

A Comprehensive Example of How to Conduct a Literature Review Following Glaser's grounded Theory Methodological Approach

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Abstract

In grounded theory studies, the literature review is conducted in different times depending on the chosen grounded theory methodology. In Charmaz' constructivist grounded theory and in Strauss and Corbin's symbolic interactionist grounded theory approach the review is conducted prior to theory development to expand the contextual framework and to assist in formulating questions. In Glaser's grounded theory approach the literature review is conducted after the core category is discovered and the emergent theory is developed to avoid contaminating the theory with preconceived knowledge and categories. Because Glaser has few methodological pointers on how to conduct a post-theory review we have proposed a comprehensive example of how to conduct a literature review following Glaser's grounded theory methodological approach.

Keywords: Glaser; Grounded theory; Literature review; Maintaining unity; Methodology.

1. Introduction

In qualitative research, the literature is traditionally reviewed before the study is initiated to explore the area of interest and to establish knowledge about the subject area (Polit & Beck, 2014). However, in grounded theory the literature review is sometimes delayed until after the theory is developed, which leads to challenging decisions for the researcher (McCallin, 2003). The time and place for the literature review in the substantial grounded theory methodologies of Barney Glaser, Kathy Charmaz, and Strauss and Corbin have been debated frequently (McCallin, 2003; McGhee, Marland, Atkinson, 2007; Dunne, 2011; Cutcliffe, 2000). While Charmaz (2014) and Strauss and Corbin (1998) suggest the initial review to assist in formulating questions and to expand the contextual framework, Glaser (1998) opposes conducting an initial review in order to avoid preconceived knowledge that may interfere with data collection and theory formulation. Even though Glaser (1998) suggests performing the literature review after the theory and core category have been discovered, he recognizes the problems arising for many students especially concerning doctoral preparation in delaying the literature review.

Because the performance and delay of the literature review in Glaser's grounded theory can be a challenging process, we aim to provide an example of how to conduct a literature review in a Glaserian grounded theory study after the theory has been developed, in order to aid others using Glaser grounded theory methodology.

The study is organised as such: In the 'Background' section we present a short introduction to Barney Glaser's grounded theory methodology and his recommendations for time frame and approach of the literature review in grounded theory studies. In the following section of 'A literature review of Maintaining Unity' we firstly present our emergent theory of Maintaining Unity (Berthelsen, Lindhardt, Frederiksen, 2014). Secondly, we present how we conducted the literature review based on the core category of Maintaining Unity and the summary and conceptualization of the characteristics of the overall concepts coherent to Maintaining Unity, based on the core categories, concepts, or themes retrieved from the literature. In the final section of 'Synthesizing the theory of Maintaining Unity with the

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literature' we present an example of a synthesis comparing the emergent theory of Maintaining Unity with the overall concepts generated from the literature review.

Through the synthesis we will discover how the existing literature fits the emergent theory and draw attention to what is gained from conducting the literature review based on Glaser's recommendations.

1.1. Background

1.1.1. Reviewing literature in Glaser's grounded theory studies

Many philosophical perspectives have influenced the epistemology and ontology of grounded theory. Glaser's positivistic roots and Strauss' pragmatic background has influenced the premises of grounded theory, which lie in both quantitative mathematics and qualitative methodology (Holton, 2008). Glaser explains grounded theory as an inductive-deductive process and emphasizes the importance of maintaining a strict balance between the two logics (Glaser, 1978). Glaser (1978) explain how an objective perspective gives the researcher freedom to discover the idea for research from clinical practice instead of from other studies and the ability to see new patterns and data with fresh eyes without being prejudiced by preconceived theories and methods (Glaser, 2003). On that note, Glaser therefore uses the term 'discovering' (Glaser & Strauss, 1967) and 'generating' (Glaser, 1978) instead of creating and constructing theory.

