constant comparison process, where incidents are compared to each other and to emerging concepts. A 'relevant' study deals with the real concern of the participants and captures attention. The theory 'works' when it explains how the problem, or main concern of participants, is being resolved and when it accounts for most of the variation in participants' behaviour in the substantive area. A 'modifiable' theory is one that is never

complete but can always be further developed when new relevant data are compared to existing data. A classic grounded theory is never right or wrong, it just has more or less fit, relevance, workability and modifiability, and readers of this paper may assess its quality according to these principles.

Descriptive and narrative data from the survey part of this study have been reported elsewhere (3, 10).

**Ethics approval**

Neither the mail survey nor the interview data in this study required formal research ethics approval according to Swedish law, but the Regional Research Ethics Committee in Linköping gave a positive advisory statement regarding the International Cancer Benchmarking Partnership survey (Diary number 2011/495-31). Local study leads of the Örenäs Research Group were asked to either gain ethical approval or obtain a statement that formal ethical approval was not needed in their jurisdiction (3, 10).

**Results**

**Rethinking cancer diagnosis by pluralistic task shifting**

In this study, based on conceptualised data from the written reflections and ideas of many primary care physicians, but also literature data, we propose that a compound strategy of ‘pluralistic task shifting’ is the core variable that can explain what could be done to improve the timeliness of cancer diagnosis from a primary care perspective.

*Table 1. Overview of the most important concepts in the theory of Pluralistic Task Shifting for a more timely cancer diagnosis.*

<p>RETHINKING CANCER DIAGNOSIS:</p> <p>Making cancer diagnosis more timely by PLURALISTIC TASK SHIFTING includes TASK SHARING and CHANGING TASKS which requires a CULTURE of PLURALISTIC DIALOGUE and COGNITIVE and DIGITAL TASK SHIFTING All the above need FINANCIAL TASK SHIFTING</p>
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*Table 2. Definitions of concepts used in the study of the theory of Pluralistic Task Shifting for a more timely cancer diagnosis.*

<p>‘Rethinking cancer diagnosis’: the ‘main concern’ of the survey participants, based on the question ‘How do you think the speed of diagnosis of cancer in primary care could be improved?’</p>
<p>‘Pluralistic task shifting’: the ‘core variable’ that explains what is going on—it is a resolution of the main concern, giving an overall explanation to how the timeliness of diagnosis of cancer in primary care could be improved. ‘Task shifting’ is the ‘rational redistribution of tasks among health workforce teams’ mostly described in healthcare in low-income countries according to WH) 2008 (29). It is an ‘in-vivo’ concept from health care. In our context, it explains how tasks such as cancer diagnosis could be improved. ‘In-vivo’ means that task shifting is an existing concept used within the substantive area of scrutiny. Task shifting has been ‘emergently fitted’ to the data, meaning that we have hypothesized that task shifting explains and</p>

covers what the respondents and literature data are suggesting on how to improve the timeliness of cancer diagnosis.
'Task sharing': a property of task shifting that emphasises collaboration, team working and training.
'Vertical task shifting and task sharing': a process that involves staff at <i>different</i> levels of training and competence, for example shifting from community health workers to nurses, or from nurses to physicians.
'Horizontal task shifting and sharing': a process that involves staff at <i>similar</i> levels of training and competence, for example shifting and sharing from a physician in one speciality to a physician in another one.
'Changing tasks': a property of pluralistic task shifting that explains standardised cancer diagnostic pathways and screening programmes.
'Culture of pluralistic dialogue': an evolving cooperative dialogue among professionals crossing boundaries of disciplines. It focuses on patients/clients and service delivery. It is a requirement for a successful task shifting and sharing to develop. 'Pluralistic dialogue' is an emergently fitted, or 'borrowed', grounded theory concept explaining professionals collaborating by deconstructing and resynthesising thinking, rethinking professional responsibility and reframing team responsibility by breaking stereotypical images [Citation30].
'Cognitive task shifting': a property of pluralistic task shifting emphasising 'thinking cancer'. It includes the 'fast thinking' used in intuitive diagnosis and the 'slow thinking' prompted by algorithms.
'Digital task shifting': a property of pluralistic task shifting that emphasises telemedicine and eHealth.
'Financial task shifting': a prerequisite for pluralistic task shifting; it includes reallocating funds ('money to follow') and cost tracking ('follow the money').

Pluralistic task shifting is a conceptual name for the overarching pattern of behaviour suggested by primary care physicians in many countries and by literature data as a composite strategy to shrink organisational gaps, reduce structural bottlenecks and thus improve how cancer may be diagnosed in a more timely manner. 'Pluralistic' implies that the diagnostic tasks are many, and 'shifting' tells us that we must change how we undertake cancer diagnosis to achieve the goal of diagnosing cancer at the right time.

### **Task shifting, sharing, and changing**

**Task shifting** emerged early in the analysis to explain the multitude of reflections made by the participants in the Örenäs Research Group survey data. Task shifting has been in use for some time in health care, making it an 'in-vivo' concept, and it was defined by the World Health Organisation (WHO) as a 'rational redistribution of tasks among health workforce teams' mostly described in healthcare in low-income countries (29). Task shifting fits well with how many respondents in our survey data wanted cancer diagnosis to work. Changing the focus of the tasks of primary care physicians from dealing with complaints that could be taken care of by other health care professionals to instead work



more with unpacking potential cancer symptoms was mentioned by many respondents as a meaningful task shifting prioritisation from physicians to nurses. This is called vertical task shifting in the literature (31).

'We should involve the nurses in gathering the patients' medical history.' Polish primary care physician

'We need better training of district nurses who initially assess the patient, often by phone.' Swedish primary care physician

Task shifting from hospital physicians to primary care physicians is called horizontal task shifting in the literature (31) and it was mentioned by many respondents.

'We (primary care physicians) should directly refer to investigations without involving specialists who can do follow up of the diagnosed disease, unless when there is real diagnostic uncertainty, instead of doing routine tasks that the general practitioner can handle.' Danish primary care physician

Shifting the focus of cancer diagnosis tasks from secondary care to primary care is a task shift motivated by longer waiting lists for hospital specialist care, while primary care physicians can offer a more timely access.

'In hospitals the diseases stay, and the people come and go; in general practice, the people stay and the diseases come and go.' (32). This expression illustrates that primary care physicians already know most of their patients' background and this can promote timeliness of cancer diagnosis.

**Task sharing** as collaboration.

Task sharing between different health care professionals in primary and secondary care requires improved communication, collaboration and true cooperation, with a need for a dialogue culture.

Task sharing with the public and the patients by information and teaching about cancer alarm signs and symptoms was also mentioned as a way of speeding up cancer diagnosis.

'More time for patient education and prevention, so that patients report faster on their own with worrying symptoms' Polish primary care physician

'Better health education for the population about alarm signals.' Portuguese primary care physician

'Safety netting' was mentioned to ensure the communication of test results, meaning that physicians and patients share responsibility of the task of monitoring incoming results from diagnostic tests such as imaging and laboratory tests [33] as well as changed symptoms and new bodily sensations.

'Normally, a follow-up physician appointment is booked, but I am also asking the patient to phone, that is doubled safety.' Danish primary care physician

Respondents often suggested that task sharing could be achieved by use of digital tools in the form of e-mails, chat functions and overarching electronic health records, to minimise thresholds between primary and secondary care. We call this 'digital task shifting', see below.

**Task changing** by standardised diagnosis pathways.

Task changing is seen in many countries (such as Denmark, Norway, Sweden and the UK) that have introduced cancer fast-track systems for diagnosing cancer that work well if the symptoms and signs of patients meet the fast-track criteria. Centralised diagnosis procedures or specialised diagnosis services that target many diagnoses simultaneously, called Rapid Diagnostic Centres in the United Kingdom (34) and diagnostic centres in Denmark (8) and Sweden, serve patients who do not meet the fast-track criteria.

Task changing in the form of screening asymptomatic people for bowel, breast, cervical and prostate cancer is also a standardised diagnosis pathway which already exists in many, but not all, jurisdictions in the 20 surveyed countries (4).

**Digital task shifting** is defined as information- and communication technology (ICT)-based task sharing and shifting. Triaging using digital tools is already done by telemedicine care providers and can improve timeliness of cancer diagnosis (35).

Telemedicine and eHealth solutions for targeting the right person to screen or to investigate, and by making better use of electronic health records, could eventually improve the cancer work-up efficiency.

“Information and Communication Technology support directly in the patient records [is needed] – today we do not have many support tools within the electronic health records” Swedish primary care physician

Digital task shifting could be achieved by better use of e-mails, chat functions and overarching electronic health records to minimise barriers between primary and secondary care. There is a huge potential for increased care task collaboration efforts, if we make better use of the advantages of ICT and telemedicine to bridge time and place.

‘With the powerful and fast ICT of today we have the potential for ultrafast diagnosis, but we still rely on analogue slow technique.’ Swedish primary care physician

**Pluralistic dialogue culture.** Task shifting, task changing and task sharing between and within professional groups and with patients requires an attitude of rethinking where dialogue is necessary. And since the tasks are many, the dialogue must be pluralistic (Table 2). So, creating a collaborative dialogue work culture, where primary care physicians and specialists would meet in real life or by digital tools, was mentioned by several physicians as a way of improving task shifting and sharing.

‘By creating an informal meeting culture between GPs and specialists, so they know each other personally.’ Dutch primary care physician

‘Allowing virtual consultations with ‘end specialists’ to validate malignancy diagnosis.’ Israeli primary care physician

**Cognitive task shifting** involves rethinking attitudes to, and awareness of, diagnostic reasoning.

Caregivers and patients are learning more about cancer diagnosis and how cancer may be discovered in primary care, where the vast symptom flow is mostly of a benign nature.

Health care professionals may benefit from reflecting on how they perform diagnostic reasoning. According to the dual process theory of cognition, it is relevant to be aware of whether System 1 or System 2 is used (36). 'System 1' diagnostic reasoning is based on fast intuitive thinking, induced by pattern recognition which involves 'gut feelings'.

Gut feeling detection depends on a number of patient characteristics.

Either the patient signals immediately entering the room, or the patient comes with relatives, or the patient can signal by body language, facial expression, skin colour, or being a frequent attender or not.' Summary memo from focus group with Spanish primary care physicians

"System 2' diagnostic reasoning is analytic and involves slow rational thinking in algorithms, in this context using traditional cancer case-finding diagnosis. Cognitive task shifting seeks to increase clinicians' awareness of these two systems of diagnostic reasoning. The ability to alternate between them is crucial for avoiding diagnostic delay. Hence a more timely diagnosis can be achieved:

'By listening carefully to patients and thus recognising possible red flags or gut feelings.' Dutch primary care physician

*Task shifting as time management.* Good cancer diagnosis involves optimal use of time. 'Not too early' to avoid over-diagnosis and 'never too late'. Since time is a limited resource and cancer is often progressive and life threatening unless treated in time, reducing time intervals is what better diagnosis and treatment provides for cancer patients. So, task shifting cancer diagnosis should have optimal time management as a goal.

'Time to listen to patients, better opportunity to have a quick consultation with a GP.' Danish primary care physician

**Financial task shifting** relies on reallocation of funds from hospital care to primary care. 'Following the money' and the need for 'money to follow' explain what underlies the necessary care restructuring to improve diagnosis timeliness. Task shifting thus involves health care reorganisation and accompanying budget rethinking or refinancing. 'Following the money' means tracking costs and thereby tracing structures and processes that need to change. By 'following the money' in the billing of medical procedures and tests, we have found evidence of short-sighted strategies in cancer diagnosis. These are not cost-efficient from a sustainable budget perspective.

'Electronic Health Records...focus too much on billing and solving how to bill most efficiently while solving the health issues become secondary.' Primary care physician working in both US and Europe

As an example, primary care physicians in some countries were not reimbursed for some tests, for example prostate specific antigen, PSA. This lack of reimbursement delays cancer work-up, slows down the diagnosis process, and since cancer is more expensive to treat at a late stage than at early stages this costs more in the long term. So, by this economic logic, early cancer diagnosis is always better than late, except in relation to cancers where a 'watchful waiting' approach is used.

'Money to follow' indicates that refinancing, using financial incentives and billing for tests and procedures for cancer diagnosis, are necessary for the restructuring. This includes covering the costs of comprehensive training of those who will be able to have tasks shifted to them, for example nurses and healthcare assistants.

'Increase funding for cancer diagnostic tests (tumour markers, colonoscopy, gastroscopy, radiographs) - currently, the funding is insufficient and as a result, PSA is rarely measured.' Polish primary care physician

A few survey respondents from countries with little screening activity wanted compulsory cancer screening.

'Gynaecology examination and mammographic screening should be made compulsory for all women regardless of their age.' Bulgarian primary care physician

One primary care physician (from a context with no cancer screening available) wrote that if patients would not attend screening, they should get penalised by losing their health insurance. However, mandatory screening is a task shift that, according to several survey respondents and the literature, would risk overdiagnosis and overtreatment (37).

### **Task shifting nihilism**

Overdiagnosis and overtreatment was mentioned by many respondents. Some were concerned that the changes necessary for earlier diagnosis could harm patients through over-treatment and unnecessary anxiety.

'Not relevant [to diagnose cancer early]. Cancer diagnosis is a difficult balancing act between under- and overdiagnosis. Faster cancer diagnosis will also give more overdiagnosis.' Danish primary care physician

But shifting the screening task from asymptomatic people to primary care patients that are 'risk factor targeted' might eventually reduce the risk of overdiagnosis and increase the cost benefit. Targeting people at risk could be done by using machine learning on electronic health record data or electronic surveys (38).

Some respondents were happy with the existing diagnostic speed and were more worried about overdiagnosis and the harm that is associated with finding cancers which may not need to be treated, or if treated would result in unnecessary suffering. This was especially true for respondents in countries, such as the United Kingdom, with fast-track diagnosis systems already in place.

## Shifting diagnosis infrastructure

Faster access to tests (imaging, endoscopic and blood tests) was mentioned by many respondents as a way of speeding up the diagnosis of cancer. This could either be part of a task shift from secondary care to primary care physicians, or task sharing between them.

In some countries, primary care physicians had poor access to many of cancer work-up and diagnostic procedures. They needed to rely on secondary care specialists to get testing and imaging done, and this often resulted in long waits.

Ultrasound is an imaging option that few primary care physicians had access to. Improving access to ultrasound, either by easier referral or by primary care physicians doing ultrasounds themselves, was mentioned as a task that could speed up cancer diagnosis.

'The choice of performing ultrasound scans by yourself or funded by the National Health Fund.' Polish primary care physician

Bypassing secondary care specialists to get access to the diagnosis infrastructure was mentioned by many respondents, and this task bypassing is a shift that already happens in the fast-track systems in some countries.

Point-of-care testing was available in some countries but not for all tests, and in some countries with limited availability. More point-of-care testing would eventually speed up diagnosis according to many respondents, especially if cost issues could be addressed.

Task sharing between primary care physicians and secondary care specialists could be eased by 'hotlines' by telephone, e-chat, or e-mail to achieve smoother and faster communication between primary care physicians and specialists. This way of overcoming long waits and delays in diagnosis is an example of digital task shifting within a dialogue culture.

To achieve all these task shifts by sharing and changing tasks in the cancer work-up processes, many respondents emphasised the need to shift or redistribute the financing, and the physical and regulatory infrastructure of the health care system in general and of primary care in particular. Also, by reducing bureaucracy, corruption, and in some countries eliminating disincentives to refer patients or perform tests was mentioned to enable task changing and shifting to speed up cancer work-up routes.

This infrastructure shifting would help primary care to implement more point-of-care testing, facilitate the access to imaging and endoscopic procedures, and eventually improve the status of primary care.

## Discussion

In this grounded theory study on how to improve the speed of cancer diagnosis, an overall multivariate strategy of pluralistic task shifting emerged from the ideas of many primary care physician respondents across 20 countries and literature data. Pluralistic task shifting expands the concept of task shifting which was in forefront for the future of primary care according to the WHO:

'...I see *task shifting* as the vanguard for the renaissance of primary health care...'  
Margaret Chan, WHO Director General 2006–2017

Our prime data were written suggestions in a survey from the Örenäs Research Group. Additional data came from an International Cancer Benchmarking Partnership survey, Spanish and Swedish interviewees, and literature which included a WHO report on task shifting (29). In many Anglo-Saxon and Nordic countries, as well as in the Netherlands and Slovenia, vertical task shifting from physicians to nurses in primary care has been in place for decades, with an emphasis on chronic disease management and prevention (39,40).

The respondents' views in our study were conceptualised as pluralistic task shifting - suggesting that many things need to be done differently to achieve the goal of a more timely diagnosis for cancer patients. Task shifting and task sharing are key strategies that involve reorganising the health care workforce to provide the cancer services necessary to ease bottlenecks in the diagnostic process. Rethinking cancer diagnosis through pluralistic task shifting could be explained theoretically as a Basic Composite Strategy (21,23,26). Functional dimensions of task shifting are digital task shifting by optimising digital tools, telemedicine and e-health, restructuring task shifting by default assessment procedures such as cancer fast-tracks and screening, and cognitive task shifting by training and fast and slow thinking in cancer case finding. Financial task shifting, with cost tracking ('following the money') and reallocating funds ('money to follow'), are fundamental conditions for successful pluralistic task shifting.

That said, task shifting cancer diagnosis will only be achievable if someone is willing to pay the price. Thus, pluralistic task shifting not only requires an acceptance of organisational cultural change but also requires a comprehensive health economic perspective. It is necessary to develop financial incentives to achieve a more timely diagnostic process for cancer in primary care across many countries and jurisdictions. However, these incentives are intrinsic, in the sense that if we view costs across the whole health and general economic systems, it almost always costs less to manage a cancer that has been diagnosed earlier. Thus, more money in the health care system may not be required to achieve a more timely diagnosis of cancer (41,42).

To achieve pluralistic task shifting, a change in workplace culture involving pluralistic dialogue is suggested. Pluralistic dialogue is a concept discovered in a New Zealand grounded theory of hospital teamwork (30) and became part of our theory at an early stage as an 'emergent fit' (grounded theory jargon for 'borrowing' either earlier grounded theory concepts or *in vivo* concepts) (21,23). Pluralistic dialogue explains how professionals succeed in collaborating by different strategies such as deconstructing and resynthesizing thinking, rethinking professional responsibility and reframing team responsibility. This eventually leads to the breaking of stereotypical images involving negotiating service provision.

In a Swedish grounded theory study of interactions between primary care physicians and patients in the context of standardised cancer pathways, 'negotiating bodily sensations' explained the reconciliation of the patients' and the physicians' expertise (43) and emphasises the tasks of patients and their unique role in diagnosing cancer.

Pluralistic task shifting shares some properties with the grounded theory of balancing cancer care (44), which explains problem-solving strategies of health care professionals

in sensing patients' symptom signals and gauging them against existing diagnostic and therapeutic resources. The balancing outcome is characterised by a compromise, at best an optimised situation, at worst a deceit.

An important condition for task shifting to happen is funding allocation or 'money to follow'. Thus, one answer to the question 'Why should we be task shifting cancer diagnosis?' comes from the value-based care model (45), based on the assumption that 'health systems should seek to obtain the maximum possible value for the health of people for every dollar they spend' (46). By cost tracking ('following the money'), we can reveal costly bottlenecks and inefficient care processes. 'From clinical pathways to care delivery value chains', 'promoting the right care and reducing medical overuse' and eventually 'turning a fragmented model into another integrated model' are processes suggested by the value-based care model (47). Similarly, pluralistic task shifting fits with the disruptive innovations concept from a design thinking perspective on health care innovations (48) explaining how existing structures become obsolete as a result of innovative improvements.

There are indeed problems with task shifting and we hypothesise this as especially caused by it being implemented outside of the context of a dialogue culture, as shown by Malterud, pointing to issues with patient safety when secondary care horizontally and one-sidedly shifts tasks to primary care (31).

Choosing experts, 'elsewhereism' of experts, and power symmetry issues were core concepts discovered in the seminal grounded theory 'Experts vs Laymen' (49). Digital task shifting has improved the potential for contact between caregiver experts and layman patients, and between experts in primary and secondary care, by bridging time and place (50). This reduces or modifies 'elsewhereism' and alters power symmetry, often to the advantage of the layman.

Cognitive task shifting as 'thinking cancer' in every primary care consultation was suggested by Holtedahl and includes 'thinking cancer epidemiology', 'thinking organ-based symptoms' and 'avoiding diagnostic traps' (51,52). This belongs to the slow analytic 'System 2' diagnostic reasoning (36) which fits well with teamwork and thus pluralistic dialogue. It also aligns with the growing evidence for the use of cancer risk scores in primary care (1,53). In Wales, 'ThinkCancer!' was an educational behaviour change aimed at the whole general practice team, designed to ensure timely diagnosis of cancer consisting of teaching and awareness sessions, the appointment of a 'safety netting champion' and the development of a bespoke 'safety netting plan' (54).

The conclusion of a Norwegian qualitative study of vertical task shifting in a haematology department fits well with our pluralistic task shifting theory:

'Task shifting from doctors to nurses... requires not only development of technical skills but also complex changes in organisation, clinical routines and role identity. Educational and organisational interventions to build a team-oriented culture could potentially increase the possibility of successful task shifting and stimulate nurses to take on untraditional responsibilities. Environmental restructuring to support doctors using their time in activities only doctors can perform may be needed to realise potential efficiency gains' (55).

## Strengths and limitations

This is, to our knowledge, the first grounded theory of cancer diagnosis from a systemic strategic perspective. Strengths include the rich qualitative data and large sample size sitting behind the explanatory concepts and the contextual scope of a grounded theory. Another strength is the collaborative learning process from a diverse group of expert analysts aspiring to achieve a collective intelligence outcome. The convergence of ideas from different research angles resulted in a conceptual theory that we hope can be understood and used across multiple disciplinary perspectives.

We only collected survey data from physicians, resulting in homogeneity of the survey population. However, the shared knowledge of the 1352 primary care physicians from 20 different health systems from countries spread geographically, and the analysis of multidisciplinary literature, yielded a coherent set of data, giving a primary care perspective that was not only international, but was also derived from heterogeneous sources.

There are limits that come with a grounded theory which is not factual description but a set of conceptual hypotheses yet based on a large amount of data. Not everyone agrees with the importance of this type of conceptual theoretical knowledge in a 'world run by description' (56).

Another limitation of this study is that we mostly used physician survey data. Yet, the constant comparison procedures of grounded theory can compensate for particularistic bias. The different categories that emerged from attitude patterns in the survey data were repeatedly compared and carefully fitted with interview data and literature records on task shifting and sharing (57-60). This leads us to conclude that the survey data were rich enough to allow conceptualisations that are relevant to other cultural and clinical settings.

## Meaning of the study

Pluralistic task shifting may be just an academic phrase or concept, but to be able to change structures and work processes in health care we need to change the language (and talk with each other) [61]. If we cannot formulate in abstractions what needs to be done, our arguments will be too descriptive and particularistic. By conceptualising we can better understand the world we live in and how to achieve the necessary change. 'The role and value of theory in improvement work in healthcare has been seriously underrecognized' (9). This quote argues for the utility of the grounded theory of pluralistic task shifting and eventually trying to apply it outside of the field of cancer diagnosis.

How should then pluralistic task shifting be initiated? Inspired by Elinor Ostrom, we think that improving the timeliness of cancer diagnosis is a 'polycentric task' (62). This means that many different actors must be involved in pluralistic task shifting that will only succeed through a 'bottom-up' process. Thus, it needs to be initiated by primary care organisations and their patients. Those who manage and use the care on a day-to-day basis can best see where there is the most need for change and amendments.



## Conclusions

Pluralistic task shifting is trying to answer the question 'how may current cancer diagnosis be improved' by conceptualising the thinking of many primary care physicians as well as literature data.

Pluralistic task shifting for more timely cancer diagnosis means that many things must be done differently, by a variety of actors, to discover and act on possible cancer at the right time, to the ultimate benefit of patients and citizens. We can achieve this demanding goal by optimising the use of technology, human resources and finances reflecting the task shifting dimensions digital, cognitive, and financial task shifting within a culture of pluralistic dialogue.

As the issues around cancer diagnosis are complex, unpacking the complexities informs our understanding of the problems. The challenge is to make this understanding help stakeholders to improve our health care systems for patients with cancer.

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The authors declare that they have no competing interests.

