



Scaling up Grounded Theory: Problems, Implications and Options for Qualitative Researchers

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Abstract: *The purpose of the grounded theory method is to develop a theory. While some grounded theories generated through the method have limited application because they tend to be grounded in the data of a single substantive area, if a substantive grounded theory is scaled up, it can be applied to more areas besides the substantive area from which it is derived. Therefore this paper outlines the options in scaling up a substantive grounded theory study.*

Key words: Grounded theory, theory, qualitative research, substantive theory, formal theory, scaling up

Introduction

Theory and theoretical contributions are the hub of academia. Even though Corley and Gioia (2011) highlight that there is no universally accepted definition of theory, the value of a theory is still irreplaceable. Theory is important because it allows scholars to structure knowledge so that it can be easily used (Gray, 2016). Udo-akang (2012) also highlights that theories are important because of the analysis frameworks as well as the clear explanations of the real world that they provide. Importantly, Corley and Gioia (2011) suggest that the value of a theory is determined by the theoretical contribution it makes. To that end, the grounded theory method has been increasingly used in theory building efforts. Glaser (1978) suggests that theories generated by the grounded theory method are relevant, fit the area for which they are developed, clarify phenomena and are also useful in predicting phenomena.

However, concerns have been raised that theories generated through the grounded theory method are largely low level theories which are limited to the

micro-phenomena from which they are generated. More specifically, the problem with the grounded theory method is that more needs to be done to highlight how (a) more abstract concepts with wider application can be gleaned from all that *richness* provided by the method, and (b) the emergent theory from the method can be linked to existing theories (Urquhart, 2013). Addressing these concerns is expected to make it easier to draw from the *rich* concepts provided by the grounded theory method while providing the necessary abstraction to enable the theories to be applied more broadly with the requisite validity.

Consequently, it is important to highlight how grounded theories can be scaled up. Birks and Mills (2011), Glaser (1998), Glaser and Strauss (1967) and Holton and Walsh (2017) are among those who have contributed on how to scale up grounded theory from a substantive to a formal level. However, it seems that few have taken the stance by Urquhart (2013) to provide specific suggestions on how the level of abstractness of both substantive and formal grounded theories can be raised. As a result, this paper explores problems and options of scaling up

theories from the grounded theory method. By doing so, this paper presents the options of scaling up grounded theory thereby synthesizing some of the existing suggestions. More importantly, the paper not only outlines suggestions to elevate substantive theories to higher levels of abstractions but also presents a case for scaling up substantive theories to formal theories. To help accomplish that exploration, the discussion sections have been set as follows: theory, grounded theory, problems of scaling grounded theory, options of scaling grounded theory and then discussion, conclusion and recommendations.

Review of Literature

This section presents literature review on various concepts in this paper.

Meaning of Theory

There are several definitions of theory (Colquitt and Zapata-Phelan 2007; Holton and Walsh 2017). This study adopted the definition given by Corley and Gioia (2011), which holds that “theory is a statement of concepts and their interrelationships that show how and/or why phenomenon occurs” (p. 1). Gregor suggests that theory is expected to analyze, describe, explain, predict and prescribe (cited in Holton & Walsh 2017). More importantly, theory makes it possible to illustrate comprehensive structures of knowledge (Gray, 2016).

Grounded Theory

Grounded theory is described as “the systematic generation of theory from data acquired by a rigorous research method. Grounded theory is not research findings, but rather it is an integrated set of conceptual hypotheses. It is just probability statements about the relationship between concepts” (Glaser, 1998, p. 3). Further, a grounded theory cannot be limited to analysis. Rather it should be at least explanatory. It can also be predictive and explanatory or prescriptive (Holton & Walsh 2017). Additionally, a grounded theory is expected to meet the measures of fit, relevance, workability, modifiability and applicability (Birks & Mills 2011; Holton & Walsh 2017). The theory that comes as a result of the grounded theory method can either be substantive or formal. Glaser (1978) emphasizes that both substantive and formal theories are mid-range theories and not grand theories. Holton and Walsh (2017) seemed to agree

with the concept when they highlight that theory building is best viewed as a continuum.

Substantive and Formal Theory

A substantive theory has been described as a theory grounded in data on a particular area. However, it may still have a broader application in more than one particular area, thereby laying the foundation for formal theory (Glaser & Strauss, 1967). Formal grounded theory, on the other hand, has been described as a “theory developed to a higher conceptual level” (Birks & Mills, 2011, p. 156).