In Glaser's (1998) grounded theory methodology the researcher aims to generate theory from data grounded in a substantive area about a general pattern of behaviour of a group of participants. Grounded theory aims to describe relationships between the concepts and categories discovered through constant comparison and simultaneous data collection, analysis and coding, which are all integrated into an emergent theory (Glaser, 1998). It is important however to acknowledge that despite the methodological and epistemological differences in grounded theory all approaches ultimately have the same goal; which is to develop a theory based on behaviour and interactions between people.

Glaser (1992) distinguishes between 'emergence' and 'forcing' of data and theory. The power of emergence is a prerequisite in Glaser's grounded theory methodology (1998) for discovering concepts and categories directly from, and grounded in, data without preconceived knowledge or ideas forcing the theory away from data. Glaser (1978) believes that emergence of the theory lays the basis for his considerations on how and when to conduct a literature review in a grounded theory study and strongly opposes conducting a literature review in the initial research process to avoid being influenced by preconceived knowledge that might not fit, work or be relevant for the emergent theory. Glaser's (1998) concern is that the emergence of the theory will be constrained or contaminated by other researchers' theories instead of being discovered directly from data in the substantive area. Glaser (1978) writes: "In our approach we collect the data in the field first. Then start analyzing it and generating theory. When the theory seems sufficiently grounded and developed, *then* we review the literature in the field and relate the theory to it through integration of ideas" (p. 31). The literature review is therefore conducted after the core category and theory have been discovered, and is used as a source of data to be theoretically sampled along with other emergent data and synthesized with the existing theory.

Glaser does not provide clear guidelines on how to conduct the literature review after theory development, and in our search for examples, we found no methodological studies proposing concrete examples on how to perform a delayed literature review. One study was found, which performed a literature review in an empirical study of end-of-life cancer care using Glaser's grounded theory methodology (Thulesius, Håkansson, Petersson, 2003), however, the results of the search were not presented in the study. Therefore, in order to make the process of performing a literature review following Glaser's grounded theory methodology more explicit we have chosen to present an example of how to conduct the literature review and how to use the literature for theoretical interpretation and conceptual formulation in synthesizing the literature with the emergent theory. Our example is based on our grounded theory of Maintaining Unity, in which Glaser's grounded theory methodology was used to explore the general patterns of behaviour and main concerns of relatives in older patients' orthopaedic fast-track programs (Berthelsen et al. 2014).

1.2. Aim

The aim of this study was to present an example of how to conduct a literature review following Glaser's grounded theory methodological approach.

2. A literature review of maintaining Unity

2.1. The emergent theory of Maintaining Unity

The aim of the study we have used as an example for conducting a literature review was to generate a grounded theory of relatives' patterns of behaviour in relation to their role in older patients' fast-track treatment programs during total hip or knee replacement, using Glaser's theoretical and methodological framework (Berthelsen et al. 2014). The constant comparative method was the guiding principle of simultaneous data collection, data analysis, and substantive and theoretical coding, while writing memos.

Data were collected between 2010 and 2011 in the orthopaedic wards of two Copenhagen university hospitals; the data collection process was guided by theoretical sampling. Seven relatives of patients over 70 years of age participated. Data consisted of 14 non-participant observations, 14 post-observational interviews, and five formal interviews. Ethical approval was provided by the Danish Data Protection Agency (J. nr. 2010-41-4462). The full description of the study method and theory can be found in the published article (Berthelsen et al. 2014). The theory and core category of Maintaining Unity showed the behavioural pattern of relatives when resolving their main concern; preventing the patients from feeling alone, by three interchangeable behavioural modes: Protecting Mode, Substituting Mode, and Adapting Mode. The interchangeable behavioural modes were interconnected and could change over time, depending on patients' needs.