## References

1. Rubin G, Berendsen A, Crawford SM, et al. The expanding role of primary care in cancer control. *Lancet Oncol.* 2015;16(12):1231–1272. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
2. Scheel BI, Holtedahl K. Symptoms, signs, and tests: the general practitioner's comprehensive approach towards a cancer diagnosis. *Scand J Prim Health Care.* 2015;33(3):170–177. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
3. Harris M, Vedsted P, Esteva M, et al. Identifying important health system factors that influence primary care practitioners' referrals for cancer suspicion: a European cross-sectional survey. *BMJ Open.* 2018;8(9):e022904. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
4. Zeichner SB, Montero AJ. Detecting cancer: pearls for the primary care physician. *Cleve Clin J Med.* 2016;83(7):515–523. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
5. Malterud K, Reventlow S, Guassora AD. Diagnostic knowing in general practice: interpretative action and reflexivity. *Scand J Prim Health Care.* 2019;37(4):393–401. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
6. Tavora F, Crowder CD, Sun CC, et al. Discrepancies between clinical and autopsy diagnoses: a comparison of university, community, and private autopsy practices. *Am J Clin Pathol.* 2008;129(1):102–109. [[Crossref](#)], [[PubMed](#)], [[Google Scholar](#)]
7. Hamilton W, Walter FM, Rubin G, et al. Improving early diagnosis of symptomatic

- cancer. *Nat Rev Clin Oncol*. 2016;13(12):740–749. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
8. Naeser E, Møller H, Fredberg U, et al. Mortality of patients examined at a diagnostic centre: a matched cohort study. *Cancer Epidemiol*. 2018; 55:130–135. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  9. Davidoff F, Dixon-Woods M, Leviton L, et al. Demystifying theory and its use in improvement. *BMJ Qual Saf*. 2015;24(3):228–238. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  10. Harris M, Thulesius H, Neves AL, et al. How European primary care practitioners think the timeliness of cancer diagnosis can be improved: a thematic analysis. *BMJ Open*. 2019;9(9):e030169. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  11. Rose PW, Rubin G, Perera-Salazar R, et al. ICBP module 3 working group. Explaining variation in cancer survival between 11 jurisdictions in the international cancer benchmarking partnership: a primary care vignette survey. *BMJ Open*. 2015;5:e007212. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  12. Oliva B, March S, Gadea C, et al. Gut feelings in the diagnostic process of spanish GPs: a focus group study. *BMJ Open*. 2016;6(12):e012847. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  13. Om lärande, prioriteringar och ekonomiska aspekter. Effekter av satsningen på standardiserade vårdförlopp i cancervården. Slutrapport del 2, 2019. [On learning, priorities and economical aspects. Effects of the drive on standardised cancer care pathways. Final report part 2, 2019]. <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2019-4-1.pdf>. (accessed June 29, 2021). [[Google Scholar](#)]
  14. Glaser BG, Strauss AL. The discovery of grounded theory: Strategies for qualitative research. Chicago: Aldine; 1967. [[Google Scholar](#)]
  15. Petrazzuoli F, Vinker S, Palmqvist S, et al. Unburdening dementia - a basic social process grounded theory based on a primary care physician survey from 25 countries. *Scand J Prim Health Care*. 2020;38(3):253–264. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  16. Sandén U, Nilsson F, Thulesius H, et al. Cancer, a relational disease exploring the needs of relatives to cancer patients. *Int J Qual Stud Health Well-Being*. 2019;14(1):1622354. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  17. Sandén U, Harrysson L, Thulesius H, et al. Breaking the patientification process - through co-creation of care, using old arctic survival knowledge. *Int J Qual Stud Health Well-Being*. 2021;16(1):1926052. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  18. Burström L, Starrin B, Engström ML, et al. Waiting management at the emergency department - a grounded theory study. *BMC Health Serv Res*. 2013;13:95. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  19. Thulesius HO, Scott H, Helgesson G, et al. De-tabooing dying control - a grounded theory study. *BMC Palliat Care*. 2013;12:13. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  20. Thulesius H, Grahn B. Reincantivizing - a new theory of work and work absence. *BMC Health Serv Res*. 2007;7(1):100. [[Crossref](#)], [[PubMed](#)], [[Google Scholar](#)]
  21. Glaser BG. Theoretical sensitivity: Advances in the methodology of grounded

- theory. Mill Valley (CA): Sociology Press; 1978. [\[Google Scholar\]](#)
22. Glaser BG. Basics of grounded theory analysis: Emergence vs. forcing. Mill Valley (CA): Sociology Press; 1992. [\[Google Scholar\]](#)
  23. Glaser BG. Doing grounded theory: Issues and discussions. Mill Valley (CA): Sociology Press; 1998. [\[Google Scholar\]](#)
  24. Glaser BG. The grounded theory perspective: Conceptualization contrasted with description. Mill Valley (CA): Sociology Press; 2001. [\[Google Scholar\]](#)
  25. Glaser BG. The grounded theory perspective II: Description's remodeling of grounded theory methodology. Mill Valley (CA): Sociology Press; 2003. [\[Google Scholar\]](#)
  26. Glaser BG. The grounded theory perspective III: Theoretical coding. Mill Valley (CA): Sociology Press; 2005. [\[Google Scholar\]](#)
  27. Glaser BG. Doing formal grounded theory. Mill Valley (CA): Sociology Press; 2007. [\[Google Scholar\]](#)
  28. Woolley AW, Fuchs E. Collective intelligence in the organization of science. *Organization Science*. 2011;22(5):1359–1367. [\[Crossref\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  29. WHO: Task shifting: global recommendations and guidelines. Geneva: World Health Organization, 2008. [\[Google Scholar\]](#)
  30. McCallin A. Pluralistic dialogue: a grounded theory of interdisciplinary practice. *Austr J Rehabil Counsell*. 1999;5(2):78–85. [\[Crossref\]](#), [\[Google Scholar\]](#)
  31. Malterud K, Aamland A, Fosse A. How can task shifting put patient safety at risk? A qualitative study of experiences among general practitioners in Norway. *Scand J Prim Health Care*. 2020;38(1):24–32. [\[Taylor & Francis Online\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  32. Blythe A. The structure and organisation of primary care” p.4. in Blythe A, Buchan J. eds. *Essential primary care*. UK: Wiley-Blackwell. 2016. [\[Google Scholar\]](#)
  33. Nicholson BD, Goyder CR, Bankhead CR, et al. Responsibility for follow-up during the diagnostic process in primary care: a secondary analysis of international cancer benchmarking partnership data. *Br J Gen Pract*. 2018;68(670):e323–e332. [\[Crossref\]](#), [\[PubMed\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  34. Hamilton W. The future of diagnosis in general practice. *Br J Gen Pract*. 2020;70(696):319–320. [\[Crossref\]](#), [\[PubMed\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  35. Riva S, Mazzocco K, Pravettoni G. Better outcomes for cancer patients using telemedicine: health-related quality of life (HrQoL) and empowerment. In *Tele-oncology*. (pp. 23–37. Cham: Springer. 2015. [\[Crossref\]](#), [\[Google Scholar\]](#)
  36. Croskerry P. Clinical cognition and diagnostic error: applications of a dual process model of reasoning. *Adv Health Sci Educ Theory Pract*. 2009;14 Suppl 1 (Suppl 1):27–35. [\[Crossref\]](#), [\[PubMed\]](#), [\[Google Scholar\]](#)
  37. Brodersen J, Schwartz LM, Heneghan C, et al. Overdiagnosis: what it is and what it isn't. *BMJ Evid Based Med*. 2018;23(1):1–3. [\[Crossref\]](#), [\[PubMed\]](#), [\[Google Scholar\]](#)
  38. Hippisley-Cox J, Coupland C. Symptoms and risk factors to identify women with suspected cancer in primary care: derivation and validation of an algorithm. *Br J Gen Pract*. 2013;63(606):e11–e21. [\[Crossref\]](#), [\[PubMed\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  39. Klemenc-Ketis Z, Terbovc A, Gomiscek B, et al. Role of nurse practitioners in reducing cardiovascular risk factors: a retrospective cohort study. *J Clin Nurs*. 2015;24(21-22):3077–3083. [\[Crossref\]](#), [\[PubMed\]](#), [\[Web of Science ®\]](#), [\[Google Scholar\]](#)
  40. Maier CB, Aiken LH. Task shifting from physicians to nurses in primary care in 39

- countries: a cross-country comparative study. *Eur J Public Health*. 2016;26(6):927–934. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
41. Pisu M, Henrikson NB, Banegas MP, et al. Costs of cancer along the care continuum: What we can expect based on recent literature. *Cancer*. 2018;124(21):4181–4191. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  42. Birtwistle M, Earnshaw A. Saving lives, averting costs: an analysis of the financial implications of achieving earlier diagnosis of colorectal, lung and ovarian cancer. UK: *Cancer Res*. 2014. [[Google Scholar](#)]
  43. Hultstrand C, Coe AB, Lilja M, et al. Negotiating bodily sensations between patients and GPs in the context of standardized cancer patient pathways - an observational study in primary care. *BMC Health Serv Res*. 2020;20(1):46. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  44. Thulesius H, Håkansson A, Petersson K. Balancing: a basic process in end-of-life cancer care. *Qual Health Res*. 2003;13(10):1353–1377. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  45. NEJM Catalyst. What is value-based healthcare? <https://catalyst.nejm.org/what-is-value-based-healthcare/>. (accessed: 29 June 2021). [[Google Scholar](#)]
  46. Porter ME, Teisberg EO. *Redefining Health Care*. Boston, Mass: Harvard Business School Press; 2006. [[Google Scholar](#)]
  47. Varela J. Looking for Value-Based Community Health. Abstract Book of the 89th EGPRN Meeting, Vigo - Spain, 17-20 October 2019. <https://www.egprn.org/file/7e2f297c-a9e0-42af-8a2e-cb30b04dfcdd/Abstract-Book-of-the-89th-EGPRN-Meeting-Vigo-Spain-17-20-October-2019.pdf>. (accessed: 29 June 2021). [[Google Scholar](#)]
  48. Christensen C, Waldeck A, Fogg R. *How Disruptive Innovation Can Finally Revolutionize Healthcare. A Plan for Incumbents and Start-Ups to Build a Future of Better Health and Lower Costs*; Clayton Christensen Institute for Disruptive Innovation, 2017. Available online: <https://www.christenseninstitute.org/wp-content/uploads/2017/05/How-Disruption-Can-Finally-Revolutionize-Healthcare-final.pdf> (accessed: 29 June 2021). [[Google Scholar](#)]
  49. Glaser B. *Experts versus laymen: a study of the patsy and the subcontractor*. Mill Valley (CA): Sociology Press 1972. [[Google Scholar](#)]
  50. Robertson FC, Lippa L, Broekman MLD. Editorial. Task shifting and task sharing for neurosurgeons amidst the COVID-19 pandemic. *J Neurosurg*. 2020 Apr 17:1-3. doi: 10.3171/2020.4.JNS201056. Epub ahead of print. PMID: 32302998; PMCID: PMC7164328. [[Crossref](#)], [[Google Scholar](#)]
  51. Holtedahl K. *Early diagnosis of cancer in general practice: a manual*. Berlin Heidelberg: Springer-Verlag, 1990. [[Crossref](#)], [[Google Scholar](#)]
  52. Holtedahl K. Challenges in early diagnosis of cancer: the fast track. *Scand J Prim Health Care*. 2020;38(3):251–252. [[Taylor & Francis Online](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  53. Ewing M, Naredi P, Zhang C, et al. Identification of patients with non-metastatic colorectal cancer in primary care: a case-control study. *Br J Gen Pract*. 2016;66(653):e880–e886. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
  54. Disbeschl S, Surgey A, Roberts JL, et al. Protocol for a feasibility study incorporating a randomised pilot trial with an embedded process evaluation and feasibility economic analysis of ThinkCancer!: a primary care intervention to expedite cancer diagnosis in Wales. *Pilot Feasibility Stud*. 2021;7(1):100. [[Crossref](#)], [[PubMed](#)], [[Google Scholar](#)]
  55. Feiring E, Lie AE. Factors perceived to influence implementation of task shifting in

- highly specialised healthcare: a theory-based qualitative approach. *BMC Health Serv Res.* 2018;18(1):899. [[Crossref](#)], [[PubMed](#)], [[Google Scholar](#)]
- 56.** Bg G. Naturalist Inquiry and Grounded Theory. *Historical Social Research/Historische Sozialforschung.* 2007. Suppl, 114-132. <http://www.jstor.org/stable/40981073>. (accessed June 29, 2021), [[Google Scholar](#)]
- 57.** Olsen DS, Fevolden A. Gradual transition. Bottlenecks and task sharing in diagnostic imaging. Oslo: the nordic institute for studies in innovation. *Res Educ.* 2013E;46. [[Google Scholar](#)]
- 58.** Gessesew A, Barnabas GA, Prata N, et al. Task shifting and sharing in Tigray, Ethiopia, to achieve comprehensive emergency obstetric care. *Int J Gynaecol Obstet.* 2011;113(1):28–31. [[Crossref](#)], [[PubMed](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
- 59.** Robertson FC, Esene IN, Kolas AG, Global Neurosurgery Survey Collaborators, et al. Global perspectives on task shifting and task sharing in neurosurgery. *World Neurosurg X.* 2020;6:100060. [[Crossref](#)], [[PubMed](#)], [[Google Scholar](#)]
- 60.** Robertson FC, Lippa L, Broekman MLD. Editorial. Task shifting and task sharing for neurosurgeons amidst the COVID-19 pandemic. *J Neurosurg.* 2020 Apr 17:1-3. doi: 10.3171/2020.4.JNS201056 [[Crossref](#)], [[Google Scholar](#)]
- 61.** Wright EO. Metatheoretical foundations of Charles Tilly's durable inequality. *Compara Stud Soc History.* 2000;42:458–474. [[Crossref](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
- 62.** Andersson KP, Ostrom E. Analyzing decentralized resource regimes from a polycentric perspective. *Policy Sci.* 2008;41(1):71–93. [[Crossref](#)], [[Web of Science ®](#)], [[Google Scholar](#)]

## **De-shaming for believability: A Grounded Theory of physicians' communication with patients about adherence to HIV medication in San Francisco and Copenhagen<sup>1</sup>**

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### **Abstract**

To be "adherent" to a medication means to take the medicine as agreed upon. Poor adherence is the main barrier to the effectiveness of HIV medication. Communication between patient and physicians is a major factor in adherence. We found that this communication is very often awkward and superficial, if not completely lacking. According to the proposed theory, it is a core determinant of adherence communication whether or not physicians use a "de-shaming" communication strategy. When physicians do not, they receive answers with low believability, and may even abstain from exploring the possibility of non-adherence. Furthermore, physicians have difficulty in handling low believability of patient statements, and their more or less beneficial strategies may have negative consequences for the relation between patient and physician, and for the patient's adherence. The here proposed theory "de-shaming for believability" suggests that communication with patients about adherence can be understood as four steps governed mainly by three factors. The four steps are: deciding whether to ask about adherence or not, pre-questioning preparations, phrasing the question, and responding to the patient's answer. The three factors/determinants are: the communicator's perceptions of adherence, awkwardness, and believability.

### **Introduction**

#### **Background: HIV Treatment and Adherence**

When patients take their medication as agreed upon, they are said to "have good adherence" (Osterberg & Blaschke, 2005). However, patients often have poor adherence (Osterberg & Blaschke, 2005), and especially in HIV treatment, it is one of the main causes of treatment failure (Osterberg & Blaschke, 2005; Wood, et. al, 2004; Dybul et.al., 2002). HIV treatment requires good adherence in order to maintain maximum treatment efficacy and avoid that the HIV virus mutates and becomes resistant to treatment (Osterberg & Blaschke, 2005; Wood, et. al, 2004; Dybul et.al., 2002). Still, around one fourth of patients have poor adherence to HAART (Wood et. al., 2004; Barfod et.al., 2005). Several factors are related to poor adherence, especially patient-related factors such as depression, abuse, and weak social support, but also regimen complexity, patient's lack of trust in the treatment, and poor patient-physician relations (Barfod et.al., 2005; Fogarty et. al., 2002). When looking at physician fac-

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<sup>1</sup> Reprinted with the kind permission of the author. Barfod, T.S. (2007). De-shaming for believability: A grounded theory study. In B.G. Glaser and J.A. Holton (Eds.), *The grounded theory seminar reader* (pp. 321-340). Based on a study first reported as follows: Barfod, T.S., Hecht, F.M., Rubow, C., & Gerstoff, J.(2006). Physicians' communication with patients about adherence to HIV medication in Sanfrancisco and Copenhagen: A qualitative study using grounded theory. *BMC Health Services Research*, 6, Article 154. <https://doi.org/10.1186/1472-6963-6-154>

tors, we find that experienced physicians achieve better patient adherence (Delgado et.al., 2003), and that trusting patient-physician relations (Heckman et.al., 2004; Mostashari et. al., 1998) and open communication (Schneider et. al., 2004) are associated with better adherence to HAART. In interviews, patients also stress that communication with physicians is important in maintaining adherence to HAART (Roberts, 2002) as well as other diseases (Osterberg & Blaschke, 2005; Cox et. al., 2004). Accordingly, guidelines for treating patients with HAART recommend that adherence be addressed at all follow-up visits to prevent treatment failure (Dybul et.al., 2002; Poppa et. al., 2004). The majority of physicians dealing with HIV also report that they do so (Roberts & Volberding, 1999; Gerbert et.al., 2000; Roberts, 2000; Golin et.al., 2004).

Physicians' communication with patients about adherence to HAART can, however, be problematic. In descriptive questionnaire and interview studies physicians have identified lack of time and resources, as well as their own lack of training as the main barriers to their communication with HIV-positive patients about adherence (Gerbert et.al., 2000; Roberts, 2000; Golin et.al., 2004). Furthermore, a recent systematic review has concluded that two-way discussions and partnership in treatment decisions regarding medicine-taking in general most likely seldom take place (Cox et. al., 2004). To our knowledge, no observational study exploring physicians' communication with patients about adherence to HAART has been done and no analytical theory of adherence communication has been developed.

The overall aim of this study was to observe and explore physicians' work with patients' adherence. During the study, communication emerged as a main issue. The aim of the present analysis therefore is to conceptualize and interpret the communication patterns of physicians when they discuss with patients about treatment adherence, and the difficulties physicians face during this communication and the ways they handle them. During this process we developed a proposed theory of four basic steps and three main factors/determinants of physicians' adherence communication. Since most HAART adherence studies have been done in the U.S. (Sherr, 2000), we wanted to explore the possible role of contextual factors and included a U.S. setting as well as a setting outside the U.S.

## **Theory**

### **Overview of Findings and Core Category**

To "de-shame for believability" means to communicate in a way that reduces the shame surrounding a subject, so that more believable responses are received. This theory claims that the degree to which physicians "de-shame for believability", and the way they do so, is crucial for the communication between patient and physician about medication adherence.

However, physicians "de-shame" not only for believability of patient responses, but also to build up a relation with the patient, who may then be more likely to comply. And the way physicians handle low believability in the communication about adherence is not only important to the "de-shaming" process, but also as general determinant of the subsequent relation between patient and physician and the personal relation between these to roles.

The theory conceptualizes the communication process as a four-step process governed by three areas of physician perceptions: adherence, awkwardness and believability. The theory

holds that physicians' individual communication patterns are not only determined by their perceptions about patients' adherence, but also by their perceptions about the awkwardness of discussing adherence with patients and by their perceptions about the believability of patients' statements on adherence. These three aspects of physician perceptions depend on the general attitudes of the physicians as well as the specific circumstances with a specific patient (e.g., when a physician suspect that a patient is non-adherent, it is a function of his or her general suspicion of non-adherence as well as the observation of specific clues in this specific patient).

This theory claims that physicians' perceptions of these three factors (adherence, awkwardness, and believability) shape their behavior through four basic steps in the adherence communication process: the decision to ask about adherence, the possible pre-questioning preparations, the phrasing of the question, and the response to the patient's answer.

The theory is further explored in the body of this paper. I first present the three perception factors and their main determinants (or "subcategories"). Then I describe the main ways that physicians act during the four steps in the communication process and how the three perception factors influence these actions. In turn, I briefly look at the consequences of these actions for the awkwardness, believability, and adherence information content of patient responses as perceived by physician and researcher.

### **Factor A: Adherence Perceptions**

Physicians' communication with patients about adherence is – not surprisingly - strongly influenced by their perceptions about the patients' degree of adherence and the perceived importance of adherence.

Physicians determine the degree of adherence both from the treatment effect (viral load) as well as from situational factors. If the patient has a *rising* viral load, physicians will virtually uniformly be suspicious that the patient might have low adherence, especially if the viral load is rising from very low (i.e., "undetectable") levels. However, physicians' interpretations of a *stable, undetectable* viral load vary considerably, since some physicians considers this proof that the patient is sufficiently adherent, whereas others will still be very alert for poor adherence. Physicians' interpretations of the patients' situational factors also vary considerably. However, all physicians generally make an overall assessment based on the patient's lifestyle, abuse patterns, perceived personality, and timing of medication refills, and they listen to patients' statements regarding adherence.

Most physicians have the general perception that adherence is very important: "It's the most important limiting factor in treatment," (SF3) or "I do a lot, I think, around adherence issues 'cause the stakes are so high" (SF11). A few physicians, however, feel that there is no need to worry much about adherence, as long as the viral load is undetectable, and others do not worry if the patient already have multi-drug resistance and a high viral load. For example, one part of an interview went like this:

*INT: Can you say more about to what degree [patients] are sufficiently adherent when they are undetectable?*



*DR: Well, I mean what is the goal of anti-viral therapy? I guess it's to drive the virus to undetectable ...*

*INT: So you don't think they could be missing enough to be at risk of developing resistance?*

*DR: I don't care. That's not a big worry to me – I'm not a big resistance-phobic person (SF13).*

According to this theory, physicians who do not consider adherence to be an important issue tend to communicate less with patients on the subject, whereas physicians who consider it to be very important tend to communicate more about it.

### **Factor B: Perceived Awkwardness of Exploring Adherence**

According to this theory, it is a main determinant of adherence communication, whether or not physicians perceive it to be an awkward issue. We found, that many actually feel it is an awkward subject. During interviews, physicians seldom spontaneously declared that exploring adherence was an awkward thing to do. But when physicians were asked why they had touched on the subject the way they did, perhaps only superficially or not at all, they often explained that further explorations were unnecessary and also would have been too awkward:

*Some patients can get a bit offended if you ask [about adherence]... They may feel that the trusting relationship is challenged... I remember one patient who got very defensive and said, *But you know that I have always taken the medicine, why do you now suddenly start sitting there saying things like that*" (Cph8).*

Physicians mainly perceive explorations into adherence to be too awkward if the patient has stated good adherence on previous visits:

*It's the awkwardness of the repetition of the series of questions (SF7).*

Physicians also perceive explorations to be awkward when there are no objective signs of non-adherence, when there are other pressing issues in the consultation, or if the physician perceives the relation with the particular patient to be difficult and fragile.

Explorations are also often considered awkward if the physician generally focus very much on showing patients respect and on avoiding creating feelings of guilt:

*I think [the physician] being in loco parentis too much is not what adult [patients] are going to really be thrilled about. You're more apt to get positive results if you're trusting and a little lenient (SF13).*

or

*I'll rather praise people than make them feel guilty by insisting on exploring something that may not be working ideally, but which works okay (Cph15).*

Exploring adherence is not perceived as awkward if the physician has a “de-shaming” communication style (see below), do not worry about the patients’ possible feelings of shame and the believability of the answer, or do not perceive the patient relation to need special nurturing.

### **Factor C: Believability Perceptions**

Believability issues are also important during all four steps of physicians’ communication process and are determined by the specific situation as well as the physician’s general perceptions.

In the specific situation, the believability of a patient’s claims of good adherence is evaluated by physicians from their independent assessment of the patient’s degree of adherence (based on viral load and situational factors as described above), coupled with the patient’s perceived general trustworthiness and the phrasing and tone of the patient’s adherence statements. If the patient is very firm in his intonation or detailed in his description of medication intake, the patient’s answer will more often be believed. If patients disclose non-adherence, physicians usually believe this, although they may feel that the degree of non-adherence is understated.

Physicians differ in their general perceptions regarding believability. Some physicians feel that patient statements on adherence are generally believable:

*I actually believe what patients tell me” (Cph1)*

and physicians can even seem torn between their suspicion of poor adherence and an almost moral obligation to trust patients. Others accept low believability with ease:

*It’s ... in my opinion, one of the hardest things to get a truthful answer for (SF9).*

Physicians in various ways explain the underlying reasons for low believability. Low believability can be explained by the patient’s politeness or sympathy with the doctor:

*Clients are very aware of what their doctors want to hear, particularly if they like their doctor (SF9),*

or by the patient’s shame:

*[Admitting having missed doses] is an admission of failure. And then they think the doctor finds them stupid or not serious about it” (Cph13).*

Low believability of patients’ answers can also be attributed to “craziness” or unacceptable manipulation and arrogance:

*I just don’t want to sit there and be ridiculed ... that they just sit and decide they know better than me” (Cph14).*

Naturally, poor believability of patients' statements on adherence can also be attributed to actual lack of knowledge, i.e. poor memory or mental repression. However, these explanations seldom observed in this study.

In the following, we will explore how physicians' perceptions of adherence, awkwardness, and believability influence the way physicians handle the four steps in the communication process.

### **Step 1: Deciding Whether to Ask About Adherence or Not**

Some physicians rarely ask about adherence, others ask only superficially, and in this study we found that only very few ask most of their patients in depth. Physicians' decision to ask or not is largely determined by their perceptions of adherence, awkwardness, and believability. In this study, patients hardly ever brought up the subject themselves.

According to this theory, physicians tend to ask about adherence if they perceive a patient's adherence to be low and they perceive adherence to be an important issue. However, in several situations, the physician will not ask at all: If physicians perceive the specific patient's adherence to be good, or if they generally do not consider it a very important issue, they often feel it is not necessary to ask, and also that it would have been awkward to do so:

*The reason that I do not ask more [... about adherence] could be that it feels unnecessary. And it could perhaps seem like a silly question, sometimes (Cph1).*

If the physician has very low trust in the believability of patients' statements on adherence, this may also keep him from asking:

*To ask 'Do you sometimes forget to take your medication' can be used for nothing ... There are these studies we have seen, showing it is useless. It's fifty-fifty whether they answer yes or no – no matter what situation they have been in (Cph7).*

On the other hand, physicians can also be led to abstain from asking about adherence if they trust the patients so much that they expect them to spontaneously tell about possible adherence problems:

*I will not ask ... everybody whether they have ... forgotten a dose on a single occasion ... this of course has to do with that I generally believe ... patients' bring up their problems to surface (Cph1).*

### **Step 2: Pre-Questioning Preparations**

According to this theory, "pre-questioning communicative preparations" is of central importance to the subsequent explicit adherence communication. In general, physicians usually try to create a trusting, informal, and friendly atmosphere in the consultation room. This can be considered as a general pre-questioning communicative preparation, as one reason to do so, is to receive more believable answers from patients. Physicians often feel this "de-shame" patients and make it easier for patients to be honest, e.g., about non-adherence. In this study, many physicians were also observed to have an informal body language, to use slang and

jokes, and to chat with patients about private things, like how the patient had spent his vacation.

However, more explicit pre-questioning preparations can also be used. (Actually, this was only seldom observed in our study, as physicians usually popped adherence questions abruptly without explicit warning). According to this theory, it is only when physicians are very aware of awkwardness and the need to promote believability that they prepare patients for the question with a “warning shot,” e.g. by referring to prior discussions or the results of recent blood tests. Physicians may also “de-shame” patients by generalizing adherence problems prior to asking about adherence, e.g. by saying: “Most people find it hard to remember taking the medication” (Cph8). According to this theory, pre-questioning preparations facilitate believable answers.

### Step 3: Phrasing The Question

When physicians individualize questions and pick from a broad palette of question styles and question content, it facilitates elaborate answers according to this theory. However, in this study we observed that most physicians use a favorite phrase with most patients.