Measures of Grounded Theory

While there are multiple definitions of theory, there seems to be more consensus on what constitutes grounded theory. Grounded theory is expected to meet set criteria. The measures of fit, relevance, workability, modifiability and applicability that a grounded theory is supposed to meet are outlined below as they are highlighted by Birks and Mills (2011) as well as Holton and Walsh (2017):

The notion of fit describes the theory’s ability to reflect the field where the theory is expected to be used or its ability to reflect the patterns that characterize the data. The emergent theory should give a reasonable reflection of the main elements that characterize the phenomena under review. As such the emergent core category and all the other categories should be representative of the substantive area (s) under review. Relevance describes the usefulness of the theory or its ability to generate interest among both academics and practitioners-practical value or utility of the theory. There should be interest from academia or practitioners in a theory, otherwise it would not be of any value. Workability describes the theory’s ability to work. The theory should be able to explain the phenomena under study,-external validity and transferability of the theory. Modifiability describes the ability of the theory to be adjusted in line with other concepts that may emerge or changes in the substantive field. Birks and Mills (2011) further discuss the applicability of a theory and raise some important points regarding that. They observe that theory is not meant to produce knowledge for the sake of it, but is meant to illuminate an identified phenomenon so that it is better understood and practiced. It is also important to observe that an emergent grounded theory does not have to be applied in its entirety but only the aspects that are

most relevant and applicable to the phenomena under study.

Problems of Scaling up Grounded Theory

One of the main issues of concern with theory is its validity (Gray, 2016). The grounded theory method provides the thoroughness that meets the rigor requirements of good theory. Substantive grounded theories can easily pass the validity test because it is easy to link the emergent theory to the data. The case may be different for formal theories because they are more abstract while representing diverse substantive fields. Glaser (1978) points that the de-densification is a potential problem that arises when scaling a theory. Fararo and Kosaka (2003) highlight that when scaling up a theory there is no guarantee that the measures of fit, relevance and workability will still apply to other areas as they did in the substantive area. In addition, there is a danger of overstretching the concepts or even misapplying them. Importantly, Gasson (2003) observes that the meaningful scaling up of substantive theories to formal theories can only take place over time when multiple substantive areas can be explored so that the formal theory meets the measures of grounded theory. The concerns that have been highlighted are

the reason why options to scale up grounded theories need to be explored.

Abstraction of Substantive Grounded Theory

Literature can be used to for the abstraction of a substantive grounded theory. The level of conceptualization in a formal theory can be raised through relating the emergent substantive theory to existing theories and literature (Urquhart, 2013). Relating the theory to existing theories helps to answer three pertinent questions: (a) does the theory confirm the existing literature? (b) does it confirm and extend the existing literature? (c) does it contradict the existing literature and highlight avenues for further research? In any case, the contribution made by the emergent theory is best understood in view of the existing literature (Urquhart, 2013).

Figure 1 illustrates how a substantive theory may be scaled up by relating it to existing literature. It is important to note that the comparison of the emergent theory with existing theories is only done after the emergent theory has been fully formulated. However, the issue of the use of literature is one of the contested areas in grounded theory (see Kenny & Fourie 2015).