2.1.1. Protecting Mode

In a Protecting Mode, the relatives preserved the patients' values by: *Loving*, *Respecting*, and *Worrying*. The relatives tried to prevent the patients from feeling alone by being considerate and giving emotional support. *Loving* was the key determinant for the relatives' presence, and was experienced as a natural thing. No stress or feelings of sacrifice were involved and the relatives stood by the patients whenever they needed support or comfort. Compassion was seen in the physical and emotional closeness between patients and relatives, while taking care of a patient going through a difficult period was based on a *Loving* aspect. *Respecting* was characterized by the behavioral foundation for relatives during their participation in the patient's fast-track treatment program and was seen when relatives left the patient in control, only participating when the patient needed them to, thereby supporting the patient's independence. *Worrying* was characterized by the relatives' genuine concern about the older patient's well-being; this related to the patient's rehabilitation strength and to the practical issues after discharge. The relatives felt responsible for managing the daily routines at home during and after the patient's admission and felt concerned for patients without relatives.

2.1.2. Substituting Mode

In Substituting Mode, the relatives demonstrated their availability to the older patient by *Substituting with practicalities* and *Substituting with cognition*. *Substituting with practicalities* was characterized by the relatives' active support regarding practical issues related to the patient's decreased mobility. The practical issues consisted of motivational conversations with the patient about their decision regarding surgery, being active in care-planning and taking care of practical issues in the home as well as in the hospital. *Substituting with cognition* was characterized by the relatives' involvement in supporting the patient's memory and supplying additional information to their medical history, which the patient might have forgotten. The relatives attended to the planned information meeting with the patient and acted as subsidiary ears and memory concerning the vast amount of information during the fast-track treatment program. The relatives emphasized the importance of ensuring that all the information had been understood, while remembering as many facts as possible. The relatives viewed themselves as essential to the patient's fast-track treatment program to discern details, listen, remember and motivate.

2.1.3. Adapting Mode

In Adapting Mode, the relatives' behavior in relation to the health professionals during the fast-track treatment program involved: *Accepting*, *Assisting*, and *Adjusting*. *Accepting* was characterized by the relatives' praise of the fast-track treatment program and the health professionals. Even though shortcomings occurred, the relatives accepted these to adapt to ward routines for the sake of the patients while observing everything that went on. Generally, the relatives felt that the patient was in good hands. *Assisting* was characterized by the relatives' behavior of taking on the role of an 'assistant nurse' to relieve the health professionals in their workload, while making sure the older patient was well cared for. Being an 'assistant nurse' involved carrying out small tasks for the patient during and after admission, while also supporting the health professionals in their busy day. *Adjusting* was characterized by the relatives' willingness to adapt

to the rules of the hospital ward concerning specific visiting hours and by staying in the background during information meetings between the health professionals and the patient, in order to keep from interfering and to maintain focus on the patient.

2.2. The Literature of Maintaining Unity

We followed the principles of the literature review process in Glaser's (1998) grounded theory methodology by conducting the literature review after the core category and theory had been developed. We searched the databases of PubMed/MEDLINE, CINAHL, PsycINFO, and Embase for literature using the core category of Maintaining Unity as a search term.

Grounded theory generates theory and hypotheses from data through an inductive-deductive process (Glaser, 1992, 1998). Since the literature supports further theoretical saturation, we used the core category as a search term. The search term 'maintaining unity' was combined with 'grounded theory' or 'qualitative', because although Glaser (1978) states that grounded theory is neither qualitative nor quantitative but a general method, it is often generalized as a part of qualitative research (Strauss & Corbin, 1998; Charmaz, 2014). We therefore included studies using grounded theory or qualitative methodology with main results consisting of 'maintaining unity' or 'unity' as a category, concept, or theme. All other studies were excluded. 48 studies with a relevant title and abstract were scrutinized. Seven studies were excluded owing to language barriers (Portuguese, Finnish, Serbian, Korean, French, and German). The remaining 41 full-text studies were investigated for the central theme, category or concept of unity and 27 studies were finally included from Pub Med (n=12), CINAHL (n=10), PsycINFO (n=2), and EMBASE (n=3) based on the inclusion criteria.