**Question Styles.** The main properties of question styles are whether the questions are broad and open or specific, and whether or not they are suggestive, and whether or not the physician is conscious about the toning of questions.

Examples of broad and open questions are “How are you doing with the medication?” (SF11) or “How is it going with taking the medication?” (SF15). In this setting of shame of awkwardness, patients’ first answers to open questions are often only superficial or not about adherence. Only when physicians give very much priority to adherence, do they follow-up with questions that are more specific. Physicians focusing on adherence may also open the adherence discussion with a more specific question, e.g. about number of missed doses within a given time frame, although this question style seem more interrogative.

Questions can also contain implicit suggestions about the patients’ degree of adherence. A suggestive question implying that some doses might have been missed can be, “How many doses have you missed in the last 14 days” (SF14). Such questions are mainly asked when physicians are very focused on the need to promote believability. Physicians feel such phrasing makes it less awkward for people to admit having missed doses, because “this means everybody is missing” (SF14). On the other hand, suggestive questions implying good adherence can be, “You don’t have any problems taking your medication, do you?” (Cph11). This kind of phrasing is mainly used when physicians are less focused on the need to promote believability and more focused on maintaining a respectful, non-awkward communication in general. Such phrases function mainly as a reminder to the patient of the importance of adherence and less as a facilitator of in-depth dialogue on the subject.

The tone of questions is also an important aspect of the question-style. The toning influences the patient’s answer, and physicians are conscious about it under circumstances where they pay attention to awkwardness and believability:

*I always ask to what degree they're taking their pills and I try to do it in a low-key manner – kind of like offhand – so that my patients have an absolute sense that they can tell me everything (SF1).*

## **Content of Questions**

The main difference in the content of adherence questions is whether or not they address the quantity or the quality of the patients' adherence. Questions regarding the qualitative aspects of medication intake elicit more elaborate responses from patients.

*Questions about the quantity of missed doses* are common when physicians perceive adherence to be important, but are less focused on awkwardness and believability. These questions are used both to assess adherence and to remind the patient of its importance. Different degrees of specificity in number and time range are addressed, though a time range of two weeks is often used. Answers to these questions are often vague and their believability not convincing both to the physician and the observer.

*Questions about the qualitative adherence-related aspects of medication intake* are mainly asked when adherence is perceived to be an important but potentially awkward issue. These questions are less awkward to ask than questions about the quantity, and the answers seem more believable. Three main topics are addressed:

- Knowledge of the regime: Whether patients can describe the regime is routinely checked by some: "I want to know what they are really taking, because... so many times they are not taking what is [written] on the bottle" (SF7). These questions do bring about some discussion, although they have some aspect of interrogation, and they underscore the asymmetrical relation between physician and patient.
- Motivation for treatment and adherence: Motivation is mainly asked about by checking for side effects. Doctors very often perceive side effects to be the main motivational barrier to treatment. The patients' perceptions of positive treatment effects or their motivation for adherence is very seldom asked about.
- Behavioral patterns. Only when physicians give adherence very high priority and they are very aware of the awkwardness of the subject do they ask about the routines patients have or could develop for taking and remembering the medication, and how they handle difficult adherence situations. Patients do, however, talk more freely about these practical problems than about knowledge and quantity of missed doses. Furthermore, during their description to doctors, they do themselves become aware of new solutions.

## **Step 4: Responding to Patients' Answers – Handling Varying Degrees of Believability**

### ***Responses to Patients Stating Good Adherence with High Believability***

When physicians perceive the believability of a statement on good adherence to be high, they briefly acknowledge the answer, perhaps with praise, a warning about the possible consequences of non-adherence, or a question about side effects. Physicians feel that a further

exploration of the patient's adherence strategies would be awkward and unnecessary in this situation.

### **Responses to Patients Stating Good Adherence with Low Believability**

Physicians respond to patients' statements of good adherence with low believability in three ways: *Okaying*, *circumventive dialoguing*, and *confronting*.

*Okaying the answer* despite its low believability is mainly done when physicians think that adherence is not that important, or that further explorations would be awkward, mainly because the relation to the patient is fragile. Also, if the physicians more generally focus more on reducing awkwardness than on achieving believability they tend to be "okaying" patient statements even when they have low believability:

*It was the message I wanted to send – that they can answer me whatever they want (Cph15).*

*Circumventive dialoguing* is here defined as continuing the communication on adherence without drawing attention to the possible low believability of patient statements. One important way to do circumventive dialoguing is to address the qualitative adherence-related aspects of medication intake instead of the quantity of missed doses, e.g., by asking what time of the day the medicine was taken, whether it was taken with food, etc. Another kind of circumventive dialogue is to re-ask closed questions about occurrence of missed doses, but with altered specificity regarding the time frame or number of missed doses. This was several times observed to elicit otherwise hidden non-adherence. For example, one dialogue went like this (SF2):

*Any problems with the medicine?*

*No.*

*You take them all?*

*Yes, the 3TC, the Viramune... and the eeh, Epivir.*

*Any problems taking them?*

*No.*

*You took them this morning?*

*No man! I did not take them this morning!*

*Confronting low believability* covers a range of reactions from subtle signals of doubt to clear expressions of anger. For example, physicians confront patients without being aggressive by stating that the patient's rising viral load without mutations was most easily explained by low adherence. Sometimes physicians explicitly ask for honesty.

When physicians perceive low believability as unacceptable, and are less focused on the awkwardness of the subject, they may shame the patient for lying or get upset and angry, i.e., by displaying a raised voice and flushing skin.

### ***Responses to Patients Stating Poor Adherence***

Physicians virtually always believe in statements of poor adherence. Such statements make all physicians focus on adherence. However, some physicians will focus on reducing the awkwardness of topic. They tend also to talk about the qualitative aspects of medicine taking, e.g. they explore the underlying reasons for missed doses and attempt to assist with behavioral advice, and they try to strengthen motivation for adherence through neutral information. Other physicians will focus differently, instead of de-shaming the topic and the patient they will try to strengthen motivation for adherence through condemnation or shaming of the patient. The first strategy leads to more dialogue than the second, and we believe it also leads to better adherence.

### **Discussion**

We propose a simple four-step theory of physicians' communication with patients about adherence, where the content of each step depends on the physician's perception of three things: adherence, awkwardness, and believability. The four steps involve the decision to ask, preparations for asking, the question and the response to patient's answer. To "de-shame" patients regarding poor adherence is an important, but underused strategy for facilitating communication on the subject. Therefore, physicians' communication with patients about adherence is often awkward and superficial, even when physicians try to create a friendly atmosphere. Physicians' interpretation of the believability of patients' statements on adherence is another major factor in the communication process.

The main communication patterns were similar in San Francisco and Copenhagen, although a question style implying poor adherence was mainly observed in San Francisco and the adherence discussions in San Francisco were slightly more comprehensive than in Copenhagen. To our knowledge, this is the first observational study to provide a theory of physicians' communication with patients about adherence to HAART. The main weaknesses of this kind of study are that the theory cannot be interpreted as validated fact (Glaser, 1998; Malterud, 2001; Kvale, 1996) and that the descriptive aspects cannot be generalized to other settings. San Francisco and Copenhagen are not typical HIV treatment sites, e.g., because of their high research priorities. However, the conceptual products of Grounded Theory methodology should have good a "fit" within context and can also sensitize physicians and researchers in other settings to the basic social processes discovered, although the specified processes may be less prevalent elsewhere (Glaser 1999). Thus, the findings may be relevant in non-HIV settings as well.

It is a possible source of bias that the observation itself may have made physicians focus more than usual on adherence, despite their explicit statements to the contrary (Smith & Mertens, 2004), and the observation may also have made the consultations more awkward. However, even though observations only lasted half a day to one day, there were very few indicators that the observed consultations were not "typical." Another limitation is the non-inclusion of patient's viewpoints, although our findings regarding the importance and the diffi-

culty of communication between patients and physicians are supported by many others who have interviewed patients about adherence to HAART Roberts, 2000; Meystre-Agustoni et.al., 2000; Laws et. al., 2000; Murphy et. al., 2003; Hill et. al., 2003; Remien et. al., 2003; Goliln et. al., 2002; Westerfelt, 2004).

The aforementioned minor differences in communication patterns between physicians in San Francisco and Copenhagen may be tentatively explained by some differences in context. As compared to Copenhagen, the clinics in San Francisco had longer consultations, much less follow-up by nurses, and a patient population with more homelessness and drug abuse. San Francisco, moreover, traditionally has a strong gay grass-roots HIV movement and a political HIV commitment among physicians, possibly linking physicians there closer to their patients. There may also be a general American tendency to openly sharing feelings (Dillon, 2002). Furthermore, some eligible physicians in San Francisco did not participate, leaving a selected sample to be studied. All this may contribute to the slightly more comprehensive adherence discussions and more consciously developed communication strategies observed in San Francisco than in Copenhagen.

Previous interview studies have highlighted lack of time, resources, education, and experience as the barriers to physicians' work with patients' adherence to HAART (Roberts & Volberding, 1999; Gerbert et. al., 2000; Roberts, 2000; Golin et. al., 2004). Our study highlights communication and the crucial role of adherence perceptions, awkwardness, and believability. These aspects of social interaction are often not given much attention in standard theories about health behavior (Glanz et. al., 1997), patient communication (Silverman et. al., 1998), and adherence support (Dybul et. al., 2002; Poppa et. al., 2003).

Recent studies find that HIV+ patients seldom tell physicians about adherence problems (Meystre-Agustoni et. al., 2000; Laws et. al., 2000; Enriquesz et. al., 2004). Our study points out physicians' difficulties of doing interviewing and counseling when patients are reluctant to tell about their problems. This is supported by a study of hypertension that points to the role of physicians' question styles in receiving believable information on adherence (Steele et. al., 2004). Our findings are also in line with an interesting study, which finds that when general practitioners meet a non-adherent diabetes patients, they tend to get frustrated and adopt a paternalistic attitude and try to threaten and pressurize patients into becoming adherent (Wens et. al., 2005). A Grounded Theory study have explored how people "vague out" on issues they do not want wish to discuss with interrogators (Rizzo, 1993).

The existing theory of motivational interviewing holds that assistance in behavior change should not primarily be done by giving advice and information, but rather by assisting patients in exploring their own priorities and in developing their own strategies for solving problems (Britt et. al., 2004). In line with this, recent guidelines for counseling about adherence to HAART (Poppa et. al., 2001) and other medications (Osterberg & Blaschke, 2005) stress that physicians should develop a partnership with patients and communicate in a non-judgmental way.

These recommendations for clinical practice are supported by our findings. However, the theory of "De-shaming for Believability" also suggest these recommendations be supplemented with an enhanced focus on "de-shaming" techniques, the provision of a broadened palette of question styles, and some conscious strategies for sensibly handling low believability



of patient statements on adherence. We believe this would make physicians better equipped for supporting patients' adherence.

Future research needs to challenge or verify our findings in other settings. Patients' perceptions of the awkwardness of discussing adherence and the background for low believability also need to be further explored.

In conclusion, communication is a main difficulty in physicians' work with patients' adherence to HAART. The here proposed theory of adherence communication identifies three factors that influence how communication may proceed through four steps. This theory – and the identification of awkwardness and believability as key issues in patient-physician communication on this subject – may aid analytical thinking on adherence communication for use in clinical practice and future research.

### **Methodological Notes**

We followed the methodology as described by Glaser (1979, 1998), but also found some practical advice in the second edition of the book by Strauss and Corbin (1998). A medical approach to qualitative research methods was honored (Malterud, 2001). Inspired by comparative anthropology (Lambert & McKeivitt, 2002; Spradley, 1980), both a U.S. and European setting was included to explore the role of contextual factors.

The author, who is a bilingual physician with training in qualitative research, did all the observations and interviews as well as the primary data analysis. Data collection and analysis were continuously checked with the co-researchers and supervisors (two physicians and one anthropologist – see acknowledgements section) and with external physicians and methodologists to validate findings and broaden the analysis by incorporating viewpoints from multiple disciplines (Malterud, 2001). The Institutional Review Board at UCSF approved the study.

Prior to the interviews, the author was familiar with the classical health behavior models (Glanz et. al., 1997), some main adherence theories (Wilson et. al., 2002; Fisher & Fisher, 1992), the basics of physician-patient communication (Silverman et. al., 1998; Britt et. al., 2004), and with guidelines for HAART adherence counseling (Dybul et. al., 2002; Stone, 2001). However, in Grounded Theory pre-formulated concepts and theories are only used to "sensitize" the researcher, as all concepts must earn their relevance through constant comparison with data (Glaser, 1998; Strauss & Corbin, 1998).

### **Data Sources: Settings and Physicians**

We chose San Francisco and Copenhagen, as both cities may be expected to provide "state of the art" services. We included five large outpatient clinics, three in San Francisco: University of California, San Francisco (UCSF), San Francisco General Hospital (SFGH), Mission Neighborhood Health Center (MNHC); and both of the two existing clinics in Copenhagen: Rigshospitalet (RH) and Hvidovre Hospital (HH).

In San Francisco 16 out of 23 eligible physicians participated, in Copenhagen 18 out of 19. Of the seven non-participants in San Francisco, three never responded to our e-mail, three consented but were not included due to illness or time constraints, and one declined without

explanation. The non-participating physician in Copenhagen was excluded because of time constraints.

### **Data Collection**

Interviews were used to explore how physicians understand and make sense of their own situation and behavior (Kvale, 1996), and direct observation was used to transcend physicians' own understanding (Glaser, 1998; Lambert & McKeivitt, 2002). Data were collected from December 2001 to August 2003. All physicians employed at the clinics were invited by e-mail or posted letter, and participants signed a consent form. Patients were given an information sheet, and all participating patients gave explicit verbal consent. The author observed each physician's consultations during one workday and simultaneously took notes on the physician's verbal and some non-verbal communication. To minimize intrusion and ensure confidentiality, and to facilitate participation of all physicians, we did not tape-record or film the consultations. Subsequently, a qualitative, semi-structured interview (Kvale, 1996) with the physician was done about how he or she had perceived and worked with patients' adherence that day (interview guide enclosed as Additional file 2). Physicians were asked how they had assessed and enhanced each patient's adherence, how they would explain each patient's degree of adherence, and how they recalled and interpreted their own communication with the patient about adherence. For validation, physicians were invited to comment on the researcher's noted observations and immediate interpretations, as recommended by Kvale (1996). These comments were included as further data to verify, correct, and broaden the observations and interpretations of the researcher. Interviews with physicians lasted about one hour, were audio-recorded and transcribed verbatim. The handwritten notes on observations were typed into a word-processing program within one day of the interview.

At the end of interviews, physicians were asked if they felt they had changed behavior due to the presence of the observer. Generally, physicians stated that they were used to having students observe their work and that the observer's behavior was easy-going and non-intrusive. Fourteen of the physicians stated that there was no influence from the observer, 13 stated that they had been conscious of the presence of the observer, especially at the beginning of the day, although it did not change their adherence communication, and 6 said they had probably focused a little more on adherence than they usually would. One physician's answer to this question was not recorded.

### **Patients and Consultations Observed**

In total, 183 consultations were observed. In San Francisco, 49 consultations with patients receiving HAART were observed as well as 11 consultations with patients not currently on treatment. In Copenhagen, the corresponding numbers were 95 and 28. In San Francisco, we observed consultations with 42 men, 6 women and 1 transgender currently on HAART. In Copenhagen, the corresponding numbers were 78, 17 and 0. In San Francisco, 27 were of Caucasian origin, 22 were not. In Copenhagen, there were 77 and 18, respectively. We prioritized highly to minimize patient dropout and to allow an undisturbed interaction between patient and physician. Therefore, we only collected the directly observable data on patients, and did not ask about patients' age, mode of transmission, housing situation or drug use habits.

However, we roughly estimate that in San Francisco 60% of the included patients had been infected through homosexual practices, 15% heterosexually, and 20% through intravenous drug abuse, whereas the corresponding estimates in Copenhagen are 50%, 40% and 5%, respectively. We further estimate that roughly 20% of included patients in San Francisco were regular users of illegal drugs other than marijuana and that 10% were homeless, whereas the corresponding numbers in Copenhagen are 10% and <1%, respectively. Approximately 10% of consultations were not observed, as requested by patient or physician. Patients and physicians most often explained that this was because sexual issues were to be discussed. Only very few patients gave other explanations or no explanation.

## **Analysis**

In the analysis, all interviews were replayed on audio and all data were re-read several times. The transcribed interviews, as well as the notes on observations, were used as data. First, a brief summary of the observations and interview with each physician was written within one day of the interview. Then, during open coding, all notes on observations and the transcribed interviews were fragmented into meaning units (a few sentences or a paragraph), which were labeled with one or more concepts or statements. Concepts were developed both from the interviewed physicians' own statements and the researcher's interpretations. During the entire coding process, analytical memos on concepts were written, concepts were re-named, units of text were recoded, and recurring themes were noted (Glaser, 1998; Strauss & Corbin, 1998). After the open coding, we narrowed our focus to the communication process and related concepts to each other during selective coding. Theoretical relations between concepts (e.g., that XX leads to YY) were developed from analysis of observations as well as from interviews. During this process, several alternative theories were developed and explored, and finally we ended up with a simple four-stage three-factor theory. For practical handling of the large amounts of conceptualized text, NVivo software was used (Version 2.0, by QSR International Pty).

Sampling was done at five different clinics in two different cities to allow for the role of contextual factors to emerge. However, as the similarities of communication patterns at the different sites were much larger than the differences, contextual factors came to play only a minor role in the final analysis.

## **San Francisco vs Copenhagen**

We observed only very little difference between San Francisco and Copenhagen in terms of adherence communication. Average consultations were longer in San Francisco than in Copenhagen (26 vs. 16 minutes) (Table 1) and the subject of adherence was mentioned in 36 of 49 (73%) consultations in San Francisco compared to 58 of 95 (61%) in Copenhagen. Adherence discussions were slightly more comprehensive in San Francisco, where a question style implying that the patient had missed some doses of medication was mainly observed, whereas a question style implying good adherence was mainly observed in Copenhagen (described in more detail later). The atmosphere seemed less formal in San Francisco than in Copenhagen, e.g., some physicians gave patients a hug or told them about incidents from the physicians' own private lives. Since the similarities between communication patterns in San Francisco and Copenhagen were so much larger than the differences, in this paper we will not further dwell on the differences. In a similar way, physicians' age, gender, experience, and

education did not emerge as independent determinants of their communication with patients about adherence to HAART and was not a primary concern from the outset of the study.

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## References

- Barfod, T., Gerstoft J., Rodkjær, L., Pedersen, C., Nielsen, H., & Møller, A. et al. (2005). Patients' answers to simple questions about treatment satisfaction and adherence, and depression are associated with failure of HAART. A cross-sectional survey. *AIDS Patient Care and STD's*, 19(5), 317-325.
- Britt, E., Hudson, S.M., & Blampied, N.M. (2004). Motivational interviewing in health settings: A review. *Patient Education and Counseling*, 53(2), 147-155.
- Cox, K., Stevenson, F., Britten, N., & Dundar, Y. (2004). A systematic review of communication between patients and health care professionals about medicine-taking and prescribing. *Guy's King's and St Thomas' School of Medicine: Medicines Partnership*.
- Delgado, J., Heath, K.V., Yip, B., Marion, S., Alfonso, V., & Montaner, J.S. et al. (2003). Highly active antiretroviral therapy: Physician experience and enhanced adherence to prescription refill. *Antiretroviral Therapy* 8(5), 471-478.
- Dillon, R.G. (2002). Boundary work: American ethnographers as intercultural communicators in Japan. *International Journal of Qualitative Methods*, 26, 59-89.
- Dybul, M., Fauci, A.S., Bartlett, J.G., Kaplan, J.E., & Pau, A.K. (2002) Guidelines for using antiretroviral agents among HIV-infected adults and adolescents. *Annals of Internal Medicine*, 137(5 Pt 2), 381-433.
- Enriquez, M., Lackey, N.R., O'Connor, M.C., & McKinsey, D.S. (2004). Successful adherence after multiple HIV treatment failures. *Journal of Advanced Nursing* 45(4), 438-446.
- Fisher, J.D., & Fisher, W.A. (1992). Changing AIDS-risk behavior. *Psychological Bulletin*, 111(3), 455-474.
- Fogarty, L., Roter, D., Larson, S., Burke, J., Gillespie, J., & Levy, R. (2002). Patient adherence to HIV medication regimens: A review of published and abstract reports. *Patient Education and Counseling*, 46(2), 93-108.
- Gerbert, B., Bronstone, A., Clanon, K., Abercrombie, B., & Bangsberg, D. (2000). Combination antiretroviral therapy: Health care providers confront emerging dilemmas. *AIDS Care* 2000; 12(4), 409-421.
- Glanz, K., Lewis, F.M., & Rimer, B.K. (1997). Health behavior and health education (2<sup>nd</sup> ed.). Jossey-Bass Publishers.
- Glaser, B. G., (1998). *Doing grounded theory: Issues and discussions*. Sociology Press.
- Glaser, B.G. (1978) *Theoretical Sensitivity*. Sociology Press.
- Golin, C., Isasi, F., Bontempi, J.B., & Eng, E. (2002). Secret pills: HIV-positive patients' experiences taking antiretroviral therapy in North Carolina. *AIDS Education and Prevention*, 14(4), 318-329.

- Golin, C.E., Smith, S.R., & Reif, S. (2004). Adherence counseling practices of generalist and specialist physicians caring for people living with HIV/AIDS in North Carolina. *Journal of General Internal Medicine*, 19(1), 16-27.
- Heckman, B.D., Catz, S.L., Heckman, T.G., Miller, J.G., & Kalichman, S.C. (2004). Adherence to antiretroviral therapy in rural persons living with HIV disease in the United States. *AIDS Care*, 16(2), 219-230.
- Hill, Z., Kendall, C., & Fernandez, M. (2003). Patterns of adherence to antiretrovirals: Why adherence has no simple measure. *AIDS Patient Care and STD's*, 17(10), 519-525.
- Kvale S. (1996). *InterViews: An introduction to qualitative research interviewing*. Sage.
- Lambert, H., & McKeivitt, C. (2002). Anthropology in health research: From qualitative methods to multidisciplinary. *BMJ*, 325(7357), 210-213.
- Laws, M.B., Wilson, I.B., Bowser, D.M., & Kerr, S.E. (2000). Taking antiretroviral therapy for HIV infection: Learning from patients' stories. *Journal of General Internal Medicine*, 15(12), 848-858.
- Malterud, K. (2001). Qualitative research: Standards, challenges, and guidelines. *Lancet*, 358(9280), 483-488.
- Meystre-Agustoni, G., Dubois-Arber, F., Cochand, P., & Telenti, A. (2000). Antiretroviral therapies from the patient's perspective. *AIDS Care*, 12(6), 717-721.
- Mostashari, F., Riley, E., Selwyn, P.A., & Altice, F.L. (1998). Acceptance and adherence with antiretroviral therapy among HIV-infected women in a correctional facility. *Journal of Acquired Immunodeficiency Syndrome and Human Retrovirology*, 18(4), 341-348.
- Murphy, D.A., Roberts, K.J., Hoffman, D., Molina, A., & Lu, M.C. (2003). Barriers and successful strategies to antiretroviral adherence among HIV-infected monolingual Spanish-speaking patients. *AIDS Care*, 15(2), 217-230.
- Osterberg, L., & Blaschke, T. (2005). Adherence to medication. *New England Journal of Medicine*, 353(5), 487-497.
- Poppa, A., Davidson, O., Deutsch, J., Godfrey, D., Fisher, M., & Head, S. et al. (2003). British HIV Association (BHIVA)/British Association for Sexual Health and HIV (BASHH) guidelines on provision of adherence support to individuals receiving antiretroviral therapy. *HIV Medicine*; 5 Suppl 2, 46-60.
- Remien, R.H., Hirky, A.E., Johnson, M.O., Weinhardt, L.S., Whittier, D., & Le, G.M. (2003). Adherence to medication treatment: A qualitative study of facilitators and barriers among a diverse sample of HIV+ men and women in four U.S. cities. *AIDS Behavior*, 7(1), 61-72.
- Rizzo, R. (1993). Vagueness in the Haight Ashbury: A study of asocialization. In B. G. Glaser (Ed.). *Examples of grounded theory: A reader*. Sociology Press, 126-138.

- Roberts, K.J., Volberding, P. (1999). Adherence communication: A qualitative analysis of physician-patient dialogue. *AIDS*, 13(13), 1771-1778.
- Roberts, K.J. (2000). Barriers to and facilitators of HIV-positive patients' adherence to antiretroviral treatment regimens. *AIDS Patient Care and STD's*, 14(3), 155-168.
- Roberts, K.J., (2000). Physician beliefs about antiretroviral adherence communication. *AIDS Patient Care and STD's*, 14(9), 477-484.
- Roberts, K.J., (2002). Physician-Patient relationships, patient satisfaction and antiretroviral medication adherence among HIV-infected adults attending a public health clinic. *AIDS Patient Care and STD's*, 16(1), 43-50.
- Schneider, J., Kaplan, S.H., Greenfield, S., Li W., & Wilson, I.B. (2004). Better Physician-Patient Relationships Are Associated with Higher Reported Adherence to Antiretroviral Therapy in Patients with HIV Infection. *Journal of General Internal Medicine*, 19(11), 1096-1103.
- Sherr, L. (2000). Adherence - sticking to the evidence. *AIDS Care*, 12(4), 373-375.
- Silverman, J., Kurtz, S., & Draper, J. (1998). Skills for communicating with patients (1<sup>st</sup> ed.). Radcliffe Medical Press, Ltd.
- Smith, G.D., & Mertens, T. (2004). What's said and what's done: The reality of sexually transmitted disease consultations. *Public Health*, 118(2), 96-103.
- Spradley, J.P. (1980). *Participant observation*. Holt, Rinehart and Winston.
- Steele, D.J., Jackson, T.C., & Gutmann, M.C. (1990). Have you been taking your pills? The adherence-monitoring sequence in the medical interview. *Journal of Family Practice*, 30(3), 294-299.
- Stone, V.E. (2001). Strategies for optimizing adherence to highly active antiretroviral therapy: Lessons from research and clinical practice. *Clinical Infectious Diseases*, 33(6), 865-872.
- Strauss, A., Corbin, J. (1998). *Basics of qualitative research* (2nd ed.) Sage Publications.
- U.S. Department of Health and Human Services (2004). *Guidelines for the use of antiretroviral agents in HIV-infected adults and adolescents* (<http://aidsinfo.nih.gov/>).
- Westerfelt, A. (2004). A qualitative investigation of adherence issues for men who are HIV positive. *Social Work*, 49(2), 231-239.
- Wens, J., Vermeire, E., Royen, P.V., Sabbe, B., & Denekens, J. (2005). GPs' perspectives of type 2 diabetes patients' adherence to treatment: A qualitative analysis of barriers and solutions. *BMC Family Practice*, 6(1), 20.