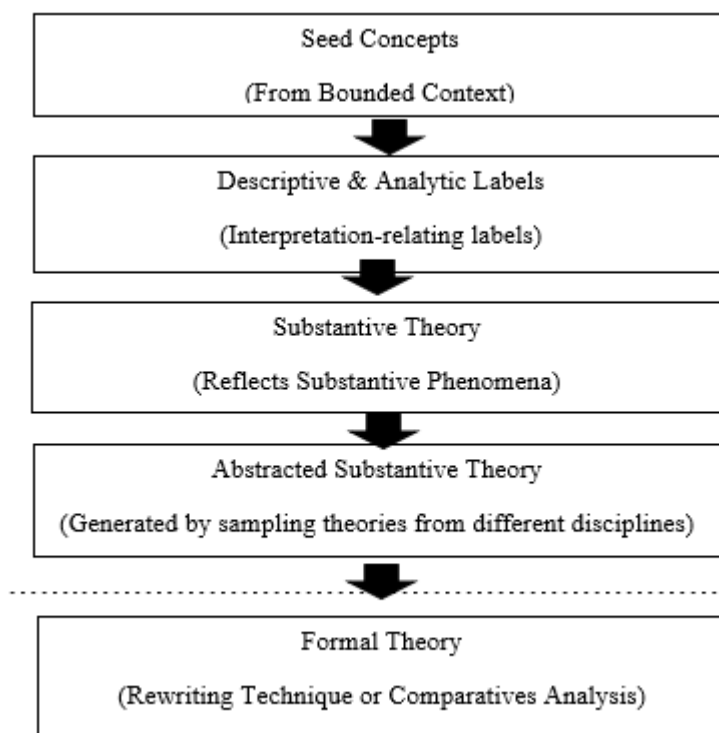


Figure 1: Scaling up Substantive Theory

From substantive to Formal Theory

Holton and Walsh (2017) and Glaser (1978) suggest two main types of formal theory. First, speculative formal theory-based on wisdoms, conjecture and assumptions. Second, formal grounded theory based on various techniques applied to the substantive theory. In either case, formal theory is abstract in terms of time, place and people. According to Glaser (1978), while speculative formal theory comes about as a result of whims and conjectures, formal grounded theory can come about as a result of one of five methods:

1. Rewriting techniques
2. Grounding the formal theory in the data from multiple substantive fields
3. Expanding a single existing substantive theory with comparative data from other areas together with comparative analysis of several existing theories
4. Basic Social Process (BSP) approach to generating formal theory and
5. Generating a formal theory through cumulative knowledge.

According to Glaser and Strauss (1967), substantive theory is a potential launching pad for formal theory. The following approaches to scaling grounded theory are evident from their discussion:

1. One area formal theory through rewriting techniques:
 - i. Rewriting to a formal theory by simply omitting substantive words, phrases or adjectives.
 - ii. Rewriting to a formal theory by rewriting the substantive theory a notch from the substantive area e.g. from writing about nurses to writing about professionals.
2. Multi-area formal theory through comparative analysis of diverse groups.
3. Using theoretical sampling to build on someone else's formal theory.
4. Direct formulation of formal theory (core categories derived from the researcher's mind, life experiences, reading, research, and scholarship then developed through comparative analysis).

While Birks and Mills (2011) as well as Holton Walsh (2017) suggest that substantive theory can be scaled up to formal theory mainly through the comparative analysis of diverse substantive groups, it seems more can be gleaned from the other methods

highlighted by Glaser and Strauss (1967) and Glaser (1978). The other methods also point to lessons which can be used in scaling up theories.

Discussion

The observations we have made are summarized in table 1. The suggested techniques are a results of the literature reviewed from grounded theorists like Birks and Mills (2011), Glaser (1978), Glaser and Strauss (1967), Holton and Walsh (2017) and Urquhart (2013). It is evident from the table that there are at least three main suggested approaches to scale up grounded theory.

The first approach is concerned with raising the abstraction of a substantive theory. The conceptual level of the emergent theory can be raised by relating it to existing literature. Fararo and Kosaka,(2003) suggest that metaphors and analogies can be used to raise the conceptual level of a theory. While their discussion was on theory in general, we suggest that analogies and metaphors can be valuable in raising the conceptual level of a substantive theory.

The second approach uses rewriting techniques to scale a substantive theory to a formal theory (Glaser & Strauss 1967). Glaser (1978) describes it as the weakest method to scale up substantive theory. But arguably, the method is useful in increasing the conceptual level of a substantive theory. We suggest that the method can raise the conceptual level of a theory to acceptable levels when it is used by an experienced grounded theorist. It is obviously the simplest and may be considered when variables like time are key considerations for a research. Gasson (2003) observes that developing a formal theory takes time, usually years and understandably so, since multiple substantive areas are required for comparative analysis. The method will at least begin the process of scaling up which may be developed by others or the same researcher through comparative analysis at a later date.

The third approach is concerned with techniques for developing a multiple area formal theory. The major tenet characterizing the techniques for multiple level theory seems to be comparative analysis (see Glaser 1978). Besides comparative analysis, the techniques seem to give room to experienced grounded theorists to leverage their experience, scholarship, literature and research to scale up

substantive theories to formal theories. Notably, some of the contemporary grounded theorists like Birks and Mills (2011) as well as Holton and Walsh (2017) do not seem to highlight the experience, scholarship and literature that experienced grounded theorists can use to scale theory. We suggest that cook book approaches may not work. However, those using the grounded theory method can keep their options open. The scaling up process like the rest of the grounded theory process is intuitive so any of the techniques may be useful.