2.2.1. Developing the overall concepts

The 27 studies included consisted of broads and diverse descriptions of the concept of unity in different perspectives. The core category of 'Maintaining Unity' was not found in any studies, which can be interpreted as no research found this category or theme. However, the concept of 'unity' was found as various categories, concepts, or themes in all the included studies using grounded theory (n=1), qualitative methods (n=24), or other methods (n=2) such as a qualitative evaluation of a community health work shop (Im & Rosenberg, 2016) and one single case observational study (Loisel et al. 2005). During the process of developing the overall concepts, we looked at the content of the single categories, concepts, and themes shown in the findings of the included studies. A mind-map was created to establish an overview of the diversities in the content and of the definitions of the concept 'unity'. We then condensed and summarized the content into smaller groups of similarities according to the different studies substantive areas and finally conceptualized the four overall concepts to: Family Unity, Inter-relational Unity, Cultural Unity and Dualistic Unity (Table 1). Glaser (1998) explains how the literature may take the grounded theory to less familiar areas, which can contribute to multidisciplinary or even interdisciplinary approaches in research. In our example, the concept of 'unity' is found in the substantive areas of education, sports, sociology, and work environment. Only seven of the included studies were conducted in a nursing context.

2.2.2. Family Unity

The concepts of: family unity/ trust, intimacy, and companionship, closeness, from unity towards unity, from unity towards distance, and from distance towards unity, family closeness, couples unity, a felt unity, unity and cooperation in the family, and feeling connected, were extracted from 11 of the included studies from the substantive areas of: taking care of family members during disease and social changes. We then summarized the concepts that characterize the overall concept of Family Unity. Family Unity is in our study defined as the wholeness and solidarity within a family and how it contributes to making the family stronger by being together. Six studies reported Family Unity as an extracted theme, concept or category (Betancourt et al. 2015; Youssef-Wazqar & Evans, 2012; Kataoka-Yahiroet al. 2004; Stainton & Besser, 1998; Martinez et al. 2013; Petzold, 2015) and one study found the theme of transgenerational unity (Ho et al. 2013). In the last four studies unity was found in the transition of roles between partners (Birgersson & Edberg, 2004), family members' reactions to disease (Al-Azri et al. 2014), connection during family therapy (Lambert et al. 2012), and cooperation within the family (Vellone et al. 2012).

Table 1: The summary and conceptualization of the Maintaining Unity literature

Categories, concepts, and themes	Substantive areas	Overall concepts	References
Family unity/ trust, intimacy, and companionship, closeness, from unity towards unity, from unity towards distance, and from distance towards unity, family closeness, couples unity, a felt unity, unity and cooperation in the family, feeling connected	Taking care of family members during disease and social changes	Family Unity	Al-Azri et al. 2014; Betancourt et al. 2011; Birgersson & Edberg, 2004; Ho et al. 2013; Kataoka-Yahiro, Ceria, Yoder, 2004; Lambert, Skinner, Friedlander, 2012; Martinez, Interian, Guarnaccia, 2013; Petzold, 2015; Stainton & Besser, 1998; Vellone, Piras, Venturini, Alvaro, Cohen, 2012; Youssef-Wazqar & Evans, 2012
Unity and group cohesion, unity and harmony in home life, collective needs, team unity and credibility, unity in child games, continuity in the sense to maintain unity, enhancing unity, peer unity, team unity	Patient, peer and student support and relations, networking and social connections, work and collaborative values	Inter-relational Unity	Aoyagi et al. 2014; Browne-Yung, Walker, Luszcz, 2015; Jackson, 1992; Loisel et al. 2005; Ravari, Bazargan-Hejazi, Ebadi, Mirzaei, Oshvandi, 2013; Watson, Baker, Chadwick, 2016; Weaver, Peters, Koch, Wilson, 2011; Wozencroft, Kennedy, Pihera, 2009
Collective unity, cultural unity but social division, sense of belonging and unity, unity in companionship	Collective action, social identity, and people uniting in communities and societies	Cultural Unity	Drury, Cocking, Beale, Hanson, Rapley, 2005; Gonzales-Guada et al. 2014; Goth & Småland, 2014; Im & Rosenberg, 2016
Indivisible unity of body and mind, unity between nurse and patient	Symbiotic and spiritual relations and body awareness	Dualistic Unity	Berg, Sandahl, Bullington, 2010; Grahn, Stigmar, Ekdahl, 2001; Mehling et al. 2011; Radmehr, Ashktorab, Abedsaedi, 2015