Wilson, H.S., Hutchinson, S.A., & Holzemer, W.L. (2002). Reconciling incompatibilities: A grounded theory of HIV medication adherence and symptom management. *Qualitative Health Research*, 12(10), 1309-1322.

Wood E., Hogg, R.S., Yip, B., Harrigan, P.R., O'Shaughnessy, M.V., & Montaner, J.S. (2004). The impact of adherence on CD4 cell count responses among HIV-infected patients. *Journal of Acquired Immune Deficiency Syndromes*, 35(3), 261-268.

**Competing interests**

The author declares that he has no competing interests.



## **'The system was blinking red': Awareness Contexts and Disasters**

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### **Abstract**

The awareness context has been a source of inspiration for grounded theories for more than 50 years; yet little has been done to extend the theory beyond nursing and the medical field, and a few works on identity. This paper extends the awareness context by examining its role in several high-profile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts after analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns that, if attended, could have mitigated the impact of the disasters.

**Keywords:** Awareness context, crisis communication, sociology of disaster, situational awareness, 9/11 attacks, Hurricane Katrina, Deepwater Horizon explosion, Sago Mine Disaster.

### **Introduction**

Whether it is in personal interactions, professional life, or community activities, we are always communicating and processing information. Some of this information is innocuous and of no immediate consequence, while other information may have direct bearing on our wellbeing, that of our families, or colleagues. In such high stakes situations, it is important to have immediate access to information that is complete and credible. Seen from this perspective, Glaser and Strauss's awareness context (1964, 1965) addresses a fundamental communication process of everyday life. We move in and out of awareness contexts throughout daily life. The identification of a typology of awareness in which interactions among health professionals and patients are shaped by whether a patient is aware of a terminal diagnosis was a critical intervention in nursing and medical studies, and continues to be a starting point for much research (Andrews & Nathaniel, 2010).

The subject—dying—and discipline in which this theory has been embedded and extended across numerous illnesses and concerns may mask the essential work

of the awareness context as a theory about the managing and sharing of information, a concern throughout organizations and institutions. Of course, the awareness context has not been limited to health issues. The role of identity and the interactions that occur when people are uncertain of the identify of another is highlighted in the *American Sociological Review* article Glaser and Strauss (1964) published prior to the release of *Awareness of Dying*; Ekins's (1997) work on cross-dressing is a successful extension of the awareness context into this realm. But awareness as a concept offers many more possibilities for explaining phenomena that impede the distribution of critical communication across many spheres.

This paper extends the awareness context by examining its role in several high-profile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts from analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns which, if attended, could have mitigated the crises. The awareness context becomes an important contribution to crisis communication and organizational communication. Concepts such as abridging awareness, discounting awareness, situational awareness, and information gaps and information rationing help tease out the ways awareness is undermined in and across agencies assigned to work together. This paper is a methodological essay and brief discussion of ongoing theory development on awareness processes. It is also a challenge to grounded theorists to identify areas in their fields where the awareness context might have greater explanatory power than current theories allow.

### **Extending the Concept**

The awareness context offers a typology explaining a mix of interactions determined by whether patients were aware they had a terminal diagnosis. In other words, whether they knew they were dying. In closed awareness situations where the patient was not aware of the diagnosis, health professionals worked to avoid disclosures, blocking and reframing information that might make its way to the patient:

To prevent the patient's comprehension of the truth, the personnel utilize a number of "situation as normal" interaction tactics. They seek to act in his presence as if he were not dying but only ill. They talk to him as if he were going to live. They converse about his future, thus enhancing his belief that he will regain his health. They tell him stories about others (including themselves) who have recovered from similar or worse illnesses. By such indirect signaling they offer him a false biography. Of course, they may directly assure him that he will live, lying with a clear purpose. (Glaser and Strauss, 1964, p. 672)

The staff cannot control the flow of information fully, thus the typology explains other types of awareness and the interactions that flow out of them. The other

types—suspicious, pretense, open—have attendant behaviors, all of which require ways of managing information and interactions. The power of the concept lies in its processual nature, as it captures the transition from various types of awareness and the interplay of interactions and structures indicative of different awareness contexts. The particulars of the typology have been discussed throughout the grounded theory literature over the decades, so it is not necessary to give an extensive account; however, it is important to reiterate what Glaser and Strauss (1964) meant by awareness and how it differs from concepts such as consciousness and attention, which have become more active areas of scholarships since the introduction of awareness. The concept of awareness itself has competing definitions, including some conflation with consciousness and attention in some disciplines. A footnote from their 1964 article provides a definition and potential broad applicability of the awareness context:

A more general definition of awareness context is the total combination of what specific people in groups, organizations, communities or nations know what about a specific issue. Thus, this structural concept can be used for the study of virtually any problem entailing awareness at any structural level of analysis. (p. 670)

I proceed with this definition, making a distinction between awareness and the more intentional behavior of attention. Awareness can lead to attention, but not necessarily. My original exploration of the awareness context revolved around news-attending as it became evident that news attending occurs in an awareness context (Martin, 2008). This context became important for understanding my theory of purpose attending, which describes a loop in which awareness triggers some initial attention, though relevance is needed to sustain it and make news-attending more purposeful. Increasing awareness based on relevance and attending recalibrates what is deemed worth attending in the next cycle. However, the wrench here is the limits to emergent awareness, which is often disrupted. Much news or information does not make it through everyday filters: people have limited interest or context and are often embedded in social networks that enable the filters.

### **Discounting Awareness**

My work subsequently led to my interest in developing the concept of discounting awareness to better understand how people avoid information they tag as uncomfortable.

Discounting awareness is evident in everyday communication “from the most innocuous decision-making, such as how much credence one should give a weather forecast of rain, to behaviors that marginalize others and poison public discourse” (Martin, 2011, p. 300). It is the triage that sorts memoranda as important and less important or lends credibility to some testimony and discredits others. The image of a child with his hands over his ears to avoid hearing his parents order him to bed or deliver news he does not care to hear visually captures the concept in its more comic form. Some discounting awareness is childish and may just create annoyance for

others, but as I address here, discounting awareness, in the form of dismissing, ignoring, or shrouding information in secrecy has also resulted in the loss of lives.

The concept is not fully my discovery. In *Awareness of Dying*, Glaser and Strauss (1965) devote a chapter to discounting awareness, a process in which researchers observed medical professionals engaging when they spoke openly in the presence of premature babies, comatose patients, and the senile and dying, whom they assumed to have no awareness of what was being said. In situations where professionals discounted awareness of patients, they made no effort to hide information and maintain a sense of everything as routine—the ritual they enacted in closed awareness. I embraced these conceptions but expanded discounting awareness as a broader behavior working on intrapersonal, interpersonal and macro communicative levels.

I initially tried out the concept with some selective coding using news reports and observations on a number of different phenomena. I also became intrigued with the many questions raised by the 9/11 attacks and subsequent claims that the signs of an impending terrorist attack had been evident but ignored. As it became public that the national security team in the Bush administration had not given adequate attention to a series of memos and communications that were indicating there was a strong threat of an imminent attack in 2001—"the system was blinking red" during the summer prior to the attacks CIA Director George Tenet told the commission (9/11 report, 2004, p. 277)—I decided to do selective coding for such incidents in the 9/11 Commission Report. Discounting awareness was evident across the Clinton and Bush administrations, but more important for my analysis, the blocks to the circulation of information across agencies seemed to be a complicated phenomenon that spoke to the awareness context more broadly (Martin, 2011). Incidents across the commission report revealed missed signals, failure to share information, lack of trust across agencies, weak distribution channels, and generally what has been described as a "failure of imagination" to connect the dots between available information.

My next question was whether the incidents in the 9/11-commission report were anomalies or whether there was a pattern of discounting awareness regularly enacted across other institutions leading up to and during various disasters. This pattern led me to sample other commission reports created in the aftermath of large-scale tragedies to map discounting and other awareness processes based on questions raised during memo-writing. The reports were created in response to Hurricane Katrina (2005), where the bursting of the levee system and flooding following a near-category-four hurricane led to the deaths of 1,100 people and destroyed sections of the city and revealed government unprepared to respond; the Sago Mine Collapse (2006), where 12 miners died and others injured during a mine explosion in West Virginia; and the BP Deepwater Horizon oil rig explosion (2010) that killed 11, injured 16, and dumped four million gallons of oil in the Gulf of Mexico.

Commission reports are useful for researchers, including grounded theorists. Typically launched with bipartisan cooperation, these government-empowered inquiries have access to most leading participants in agencies and others with special knowledge about the disasters and aftermath. For some events there are series of reports or different parties with reports—for example, the miners' union after Sago—and numerous supplements; reports are available. In some cases, such as the panel charged with investigating the problems during and leading up to Katrina that contributed to the death of approximately 1,100 people in New Orleans, including many who were trapped in their homes after failing to evacuate, the interviews include ordinary citizens alongside government officials and first responders in the community.

The data, like any, come with imperfections but provide an opportunity to examine patterns after the initial media interest and conventional wisdom have moved on to other topics. As observed by Vaughan (1997), who studied hundreds of pages of official reports and conducted interviews following the explosion of the Challenger on January 28, 1986, which was launched despite engineers' reservation about the impact of the cold on the O-ring that held together sections of the shuttle, the public narrative that emerges is often simplistic or incorrect. After the blowup of the Challenger, the general view was that concerns with costs and politics of sending a teacher into space with the astronauts put extra pressure on NASA to push forward with the launch and ignore any cautions. What Vaughan discovered instead was that the organizational cultures could not easily accommodate the reservations that had been expressed. The engineers had reservations about how low temperatures might impact the O-rings but could not quantify their objections; they could not make a definitive case for not going forward, which was the best way to be heard within the paradigm in which they worked. A successful argument for aborting the launch would have had to break through various structures with long established paths to decision-making. The decrease in technical expertise as information traveled closer to the top of the pyramid was also part of the abridgement of awareness that occurs along information chains.

Vaughan (1997) provided a typology of signals (routine, weak, strong) and argued that verbal complaints and memos in organizations are weak signals due to their informality. Her concept of "structural secrecy" (p. 238), meanwhile, is also an indicator of an awareness context. Certainly, there are other dynamics involved, but disclosure and information flow in NASA and the contractors working with it have many similarities to patterns in the data from the crises I studied. The BP well explosion and Sago Mine are shaped in some ways by profiteering and regulation issues. But the abridgements of awareness were evident in those tragedies as they were in the lead-up to the 9/11 attacks and prior to and in the aftermath of Hurricane Katrina. The awareness context is the landscape actors must navigate. This analysis moves it from the hospital ward to a web of institutions in which networks of information and actors operate. During certain types of crises and disasters the context moves further out into the world, affecting communities and individuals, and necessitating different levels of analyses.

### **A Methodological Note**

The brief research report in this paper is part of a larger project on awareness processes; therefore, it would take the discussion off track to address the various methodological issues inherent in building formal theory. One observation worth sharing, however, is that the notion that one can move from a substantive theory into a formal theory without new data, thereby relying on extant literature in other areas; such a notion is problematic. Awareness, a concept that continues to elude social scientists, needs more fleshing out and discovery of its contours, making data such as the commission reports especially welcome. Extant literature requires unpacking based on the methods used and the nature of the data. The data underlying some of the literature is not often clear or represented well enough to evaluate prior to its integration in theory.

I also incorporated strategies that are out of the comfort zone of many classic grounded theorists but must be considered when databases become large. Although my initial coding was on paper copies of the reports, I utilized NVivo10, not just for retrieval, but for its matrices, word trees, cluster analysis with quantitative measures; other tools also helped me look at my data across the large documents and better account for coding patterns. An example of something that could not be done by hand was the ability to run a Jaccard's coefficient, an index that reveals where coding intersects. The tool also allowed me to determine that certain words across the documents were often in the same places; for example, awareness, communication, or failure are tightly connected with an index number of 1 (tight correspondence). Typically, these sections contain references to incidents of communication failures, giving strength to the conceptualization I was doing. While this extra level of accountability is not necessary for all classic grounded theorists, especially those without access to or training on NVivo, having both I chose to use this extra bit of auditing given the high-profile nature of the reports, the volume of the data and as a source of reassurance for different audiences.

### **Abridging Awareness**

The typology of an awareness context in which critical information is managed across different people, departments and organizations is relevant in all four of the circumstances studied in this paper. The emphasis differs across sites. The Sago Mine explosion had the earmarks of the crisis in which quick orientation was needed, but its pre-crisis culture was less an area of focus in the report, though some of these issues were implied in the history of citations and other problems. The pre-crisis awareness contexts are addressed more explicitly in the other three reports and contain elements of closed awareness that might have contributed to the tragedies or impacted the aftermath negatively. I use abridging awareness or the abridgement of awareness to conceptualize the mix of practices that block the flow of information and decrease awareness in the agencies and organizations under study, particularly prior to the crises.

The pre-crisis and crisis contexts bring different properties to the forefront. The pre-crisis context is the norm under which organizations and institutions operate and include all of the communication and information practices. For example, the following two brief descriptions are full of implications for understanding the routine awareness context prior to 9/11 as a willful disattending, a vacating of accountability found throughout the crises studied. The following incidents are reported in the 9/11 Commission report:

President Clinton appointed George Tenet as DCI in 1997, and by all accounts terrorism was a priority for him. But Tenet's own assessment, when questioned by the Commission, was that in 2004, the CIA's clandestine service was still at least five years away from being fully ready to play its counterterrorism role. And while Tenet was clearly the leader of the CIA, the intelligence community's confederated structure left open the question of who really was in charge of the entire U.S. intelligence effort. (p. 93)

Moreover, the FAA's intelligence unit did not receive much attention from the agency's leadership. Neither Administrator Jane Garvey nor her deputy routinely reviewed daily intelligence, and what they did see was screened for them. She was unaware of a great amount of hijacking threat information from her own intelligence unit, which, in turn, was not deeply involved in the agency's policymaking process. Historically, decisive security action took place only after a disaster had occurred or a specific plot had been discovered. (p. 83)

In the pre-crisis "normal," people operate under a type of awareness that is often closed, but the rituals of organizational are such that there is much pretense around knowledge in some strata. The structures in which the people in the aforementioned examples worked enabled their ability to push away responsibility and accountability with impunity. The abridgement of awareness comes to light when crisis hits as communities are left with the fallout as they try to achieve awareness, sometimes to save their lives.

When disaster strikes, awareness becomes foreground and is the main concern before action is taken, rather than a tacit aspect of routine organizational life where people are often unaware of what they do not know. Temporality becomes a critical property of the awareness context as the emergency quickens. The passengers on hijacked planes during 9/11 had minutes to ascertain their situation, and had few options once they achieved some awareness. The circumstances surrounding Hurricane Katrina, however, had a longer trajectory of struggle for awareness. Warnings about the severity of the imminent hurricane, as well as knowledge about the vulnerability of the levees in New Orleans were well known—National Hurricane Center, which perfectly predicted landfall days in advance, was one of the few agencies credited with doing its job well—yet local leaders failed to force evacuations until it was too late for many. Of the four crises examined, Katrina is the one most vividly illustrative of an awareness context with many broken nodes. It is the one case where it is not overreaching to say that a healthier structure of awareness could have resulted in a far less tragic situation. As the authors of "A Failure of Initiative" (2006), the commission report on Katrina, wrote:

Many of the problems we have identified can be categorized as 'information gaps'—or at least problems with information-related implications, or failures to act decisively because information was sketchy at best. Better information would have been an optimal weapon against Katrina. Information sent to the right people at the right place at the right time. Information moved within

agencies, across departments, and between jurisdictions of government as well. Seamlessly. Securely. Efficiently. (p. 1)

Information gaps, an in vivo code I've adapted to my work, are components in awareness contexts. Information is the currency that spurs action, or causes impasses if it is not credible. Information that is rationed and only shared among a few, or not delivered with appropriate context, can derail plans and put lives in peril, as we see happening in the data. A seamless, secure, efficient network of information flowing back and forth is an ideal expressed in the excerpt from the Katrina report, but awareness contexts have many actors with different agendas, degrees of flexibility, and competence. In reviewing the explosion of the Deepwater oil rig, which resulted in the death of 11 men, injured 16, and caused the release of four million gallons of oil in the Gulf of Mexico, the special commission found:

BP, Transocean, and Halliburton failed to communicate adequately. Information appears to have been excessively compartmentalized at Macondo as a result of poor communication. BP did not share important information with its contractors, or sometimes internally even with members of its own team. Contractors did not share important information with BP or each other. As a result, individuals often found themselves making critical decisions without a full appreciation for the context in which they were being made (or even without recognition that the decisions were critical). (p. 123)

A particularly illustrative indicator of pre-crisis information rationing with tragic consequences in the Deepwater Horizon oilrig explosion was an advisory Transocean, the company drilling for BP, failed to share with the Deepwater team. Four months prior to the Deepwater explosion in 2010 at Macondo, there was a near-miss on one of its rigs in the North Sea in December 2009. Gas entered a riser while the crew was conducting an operation in a manner similar to the crew in Louisiana. A crew had declared a previous test a success—which also occurred at Macondo—but a barrier failed and hydrocarbon rushed in, according to the commission report. The crew in the North Sea was able to shut the well before a blowout erupted, but as the commission learned, "Nearly one metric ton of oil-based mud ended up in the ocean. The incident cost Transocean 11.2 days of additional work and more than 5 million British pounds in Expenses" (p. 124).

Transocean subsequently created an internal PowerPoint presentation warning that '[t]ested barriers can fail' and that 'risk perception of barrier failure was blinkered by the positive inflow test [negative test].' The presentation noted that '[f]luid displacements for inflow test [negative test] and well clean up operations are not adequately covered in our well control manual or adequately cover displacements in under balanced operations.' It concluded with a slide titled 'Are we ready?' and 'WHAT IF?' containing the bullet points: '[h]igh vigilance when reduced to one barrier underbalanced,' '[r]ecognise when going underbalanced—heightened vigilance,' and '[h]ighlight what the kick indicators are when not drilling.' (p. 124)

Transocean sent out an "operations advisory" using what the commission described as "less pointed and vivid" language than in the PowerPoint to its fleet in the North Sea. However, the commission quotes Transocean as conceding that neither the advisory or PowerPoint made it to Deepwater Horizon. In a fairly bold act of discounting awareness, Transocean took issue with suggestions that informing the Deepwater crew might have made people more cautious about the test barriers, possibly averting the disaster. Transocean argued that a different test barrier was



involved in the North Sea, but the commission found that the differences are “cosmetic” and wrote, “The basic facts of both incidents are the same. Had the rig crew been adequately informed of the prior event and trained on its lessons, events at Macondo may have unfolded very differently” (p. 125). The heavy editing of the advisories and restricted flow suggests the circulation of these types of alerts within a company would be useful for further development of closed awareness as a spectrum when applied to organization culture.

### **Achieving Situational Awareness**

Situational awareness is a term most immediately associated with military operations but has spread to aeronautics and other fields. In essence, it is knowledge of what is going on in a given situation and what some of the moving issues might be. Former Secretary of Defense Donald Rumsfeld, in speaking to the presidential commission on 9/11, described himself as eager to establish “situational awareness” upon learning of the attacks on 9/11. The term is used frequently in the reports to describe the challenges of orienting to the fast-changing crises of 9/11 and Katrina. The word is probably used in these documents and not the other two because of the immense difficulties gaining situational awareness in the midst of the attacks and hurricane and the subsequent chaos in which thousands of people were thrown and lost lives. In the case of Katrina, there is a direct link between the everyday pre-crisis practices abridging awareness across the agencies involved and what happened when the hurricane struck. Failed infrastructure, including massive power outages, dwindling supplies, uncertainty about chains of command, equipment that did not work and paralyzed leadership all contributed to the delays understanding what was going on, sometimes for days. The report observes:

Without sufficient working communications capability to get better situational awareness, the local, state, and federal officials directing the response in New Orleans had too little factual information to address—and, if need be, rebut—what the media were reporting. This allowed terrible situations—the evacuees’ fear and anxiety in the Superdome and Convention Center—to continue longer than they should have and, as noted, delayed response efforts by, for example, causing the National Guard to wait to assemble enough force to deal with security problems at the Convention Center that turned out to be overstated. (p. 171)

As a concept, situational awareness helps switch the context from everyday routines to the live event, where the context now expands to multitudinous actors and scenarios; beating the clock also becomes a factor. Situational awareness can be conceptualized as having two distinct phases: the initial jolt of disruption and immediate need for information triage in which people must obtain, verify, and evaluate information they must accept or discount; and action thresholds—the point at which people, their awareness limited, may need to take a leap of faith or risk death. These phases can cycle out within minutes. Tentatively I have conceptualized a third phase, opening awareness, which would encompass the continual response to the crisis and aftermath. It might be that the commissions assembled to create reports are part of the opening of awareness longterm. The proposition here is not that all would be transparent. Awareness is recalibrated to move to a new level of

response, though there is no guarantee the pre-crisis awareness context would change much. In fact, the commission reports contain a lot of material suggesting that the agencies involved had failed to learn from past lessons or were slow to implement them. However, conceiving of situational awareness as a cyclical subcore helps link the pre-crisis context, the immediate crisis and aftermath.

A few examples from the crises provide indicators to explore situational awareness unfolding. The Sago Mine disaster was especially painful for the country to witness. At one point after families had waited anxiously to hear whether the miners had been rescued, the governor and media reported that all but one of the 13 miners, who had been trapped, had survived. But the celebrations were short-lived. There had been a communication mix up: only one of the 13 miners survived. The so-called “fog” associated with war impedes awareness in these early moments. Stories from 9/11 of people attempting to evacuate the towers but being told to remain in place are indicators of the confusion and misdirection that makes verification so difficult.

The 911 system remained plagued by the operators’ lack of awareness of what was occurring. Just as in the North Tower, callers from below and above the impact zone were advised to remain where they were and wait for help. The operators were not given any information about the inability to conduct rooftop rescues and therefore could not advise callers that they had essentially been ruled out. This lack of information, combined with the general advice to remain where they were, may have caused civilians above the impact not to attempt to descend, although Stairwell A may have been passable. (National Commission on Terrorist . . . , 2004, p. 295)

Escalating contingency explains the ways in which the limited amount of awareness is outstripped by the fast pace of events. Those people in the midst of disaster often found themselves replacing one unworkable plan with another that was too little too late. Yet also in need of better understanding are the action thresholds that cause some people to move forward. Some of the risk—running in the same direction of the rest of the crowd as people did during the 9/11 attacks, going back into the mines to save brother miners—are instinctual and hence easier to explain. But situations where people are paralyzed by inaction for stretches of time need closer examination. From Katrina, we know that there was much procrastination and desperation as people realized they were on their own as the floodwaters rose. At hospitals where the elderly and informed had limited mobility, hospital staff had to make the difficult decision to simply leave the sickest to die. The commission reports include examples of heroism and personal initiative such as the doctor who, with help from police, broke into a pharmacy to get medicine to help victims. But, much of the Katrina story is one of tragedy that many people in government let happen due to the closed awareness context they built.

### **Awareness Context as Culture**

Awareness contexts make up the culture of organizations, revealing how such entities communicate within and outside of their walls. The communication patterns

are deeply embedded and difficult to steer in counter directions. Unlike the medical professionals in the hospital observed by Glaser and Strauss, knowledge blackouts, or the process of often do not know what they do not know or need to know. Many are also incompetent, vacating accountability with the assistance of the organizational structure. Rather than a strictly closed system, the pretense type of awareness identified by Glaser and Strauss (1964, 1965) is worth exploring to capture the ways in which people perpetuate knowledge gaps willingly. These steps are among my next course of action. Any organization would have a business-as-usual awareness context that could be mapped, particularly around crisis or less threatening disruptions. Yet, its history aside, the awareness context would need to earn its way anew.

This article is an attempt to share some ongoing work on awareness processes, and more immediately an effort to suggest that the awareness context is underutilized and rich for development. Grounded theorists and researchers in general often delay projects for want of data. Increasingly, government websites make available reports and inquiries of high-profile disasters and other crises; these reports could be useful for any number of projects. The large numbers of documents that exist on various topics lend themselves to solo or group projects. Imagine an international team of grounded theorists taking on a topic and coming up with a theory with grab that sets the world straight on a public problem. That is a flight of fantasy to some degree, but I use it to suggest that our toolbox can bring a lot of light, awareness, out there.

### References

- Ekins, R. (1997). *Male femaling: A grounded theory approach to cross-dressing and sex-changing*. New York, NY: Routledge.
- Glaser, B. G. & Strauss, A. L. (1964). Awareness contexts and social interaction. *American Sociological Review*, 29, 669-679. doi:10.2307/2091417
- Glaser, B. G. & Strauss, A. L. (1965). *Awareness of dying*. Chicago, IL: Aldine Publishing.
- Martin, V. B. (2008). Attending the news: A grounded theory about a daily regiment. *Journalism: Theory, Practice & Criticism*, 9, 76-94. doi:10.1177/1464884907084341
- Martin, V. B. (2011). The Power of and Enduring Concept. In V. Martin & A. Gynnild (Eds.), *Grounded Theory: The Philosophy, Method, and Work of Barney Glaser* (pp-297-308). Boca Raton, FL: Brown Walker Press.
- Nathaniel, A. & Andrews, T. (2010). The modifiability of grounded theory. *The Grounded Theory Review*, 9(1), 65-67. Retrieved from <http://groundedtheoryreview.com>

- National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. (2011) *Deepwater: The Gulf oil disaster and the future of offshore drilling*. Retrieved from <http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf>
- National Commission on Terrorist Attacks on the United States. (2004). *The 9/11 Commission Report*. New York, NY: Norton. Retrieved from <http://www.9-11commission.gov/report/911Report.pdf>
- Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina. (2006). *A failure of initiative: The final report of the select bipartisan committee to investigate the preparation for and response to Hurricane Katrina*. Retrieved from [http://katrina.house.gov/full\\_katrina\\_report.htm](http://katrina.house.gov/full_katrina_report.htm)
- United States Department of Labor/Mine Safety and Health Administration. (2007). *Report of investigation. Fatal underground coal mine explosion. Jan 2, 2006, Sago Mine*. Retrieved from <http://www.msha.gov/FATALS/2006/Sago/sagoreport.asp>
- Vaughan, D. (1997). *The challenger launch decision: Risky technology, culture, and deviance at NASA*. Chicago, IL: The University of Chicago Press.