Conclusions and Recommendations

We conclude that the three approaches listed in table 1 can be useful in scaling up grounded theory. Substantive theories can be scaled up by relating them to existing theories, using metaphors, analogies and literature. Doing so raises their conceptualization and utility. Similarly, one area formal theories wrought through rewriting techniques have higher conceptual levels and utility. Finally, multiple area formal theories formed through comparative analysis, BSP, cumulative knowledge, extension of existing formal and substantive theories and direct formulation raise the conceptualization of grounded theories. However, the suggested approaches should not serve as a cook book formula to scale up grounded theory. Rather they should provide options which grounded theorists can explore in this largely intuitive qualitative research process. The suggestions present a synthesis of the approaches which reviewed literature. They are expected to compliment current suggestions in literature.

We give four recommendations arising from the scaling options outlined in Table 1. First, the abstracted substantive theory approach can be used in situations the research is an applied study in a substantive area of interest. Additionally, it may also be useful when a study has to be completed within a specified time period. Dissertation or thesis studies are examples of researches which may need to be completed within a stipulated time limit. A theory scaled using this approach has higher a conceptual level and can be applied beyond the substantive field.

Second, the one area formal theory approach can be used to initiate the process of abstraction using the rewriting techniques. While a theory scaled using

the rewriting techniques can have limited fit, it can have better application in other areas. Its foundation in data plus the raised conceptualization would arguably make it more useful than a substantive theory that has not been scaled up. A substantive theory that has been scaled up using the rewriting techniques becomes more recognizable and accessible to others who may not be familiar with the substantive area.

Third, the multiple area formal theory approaches like the multiple substantive area technique, the direct formulation technique and the BSP technique can be used by or in collaboration with more experienced grounded theorists. Experience is important for all of these techniques since they rely on the grounded theorists' judgement, life experience, scholarship and theoretical sensitivity to compare various substantive and non-substantive areas, theories, incidents etc. in the process of scaling. Possibly, an experienced grounded theorist can consider a data set in one substantive area and spontaneously envision possibilities beyond the substantive data. Such possibilities hinge on his or her judgement, life experience, scholarship and theoretical sensitivity which a novice for example, may not possess.

Fourth, the cumulative knowledge as well as the extension of substantive or formal theory approaches can be used by or in collaboration with grounded theory approaches when possibilities of uncovering universal laws, concepts or theories beyond a substantive area exist. In such cases additional data from multiple substantive fields presents data which the researcher can use to extract concepts to build a universal theory. The progressive scaling up of theory using additional data as well as comparative analysis which the techniques rely on results in robust theories with better fit and which can be useful in multiple areas.

Finally, the grounded theory method is intuitive ideational and evolutionary due to the fact that all the recommendations proffered are not prescriptive. Rather they should serve to highlight possible scaling options. Possibly combinations or possibilities not explored in this paper can be used depending on the grounded theorist judgement.

Table 1 Options for Scaling-up grounded theory

Scaling Approach	Technique	Brief Description	Implication(s)
1. Abstracted substantive theory	Abstraction of substantive theory	Relate substantive theory to existing theories	<ul style="list-style-type: none"> • Raised conceptualization
2. One area formal theory	Rewriting Techniques	a) Rewording	<ul style="list-style-type: none"> • Raised conceptualization • Reduces fit • Ignores other fields • Initial step towards formal theory
		b) Notch-up	
3. Multiple area formal theory	Multiple substantive area comparative analysis	Build up on initial substantive area	<ul style="list-style-type: none"> • Raised conceptualization • Better fit & relevance • Robust variable structure
	Basic Social Process (BSP)	<ul style="list-style-type: none"> • The BSP in the starting point; • Through the experienced grounded theorist's judgement, its phenomena is compared in other substantive areas, relevant literature, experience, and incidents 	<ul style="list-style-type: none"> • Raised conceptualization • Better fit & relevance • Robust variable structure • Requires mature grounded theorist
	Cumulative Knowledge	<ul style="list-style-type: none"> • Progressive building of facts through ethnographic studies, direct data collection, substantive theories, formal theories 	<ul style="list-style-type: none"> • Raised conceptualization • Better fit & relevance • Robust variable structure
	Substantive/formal theory extension	<ul style="list-style-type: none"> • Comparative analysis of other substantive theories or multiple substantive areas • Consider comparisons-forgotten, written off, directly suggested by the analysis, or suggested by one's own reflection 	<ul style="list-style-type: none"> • Raised conceptualization • Better fit & relevance • Robust variable structure
	Direct formulation of formal theory	<ul style="list-style-type: none"> • Core category derived from grounded theorists experience, reading, life experiences, research and scholarship • Comparative analysis • Pilot tests 	<ul style="list-style-type: none"> • Raised conceptualization • Lower fit & relevance • Robust variable structure

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