2.2.3. Inter-relational Unity

The concepts of: unity and group cohesion, unity and harmony in home life, collective needs, team unity and credibility, unity in child games, continuity in the sense to maintain unity, enhancing unity, peer unity, and team unity were extracted from eight of the included studies from the substantive areas of: patient, peer and student support and relations, networking and social connections, work and collaborative values. The concepts were summarized and characterize the overall concept of Inter-relational Unity. Inter-relational Unity is in our study defined as the personal relations created between people during their interactions in a social context outside the family.

No studies reported Inter-relational unity as a specific category or theme. One study found team unity to be a theme (Loisel et al. 2005), and one study found peer unity to be a theme (Weaver et al. 2011). Other studies found unity in networking on Facebook (Wozencroft et al. 2009) and gaming (Watson et al. 2016) to be essential, as well as in sports through unity with their partner (Jackson, 1992). Inter-relational Unity was also found in larger groups at workplaces as a means to enhance work values and job satisfaction (Ravari et al. 2013) and in group therapy where unity helped to provide a sense of identity (Browne-Yung et al. 2015). One study found a lack of unity to influence motivation for students' sports activities (Auyagi et al. 2014).

2.2.4. Cultural Unity

The concepts of: Collective unity, cultural unity but social division, sense of belonging and unity, unity in companionship were extracted from four of the included studies from the substantive areas of: Collective action, social identity, and people uniting in communities and societies. The concepts were summarized and characterize the overall concept of Cultural Unity. Cultural Unity is in our study defined as the connection and relations developed in larger groups, communities and certain cultural settings with a focus on a society. One study found the theme of Cultural Unity in Cuban adolescents' dating experiences (Gonzales-Guarda et al. 2014).

The other three studies found unity to be important for people's perception of themselves as part of a whole (Drury et al. 2005; Im & Rosenberg, 2016; Goth & Småland, 2014). Drury and colleagues (2005) found that unity in collective self-objectification could support empowerment in activist groups, Goth and Småland (2014) found unity and companionship as a social benefit concerning civic engagement for men's health. Im and Rosenberg's (2016) study led

to knowledge about how a sense of belonging and unity could support building social capital in a Bhutanese refugee camp.

2.2.5. Dualistic Unity

The concepts of: Indivisible unity of body and mind and unity between nurse and patient were extracted from four of the included studies from the substantive areas of: Symbiotic and spiritual relations and body awareness. The concepts were summarized and characterize the overall concept of Dualistic Unity. Dualistic Unity is in this study defined as the cohesion between close aesthetic relations of body and mind and body and self.

No studies reported Dualistic Unity as a specific category or theme. Three studies found unity of body and mind in relation to body awareness in therapy progressing towards a unity between body and self (Mehling et al. 2011), indivisible unity between body and mind in patients with prolonged musculoskeletal disorders (Grahn et al. 2001), and mind-body unity in body psychotherapy for generalized anxiety disorder (Berg et al. 2010). One study found a sense of unity between the nurse and the patients when investigating nursing care aesthetic in Iran (Radmehr et al. 2015).