## **'The system was blinking red': Awareness Contexts and Disasters**

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### **Abstract**

The awareness context has been a source of inspiration for grounded theories for more than 50 years; yet little has been done to extend the theory beyond nursing and the medical field, and a few works on identity. This paper extends the awareness context by examining its role in several high-profile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts after analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns that, if attended, could have mitigated the impact of the disasters.

**Keywords:** Awareness context, crisis communication, sociology of disaster, situational awareness, 9/11 attacks, Hurricane Katrina, Deepwater Horizon explosion, Sago Mine Disaster.

### **Introduction**

Whether it is in personal interactions, professional life, or community activities, we are always communicating and processing information. Some of this information is innocuous and of no immediate consequence, while other information may have direct bearing on our wellbeing, that of our families, or colleagues. In such high stakes situations, it is important to have immediate access to information that is complete and credible. Seen from this perspective, Glaser and Strauss's awareness context (1964, 1965) addresses a fundamental communication process of everyday life. We move in and out of awareness contexts throughout daily life. The identification of a typology of awareness in which interactions among health professionals and patients are shaped by whether a patient is aware of a terminal diagnosis was a critical intervention in nursing and medical studies, and continues to be a starting point for much research (Andrews & Nathaniel, 2010).

The subject—dying—and discipline in which this theory has been embedded and extended across numerous illnesses and concerns may mask the essential work

of the awareness context as a theory about the managing and sharing of information, a concern throughout organizations and institutions. Of course, the awareness context has not been limited to health issues. The role of identity and the interactions that occur when people are uncertain of the identity of another is highlighted in the *American Sociological Review* article Glaser and Strauss (1964) published prior to the release of *Awareness of Dying*; Ekins's (1997) work on cross-dressing is a successful extension of the awareness context into this realm. But awareness as a concept offers many more possibilities for explaining phenomena that impede the distribution of critical communication across many spheres.

This paper extends the awareness context by examining its role in several high-profile disasters, natural and man-made, where gaining a clear sense of what was going on was often blocked by poor information flow and general communication failures, interpersonal and technological. Selective coding and the introduction of new concepts from analyzing hundreds of pages of documents issued by special commissions in the aftermath of the 9/11 attacks, Hurricane Katrina, the Deepwater Horizon oil spill in the Gulf, and the Sago Mine Disaster not only explain various processes around awareness in the midst of crisis, but also illuminate pre-crisis patterns which, if attended, could have mitigated the crises. The awareness context becomes an important contribution to crisis communication and organizational communication. Concepts such as abridging awareness, discounting awareness, situational awareness, and information gaps and information rationing help tease out the ways awareness is undermined in and across agencies assigned to work together. This paper is a methodological essay and brief discussion of ongoing theory development on awareness processes. It is also a challenge to grounded theorists to identify areas in their fields where the awareness context might have greater explanatory power than current theories allow.

### **Extending the Concept**

The awareness context offers a typology explaining a mix of interactions determined by whether patients were aware they had a terminal diagnosis. In other words, whether they knew they were dying. In closed awareness situations where the patient was not aware of the diagnosis, health professionals worked to avoid disclosures, blocking and reframing information that might make its way to the patient:

To prevent the patient's comprehension of the truth, the personnel utilize a number of "situation as normal" interaction tactics. They seek to act in his presence as if he were not dying but only ill. They talk to him as if he were going to live. They converse about his future, thus enhancing his belief that he will regain his health. They tell him stories about others (including themselves) who have recovered from similar or worse illnesses. By such indirect signaling they offer him a false biography. Of course, they may directly assure him that he will live, lying with a clear purpose. (Glaser and Strauss, 1964, p. 672)

The staff cannot control the flow of information fully, thus the typology explains other types of awareness and the interactions that flow out of them. The other

types—suspicious, pretense, open—have attendant behaviors, all of which require ways of managing information and interactions. The power of the concept lies in its processual nature, as it captures the transition from various types of awareness and the interplay of interactions and structures indicative of different awareness contexts. The particulars of the typology have been discussed throughout the grounded theory literature over the decades, so it is not necessary to give an extensive account; however, it is important to reiterate what Glaser and Strauss (1964) meant by awareness and how it differs from concepts such as consciousness and attention, which have become more active areas of scholarships since the introduction of awareness. The concept of awareness itself has competing definitions, including some conflation with consciousness and attention in some disciplines. A footnote from their 1964 article provides a definition and potential broad applicability of the awareness context:

A more general definition of awareness context is the total combination of what specific people in groups, organizations, communities or nations know what about a specific issue. Thus, this structural concept can be used for the study of virtually any problem entailing awareness at any structural level of analysis. (p. 670)

I proceed with this definition, making a distinction between awareness and the more intentional behavior of attention. Awareness can lead to attention, but not necessarily. My original exploration of the awareness context revolved around news-attending as it became evident that news attending occurs in an awareness context (Martin, 2008). This context became important for understanding my theory of purpose attending, which describes a loop in which awareness triggers some initial attention, though relevance is needed to sustain it and make news-attending more purposeful. Increasing awareness based on relevance and attending recalibrates what is deemed worth attending in the next cycle. However, the wrench here is the limits to emergent awareness, which is often disrupted. Much news or information does not make it through everyday filters: people have limited interest or context and are often embedded in social networks that enable the filters.

### **Discounting Awareness**

My work subsequently led to my interest in developing the concept of discounting awareness to better understand how people avoid information they tag as uncomfortable.

Discounting awareness is evident in everyday communication “from the most innocuous decision-making, such as how much credence one should give a weather forecast of rain, to behaviors that marginalize others and poison public discourse” (Martin, 2011, p. 300). It is the triage that sorts memoranda as important and less important or lends credibility to some testimony and discredits others. The image of a child with his hands over his ears to avoid hearing his parents order him to bed or deliver news he does not care to hear visually captures the concept in its more comic form. Some discounting awareness is childish and may just create annoyance for

others, but as I address here, discounting awareness, in the form of dismissing, ignoring, or shrouding information in secrecy has also resulted in the loss of lives.

The concept is not fully my discovery. In *Awareness of Dying*, Glaser and Strauss (1965) devote a chapter to discounting awareness, a process in which researchers observed medical professionals engaging when they spoke openly in the presence of premature babies, comatose patients, and the senile and dying, whom they assumed to have no awareness of what was being said. In situations where professionals discounted awareness of patients, they made no effort to hide information and maintain a sense of everything as routine—the ritual they enacted in closed awareness. I embraced these conceptions but expanded discounting awareness as a broader behavior working on intrapersonal, interpersonal and macro communicative levels.

I initially tried out the concept with some selective coding using news reports and observations on a number of different phenomena. I also became intrigued with the many questions raised by the 9/11 attacks and subsequent claims that the signs of an impending terrorist attack had been evident but ignored. As it became public that the national security team in the Bush administration had not given adequate attention to a series of memos and communications that were indicating there was a strong threat of an imminent attack in 2001—"the system was blinking red" during the summer prior to the attacks CIA Director George Tenet told the commission (9/11 report, 2004, p. 277)—I decided to do selective coding for such incidents in the 9/11 Commission Report. Discounting awareness was evident across the Clinton and Bush administrations, but more important for my analysis, the blocks to the circulation of information across agencies seemed to be a complicated phenomenon that spoke to the awareness context more broadly (Martin, 2011). Incidents across the commission report revealed missed signals, failure to share information, lack of trust across agencies, weak distribution channels, and generally what has been described as a "failure of imagination" to connect the dots between available information.

My next question was whether the incidents in the 9/11-commission report were anomalies or whether there was a pattern of discounting awareness regularly enacted across other institutions leading up to and during various disasters. This pattern led me to sample other commission reports created in the aftermath of large-scale tragedies to map discounting and other awareness processes based on questions raised during memo-writing. The reports were created in response to Hurricane Katrina (2005), where the bursting of the levee system and flooding following a near-category-four hurricane led to the deaths of 1,100 people and destroyed sections of the city and revealed government unprepared to respond; the Sago Mine Collapse (2006), where 12 miners died and others injured during a mine explosion in West Virginia; and the BP Deepwater Horizon oil rig explosion (2010) that killed 11, injured 16, and dumped four million gallons of oil in the Gulf of Mexico.



Commission reports are useful for researchers, including grounded theorists. Typically launched with bipartisan cooperation, these government-empowered inquiries have access to most leading participants in agencies and others with special knowledge about the disasters and aftermath. For some events there are series of reports or different parties with reports—for example, the miners' union after Sago—and numerous supplements; reports are available. In some cases, such as the panel charged with investigating the problems during and leading up to Katrina that contributed to the death of approximately 1,100 people in New Orleans, including many who were trapped in their homes after failing to evacuate, the interviews include ordinary citizens alongside government officials and first responders in the community.

The data, like any, come with imperfections but provide an opportunity to examine patterns after the initial media interest and conventional wisdom have moved on to other topics. As observed by Vaughan (1997), who studied hundreds of pages of official reports and conducted interviews following the explosion of the Challenger on January 28, 1986, which was launched despite engineers' reservation about the impact of the cold on the O-ring that held together sections of the shuttle, the public narrative that emerges is often simplistic or incorrect. After the blowup of the Challenger, the general view was that concerns with costs and politics of sending a teacher into space with the astronauts put extra pressure on NASA to push forward with the launch and ignore any cautions. What Vaughan discovered instead was that the organizational cultures could not easily accommodate the reservations that had been expressed. The engineers had reservations about how low temperatures might impact the O-rings but could not quantify their objections; they could not make a definitive case for not going forward, which was the best way to be heard within the paradigm in which they worked. A successful argument for aborting the launch would have had to break through various structures with long established paths to decision-making. The decrease in technical expertise as information traveled closer to the top of the pyramid was also part of the abridgement of awareness that occurs along information chains.

Vaughan (1997) provided a typology of signals (routine, weak, strong) and argued that verbal complaints and memos in organizations are weak signals due to their informality. Her concept of "structural secrecy" (p. 238), meanwhile, is also an indicator of an awareness context. Certainly, there are other dynamics involved, but disclosure and information flow in NASA and the contractors working with it have many similarities to patterns in the data from the crises I studied. The BP well explosion and Sago Mine are shaped in some ways by profiteering and regulation issues. But the abridgements of awareness were evident in those tragedies as they were in the lead-up to the 9/11 attacks and prior to and in the aftermath of Hurricane Katrina. The awareness context is the landscape actors must navigate. This analysis moves it from the hospital ward to a web of institutions in which networks of information and actors operate. During certain types of crises and disasters the context moves further out into the world, affecting communities and individuals, and necessitating different levels of analyses.

### **A Methodological Note**

The brief research report in this paper is part of a larger project on awareness processes; therefore, it would take the discussion off track to address the various methodological issues inherent in building formal theory. One observation worth sharing, however, is that the notion that one can move from a substantive theory into a formal theory without new data, thereby relying on extant literature in other areas; such a notion is problematic. Awareness, a concept that continues to elude social scientists, needs more fleshing out and discovery of its contours, making data such as the commission reports especially welcome. Extant literature requires unpacking based on the methods used and the nature of the data. The data underlying some of the literature is not often clear or represented well enough to evaluate prior to its integration in theory.

I also incorporated strategies that are out of the comfort zone of many classic grounded theorists but must be considered when databases become large. Although my initial coding was on paper copies of the reports, I utilized NVivo10, not just for retrieval, but for its matrices, word trees, cluster analysis with quantitative measures; other tools also helped me look at my data across the large documents and better account for coding patterns. An example of something that could not be done by hand was the ability to run a Jaccard's coefficient, an index that reveals where coding intersects. The tool also allowed me to determine that certain words across the documents were often in the same places; for example, awareness, communication, or failure are tightly connected with an index number of 1 (tight correspondence). Typically, these sections contain references to incidents of communication failures, giving strength to the conceptualization I was doing. While this extra level of accountability is not necessary for all classic grounded theorists, especially those without access to or training on NVivo, having both I chose to use this extra bit of auditing given the high-profile nature of the reports, the volume of the data and as a source of reassurance for different audiences.

### **Abridging Awareness**

The typology of an awareness context in which critical information is managed across different people, departments and organizations is relevant in all four of the circumstances studied in this paper. The emphasis differs across sites. The Sago Mine explosion had the earmarks of the crisis in which quick orientation was needed, but its pre-crisis culture was less an area of focus in the report, though some of these issues were implied in the history of citations and other problems. The pre-crisis awareness contexts are addressed more explicitly in the other three reports and contain elements of closed awareness that might have contributed to the tragedies or impacted the aftermath negatively. I use abridging awareness or the abridgement of awareness to conceptualize the mix of practices that block the flow of information and decrease awareness in the agencies and organizations under study, particularly prior to the crises.

The pre-crisis and crisis contexts bring different properties to the forefront. The pre-crisis context is the norm under which organizations and institutions operate and include all of the communication and information practices. For example, the following two brief descriptions are full of implications for understanding the routine awareness context prior to 9/11 as a willful disattending, a vacating of accountability found throughout the crises studied. The following incidents are reported in the 9/11 Commission report:

President Clinton appointed George Tenet as DCI in 1997, and by all accounts terrorism was a priority for him. But Tenet's own assessment, when questioned by the Commission, was that in 2004, the CIA's clandestine service was still at least five years away from being fully ready to play its counterterrorism role. And while Tenet was clearly the leader of the CIA, the intelligence community's confederated structure left open the question of who really was in charge of the entire U.S. intelligence effort. (p. 93)

Moreover, the FAA's intelligence unit did not receive much attention from the agency's leadership. Neither Administrator Jane Garvey nor her deputy routinely reviewed daily intelligence, and what they did see was screened for them. She was unaware of a great amount of hijacking threat information from her own intelligence unit, which, in turn, was not deeply involved in the agency's policymaking process. Historically, decisive security action took place only after a disaster had occurred or a specific plot had been discovered. (p. 83)

In the pre-crisis "normal," people operate under a type of awareness that is often closed, but the rituals of organizational are such that there is much pretense around knowledge in some strata. The structures in which the people in the aforementioned examples worked enabled their ability to push away responsibility and accountability with impunity. The abridgement of awareness comes to light when crisis hits as communities are left with the fallout as they try to achieve awareness, sometimes to save their lives.

When disaster strikes, awareness becomes foreground and is the main concern before action is taken, rather than a tacit aspect of routine organizational life where people are often unaware of what they do not know. Temporality becomes a critical property of the awareness context as the emergency quickens. The passengers on hijacked planes during 9/11 had minutes to ascertain their situation, and had few options once they achieved some awareness. The circumstances surrounding Hurricane Katrina, however, had a longer trajectory of struggle for awareness. Warnings about the severity of the imminent hurricane, as well as knowledge about the vulnerability of the levees in New Orleans were well known—National Hurricane Center, which perfectly predicted landfall days in advance, was one of the few agencies credited with doing its job well—yet local leaders failed to force evacuations until it was too late for many. Of the four crises examined, Katrina is the one most vividly illustrative of an awareness context with many broken nodes. It is the one case where it is not overreaching to say that a healthier structure of awareness could have resulted in a far less tragic situation. As the authors of "A Failure of Initiative" (2006), the commission report on Katrina, wrote:

Many of the problems we have identified can be categorized as 'information gaps'—or at least problems with information-related implications, or failures to act decisively because information was sketchy at best. Better information would have been an optimal weapon against Katrina. Information sent to the right people at the right place at the right time. Information moved within

agencies, across departments, and between jurisdictions of government as well. Seamlessly. Securely. Efficiently. (p. 1)

Information gaps, an in vivo code I've adapted to my work, are components in awareness contexts. Information is the currency that spurs action, or causes impasses if it is not credible. Information that is rationed and only shared among a few, or not delivered with appropriate context, can derail plans and put lives in peril, as we see happening in the data. A seamless, secure, efficient network of information flowing back and forth is an ideal expressed in the excerpt from the Katrina report, but awareness contexts have many actors with different agendas, degrees of flexibility, and competence. In reviewing the explosion of the Deepwater oil rig, which resulted in the death of 11 men, injured 16, and caused the release of four million gallons of oil in the Gulf of Mexico, the special commission found:

BP, Transocean, and Halliburton failed to communicate adequately. Information appears to have been excessively compartmentalized at Macondo as a result of poor communication. BP did not share important information with its contractors, or sometimes internally even with members of its own team. Contractors did not share important information with BP or each other. As a result, individuals often found themselves making critical decisions without a full appreciation for the context in which they were being made (or even without recognition that the decisions were critical). (p. 123)

A particularly illustrative indicator of pre-crisis information rationing with tragic consequences in the Deepwater Horizon oilrig explosion was an advisory Transocean, the company drilling for BP, failed to share with the Deepwater team. Four months prior to the Deepwater explosion in 2010 at Maconda, there was a near-miss on one of its rigs in the North Sea in December 2009. Gas entered a riser while the crew was conducting an operation in a manner similar to the crew in Louisiana. A crew had declared a previous test a success—which also occurred at Maconda—but a barrier failed and hydrocarbon rushed in, according to the commission report. The crew in the North Sea was able to shut the well before a blowout erupted, but as the commission learned, "Nearly one metric ton of oil-based mud ended up in the ocean. The incident cost Transocean 11.2 days of additional work and more than 5 million British pounds in Expenses" (p. 124).

Transocean subsequently created an internal PowerPoint presentation warning that '[t]ested barriers can fail' and that 'risk perception of barrier failure was blinkered by the positive inflow test [negative test].' The presentation noted that '[f]luid displacements for inflow test [negative test] and well clean up operations are not adequately covered in our well control manual or adequately cover displacements in under balanced operations.' It concluded with a slide titled 'Are we ready?' and 'WHAT IF?' containing the bullet points: '[h]igh vigilance when reduced to one barrier underbalanced,' '[r]ecognise when going underbalanced—heightened vigilance,' and '[h]ighlight what the kick indicators are when not drilling.' (p. 124)

Transocean sent out an "operations advisory" using what the commission described as "less pointed and vivid" language than in the PowerPoint to its fleet in the North Sea. However, the commission quotes Transocean as conceding that neither the advisory or PowerPoint made it to Deepwater Horizon. In a fairly bold act of discounting awareness, Transocean took issue with suggestions that informing the Deepwater crew might have made people more cautious about the test barriers, possibly averting the disaster. Transocean argued that a different test barrier was

involved in the North Sea, but the commission found that the differences are “cosmetic” and wrote, “The basic facts of both incidents are the same. Had the rig crew been adequately informed of the prior event and trained on its lessons, events at Macondo may have unfolded very differently” (p. 125). The heavy editing of the advisories and restricted flow suggests the circulation of these types of alerts within a company would be useful for further development of closed awareness as a spectrum when applied to organization culture.

### **Achieving Situational Awareness**

Situational awareness is a term most immediately associated with military operations but has spread to aeronautics and other fields. In essence, it is knowledge of what is going on in a given situation and what some of the moving issues might be. Former Secretary of Defense Donald Rumsfeld, in speaking to the presidential commission on 9/11, described himself as eager to establish “situational awareness” upon learning of the attacks on 9/11. The term is used frequently in the reports to describe the challenges of orienting to the fast-changing crises of 9/11 and Katrina. The word is probably used in these documents and not the other two because of the immense difficulties gaining situational awareness in the midst of the attacks and hurricane and the subsequent chaos in which thousands of people were thrown and lost lives. In the case of Katrina, there is a direct link between the everyday pre-crisis practices abridging awareness across the agencies involved and what happened when the hurricane struck. Failed infrastructure, including massive power outages, dwindling supplies, uncertainty about chains of command, equipment that did not work and paralyzed leadership all contributed to the delays understanding what was going on, sometimes for days. The report observes:

Without sufficient working communications capability to get better situational awareness, the local, state, and federal officials directing the response in New Orleans had too little factual information to address—and, if need be, rebut—what the media were reporting. This allowed terrible situations—the evacuees’ fear and anxiety in the Superdome and Convention Center—to continue longer than they should have and, as noted, delayed response efforts by, for example, causing the National Guard to wait to assemble enough force to deal with security problems at the Convention Center that turned out to be overstated. (p. 171)

As a concept, situational awareness helps switch the context from everyday routines to the live event, where the context now expands to multitudinous actors and scenarios; beating the clock also becomes a factor. Situational awareness can be conceptualized as having two distinct phases: the initial jolt of disruption and immediate need for information triage in which people must obtain, verify, and evaluate information they must accept or discount; and action thresholds—the point at which people, their awareness limited, may need to take a leap of faith or risk death. These phases can cycle out within minutes. Tentatively I have conceptualized a third phase, opening awareness, which would encompass the continual response to the crisis and aftermath. It might be that the commissions assembled to create reports are part of the opening of awareness longterm. The proposition here is not that all would be transparent. Awareness is recalibrated to move to a new level of

response, though there is no guarantee the pre-crisis awareness context would change much. In fact, the commission reports contain a lot of material suggesting that the agencies involved had failed to learn from past lessons or were slow to implement them. However, conceiving of situational awareness as a cyclical subcore helps link the pre-crisis context, the immediate crisis and aftermath.

A few examples from the crises provide indicators to explore situational awareness unfolding. The Sago Mine disaster was especially painful for the country to witness. At one point after families had waited anxiously to hear whether the miners had been rescued, the governor and media reported that all but one of the 13 miners, who had been trapped, had survived. But the celebrations were short-lived. There had been a communication mix up: only one of the 13 miners survived. The so-called “fog” associated with war impedes awareness in these early moments. Stories from 9/11 of people attempting to evacuate the towers but being told to remain in place are indicators of the confusion and misdirection that makes verification so difficult.

The 911 system remained plagued by the operators’ lack of awareness of what was occurring. Just as in the North Tower, callers from below and above the impact zone were advised to remain where they were and wait for help. The operators were not given any information about the inability to conduct rooftop rescues and therefore could not advise callers that they had essentially been ruled out. This lack of information, combined with the general advice to remain where they were, may have caused civilians above the impact not to attempt to descend, although Stairwell A may have been passable. (National Commission on Terrorist . . . , 2004, p. 295)

Escalating contingency explains the ways in which the limited amount of awareness is outstripped by the fast pace of events. Those people in the midst of disaster often found themselves replacing one unworkable plan with another that was too little too late. Yet also in need of better understanding are the action thresholds that cause some people to move forward. Some of the risk—running in the same direction of the rest of the crowd as people did during the 9/11 attacks, going back into the mines to save brother miners—are instinctual and hence easier to explain. But situations where people are paralyzed by inaction for stretches of time need closer examination. From Katrina, we know that there was much procrastination and desperation as people realized they were on their own as the floodwaters rose. At hospitals where the elderly and informed had limited mobility, hospital staff had to make the difficult decision to simply leave the sickest to die. The commission reports include examples of heroism and personal initiative such as the doctor who, with help from police, broke into a pharmacy to get medicine to help victims. But, much of the Katrina story is one of tragedy that many people in government let happen due to the closed awareness context they built.

### **Awareness Context as Culture**

Awareness contexts make up the culture of organizations, revealing how such entities communicate within and outside of their walls. The communication patterns

are deeply embedded and difficult to steer in counter directions. Unlike the medical professionals in the hospital observed by Glaser and Strauss, knowledge blackouts, or the process of often do not know what they do not know or need to know. Many are also incompetent, vacating accountability with the assistance of the organizational structure. Rather than a strictly closed system, the pretense type of awareness identified by Glaser and Strauss (1964, 1965) is worth exploring to capture the ways in which people perpetuate knowledge gaps willingly. These steps are among my next course of action. Any organization would have a business-as-usual awareness context that could be mapped, particularly around crisis or less threatening disruptions. Yet, its history aside, the awareness context would need to earn its way anew.

This article is an attempt to share some ongoing work on awareness processes, and more immediately an effort to suggest that the awareness context is underutilized and rich for development. Grounded theorists and researchers in general often delay projects for want of data. Increasingly, government websites make available reports and inquiries of high-profile disasters and other crises; these reports could be useful for any number of projects. The large numbers of documents that exist on various topics lend themselves to solo or group projects. Imagine an international team of grounded theorists taking on a topic and coming up with a theory with grab that sets the world straight on a public problem. That is a flight of fantasy to some degree, but I use it to suggest that our toolbox can bring a lot of light, awareness, out there.

### References

- Ekins, R. (1997). *Male femaling: A grounded theory approach to cross-dressing and sex-changing*. New York, NY: Routledge.
- Glaser, B. G. & Strauss, A. L. (1964). Awareness contexts and social interaction. *American Sociological Review*, 29, 669-679. doi:10.2307/2091417
- Glaser, B. G. & Strauss, A. L. (1965). *Awareness of dying*. Chicago, IL: Aldine Publishing.
- Martin, V. B. (2008). Attending the news: A grounded theory about a daily regiment. *Journalism: Theory, Practice & Criticism*, 9, 76-94. doi:10.1177/1464884907084341
- Martin, V. B. (2011). The Power of and Enduring Concept. In V. Martin & A. Gynnild (Eds.), *Grounded Theory: The Philosophy, Method, and Work of Barney Glaser* (pp-297-308). Boca Raton, FL: Brown Walker Press.
- Nathaniel, A. & Andrews, T. (2010). The modifiability of grounded theory. *The Grounded Theory Review*, 9(1), 65-67. Retrieved from <http://groundedtheoryreview.com>

- National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling. (2011) *Deepwater: The Gulf oil disaster and the future of offshore drilling*. Retrieved from <http://www.gpo.gov/fdsys/pkg/GPO-OILCOMMISSION/pdf/GPO-OILCOMMISSION.pdf>
- National Commission on Terrorist Attacks on the United States. (2004). *The 9/11 Commission Report*. New York, NY: Norton. Retrieved from <http://www.9-11commission.gov/report/911Report.pdf>
- Select Bipartisan Committee to Investigate the Preparation for and Response to Hurricane Katrina. (2006). *A failure of initiative: The final report of the select bipartisan committee to investigate the preparation for and response to Hurricane Katrina*. Retrieved from [http://katrina.house.gov/full\\_katrina\\_report.htm](http://katrina.house.gov/full_katrina_report.htm)
- United States Department of Labor/Mine Safety and Health Administration. (2007). *Report of investigation. Fatal underground coal mine explosion. Jan 2, 2006, Sago Mine*. Retrieved from <http://www.msha.gov/FATALS/2006/Sago/sagoreport.asp>
- Vaughan, D. (1997). *The challenger launch decision: Risky technology, culture, and deviance at NASA*. Chicago, IL: The University of Chicago Press.



## **A Novice Researcher's First Walk Through the Maze of Grounded Theory: Rationalization for Classical Grounded Theory**

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### **Abstract**

Being new to grounded theory the onus to understand the methodology and the various versions can be daunting. Learning and understanding the differences between grounded theories methodologies can be as much a learning of one's own research philosophy and this philosophy is often the deciding factor in methodology selection. Learning the different methodologies is a difficult journey as terminology often sounds similar to the novice researcher, but only by exploring the differences can the researcher rationalize their own choice. This paper offers the new researcher a view into the confusing world of grounded theory, where common terms are used but the secret lies in understanding the philosophy of the researcher and the topic of discovery. Glaser was correct, the answer is in the data, but you need to understand the philosophy of the method and if it matches your philosophy of research.

### **Theoretical Framework**

Grounded theory, developed by Barney Glaser and Anselm Strauss in the early 1960s, is a methodology for inductively generating theory (Patton, 1990). Glaser's definition of grounded theory is "a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area" (Glaser, 1992, p. 16). While this definition is accepted by researchers, the approach and rigor in the data collection, handling and analysis created differences between Glaser and Strauss. Strauss developed a more linear approach to the research methodology (Strauss & Corbin 1990). Grounded theory is not new to business research and Mintzberg emphasized the importance of grounded research for qualitative inquiry within organization settings:

"measuring in real organizational terms means first of all getting out, into real organizations. Questionnaires often won't do. Nor will laboratory simulations... The qualitative research designs, on the other hand, permit the researcher to get close to the data, to know well all the individuals involved and observe and record what they do and say" (Mintzberg, 1979, p. 586).

As grounded theory became more popular for researchers, the substantial divide between the creators of the methodology was apparent. The two original authors reached a diacritical juncture on the aims, principles, and procedures associated with the implementation of the method. Two paths emerged, and these are marked by Strauss and Corbin's 1990 publication, *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, to which Glaser responded harshly with accusations of distortion of the central objectives of parsimony and theoretical emergence (Glaser, 1992). Glaser's views were supported by other grounded theory researchers who agreed that the late Strauss' 1990

publication was an erosion of the original 1967 methodology (Stern, 1994). During the years since the opening of the debate on grounded theory, a number of researchers have firmly supported the classic grounded theory methodology CGT (Bowen 2005; Clark & Lang 2002; Davis 1996; Efinger, Maldonado & McArdie 2004; Holton 2007; Schreiber 2001).

Various scholars have put forward a range of strategies and guidelines for the coding process (Charmaz 2006; Goulding 2005; Partington 2002; Patton 2002; Strauss & Corbin 1990, 1998). The process and methods for coding have created the highest level of debate for users of grounded theory. Some researchers have combined quantitative and qualitative forms of data collection when using grounded theory. And while nothing prohibits such combination, the purpose needs to be clear, otherwise a muddling of the methodology will occur (Baker, West & Stern 1992; Wells, 1995). While the coding process is an important part of grounded theory, over-rigid structures can create blocks that limit the researcher's ability to complete the analysis (Glaser, 1978; Katz, 1983). These changes in coding go much deeper than just a coding process, they are a departure from the core elements of CGT and this paper looks at how these differences impact the researcher.

Fernandez (2012) identified four different grounded theory models: CGT (Glaser 1978), the Strauss and Corbin (1990) qualitative data analysis (QDA) sometimes referred to as the Straussian grounded theory, the constructivist grounded theory (Charmaz, 2000), and the feminist grounded theory (Wuest, 1995). While less known variants of grounded theory exist, these are considered the main grounded theory methodologies widely used in academic research.

Gynnild (2011) is critical of a number of how to grounded theory books for committing theory slurring making "non-systematic switching between references to Strauss/Corbin, Glaser and Charmaz...a rather diffuse method of skip and dip when collecting data" (Gynnild, 2011, p. 64). This has increased the confusion for the novice user of grounded theory. Tolhurst (2012), in reviewing the grounded theory methods, "skips and dips" to develop a view without explaining the actual differences between methods. His final analysis did not add clarity, but furthered the confusion by referring to the method as tortuous with no alternative methodology. Egan (2002) also "skips and dips" between CGT and Straussian theory, scarcely making reference to the difference, leading the reader to believe they follow a similar path of data analysis. Martin (2011) noted that numerous published works presented as grounded theory have been guilty of method mixing or method slurring. Stern and Porr (2011), in defence of critics of their book *Essentials of Accessible Grounded Theory 2011*, argued that, unlike others, any modification they put forward never departed from the core elements found in the traditional Glaser and Strauss (1967) grounded theory. They stated that they had adhered to the "four fundamental principles (Discovery never verification, explanation never description, emergence never forcing and the matrix operation)" (Stern & Porr, 2011:88).

Simmons (2011) believes that greater distinction needs to be made between CGT and constructivist grounded theory, and that while Stern and Porr (2011) may have adhered to some of the basics of grounded theory, they failed to effectively draw the differences between the methodologies. In 2004, Glaser put forward a number of concerns about some

of the re-modelling that had taken place with what is termed qualitative data analysis (QDA). Glaser asserted that the mixing of QDA and grounded theory methodologies had the effect of downgrading and eroding the goal of conceptual theory (Glaser, 2004, 2009b, 2012b). Conceptualization blocking by applying QDA constraints continues to be the most common complaint of grounded theory researchers (Glaser, 2011). Glaser (2009b) explains in detail how QDA and multiple versions of grounded theory have jargonized elements of CGT to achieve authenticity. A strong advocate of CGT, Simmons (2010, 2011) is critical of any mixing of grounded theory methodologies. An alternative is to remain true to the original work of 1967, with Glaser's subsequent work (1978, 1992, 1998a, 1998b, 2001, 2004, 2007, 2009a, 2009b, 2011, 2012a).

A more effective process is to view the different types of grounded theory methods and to select the one that best fits the researcher (Fendt & Sachs 2008). It is important to understand the impact of different research methodologies and how the researcher views the world. Howell (2013) recognizes the importance of the combined philosophy of the researcher and the methodology and highlights this in the following statement: "When we undertake a research project we approach the world with pre-conceptions about the relationship between mind and external reality; such will affect the methodological approach, research programme and methods of data collection" (p. 4). The following explores four of the most cited forms of grounded theory, how their views differ on the application of grounded theory, and, ultimately, a rationale for the selection of CGT. To aid the novice research this paper reviews the four main categories of grounded theory and uses the scholarly works of experienced researchers to position the differences.

#### Feminist grounded theory

Feminist grounded theory was developed initially for nurses in recognition of the andocentric bias and to ensure that women's voices were heard in the research community (Wuest 1995). Wuest overlays feminist theory onto the CGT, the Straussian, and the constructivist grounded theory, advocating that "[g]rounded theory is consistent with the postmodern feminist epistemology in the recognition of multiple explanations of reality" (Wuest, 1995, p. 127). No preference is stated towards the Straussian, CGT, or constructivist grounded theory methodologies. Wuest selects methodological elements from all three grounded theories to put forward the importance of merging with feminist theory. Wuest states that "[f]eminism is not a research method; it is a perspective that can be applied to a traditional disciplinary method" (1995, p. 129). The feminist grounded theory has been widely accepted as a method of research ideally suited to the nursing profession, and grounded theory is enriched by taking a feminist perspective when the research is based on women (Plummer & Young, 2010).

#### Classic grounded theory (CGT)

The CGT grounded theory methodology has its grounding in the original work of Glaser and Strauss (1965, 1967). They provided some guidance for evaluation of the empirical grounding of a grounded theory. This can be summarized as follows:

*(1) Fit – does the theory fit the substantive area in which it will be used?*

- (2) *Understandability* – will non-professionals concerned with the substantive area understand the theory?
- (3) *Generalizability* – does the theory apply to a wide range of situations in the substantive area?
- (4) *Control* – does the theory allow the user some control over the "structure and process of daily situations as they change through time"? (Glaser & Strauss, 1967, p. 237)

There are two types of coding in CGT: substantive coding and theoretical coding, with the former preceding the latter. Some authors refer to the substantive CGT as having sub phases of open and selective (Hernandez & Andrews, 2012; Walker & Myrick, 2006). Holton (2007) summarizes the substantive coding process as follows:

"In substantive coding, the researcher works with the data directly, fracturing and analyzing it, initially through *open coding* for the emergence of a core category and related concepts and then subsequently through theoretical sampling and *selective coding* of data to theoretically saturate the core and related concepts" (p. 265).

The constant comparative process involves three types of comparisons: (1) incident to incident for the emergence of concepts, (2) concepts to more incidents for further theoretical elaboration, saturation, and densification of concepts, and (3) concepts to concepts for their emergent theoretical integration and through theoretical coding (Glaser & Strauss, 1967; Holton, 2007). "All is data" is a well-known Glaser dictum. It means that all research is considered data, unlike QDA which has a specific descriptive structure. The grounded theory researcher needs to compare the data on as many dimensions as possible. Grounded theory researchers take into account all data, including newspaper articles, questionnaire results, social, structural and interactional observations, interviews, casual comments, global and cultural statements, historical documents, whatever is available that allows the researcher to explore all aspects of the theory. Grounded theory produces abstractions not descriptions (Glaser, 2007).

The memoing process helps the researcher determine which of the theoretical codes provides the best relational model to integrate substantive codes to theoretical codes (Hernandez, 2009). Theoretical memos capture the "meaning and ideas for one's growing theory at the moment they occur" (Glaser, 1998a, p. 178). Glaser does not support having different types of notes, as put forward by Strauss and Corbin (1990); in his view this limits the development of the theory. The use of field notes and coding freedom are key elements of CGT. Field notes allow the researcher to "stay focused on what is really happening and facilitates coding on a higher conceptual level without the distraction of endless descriptive and superfluous detail" (Glaser, 2011, p. 55). The constant comparison allows the core category to emerge and, unlike the Straussian and constructivist grounded theory, the CGT view is that this core then becomes a focus for the literature review and further selective data collection (Glaser, 2011). For CGT, field notes "form the basis for the construction of memos, memos play a key role in the development of the theory" (Montgomery & Bailey, 2007, p.76). Using CGT, there is no one set format in the design of field notes and they may change in format as the research develops (Glaser, 2011).

Theoretical coding occurs as the final stage “to conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into the theory” (Holton, 2007, p. 255). For many researchers, the challenge in grounded theory is the ability to get conceptual, being close to the data can cause blurring and difficulty in seeing the theoretical patterns (Scott, 2009). “Theoretical codes conceptualize how the substantive codes may relate to each other as hypotheses to be integrated into the theory” (Glaser, 1978, p. 164). Substantive codes break down (fracture the data) while theoretical codes “weave the fractured story back together again [into] an organized whole theory” (Glaser, 1978, p. 165). Theoretical codes are either implicit or explicit but, whether implicit or explicit, their purpose is to integrate the substantive theory (Glaser, 2005).

Theoretical saturation is achieved by the constant comparison of incidents in the data to elicit the properties and dimensions of each category or code. Riley (1996) stated that most studies achieve saturation with between eight and 24 interviews, depending on the topic focus. While it is dangerous to provide specific numbers in the development of a saturation point, it is a guideline in a methodology that has often developed over-rigid rules for judging the credibility of grounded theory products (Skodol-Wilson & Ambler-Hutchinson, 1996). In evaluating the credibility of the theoretical sampling, it is important that the researcher understands that there is no definitive checklist for ensuring credibility and that theoretical sampling will be different for every theory (Breckenridge & Jones, 2009).

A difference between Straussian theory and CGT is in the use of literature. CGT believes “More focused reading only occurs when emergent theory is sufficiently developed to allow the literature to be used as additional data” (Heath & Cowley, 2004, p. 143). Heath (2006) found delaying the literature was effective in allowing her to use past literature to challenge as well as support her emergent theory. Christiansen (2011) put forward that if the researcher cannot accept the delaying of the literature review process during the research, they should choose another research method. To be true to theory development and effective use of literature it should not occur at the beginning of the study, for those who advocate a pre-study literature review they should understand it will damage the research by creating early closure to the direction, by misleading the direction to follow, and it may in itself be an inappropriate selection of literature (Hickey, 1997). The literature review process is one of the starkest differences of CGT when compared to the Straussian and constructivist grounded theories. Following the CGT methodology allows the researcher to use existing theory to “challenge emergent theory and locate the emergent theory within the current body of knowledge” (Heath, 2006, p.527).

A common problem during the write-up stage is to write description vs. abstract, which is often a result of data overload (Glaser, 2012a). Glaser (2012a) suggests that memo sorting is a key part of the writing process and that a memo can range from a trigger word to several pages.

The final hurdle for many grounded theory researchers is that they must have the ability to be aware of their own personal bias throughout the research process through reflexivity. Dedy (2011) points out that part of the richness of the experienced researcher is the knowledge gained in the field of expertise. CGT researchers need to ask themselves

the questions: "What perspective do I represent?" and "How may this perspective influence my reading? And how should I factor it out?" (Deady, 2011, p.51). Ehigie and Ehigie (2005) state that the interviewer must be knowledgeable about the topic and be able to relate to the participants in terms of language – using vocabulary normally used within the sector being studied. The interviewer must also know when it is necessary to probe deeper, get the interviewee to elaborate, or broaden the topic of discussion. Having knowledge in a topic does not mean having preconceived ideas. To do research in nursing it helps to understand the issues related to nursing, just as in business it helps to have a business background when dealing with business research. Glaser (2011) never questioned the ability of the researcher to have knowledge, but rather to stay open and ensure the inductive process is allowed to work effectively. Neither Glaser nor Strauss ever made "a claim of pure objectivity; it is merely a statement regarding maximizing objectivity to the extent possible. This is what classical grounded theory was designed to accomplish" (Simmons, 2011, p. 75).

CGT places induction as a key process with deduction occurring on emerging questions and patterns, allowing a movement from generalization to theory. CGT has what is defined by Glaser (1978, 1992) an inductive-deductive mix. The Straussian approach puts more emphasis on deduction and verification, often leading the researcher away from the data and into following prior research and knowledge which reduces the effectiveness of the research (Heath & Cowley, 2004; Rennie, 1998). Glaser (2009a) put forward that CGT allows the generation of a hypothesis that can be later tested using qualitative or quantitative measures, but the researcher does not formulate any hypothesis in advance of the research, whereas the Straussian approach "argues that an empirically grounded theory is both generated and verified in the data" (Hallberg, 2006, p. 143). After comparing CGT and Straussian theory, Rennie (1998) concluded that "Glaser's procedures are the most consistent with the objectives of the method" (p. 101). Elizondo-Schmelkes (2011) used CGT to develop her theory of authenticating incorporating descriptions from interviews as backup to the categories that she discovered during her research. While the process and steps may seem daunting at first Glaser has written extensively on grounded theory procedures (Glaser, 1978, 1992, 1993, 1994, 1995, 1998a, 1998b, 2001, 2004, 2007, 2009a, 2009b, 2011, 2012a.)

The CGT as put forward by Glaser (1978, 2002, 2007, 2011) stays true to the original concepts put forward by Glaser and Strauss (1967) and all other methods have serious flaws that distract from the goals of grounded theory. Deady (2011) selected CGT for its combination of rigour and flexibility in how it incorporated the literature review into the data analysis and, unlike other grounded theory models, allowed the researcher freedom to develop their own memoing process. Many supporters of CGT see the methodology as offering the greatest amount of freedom in the development of substantive theory (Deady, 2011; Loy, 2011; Simmons, 2011). When looking at the future of grounded theory, Glaser sees expansion of theory bits or parts of what makes up a substantive theory that will be used to describe a situation or to tell part of a story, i.e. the group is superdiversifying, or cultivating each bit giving a meaning to actions or stories. The researcher will need to continue to point out that theory bits are only part of the substantive theory and that part of good grounded theory is that the theory bits are the beginning of

more research (Glaser, 1999). Glaser also points out that CGT is only part of the research tools available; it is not intended to replace other forms of research but adds a valuable complement to the research community.

### Straussian Grounded Theory

Strauss and Corbin's (1990) book *Basics of Qualitative Research: Grounded Theory Procedures and Techniques* took a prescriptive position for grounded theory. The main changes they incorporated were to the coding structure adding more procedures on how to code and structure the data. This method is often referred to as Straussian grounded theory. They used a three stage coding methodology of open coding, axial coding, and selective coding. While based on the concepts of Glaser and Strauss (1967), the Straussian methodology has proven too difficult for most researchers and doctoral students to follow and most revert back to the less prescriptive CGT approach (Partington, 2000). Corbin and Strauss (1990) put forward eleven basic procedures to follow in the development of their method as follows:

1. *Data collection and analysis are interrelated processes.*
2. *Concepts are the basic units of analysis.*
3. *Categories must be developed and related.*
4. *Sampling in grounded theory proceeds on theoretical grounds.*
5. *Analysis makes use of constant comparisons.*
6. *Patterns and variations must be accounted for.*
7. *Process must be built into theory.*
8. *Writing theoretical memos is an integral part of doing grounded theory.*
9. *Hypotheses about relationships among categories are developed and verified as much as possible during the research process.*
10. *A grounded theorist need not work alone.*
11. *Broader structural conditions must be brought into the analysis, however microscopic in focus is the research (pp. 419–422).*

These procedures allow the researcher to understand more clearly the differences between Straussian and CGT beyond just the coding methods. At the highest level they would appear very similar; however, taking a more detailed review of each heading, the major differences are in points four, nine and 11. CGT would argue point 4, *Sampling in grounded theory proceeds on theoretical grounds*, creates a preconceived bias. While both support sampling based on theoretical grounds, Corbin and Strauss (1990) support the concept that the researcher brings the idea of the phenomenon to be studied; alternatively the CGT would insist that it should come from the data and not be initiated by the researcher.

Goulding (1999) identifies the need for flexibility in some aspects of grounded theory. No researcher starts with a totally blank sheet. In fact, the body of knowledge is key to the development of new theories. The art lies in finding a balance between all aspects of data collection that allow the researcher to develop their themes without prejudice or preconceptions. Glaser (2011) argues that the obsession with this point of preconceptions is a misunderstanding of the importance of the inductive process. CGT

supports the use of both literature and what can be brought by other theories, but not until the data has had the opportunity to direct the researcher (Glaser, 2011).

Point nine sees a substantive separation between Straussian theory and CGT, where the process for verification takes a very different path for the two methods.

The Straussian approach is more structured, leading to a much more rigid coding structure for analysis. It also has its emphasis on deduction, verification and validation. What at first glance may appear more structured and therefore easier, on investigation the method put forward is actually more complex, with the use of tools, paradigms, and matrices beyond the constant comparative method offered within CGT. Glaser (1992) put forward that the Straussian approach is not a modification to grounded theory, but a whole new approach and should not be confused with grounded theory. Rennie (1998) sees Straussian grounded theory as introducing hypothetico-deductivism to grounded theory based on instrumentalism, whereas CGT insists on an inductive approach and that the method should only lead to theory and not to verification.

Lastly, for point 11, *broader structural conditions must be brought into the analysis, however microscopic in focus is the research*, again we see a much more step by step structured process, where CGT would argue that the broader conditions would be reflected in the data (Strauss & Corbin, 1998; Glaser, 2001). In their methodology, Strauss and Corbin argue that their coding methods provide an aid to the researcher, moving the research from too much focus on induction and towards a more balanced method that encompasses induction, deduction, and verification.

While both CGT and Straussian grounded theory use a comparative method in the use of literature as data, the Straussian approach uses the literature in the early stages of research to develop theoretical sensitivity and the generation of hypotheses (Heath and Cowley, 2004). Heath and Cowley also highlight that while a shared ontology exists between CGT and Straussian theory, "there may be slight epistemological differences" (p. 142). These differences are often misunderstood by the novice researcher as both state they strive for similar results, but the coding process which is often cited as the primary difference has at its root a different philosophical use of induction, deduction, and verification (Heath & Cowley, 2004).

Glaser (1978) uses the term substantive (open) coding as a way to develop a set of categories and their properties that are "relevant for integrating into a theory" (Glaser, 1978, p. 56). For Glaser (2011), the process is an inductive process and the emergence comes directly from the data. Strauss and Corbin (1990) also use the term "open coding" but the emphasis of conceptualizing and categorizing the data may be predetermined and while partially from the data it can equally come from the researcher. Axial coding is unique to Strauss and Corbin as an addition to the CGT and is defined as "a set of procedures whereby data are put back together in new ways after open coding, by making connections between categories. This is done by using a coding paradigm involving conditions, context, action/interactional strategies and consequences" (Strauss & Corbin, 1990, p. 96). Kendall (1999) cites the difference in the concept of open coding and the inclusion of axial coding as



a key differentiation between CGT and Straussian grounded theory. In conclusion of her analysis, Kendall (1999) agrees with Glaser (1992) that the use of paradigm and axial coding is inconsistent to the purpose of grounded theory to generate a substantive theory and that the Straussian method allows an escape for those struggling with the conceptual difficulties of CGT.

Neill (2006) put forward an argument that reflexivity/reflection are an important part of the data analysis as long as it does not become a distraction from the data. Reflection can be an important part of the comparative process. Glaser (2001) was wary of too much dependence on reflexivity and warned researchers to be careful that they don't lose focus. The use of reflexivity and relationality is credited to Strauss and Corbin (1998) and is not seen as part of CGT. Hall and Callery (2001) argued that the inclusion of reflexivity and relationality is an important part of the validation and rigor of Straussian grounded theory, but that it has been misused by the constructivist approach.

### Constructivist Grounded Theory

Constructionism has its beginning in sociology – how observations form an accurate reflection of the world – and has recently had a profound impact on researchers who select grounded theory as their methodology of choice (Andrews, 2012). Andrews (2012) is critical of Charmaz (2000, 2006) who has led the debate on the use of constructionism, stating that she's used the terms "constructionism" and "social constructionism" interchangeably without adequately explaining the differences – that one has an individual focus and the other a social focus on the world.

At the root of the constructivist theory is the belief that concepts are constructed, not discovered as put forward by Glaser (2002). For the constructivist, you begin with specific questions on a particular substantive area; in contrast, the CGT starts with a desire to know more about a substantive area but has no preconceived questions prior to the study (Hernandez & Andrews, 2012). Similar to the Straussian grounded theory, constructivist grounded theory begins with a review of the literature to determine what has been done before in the area of interest. This difference in the timing and approach to literature is a key difference found in both the constructivist and Straussian approaches (Hernandez & Andrews, 2012). Glaser (1978, 2011) points out that CGT allows the data to be developed without preconceived ideas and will integrate previous work during the comparative analysis. Andrews (2012) puts forward that the main argument against constructionism is in the perceived conceptualization of realism and relativism and that the argument has an "epistemological not an ontological perspective" (Andrews, 2012, p. 44).

CGT is less focused on language as a method of interpretation but can coexist with a constructivist view that supports both objective and subjective reality. The CGT is not compatible to relativism (Andrews, 2012; Glaser, 2011). This has been a core of the debate between Charmaz and Glaser (Charmaz, 2000; Glaser, 2002, 2012b). The argument that constructivist grounded theory compensates for the single minded view is unjustified to CGT advocates who highlight that CGT focuses on a single concern of study (i.e. culture). They argue that the value of grounded theory is not on producing and verifying facts, but is in

generating concepts that will have different meanings to different people, and that the final theory is open to modification and new data (Breckenridge & Jones, 2012).

Bryant (2003), a supporter of and co-author with Charmaz (Bryant & Charmaz 2007), sees constructivism methodology as seeking to deal with the conflict of potential bias of the researcher and not a direct attack on the philosophy of grounded theory. Constructivist theory sees Glaser as an objectivist and CGT (including Straussian) as a "post-positivist ontology of critical realism" (Hallberg, 2006, p. 146). Hallberg (2006) saw the constructivist development of grounded theory as more of the evolutionary development of grounded theory, from CGT in the 1960s, to Straussian in the 1990s, to the constructivist model in the 2000s, an approach between positivism and postmodernism. Howell 2013 points out that for the constructivists "Knowledge, truth, reality and theory are considered contingent and based on human perception and experience" (p. 16). Each methodology comes with a philosophy which impacts the mindset and all aspects of how a methodology is used down to the method of coding (Howell, 2013).

The coding process for constructivist grounded theory uses three types of coding: open, focused, and theoretical. This is compared to CGT where two levels of coding exist, substantive and theoretical, and Straussian with its axial and selective coding. While the terminology may be similar, the definitions of what is termed "theoretical" coding is very different. For the constructivist approach, theoretical coding is the merging of concepts into groups. This happens throughout the process, whereas for the CGT the theoretical coding is part of the selective process used to integrate the grounded theory (Hernandez & Andrews, 2012). Bringer, Johnston and Brackenridge (2006), advocates of constructivist grounded theory, explain in detail how it is possible to use the constructivist method to code the variables into NVivo software. In the development of the article, Bringer, Johnston and Brackenridge make selective references to Glaser (1978), Strauss and Corbin (1990), and Charmaz (2000) to try to illustrate their use of grounded theory. As stated earlier, the combination of these different methods is referred to as method slurring and tends to erode the quality of the research instead of enhancing it (Simmons, 2011).