3. Synthesizing the theory of maintaining Unity with the literature

In this section, we present an example of how we synthesized the emergent theory of Maintaining Unity and the three interchangeable behavioural modes of Protecting, Substituting and Adapting with the overall concepts of Family Unity, Inter-relational Unity, Cultural Unity, and Dualistic Unity generated from the literature review is presented, to discover how the existing literature fits the emergent theory.

3.1. Maintaining Unity

Maintaining Unity was described as a sense of consecutively coherence and belonging, where the relatives' main concern was to prevent the older patient from feeling alone. Some of the studies extracted from the literature view shared conceptual properties with the overarching feeling of unity in the core category of Maintaining Unity. Ravari and colleagues (2013) conducted a study of the job satisfaction of Iranian nurses' working in a hospital in Tehran. They found the theme 'enhance unity', which can be related to Inter-relational Unity. Ravari and colleagues (2013) described how the Iranian nurses' unity within their work values was an important aspect of their job satisfaction. The nurses explained how their specific values on a long perspective could create a friendly atmosphere, enabling them to work more closely and support each other (Ravari et al. 2013). This can be related to the relatives' needs to be supportive and maintain unity with the older patient on a long term basis.

Maintaining Unity was also found concerning the overall concept of Cultural Unity. Goth and Småland (2014) used 14 in-depth interviews to examine the effect of volunteering on older men's well-being and level of social engagement. The men experienced strong unity and group cohesion in making important contributions to society (Goth & Småland, 2014). Both the strong collective aspect and perseverance of the participating men could be related to the relatives' profound need to assist and maintain a unity with the patient.

The overall aspect of unity was also found in other variations in the literature. 'The unity between body and self' was described by Mehling and colleagues (2011) as a result of body awareness in mind-body therapy, whereas 'the unity between body and mind' was found in recreational therapy for patients with prolonged musculoskeletal disorders (Grahn et al. 2001) and in body psychotherapy for patients with generalized anxiety disorders (Berg et al. 2010). The description of overall unity in these studies is related to the close feeling of coherence between the relative and the patient as well as staying connected to the patient in the theory of Maintaining Unity.

3.2. Protecting Mode

In the theory of Maintaining Unity, *Protecting* was discovered to be an emotional behavioral mode through which the relatives attempted, with love and respect, to prevent patients from feeling alone. The Protecting Mode has a strong relation to Family Unity, concerning closeness, feeling connected, and intimacy within the family, and to Cultural Unity concerning collective action and people uniting in societal settings.

Family Unity as an overall concept of the Maintaining Unity literature emphasized intimacy and closeness within the family. This was found in a study by Petzold (2015), who explored how children and teenagers with cancer considered family bonding and unity to have an important role in their emotional state during art therapy. The Protection Mode was also seen in a study by Martinez and colleagues (2013), where Latinos with mental illnesses covered up their symptoms to protect their family and avoid being a burden to them: Family Unity took precedence over individual

needs. Lambert and colleagues (2012) found that teenagers in conjoint family therapy perceived no need for therapy, but attended for the sake of their parents, owing to a strongly felt family connection; this has strong coherence with the conceptual properties of *Loving* and *Respecting* in the theory of Maintaining Unity, where being close to family through support is a natural thing.

Closeness was an aspect of the Protecting Mode and was found to be an important property of unity in Kataoka-Yahiro and colleagues' (2004) study of caregiving by grandparents, where 'closeness and family unity' was essential to their role of taking care of their grandchildren.

In Ravari and colleagues' study (2013), the Iranian nurses explained how their work-related values helped to reduce their sense of selfishness and promote group unity, which can be compared to the theory of Maintaining Unity where the relatives' need to leave the patient in control to support their feeling of independence through *Respecting*.