Cupchik (2001) put forward that constructivist realism "demonstrate[s] the complementary roles played by quantitative and qualitative methods in the analysis of social phenomena" (p. 10). Glaser (2012b) stated that Charmaz and other constructivists were doing qualitative data analysis (QDA) and that the use of such methodologies completely subverted all the principles of grounded theory. He argued that researchers who use a constructivist approach are doing QDA and not grounded theory, and while it may appeal to those who like the QDA conceptual description method, it is a total erosion of CGT (Glaser, 2012b). Hernandez and Andrews (2012) are more generous in their final analysis, stating that the final difference in the product is that constructivist grounded theory creates a descriptive theory, whereas CGT is an explanatory theory.

Bryant (2009), seeing that the disputed differences between CGT, Straussian theory, and constructivist theory was likely to continue, took a pragmatic approach. He felt that the many issues could be put aside if the researchers remembered the core objective of research: "The epistemological issues that separate different strands, or branches of the

GTM family, can then be set to one side provided that people's research writings do not seek to make strong epistemological claims: the ultimate criterion of good research should be that it makes a difference" (p. 32).

If researchers accept that both Straussian and constructivist forms of grounded theory are forms of QDA, then it is not surprising that these forms of grounded theory have closer relationships to software programs that are more structured in nature. In reviewing potential computer-assisted qualitative data analysis software (CAQDAS) tools, it became evident that either a Straussian or constructivist revision of grounded theory was being applied. Welsh (2002), who is experienced in the use of software, warns researchers to take care that their research does not get driven by the attributes of the software, creating codes that add little or no value to the analysis of the data.

### **Rationale for Selection of Classical Grounded Theory Methodology**

The purpose of this author's research was to review boards, their structure and leadership, to determine the impact of culture on the functionality of the board. Goethals, Sorenson and Burns (2004) identified CGT as the best suited methodology for the study of leadership. They acknowledged that other versions of grounded theory exist but argued that the core elements, as initially put forward by Glaser and Strauss (1967), offered an excellent process to study the influence between people and leadership processes. The methodology is not guided by a theoretical perspective, and one of its strengths is its flexibility. Martin and Turner (1986) identified the characteristics of the CGT as an effective tool in the study of organizations. They argued that as an inductive theory, discovery methodology could lead and facilitate desirable improvements in the workplace. Deady (2011), a user of CGT, found "other methodologies tended to have gate-keeping rules to prevent use of casual or serendipitous observations" (p. 43). Deady went on to argue that the CGT method allows the literature review and researcher bias to become just another variable, without placing an unnecessary structure on the data. Unlike the QDA approach which has a fixed method of coding and memoing, the CGT process allows the researcher to be flexible in their memoing process and leads to greater theoretical completeness (Deady, 2011). Heath and Cowley (2004) have pointed out that qualitative research using grounded theory is a "cognitive process and that each individual has a different cognitive style. A person's way of thinking, and explanation of analysis, may seem crystal clear to someone with a similar cognitive style and very confusing to another person whose approach is different" (p. 149). The selection of the methodology is always a difficult task for the researcher who must be aware of "what is the relationship between the world thought the researcher, the researched and the issue under investigation?" (Howell, 2013, p. 14). For the researcher it is important to have a full understanding of the philosophy that the research method puts forward and to select the one that best suits all aspect of the study (Howell, 2013).

Each of the grounded theories discussed have merit and arguments could be put forward for each of the processes, but for this research the best approach that matches the goals of the research, as well as the cognitive style of the researcher, is the CGT approach. All researchers who consider grounded theory need to determine which type of grounded

theory best suits their purpose. Loy (2011) describes his frustration in researching various versions of grounded theory, including considering the mixing of two methods, before finally reconciling to the use of CGT. His selection of the CGT over both the Straussian and constructivist grounded theories was partly influenced by his exposure to the more detailed works of Glaser and Holton, many which have been cited within this paper.

As this paper demonstrates, there is a large volume of literature available on grounded theory, with many researchers offering to demystify the methodology by stating the fundamental tenets of grounded theory (constant comparative method, theoretical coding, sampling, saturation, and sensitivity) without explaining the differences that exist between methods. O'Reilly, Paper and Marx (2012), with passing comments on the history and splintering of grounded theory, offer excellent reasons for the use of grounded theory and the resulting benefits; but by cross referencing the various forms of grounded theory, they leave the novice researcher confused and no further ahead in understanding which form of grounded theory best suits their research. Much of the research published citing grounded theory does not identify which form of grounded theory is being used, and it is only by following the citations and coding methods that one can clearly distinguish the method used. Much of the "how to" type literature on grounded theory will use terms that are common to more than one type of grounded theory, and it is only by understanding the different grounded theory models that the reader can distinguish which model is being referred to. Draucker, Martsolf, Ross and Rusk (2007) presented a paper entitled "Theoretical Sampling and Category Development in Grounded Theory" which, on review, is only applicable to Straussian grounded theory and would have no place in CGT; both methods discuss theoretical sampling and category development but from very different positions.

The purpose of this paper was not to discredit other forms of grounded theory, but to put forward that CGT was the best fit for the combination of the topic of board culture and the researcher (Author, 2010). The aspects of CGT that created the best fit included the concept that the theory needed to come from the data and that literature review could be viewed as another aspect of the data. The inductive philosophy put forward by Glaser (2011) had direct appeal to this researcher. Walker and Myrick, in their detailed analysis on coding and process, concluded that "maybe it is more about the researcher and less about the method" (2006, p. 558), a sentiment shared by Heath and Cowley (2004), Fendt and Sacks (2008), Bryant (2009), and Fernandez (2012). For the researcher it is not about which method is superior, it is more which one fits both the data and the researcher.

What has been outlined previously within this paper is a discussion of method differences as viewed by various grounded theory scholars. As put forward by Glaser (2011) in describing the teaching of grounded theory, it is important for those using CGT to focus on two aspects of grounded theory: "1. the nature of the area of interest and 2. the extent of the researcher's abilities and talents and temperament to handle initial conceptual confusion" (p. 47). As described earlier, the method of coding is very different for each form of grounded theory. The board culture research successfully completed by this author only considered coding from the perspective of CGT, which is based on induction and has a multi-level application of abstract codes for each line of data. A line of data may be a

recorded transcript, or memos and notes taken by the interviewer, or any other form of data. Glaser defines coding as “conceptualizing data by constant comparison of incident with incident, and incident with concept” (1992, p. 38).

In researching the various versions of grounded theory and having had the opportunity to read volumes of different studies some valuable lessons were learned from the perspective of a novice user of grounded theory. These learnings can be summarized as follows:

1. Understand yourself and how you like to do research. Can you tolerate the lack of clarity at the beginning of the research journey?
2. Take the time to explore the details of the various versions of grounded theory and be constantly aware of signs of method slurring.
3. Approach the how-to grounded theory books with a great deal of caution, many speak the terms but do not walk the talk.
4. Manage your fear that you will end up with lots of interview notes but no theory. (Having had that feeling, it does go away)
5. Trust in the process but stay true to the course. (For those doing CGT, caving in and doing the literature review prior to substantial development of your theory will likely derail a potentially good theory before it has the opportunity to blossom.) The research on culture and boards lucked out in that the researcher was so focused on trying to understand the data when time was allocated to the literature review the board culture theory was taking form and the literature review only re-enforced why the theory was important for future research.
6. If a mentor can be identified, use him/her but ensure that their philosophy is in tune with both the researcher and research area.
7. Don't give up. The eureka moment does come but most experience it when they are close to giving up. Have faith in the CGT process when used as designed it generates fantastic results.
8. Linked to the previous point stay open and remember if you selected CGT it will generate a substantive theory.
9. If using CGT be cautious of software claiming it will aid in your analysis it can act as a block and not an enabler.
10. Finally keep referring back to the '*Fit, Understandability, Generalizability and Control*' as put forward by Glaser and Strauss 1967 it keeps you on track.

With hindsight, the decision to use CGT for board culture research was the correct decision. The focus was to try and understand culture as applied to boards and to use the researchers unique accessibility to the boardroom to determine if by using CGT a new theory could be developed allowing boards to become more effective. The answer was yes.

## References

Andrews, T. (2012). What is Social Constructionism? *The Grounded Theory Review*, 11(1), 39-46.

- Baker, C., West, J. & Stern, P. (1992). Method slurring; the grounded theory/phenomenology example. *Journal of Advanced Nursing*, 17(11), 1355–1360.
- Bowen, G.A. (2005). Preparing a Qualitative Research-based Dissertation: Lessons Learned. *The Qualitative Report*, 10(2), 208–222.
- Breckenridge, J. & Jones, D. (2009). Demystifying Theoretical Sampling in Grounded Theory Research. *The Grounded Theory Review*, 8(2), 113–126.
- Breckenridge, J. & Jones, D. (2012). Choosing a Methodological Path: Reflections on the Constructivist Turn. *The Grounded Theory Review*, 11(1), 64–71.
- Bringer, J.D., Johnston, L.H. & Brackenridge, C.H. (2006). Using Computer-Assisted Qualitative Data Analysis Software to Develop a Grounded Theory Project. *Field Methods*, 18(3), 245–266.
- Bryant, A. (2003). A Constructive/ist Response to Glaser. *Forum: Qualitative social Research Sozialforschung*, 4(1), Art.16. Available at: <http://nbn-resolving.de/urn:nbn:de.0114-fqs0301155>, [Accessed: 5 June 2012].
- Bryant, A. (2009). Grounded theory and pragmatism: The curious case of Anselm Strauss. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 10(3), Available at: <http://www.qualitative-research.net/index.php/fqs/article/viewArticle/1358>, [Accessed: 7 June, 2012].
- Bryant, A., & Charmaz, K. (2007). Introduction to grounded theory research: Methods and practices. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of grounded theory* (pp. 1-28). London, Thousand Oaks, New Delhi: SAGE Publications Ltd.
- Charmaz K. (2000). Grounded theory: Objectivist and constructivist methods. In N. Denzin, & Y. Lincoln, (eds.), *Handbook of Qualitative Research* (pp. 509-535). Thousand Oaks, CA, Sage Publications, Inc.
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: SAGE.
- Christiansen, O. (2011). The Literature Review in Classic Grounded Theory Studies: A methodological note. *The Grounded Theory Review*, 10(3), 21–25.
- Clark, R. & Lang, A. (2002). Balancing Yin and Yang: Teaching and Learning Qualitative Data Analysis within an Undergraduate Quantitative Analysis Course. *Teaching Sociology*, 30(3), 343–360.
- Corbin, J. & Strauss, A. (1990). Grounded Theory Research: Procedures, Canons and Evaluative Criteria. *Zeitschrift fur Soziologie*, 19(6), 418–427.

- Cupchik, G. (2001). Constructivist Realism: An Ontology That Encompasses Positivist and Constructivist Approaches to the Social Sciences. *Forum: Qualitative Social Research*, 2(1), Art.7, 1-12.0 Available at: <http://www.qualitative-research.net/fqs/>, [Accessed: 14 August 2012].
- Davis, L.E. (1996). Learning Qualitative Research: Electronic Learning Circles. *Qualitative Health Research*, 6(3), 453–457.
- Deady, R. (2011). Reading with Methodological Perspective Bias: A Journey into Classic Grounded Theory. *The Grounded Theory Review*, 10(1), 41–57.
- Draucker, C.B., Martsolf, D.S., Ross, R. & Rusk, T.B. (2007). Theoretical Sampling and Category Development in Grounded Theory. *Qualitative Health Research*, 17(8), 1137–1148.
- Efinger, J., Maldonado, N. & McArdie, G. (2004). PhD Students' Perceptions of the Relationship between Philosophy and Research: A Qualitative Investigation. *The Qualitative Report*, 9(4), 732–759.
- Egan, M.T. (2002). Grounded Theory Research and Theory Building. *Advances in Developing Human Resources*, 4(3), 277–295.
- Ehigie, B. & Ehigie, R. (2005). Applying Qualitative Methods in Organizations: A Note for Industrial/Organizational Psychologists. *The Qualitative Report*, 10(3), 621–638.
- Elizondo-Schmelkes, N. (2011). Authenticizing the Research Process. *The Grounded Theory Review*, 10(2), 1–20.
- Evans, G. (2010). Corporate Governance Culture – An Interview-Based Ethnography of Two Boards of Directors Using Grounded Theory. *Poznan University of Economics Review*, 10(2), 15–32.
- Fendt, J. & Sachs, W. (2008). Grounded Theory Method in Management Research: Users' Perspectives. *Organizational Research Methods*, 11(3), 430–455.
- Fernandez, C. (2012). Guest Editorial, Themed Section. *The Grounded Theory Review*, 11(1), 7–28.
- Glaser, B. (1978). *Theoretical Sensitivity: Advances in the Methodology of Grounded Theory*. Mill Valley, CA: Sociology Press.
- Glaser, B. (1992). *Basics of Grounded Theory Analysis: Emergence v Forcing*. Mill Valley, CA: Sociology Press.
- Glaser, B. (1993). *Examples of Grounded Theory. A Reader*. Mill Valley, CA: Sociology Press.

- Glaser, B. (1994). *More Grounded Theory Methodology. A Reader*. Mill Valley, CA: Sociology Press.
- Glaser, B. (1995). *Grounded Theory 1984 to 1994*. Mill Valley, CA: Sociology Press.
- Glaser, B. (1998a). *Doing Grounded Theory. Issues and Discussions*. Mill Valley, CA: Sociology Press.
- Glaser, B. (1998b). *Gerund Grounded Theory: The Basic Social Process Dissertation*. With the assistance of W. D. Kaplan (ed.) Mill Valley, CA: Sociology Press.
- Glaser, B. (1999). The Future of Grounded Theory. *Qualitative Health Research*, 9(6), 836–845.
- Glaser, B. (2001). *The Grounded Theory Perspective: Conceptualization Contrasted with Description*. Mill Valley, CA: Sociology Press.
- Glaser, B. (2002). Constructivist Grounded Theory? *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 3(3), Art.12. Available at: <http://www.qualitative-research.net/fqs-texte/3-02/3-02glaser-e.htm>, [Accessed: 18 July 2012].
- Glaser, B. (2004). Remodeling Grounded Theory. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 5(2), Art.4, 1–22. Available at: <http://www.qualitative-research.net/fqs/>, [Accessed: 18 July 2012].
- Glaser, B. (2005). *The grounded theory perspective III: Theoretical coding*. Sociology Press.
- Glaser, B. (2007). All is Data. *The Grounded Theory Review*, 6(2), 1–22
- Glaser, B. (2009a). The Novice GT Researcher. *The Grounded Theory Review*, 8(2), 1–22.
- Glaser, B. (2009b). *Jargonizing Using the Grounded Theory Vocabulary*. Mill Valley, CA: Sociology Press.
- Glaser, B. (2011). *Getting Out of the Data: Grounded Theory Conceptualization*. Mill Valley, CA: Sociology Press.
- Glaser, B. (2012a). Stop. Write! Writing Grounded Theory. *The Grounded Theory Review*, 11(1), 2–11.
- Glaser, B. (2012b). Constructivist Grounded Theory. *The Grounded Theory Review*, 11(1), 28–38.
- Glaser, B. & Strauss, A. (1965). Discovery of Substantive Theory: A Basic Strategy Underlying Qualitative Research. *The American Behavioral Scientist*. 8(6), 5–12.
- Glaser, B. & Strauss, A. (1967). *The Discovery of Grounded Theory – Strategies for Qualitative Research*. London: Weidenfeld and Nicolson.



- Goethals, G.R., Sorenson, G.J. & Burns J.M. (2004). Encyclopedia of Leadership Grounded Theory. *SAGE Knowledge*, pp.608–612.
- Goulding, C. (1999). Grounded Theory: Some Reflections on Paradigm, Procedures and Misconceptions. *Working Paper*. Series No. WP006/99, University of Wolverhampton, UK.
- Goulding, C. (2005). Grounded Theory, Ethnography and phenomenology. *European Journal of Marketing*, 39(3), 294–308.
- Gynnild, A. (2011). Book Review: Grounded Theory: A practical guide (Birks & Mills, 2011). *The Grounded Theory Review*, 10(3), 63–66.
- Hall, W.A. & Callery P. (2001). Enhancing the Rigor of Grounded Theory: Incorporating Reflexivity and Relationality. *Qualitative Health Research*, 11(2), 257–272.
- Hallberg, L.R.M. (2006). The "core category" of grounded theory: Making constant comparisons. *International Journal of Qualitative Studies on Health and Well-being*, 1, 141–148.
- Heath, H. (2006). Exploring the influences and use of the literature during a grounded theory study. *Journal of Research in Nursing*, 11(6), 519–528.
- Heath, H. & Cowley, S. (2004). Developing a grounded theory approach: a comparison of Glaser and Strauss. *International Journal of Nursing Studies*, 41, 141–150.
- Hernandez, C.A. (2009) Theoretical Coding in Grounded Theory Methodology. *The Grounded Theory Review*, 8(3), 51-66.
- Hernandez, C.A. & Andrews, T. (2012). Commentary on "Constructing New Theory for Identifying Students with Emotional Disturbance". *The Grounded Theory Review*, 11(2), 59–63.
- Hickey, G. (1997). The use of literature in grounded theory. *Nursing Times Research*, 2(3), 371–378.
- Holton, J.A. (2007). The Coding Process and Its Challenges. In Bryant, A. and Charmaz, K. (eds.) *The SAGE Handbook of Grounded Theory*. Thousand Oaks, CA: Sage, pp.265–389.
- Howell, K. (2013). *An Introduction to the Philosophy of Methodology*, London, SAGE.
- Katz, J. (1983). A Theory of Qualitative Methodology: The Social System of Analytical Fieldwork. In Emerson, R. (ed.) *Contemporary Field Research: A Collection of Readings*. Boston, MA: Little Brown, pp.127–148.
- Kendall, J. (1999). Axial coding and the grounded theory controversy. *Western Journal of Nursing Research*, 21(6), 743-757.
- Loy, J. T.-C. (2011). Dynasting Theory: Lessons in Learning Grounded Theory. *The Grounded Theory Review*, 10(2), 45-60.

- Martin, M.B. (2011). A Commentary on Ekins (2011). *The Grounded Theory Review*, 10(3), 57–59.
- Martin, P.Y. & Turner, B.A. (1986). Grounded Theory and Organizational Research. *The Journal of Applied Behavioral Science*, 22(2), 141–157.
- Mintzberg, H. (1979). An Emerging Strategy of Direct Research. *Administrative Science Quarterly*, 24, 582–589.
- Montgomery, P. & Bailey, P.H. (2007). Field Notes and Theoretical Memos in Grounded Theory. *Western Journal of Nursing Research*, 29(1), 65–79.
- Neill, S.J. (2006). Grounded theory sampling: The contribution of reflexivity. *Journal of Research in Nursing*, 11(3), 253–260.
- O'Reilly, K., Paper, D. & Marx, S. (2012). Demystifying Grounded Theory for Business Research. *Organizational Research Methods*, 15(2), 247–262.
- Partington, D. (2002). Grounded theory. In Partington, D. (ed.) *Essential Skills for Management Research*. London: SAGE Publications, pp.136–157.
- Patton, M. (1990). *Qualitative Evaluation and Research Methods*. CA: Sage.
- Patton, M. (2002). *Qualitative evaluation and research methods*. 3rd ed. Newbury Park, CA: Sage.
- Plummer, M. & Young, L.E. (2010). Grounded Theory and Feminist Inquiry: Revitalizing Links to the Past. *Western Journal of Nursing Research*, 32(3), 305–321.
- Rennie, D.L. (1998). Grounded Theory Methodology: The Pressing Need for a Coherent Logic of Justification. *Theory & Psychology*, 8(1), 101–119.
- Riley, R. (1996). Revealing Socially Constructed Knowledge through Quasi-Structured Interviews and Grounded Theory Analysis. *Journal of Travel and Tourism Marketing*, 15(2), 21–40.
- Schreiber, R.S. (2001). The “How To” of Grounded Theory, Avoiding the Pitfalls. In Schreiber, R.S. and Stern, P.N. (eds.) *Using Grounded Theory in Nursing*. New York: Springer, 55–84.
- Scott, H. (2009). Data Analysis: Getting Conceptual. *The Grounded Theory Review*, 8(2), 89–112.
- Simmons, O.E. (2010) Is That a Real Theory or Did You Just Make It Up? Teaching Classic Grounded Theory. *The Grounded Theory Review*, 9(2), 15–38
- Simmons, O.E. (2011). Book Review: Essentials of Accessible Grounded Theory (Stern & Porr, 2011). *The Grounded Theory Review*, 10(3), 67–85.
- Skodol-Wilson, H. and Ambler-Hutchinson, S. (1996). Methodological Mistakes in Grounded Theory. *Nursing Research*, 45(2), 122–124.

- Stern, P.N. (1994). Eroding Grounded Theory. In Morse, J.M. (ed.) *Critical Issues in Qualitative Research Methods*. Thousand Oaks, CA: Sage.
- Stern, P. N., and Porr. C. (2011). *Essentials of accessible grounded theory*. Left Coast Press.
- Strauss, A. & Corbin, J. (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. London: Sage.
- Strauss, A. and Corbin, J. (1998) *Basics of Qualitative Research – Techniques and Procedures for Developing Grounded Theory*. (2nd ed). CA: Sage.
- Tolhurst, E. (2012). Grounded Theory Method: Sociology's Quest for Exclusive Items of Inquiry. *Forum: Qualitative Social Research Sozialforschung*, 13(3), Art. 26. Available at: <http://www.qualitative-research.net/>, [Accessed: 12 September 2012].
- Walker, D. & Myrick, F. (2006). Grounded Theory: an Exploration of Process and Procedure. *Qualitative Health Research*, 16(4), 547–589.
- Wells, K. (1995). The Strategy of Grounded Theory: Possibilities and Problems. *Social Work Research*, 19(1), 22–27.
- Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. *Forum: Qualitative Social Research Sozialforschung*, 3(2), Art.26 Available at: <http://www.qualitative-research.net/fqs/>, [Accessed: 12 October 2011].
- Wuest, J. (1995). Feminist Grounded Theory: An exploration of the Congruency and Tensions Between Two Traditions in Knowledge Discovery. *Qualitative Health Research*, 5(1), 125–137.

# **Surviving Grounded Theory Research Method in an Academic World: Proposal Writing and Theoretical Frameworks**

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## **Abstract**

Grounded theory research students are frequently faced with the challenge of writing a research proposal and using a theoretical framework as part of the academic requirements for a degree programme. Drawing from personal experiences of two PhD graduates who used classic grounded theory in two different universities, this paper highlights key lessons learnt which may help future students who are setting out to use grounded theory method. It identifies key discussion points that students may find useful when engaging with critical audiences, and defending their grounded theory thesis at final examination. Key discussion points included are: the difference between inductive and deductive inquiry; how grounded theory method of data gathering and analysis provide researchers with a viable means of generating new theory; the primacy of the questions used in data gathering and data analysis; and, the research-theory link as opposed to the theory-research link.

## **Introduction**

The aim of this paper is to help grounded theory research students deal with challenges arising from doing grounded theory research within an academic context and meeting the requirements of their degree programmes. The status of grounded theory research method in academia is contested (Bryant & Charmaz, 2007); insofar as it is considered that some aspects of grounded theory method do not conform to traditional conventions of academic research. Although each grounded theory research project gives rise to a unique set of challenges, when working in an academic environment that is unfamiliar with grounded theory, there are common problems that many students and researchers experience. Two recurring problems experienced by numerous grounded theory students across Canada and Europe (Luckerhoff & Guillemette, 2011; Walls, Parahoo, & Fleming, 2010) relate to the initial literature review and use of a theoretical framework. For students, these are key issues, not only at the start of their research project, but at the end stage when defending their grounded theory thesis at final examination.

Drawing from personal experiences of two PhD graduates who used classic grounded theory in two universities, one UK (Queen's University, Belfast) and one Irish (Trinity College Dublin), this paper highlights key lessons learned that may help students who are setting out to use grounded theory method. Key discussion points are also identified that students may use when engaging with critical audiences when

discussing grounded theory method with other researchers, writing up the thesis, defending at viva or doing conference presentations.

### **Tensions between Grounded Theory and Traditional Research Approaches**

Since its introduction by Glaser and Strauss in 1967, grounded theory is increasingly being used as a research method in diverse areas. It provides a viable means for scholars and participants to generate a new and emic perspective, and to generate theory that is grounded in the realities of the participants' daily life experiences. However, the hegemony of traditional research approach gives rise to difficulties for those researchers who wish to pursue an approach that is outside the traditional research conventions. Many of the tensions between grounded theory and traditional research stem from differences that are rooted in the differences between inductive and deductive enquiry. A key feature of grounded theory is it provides for inductive enquiry, a means of generating new theory and new understandings, and requires researchers to identify the research problem from the research participants' perspectives. By contrast, traditional research provides for deductive enquiry, a means of proving or disproving existing theory and requires researchers to identify the research problem from the extant literature. The traditional research process begins with a literature review, which is used to inform the research question and theoretical framework that ultimately guides data collection and analysis. The crux of the problem for many research students undertaking academic degree programmes is that a literature review is required in order to complete the research proposal, application forms for ethical approval and/or financial funding. At doctoral level, consideration of the theoretical framework underpinning the research study may also be needed in order to satisfy research supervisors and degree requirements.

### **Challenge 1: Developing a Proposal to meet Academic Requirements**

A key challenge facing research students is how to develop a research proposal that meets academic requirements. The process of doing a research proposal involves critical analysis of the extant literature in order to map out what is already known about the topic and to identify the gaps in knowledge (McGhee, Marland, & Atkinson, 2007; Dunne, 2011). At doctoral level, this is critical, as generating new knowledge is a criterion for the award of a PhD (e.g. National Framework of Qualifications, undated; Quality Assurance Agency for Higher Education, 2008). In keeping with the traditional research perspective, Hart (1998) suggests that a prior literature review in the substantive area helps the researcher to think rigorously about the topic and develop a conceptual map of the subject area, thus ensuring that the subject area is researchable before the research commences. It also helps researchers to narrow the focus of the topic, define the research question, select a theoretical framework, and justify the research methodology. A critical review of the literature is used to generate the research question and consequently, for many students, precedes the selection of a research methodology. In other words, students complete a literature review for the purpose of generating a research question, and it is at this stage they are in a position to select an appropriate methodology to answer the research question. For many research students, including Elliott (2007) and Higgins (2007), they do not set out as "grounded theory" research students. It was only after the required research proposal is completed and grounded theory methodology is selected as the most appropriate methodology that they become PhD grounded theory research students.

### Elliott's experience as a doctoral student

In keeping with the academic requirement that doctoral candidates generate new knowledge through their dissertation, Elliott (2007) carried out a scoping exercise of the literature on her area of interest, which was clinical decision-making and advanced nursing practice. In order to provide a justification for the research proposal, a requirement for registration, a systematic analysis of the decision-making literature was carried out to determine what was already known and what was not known. This identified gaps in the body of knowledge and highlighted that little was known about advanced practitioner's decision-making in community care settings, and that previous studies assumed clinical decision-making was explained by hypothetico-deductive information processing, intuition or heuristics. It was at this point that Elliott was able to identify the research question, "how do advanced practitioners make clinical decisions in community care contexts?", and consider appropriate methodologies including grounded theory.

Similar to Urquhart's (2007) view of the literature review as orientation, Elliott used the literature to identify the area of inquiry and research question, which was to explain how advanced practitioners make clinical decisions in community care contexts. Although Elliott's research proposal involved a critical analysis of the decision-making literature and theory, it was not used to inform data gathering or to formulate the interview questions. Instead, the interview questions followed Glaser's (1998) approach, and asked 'what were your main concerns when making clinical decisions [for the patient you have just treated]?' and "how did you resolve your concerns?' These relatively unstructured, neutral interview questions were critical to ensuring that it did not guide data collection, although an analysis of the decision making literature had been carried out. Using Glaser's questions provided a means of assuring an inductive approach to the research, and a means of surfacing the participants' main concerns and not those emanating from the extant literature.

The potential risk that the review of the clinical decision-making literature could colour data analysis was recognised. Strategies that enable researchers stay close to the data are critical if the potential bias from a literature review is to be avoided. Using Glaser's neutral questions of the data namely, "what is this a study of? What category does this incident indicate? And [sic] what property of what category does this incident indicate" (Glaser, 1998, p. 123), using *in vivo* codes and suspending further literature review until the theory was developed, became important to assuring that data analysis remained focused on the participants' accounts. *In vivo* codes, which came directly from the clinical practitioners' own words, were important to minimizing potential bias from the literature review. For example, the code "keeping the patient's boundaries" was developed from the following account:

...I had to say to her [the patient], no you don't need to talk about them [the patient's thoughts] if you don't want to...because often maybe some of them could be very embarrassing now in a rational conversation ...so its about her being allowed to keep her boundaries so she can be comfortable.

One advantage of using *in vivo* coding, such as "keeping the patient's boundaries," was that it focused the analysis on the participants' accounts, and on eliciting their

perspectives rather than that of the extant literature. As coding progressed, *in vivo* codes were eventually superseded by analyst specified categories. However, *in vivo* codes served an important function in the early stages of data analysis by keeping the researcher close to the data.

Being aware that the risk of literature colouring data analysis was greatest when coding the initial interview transcripts, Elliott did a review of her early codes and memos to check if they were linked to the literature. The timing of this review was important, and carried out after the grounded theory had been generated. In so doing, the researcher was not influenced by the literature during the analytic process and theory generation. This review showed that very few codes were linked to the decision-making literature, and as data gathering and analysis progressed, these early codes were superseded by new codes. Gradually, issues relating to the nurse-patient relationship became the focus of data analysis. The link between the nurse-patient relationship and clinical decision-making had not been identified previously in the literature. Using grounded theory methods in data gathering and analysis, therefore, provided a viable means of generating a new perspective, one that was generated from and relevant to the participant's practice. Although the process of reviewing codes for similarities against preliminary literature reviews is not commonly reported in grounded theory research literature, it provided a useful means of demonstrating to any critic that the theory and its constituent components were grounded in the data.

In summary, although Elliott carried out a critical review of the decision-making literature as part of justifying her PhD research proposal, the literature was not used to inform interview questions. By using the interview questions "what were your main concerns when making clinical decisions [for the patient you have just treated]?" and "how did you resolve your concerns?," the data gathering focused on eliciting the participants' concerns. The risk that the literature review coloured data analysis was limited by using Glaser's grounded theory data analysis questions, namely "what is this a study of? What category does this incident indicate? And [sic] what property of what category does this incident indicate?" (Glaser, 1998, p.123); including *in vivo* codes during data analysis, and suspending further literature review until after theory development.

#### Higgins's experience as a doctoral student

Higgins's (2007) research was focused on sexuality and mental health nursing practice. Unlike Elliott, Higgins's research question was formulated prior to engaging in a literature review, and arose from her experience of working in clinical practice and from informal conversations with colleagues. Being convinced that sexuality was an ever present issue within nurse-client relationships; Higgins was interested in how nurses coped, addressed and responded to issues of sexuality within clinical practice. Similarly to Elliott, a detailed review of both nursing and mental health literature was conducted, under the mentorship of a librarian, to ensure that nothing of importance was omitted. This strategy was employed not just for academic registration, but to enhance the likelihood of receiving national funding for the study. The literature review suggested that limited research was conducted in the area, and no framework or model existed that explained or aided understanding of the phenomenon of interest. It was following this review that Higgins selected grounded theory as her preferred methodology, and successfully defended the choice to academic supervisors and funders on the grounds that the key outcome of the study would be

"a substantive theory of how mental health nurses respond to issues of sexuality in a clinical practice context." The decision to adopt a classic grounded theory approach only occurred after in-depth study of Grounded Theory method, and attendance at workshops facilitated by Dr. J. Corbin and Dr. B. Glaser, on their respective method. Classic grounded theory was selected for a number of reasons. Firstly, it emphasises letting the problem emerge from the participants' perspective. Secondly, the classic approach, although no less rigorous, seemed flexible enough to allow freedom to follow leads and use a variety of data collection methods, as ideas emerged. Thirdly, the notion of finding a latent pattern of behaviour also fitted with her idea of developing a theory of practice (Glaser, 1978; 1992; 1998; 2001; 2005).

As part of the research proposal for funding, Higgins developed an interview schedule consisting of a list of possible questions for discussion. Following a workshop with Dr. Glaser, she recognised that using the interview schedule at the beginning of the research process was inimical to grounded theory methodology, as it risked pre-framing the problem, and leading participants to talk about the researcher's concerns. Consequently, the real issues would become obscured. As advised by Glaser (1998) she abandoned the original interview schedule and endeavoured to "instill a spill," by commencing the interviews with a very open and broad statement, which permitted participants to talk freely about their issues. As the study unfolded and categories began to be developed, questions aimed at identifying properties of categories were identified and explored in subsequent interviews. In this way, the interviews gradually became more focused as the emerging concepts determined both the questions asked and the development of a theoretical sample.

Once coding of data commences, the aim is to get the best concept that fits and authentically reflects the data, as opposed to developing concepts by conjecture or importing received concepts from the literature. As Glaser (1998) states, "no theoretical capitalism is tolerated" (p. 31). A number of writers highlight the need to make every effort to uncover and challenge preconceived ideas, and only bring into the study concepts that have earned their way and are supported by data (Blumer, 1969; Glaser, 2001; Schreiber & Noerager-Stern, 2001). In other words, grounded theorists cannot "shop their disciplinary stores for preconceived concepts and dress their data in them" (Charmaz, 2000, p. 511). For example, Higgins had identified some concepts from the literature, such as "lacking comfort", "compliance" and "maintaining silence" and was constantly on alert to anything in the data that might reinforce or refute these concepts. While these concepts did emerge, they only accounted for a small amount of the final theory. Throughout the analysis a combination of *in vivo* codes (come from the language of the participants), and *in vitro* codes (constructed by the researcher to reflect the data) were used. Once the grounded theory concepts were identified, they were modified, sharpened and verified throughout the data collection and analysis phase of the study and concepts that best fitted the data were selected. Similarly, categories, properties and their relationships were checked repeatedly, using the constant comparative process and theoretically sampling, to see if they patterned out in both new data and in previously collected data. This self-correcting process ensured that pet ideas and assumptions were not imposed.

Glaser and Strauss (1967) acknowledge that no researcher can erase from their mind all the literature or theory they know before beginning research. Hence, they identify the importance of cultivating ideas from the literature, within the framework of the developing theory, by constantly comparing one's own and others



theoretical ideas with the emerging data. In addition to using the constant comparative process during the coding and analysing stage, Higgins also used analytic memos to capture and track conceptual ideas, and to document her own non-grounded ideas about the emerging theory (Glaser, 1998). Another strategy used was peer debriefing. The role of a peer de-briefer was to ask probing questions of the researcher and help search for alternative perspectives and explanations (Baxter & Eyles, 1997). This approach helped identify ungrounded assumptions prior to commencing and throughout the study; thus, stopping the creative mind from being a conjecturing mind (Glaser, 1998).

### **Key Discussion Point - GT Questions for Gathering and Analysing Data**

The role and place of literature review in grounded theory has generated debate amongst researchers and scholars (McGhee *et al.*, 2007; Walls *et al.*, 2010; Dunne, 2011). From a grounded theory perspective, a pre-research literature review is "inimical" to generating grounded theory (Glaser, 1998, p.67), as preconceptualising the problem, theoretical framework, or concepts have the potential to contaminate the emerging theory, and can result in forcing both the problem and the data into a preconceived model. In Glaser's (1992) view, it is hard enough for researchers to generate their own concepts, without having to contend with "the derailment provided by the literature in the form of conscious or unrecognised assumptions of what ought to be in the data" (p.31). Conceptual ideas may be conjectured from the literature and superimposed, as opposed to emerging from the data. Since the main concern of the participant cannot be known beforehand, neither can one know the pertinent literature to review. Once the main process has emerged and theory development is at a stage that literature will not derail the researcher from seeing what is going on in the data, the required literature becomes apparent and is reviewed. In other words, "the literature is discovered as the theory is" (Glaser, 1998, p.69). In keeping with the maxim all is data; the literature is then treated like any other source of data, and woven into the theory in the constant comparative process. In this way, it is hoped that the "grounded theorist will generate a theory that transcends the literature, synthesises it at the same time" (Glaser, 1998, p.120), and produces a theory that is relevant and fit for context.

Although discourse on the place and role of literature in grounded theory research is important, what is missing is a discussion about other key determinants of data gathering and analysis. As such, key determinants that directly influence the process are, the questions used to collect data, and the questions asked of the data during the analysis. Researchers bring their own mix of theoretical, academic, professional and personal knowledge into the research field, so the crux of the issue is what questions are used in gathering data and later, what questions are asked of the data during analysis. A critical discussion point, therefore, is how grounded theory methods and the use of relatively neutral questions for gathering and analysing data provide researchers with a means of generating a new and emic perspective; one that is rooted in the participant's perspective. Grounded theory research students can demonstrate this by specifying what questions were used to gather data, and how data analysis informed the subsequent interview questions. Importantly, the logic of the line of inquiry can be demonstrated by tracing the progressive modification of interview questions from the initial interview questions to those used in the final interview. Finally, this issue needs to be discussed in the context of differences between inductive and deductive enquiry.

## **Challenge 2: What Theoretical Framework is Underpinning your Study?**

Another challenge, for grounded theory research students, is how to deal with the question, “what theoretical framework is underpinning your study?” In academic contexts, scholars are responsible for making explicit the assumptions they are using within their research project. The relationship between theory and qualitative research, however, is complex and there are divergent views as to what the term “theoretical framework” means. On the one hand, Anfara and Mertz (2006) define theoretical framework as “...any empirical or quasi-empirical theory of social and/or psychological processes, at a variety of levels (e.g. grand, mid-range, and explanatory), that can be applied to the understanding phenomena” (p. pxxvii). For Anfara and Mertz, theoretical frameworks are not synonymous with methodological issues (e.g. symbolic interactionism, narrative analysis) or research paradigms (e.g. post-positivist or constructivist). By contrast others, such as Wu and Volker (2009), adopt a broader view of theoretical framework, and recommend that researchers articulate an understanding of the philosophical and theoretical underpinnings of the research approach they are using. Although they recognise that “theory is the outcome of [grounded theory] research” (Wu & Volker, 2009, p.2728), they also position grounded theory within symbolic interactionist philosophy without any consideration if this is appropriate. Notwithstanding the different understandings of what theoretical framework means, a challenge for doctoral students undertaking grounded theory research is how to deal with the question, “what theoretical framework is underpinning your study?”

### Elliott’s experience as a doctoral student

At doctoral level, in addition to generating new knowledge, students are expected to engage in a discussion of their research at higher levels of theory, epistemology and philosophy. The question regarding which theoretical framework was underpinning Elliott’s (2007) grounded theory study on clinical-decision making by advanced practitioners was posed by her supervisor in the early stages of her PhD study. A review of the literature identified several scholarly papers on symbolic interactionism and grounded theory (Becker, 1993; Hutchinson, 1993; Morse, 2001; Locke, 2001; Milliken & Schreiber, 2001). Given the predominant view in the literature that asserts a link between grounded theory and symbolic interactionism, Elliott initially reasoned to her supervisor that symbolic interactionism (Blumer, 1969) was an appropriate theoretical framework for her study. However, it was only after the grounded theory was developed, when Elliott critically examined her theory to determine how symbolic interactionism had influenced its development that she realised it had not. It became apparent that data gathering and analysis had focused on how advanced practitioners resolved their main concerns when making clinical decisions for patients without influence from symbolic interactionism. The assumption commonly held by research scholars that symbolic interactionism underpins grounded theory was reinforced further during Elliott’s experience of publishing a paper, *How to recognise a quality grounded theory study* (Elliott & Lazenbatt, 2005). One reviewer’s recommendation that the paper include the link between grounded theory and symbolic interactionism, again reinforced the notion that symbolic interactionism underpins grounded theory.

The main lesson learnt from Elliott’s experience, is for grounded theory researchers to avoid falling into the trap of thinking they are using, or that they have

to use, symbolic interactionism. Grounded theory methodology does not require symbolic interactionism. The theoretical discussion which characterises a doctoral thesis can be achieved after the grounded theory has been developed, when the new theory is critically discussed with the relevant extant literature. For Elliott, after the theory of mutual interacting had been developed, a search of the theoretical literature led to a discovery of Habermas's theory of communicative action (1984; 1987), and it was only after the grounded theory had been developed it became known that Habermas's theory was most relevant to her discussion. The key issue, therefore, is how can grounded theory researchers know what theories are relevant until their grounded theory has been developed? If grounded theory research students are asked to discuss the issue of theoretical frameworks early in their PhD, perhaps one way of demonstrating that they are theoretically aware is to discuss the theory of grounded theory, in other words the epistemology and the inductive approach to generating new theory.

### Higgins's experience as a doctoral student

In the context of Higgins's experience as a doctoral student, part of the requirement for funding involved the demonstration of an awareness of the state of existing theory regarding the phenomenon under study, in order for the funding body to evaluate the proposal. Although a preliminary review of relevant literature and theories (e.g. Foucault theory of power) was conducted prior to the enquiry, they were not used as a theoretical framework to guide the study but, as Glaser (1978) suggested, to help develop theoretical sensitivity. Theoretical sensitivity is the ability to sense the subtleties of the data. A distinction, therefore, must be made between using sensitising concepts to sharpen one's awareness, and using concepts to impose a framework on the data. However, in the early stages of the research there were some suggestions from academic colleagues that Higgins should use Foucault's (1976; 2001) work as the theoretical framework for the study. The following memo was recorded six months after Higgins had commenced her study.

Memo title: Using prior theoretical framework

Currently reading Chapter 6 on forcing the data in *Doing Grounded Theory* (Issues and Discussion). Just realising what was happening in a recent seminar when I presented my research. Came away from the seminar very anxious but now realise that the advice being given was going to force me into looking at a prior theoretical framework (Foucault's work) as a basis for my study. Be careful of perceived wisdom from academic colleagues who have already completed PhD's using a traditional framework. In Glaser's (1998) view, "preconceptualising the problem, theoretical framework, or concepts have the potential to contaminate the emerging theory and can result in forcing both the problem and the data into a preconceived model" (p. 67).

As far back as 1978, Glaser points out that "one needs good scholarship to be a good analyst" (Glaser, 1978, p.12); consequently, to enhance her scholarship and analytical skills, Higgins read various theoretical perspectives throughout the research process. In addition to enhancing her analytical skills, this approach also provided her with some insights into the theoretical codes other theorists used to weave their theory together, and enhanced her understanding of the variety of theoretical codes discussed by Glaser in his text on theoretical coding (Glaser, 2005).

In addition, once the grounded theory was developed, Higgins returned to the literature and reviewed other relevant theories, such as theories of self presentation (Goffman, 1959), cognitive dissonance (Festinger, 1957), and interpersonal theory of nursing (Peplau, 1952). Following that review, she positioned her own theory of 'Veiling Sexualities' in the context of the wider theoretical literature and discussed how her theory might confirm or refute previous theoretical or philosophical positions.

### **Key Discussion Point- Interaction between Inductive and Deductive Enquiry**

As with the literature review, the use of *à priori* theoretical frameworks within grounded theory research is a contentious issue. Mitchell and Cody (1993) critique grounded theory methodology on the grounds that the role of prior theory is "veiled in obscurity" (p.171). Morse (2001) fears that without a theoretical context to draw on, new researchers may "find themselves rapidly mired in data" (p.9) without the ability to conceptualise or position their study or findings within the existing body of theory. Thus, she states that "literature should not be ignored but rather 'bracketed' and used for comparison with emerging categories" (Morse 2001, p.9). There is no doubt that the role of existing theory in grounded theory differs from that of the traditional research approaches. This is not to suggest, however, that the generation of a grounded theory proceeds in isolation of existing theory, or that a grounded theory is atheoretical. Glaser and Strauss (1967) acknowledge that the researcher "does not approach reality as a *tabula rasa*" (p.3), and as such cannot erase from their mind all the theory they know, before beginning research. What Glaser (1998) objects to, is the selection of a theoretical framework prior to commencing a grounded theory study, and using theory to preconceptualise the problem or concepts. However, Glaser (1978) does advise the researcher to read in areas other than the substantive area throughout the study. Reading for ideas and style not only fuels the researcher's creative processes, but it helps develop theoretical sensitivity. Theoretical sensitivity can also be gained by a preliminary review of the literature in the substantive area, or from personal experience in the clinical field. However, a distinction must be made between using sensitising concepts to help sharpen ones awareness, and using theoretical concepts to impose a framework on the data. Grounded theory research students can demonstrate scholarliness by addressing the issue of theory from a research-theory perspective, as opposed to a theory-research perspective.

In addition, research students need to address the distinction between inductive and deductive enquiry, and acknowledge the subtle interaction between induction and deduction within classic grounded theory. Although classic grounded theory is primarily an inductive methodology, in that it commences with the data and builds a theory based on the systematic analysis of the data, to classify it as wholly inductive is to ignore its deductive element as one theoretically samples. Glaser (1998) however, points out that "it is not logical, conjectured deduction based on no systematic research" (Glaser, 1998, p.43), but a carefully grounded deduction based on an induced category, which directs the researcher on where to go next for data. Thus, the researcher starts by coding, conceptualising and generating hypothesis about the relationship between concepts, and then begins to deduce where more data can be found (theoretical sampling) for comparative purposes. Thus, grounded theory is both inductive and deductive, with deduction primarily in the service of induction. The logic and interaction between inductive and deductive enquiry can be

demonstrated by tracing how concepts and theory were generated from raw data and importantly, by demonstrating how grounded theory methods, such as theoretically sampling and constant comparative analysis, are used to test emergent concepts throughout the research process.

### Conclusion

Preparing a research proposal and using a theoretical framework to underpin a study are two key challenges for many grounded theory researchers in academic environments. These issues usually present in the early stages of the research process yet, they are relevant at the end stage when students are required to defend their choice of methodology at examination, or at research conferences. The lessons learnt from the experiences of two PhD graduates, who survived using grounded theory in an academic world, provide future students with key discussion points to consider when engaging with critical audiences, and discussing grounded theory methods with other non-grounded theory researchers.

Grounded theory researchers can demonstrate academic scholarliness by focusing on the following four key discussion points: what inductive enquiry means and its contribution to generating new knowledge; secondly, the primacy of the classic grounded theory questions used in data gathering and analysis; thirdly, the research-theory link as opposed to the theory-research link; and finally, how classic grounded theory provides a viable means of inductively and deductively generating a theory that is derived from the participant's lifeworld. Using classic grounded theory research method in an academic world can create tensions for students, who on the one hand want to use classic grounded theory as a whole methodological package whilst on the other hand, need to make adjustments to meet academic requirements. The challenge for all researchers is to know what is important to fight for, and what adjustments can be made without compromising on methodological integrity.

### References

- Anfara, V., & Mertz, N. (2006). Introduction. In V. Anfara & N. Mertz (Eds.), *Theoretical Frameworks in Qualitative Research* (pp. xiii- xxxii). Thousand Oaks, London, New Delhi: Sage Publications Inc.
- Baxter, J., & J. Eyles (1997). Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22(4), 505-525.
- Becker, P. H. (1993). Pearls, Pith, and Provocation: Common Pitfalls in Published Grounded Theory Research. *Qualitative Health Research*, 3(2), 254-260.
- Blumer, H. (1969). *Symbolic interactionism: Perspective and method*. Berkeley, CA: University of California Press Ltd.
- Bryant, A., & Charmaz, K. (2007). Introduction to grounded theory research: Methods and practices. In A. Bryant & K. Charmaz (Eds.), *The SAGE handbook of*

*grounded theory* (pp. 1- 28). London, Thousand Oaks, New Delhi: SAGE Publications Ltd.

Charmaz, K. (2000). Grounded theory: Objectivist and constructivist methods.. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 509-535). Thousand Oaks, London, New Delhi: Sage Publications, Inc.

Dunne, C. (2011). The place of the literature review in grounded theory research. *International Journal of Social Research Methodology*, 14(2), 111-124.

Elliott, N., & Lazenbatt, A. (2005). How to recognise a 'quality' grounded theory research study. *Australian Journal of Advanced Nursing*, 22(3), 40 - 44.

Elliott, N. (2007). *Mutual intacting- keeping the patient-practitioner relationship and patient treatment intact*. Unpublished PhD thesis, Queen's University Belfast, Belfast.

Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

Foucault, M. (1976). *The will to knowledge. The history of sexuality: 1*. London, New York, Victoria, Penguin Books.

Foucault, M. (2001). Power/Knowledge In S. Seidman and J. C. Alexander (Eds.) *The new social theory reader: contemporary debates*. London New York, Routledge Taylor & Francis Group.

Glaser, B. G. (1978). *Theoretical sensitivity*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1992). *Emergence vs. forcing: Basics of grounded theory analysis*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (1998). *Doing grounded theory: Issues and discussions*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.

Glaser, B. G. (2005). *The grounded theory perspective 111: Theoretical coding*. Mill Valley, CA: Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. New York: Aldine de Gruyter.

Goffman, E. (1959). *The presentation of self in everyday life*. London, New York, Victoria: Penguin Group.

Habermas, J. (1984). *The theory of communicative action: Volume 1 Reason and the rationalization of society* (T. McCarthy, Trans.). Cambridge, UK: Polity Press.

Habermas, J. (1987). *The theory of communicative action: Volume 2 Lifeworld and System* (T. McCarthy, Trans.). Cambridge, UK: Polity Press.

Hart, C. (1998). *Doing a literature review*. London, Thousand Oaks, New Delhi: Sage Publications.

Higgins, A. (2007). Veiling sexualities in a psychiatric nursing context: A grounded theory study . Unpublished PhD Thesis. Trinity College Dublin.

Hutchinson, S. A. (1993). Grounded theory: The method. In P. Munhall & C. O. Boyd (Eds.), *Nursing Research: A Qualitative Perspective* (pp. 180-212). New York: National League for Nursing Press.

Locke, K. (2001). *Grounded theory in management research*. London, Thousand Oaks, New Delhi: Sage Publications Inc.

Luckerhoff, J., & Guillemette, F. (2011). The conflicts between grounded theory requirements and institutional requirements for scientific research. *The Qualitative Report*, 16(2), 396-414.

McGhee, G., Marland, G. R., & Atkinson, J. (2007). Grounded theory research: literature reviewing and reflexivity. *Journal of Advanced Nursing*, 60(3), 334-342.

Mitchell, G., & Cody, W. (1993). The role of theory in qualitative research. *Nursing Science Quarterly*, 6(4), 170-178.

Milliken, P. J., & Schreiber, R. S. (2001). Can you "do" grounded theory without symbolic interactionism? In R. S. Schreiber & P. N. Stern (Eds.), *Using grounded theory in nursing* (pp. 177-191). New York: Springer Publishing Company.

Morse, J. M. (2001). Situating grounded theory within qualitative inquiry. In R. S. Schreiber & P. N. Stern (Eds.), *Using grounded theory in nursing* (pp. 1-16). New York: Springer Publishing Company.

National Framework of Qualifications (undated). *National framework of qualifications*. Retrieved from <http://www.nfq.ie>

Peplau, H. (1952). *Interpersonal Relations in Nursing*. New York: Putnam.

Quality Assurance Agency for Higher Education. (2008). *The frameworks for higher education qualifications in England, Wales and Northern Ireland*. Mansfield UK: Quality Assurance Agency.

Schreiber, R., & Noerager- Stern, P. (2001). Early grounded theory: Its processes and products. In R. S. Schreiber and P. N. Stern (Eds.) *Using grounded theory in nursing* (pp. 17-34). New York: Springer Publishing Company.

Walls, P., Parahoo, K., & Fleming, P. (2010). The role and place of knowledge and literature in grounded theory. *Nurse Researcher*, 17(4), 8-17.

Urquhart, C. (2007). The evolving nature of grounded theory method: The case of the information systems discipline. In A. Bryant & K. Charmaz (Eds.), *The SAGE Handbook of Grounded Theory* (pp. 339-361). London, Thousand Oaks, New Delhi: Sage Publications.

Wu, H., & Volker, D. (2009). The use of theory in qualitative approaches to research: application in end-of-life studies. *Journal of Advanced Nursing*, 65(12), 2719- 2732.



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