Cultural Unity as an overall concept describing social support was seen in a phenomenological study by Drury and colleagues (2005), where 37 activists described through interviews how 'collective self-objectification', 'unity', and 'support' made them feel empowered in actions against the power of dominant groups. The unification between people has strong relations to the theory of Maintaining Unity and the Protecting Mode, where the relatives supported the patients in decision-making, caregiving and basic practical support based on their feeling of being a unit.

3.3. Substituting Mode

Substituting was discovered to be a practical behavioural mode in which the relatives supported the older patients with practical issues as well as their memory. The relatives prevented the patients from feeling alone by participating in information meetings and taking care of practical issues while the patients were immobile. The Substituting Mode is related to the overall concepts of Family Unity concerning companionship, trust, and collective action.

In the overall concept of Family Unity, Support for practical issues, such as housework, training, personal hygiene, and always being present when needed were seen in the study by Birgersson and Edberg (2004), who explored the experiences of partners of patients with Parkinson's disease. This related to the Substituting Mode of Maintaining Unity, where the relatives had a natural tendency to support the patients with practical and cognitive support. Vellone and colleagues (2012) found Family Unity in their study concerning experiences of the quality of life of those caring for older people with Alzheimer's disease, which is related to the Substituting Mode. The caregivers believed that an increase in quality of life was supported and inevitable without the unity and collaboration within the family (Vellone et al. 2012).

3.4. Adapting Mode

In the theory of Maintaining Unity the Adapting Mode was discovered to be an interchangeable behavioral mode through which the relatives appraised the health professionals' action and adapted to the rules of the ward to maintain unity with the older patient. The Adapting Mode was related to Family Unity, Inter-relational Unity and Cultural Unity concerning the conceptual properties of *Accepting*, *Adjusting*, and *Assisting*. In the overall concept of Family Unity, one study related to the Adapting Mode of the Maintaining Unity theory by considering relatives' acceptance and adjustment. Stainton and Besser (1998) reported findings from a qualitative study of families of children with an intellectual disability, where the families described how the experience had brought them closer together and made them grow as individuals. This form of setting oneself aside for the sake of family need can be related to the Adapting Mode in the theory of Maintaining Unity, where the relatives adjusted their presence according to the needs of the patients and the work routines of the health professionals. In the overall concept of Inter-relational Unity the emphasis was on the unity between non-family members, which was explored by Browne-Yung and colleagues (2015) who studied resilience and coping in the oldest old in a qualitative study with 20 in-depth interviews and found that they tried to maintain a sense of independence and adapt to aging-related physical changes through social connections.

In the overall concept of Cultural Unity a study by Gonzalez-Guarda and colleagues (2014) explored the dating relationships of Hispanic teens and found the theme 'cultural unity but social division'. This described how the teens felt a strict unity with their Hispanic culture but was socially separated from other groups because of their Hispanic traditions. The study described how the teens tried to adapt to the dating scene according to their parents' traditional beliefs about preferring interracial relationships (Gonzalez-Guarda et al. 2014). The findings of Gonzales-Guarda and colleagues (2014) can be related to the Adapting Mode of the theory of Maintaining Unity, where the relatives adapted to the patients' needs for support and care.

3.5. Summary of synthesis

The purpose of the Glaserian post-theory literature review is to integrate the theory with other literature to show its contribution to the theory (Glaser 1992).

This type of review differs from the usual pre-study literature review, whose purpose is to evaluate existing research and identify gaps in our knowledge, because it is conducted after obtaining the study results or saturation of the theory. We have provided an example of how the literature retrieved from the post-theory review contributes to our grounded theory of Maintaining Unity. The overall concepts summarized from the review were integrated into an additional part of the discussion section in the grounded theory study and compared through a synthesis with the emergent theory.

No knowledge of the concept of Maintaining Unity was found in any of the studies included in the review. The review therefore does not facilitate a confirmation of the theory or concept of Maintaining Unity, since no other study had the specific concept as a category, concept, or theme in its findings. Hence, these results could imply authenticity of the concept of Maintaining Unity. The studies included in the review did, however, provide knowledge of a more general perspective concerning the concept of unity. In grounded theory, the objective is to have an inductive-deductive approach, which results in a hypothesis, rather than testing a hypothesis. In our example, the hypothesis following the integration of the literature review into our grounded theory of Maintaining Unity is that unity is a general issue for people in vast settings and cultures. The concept of unity was found to be an important feature in the substantive areas of family care, interrelations and social connections between patients and peers, in student, cultural and community bonding, and in spiritual relations.

4. Discussion

There are many challenges in conducting a literature review in Glaser's grounded theory methodology. The main challenges lie in the lack of specific methodological descriptions of how to conduct the post-theory literature review, and how to integrate data retrieved from the review into the grounded theory. Glaser (1998) describes how knowledge from the review should be used as data for further development and abstraction of the theory. However, no specific methods have been presented by Glaser on how to review the literature after the theory and core category have been developed. Glaser (1978) believes that the emergence of the theory lays the basis for how and when to conduct a literature review in a grounded theory study. He strongly opposes conducting a literature review in initial the research process, in order to avoid being influenced by preconceived knowledge that might not fit or be relevant to the emergent theory (Glaser 1978). Glaser's (1998) concern is that the emergence of the theory will be constrained or contaminated by other researchers' theories, instead of being discovered directly from data in the substantive area. However, Glaser (1998) recommends reading literature in other substantive areas, while avoiding literature that can contaminate the theory with preconceptions. It can be difficult to make a clear distinction between this reading and the pre-study literature review. A focus in Glaser's (1998) grounded theory methodology is the inductive generation of hypotheses; the deductive process of generating theory from data, rather than from literature, and avoiding a pre-review of the literature is part of grounded theory empowerment and strategic grounded theory pacing. The researcher does not know the substantive area of the theory and which literature is relevant until the theory has been developed (Glaser 1998).

Avoiding a pre-study of the literature can have other complications. For example, when the researcher is required to develop a proposal for funding or apply for a PhD study, the literature review usually lays the basis for knowledge on the topic and supports the development of the aim and objectives (Polit & Beck, 2014). Glaser recommends writing a simple proposal including a relevant area of interest and a unit, site or population to which you have access, and "That is all. It is simple. Just do it" (Glaser, 2001, p.111). However, he is aware that this approach is only valid for the few committees and funding agencies devoted to grounded theory (Glaser 2001).

Other grounded theory approaches with a social constructivist perspective acknowledge the necessity of a well-developed proposal for funding and approval from the university and are more accommodating for a pre-review of the literature (Bryant & Charmaz, 2007).

Another challenge in adhering closely to Glaser's recommendation on performing a post-theory literature review is that the search process becomes very restricted. In order to synthesize the emergent theory with the current literature the post-theory literature search for relevant studies must be based on the core category to be as closely related

to the emergent theory (Thulesius et al. 2003). However, in adhering to the core category of Maintaining Unity so closely, the literature search could have missed out on theoretical constructs which related closely to the theory, and which could have elevated the discussion of findings to a higher level.

5. Conclusion

In this article we have given an example of how we have followed Glaser's advice: we have refrained from allowing a grounded theory on the general pattern of behaviour and main concern of relatives in older patients' orthopaedic fast-track programs be influenced by consulting the existing research before the emergence of the theory. We find it important to draw attention to the differences in the aim for a traditional pre-study literature review and a Glaser-inspired post-study literature review. While the more traditional literature review should provide the researcher with knowledge about the subject and identify gaps in our knowledge, the post-study review is quite different: its aim is to integrate the review into the emergent theory – in our example the emergent theory of Maintaining Unity – thereby discovering how the existing theory fits the emerging theory. Although we are not quite confident about Glaser's rather optimistic tone regarding writing a simple proposal, we have found it very educational to follow his recommendations on when and how to conduct a literature review in a grounded theory study.

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