Constructionist Grounded Theory – GT. Conceptual and Methodological Clarifications

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Abstract: In this article we aim to bring a series of epistemological and conceptual clarifications on a particular method of qualitative research entitled Grounded Theory (GT) in its social-constructive approach. The peculiarity of this research method is the exploratory character, the theoretical explanatory construction based on data gathered from the field and not from a series of assumptions taken from the literature, or built from the missing knowledge areas within it. The socio-constructivist dimension emphasizes the context dependence of the obtained results and the generated interpretative model.

Keywords: Grounded Theory, qualitative research, social constructivism, interpretive model, data encoding.

Introduction

In this article we aim to bring a series of epistemological and conceptual clarifications on a particular method of Qualitative Research, entitled Grounded Theory (GT) in its social-constructional approach, starting from the literature (Charmaz, 2006), (Dey, 1999), (Creswell, 2012) and from our own experience using this research method.

Major differences between quantitative and qualitative approaches

Iluţ (1997, p. 63) highlights a number of significant differences between the quantitative and qualitative approach summarized in the table below.

Dimensions	Type of research	
	Quantitative	Qualitative
1. Epistemological general orientation	Positive-explanatory, nomotetic	Phenomenological-comprehensive, idiographic
2. Level of reality concerned	Predominantly macrosocial, global, formal	Microsocial, local, contextual, "concrete-natural"
3. Nature of the reality concerned	Static and external to the social actor	Procesual and socially built by the actor
4. Relevant to the point of view in explaining and understanding the reality	The researcher's (ethical approach)	The subjects', the world of meanings and daily interpretations (emotional approach)
5. Relationship between researcher and subject	Distance (position "from the outside")	Close (position "from inside")
6. The relationship between theory (concepts, hypotheses) and empirical research	Of verification of theory by empirical research	Of emergence of the theory during the research
7. Selection of the units actually researched from the target population	Mostly by statistical sampling	The entire population or theoretical sampling
8. Time for data collection	Short, episodic period	Long and continuous period
9. Main Methods	Experimental, standardized questionnaire survey, quantitative analysis of documents, systemic observation from the outside	Participatory observation, intensive interview, (self) biographies, qualitative analysis of documents

10. Nature of data	Valid "taras" (of high fidelity)	Complex, rich, deep
11. The style of the research report (of the text)	Figures, tables, graphs, comments in natural language	Natural, metaphorical language with little statistical data and graphical representations
12. The predominance of social disciplines (in a narrow sense)	Sociology (demography), social psychology	Cultural Anthropology (Ethnography), History

Table taken after (Ilut, 1997, p. 63)

From an epistemological perspective, Ilut (1997) observes the preponderance of quantitative methodologies in the positivist-explicativeist research, and the preponderance of qualitative methodologies in the phenomenological-comprehensive epistemological approaches. Together with phenomenological and comprehensive methodological approaches, Creswell (2012) identifies other research models that meet a qualitative methodology, namely: Grounded Theory, narrative methodology, content analysis, etc.

Researchers who consider social reality to be static and external to the social actor will seek to measure and explain it based on evidence of a quantitative nature. Researchers who consider social reality to be the result of social construction - as a result of a negotiation of that reality in the social environment in which it occurs, will focus on understanding how that reality has been built, the meanings assigned to it and how social actors relate to that reality.

A realist objectivist ontology will postulate the researcher's neutral role, while research conducted in relation to a socio-constructivist epistemological paradigm will focus on the active role of the researcher and on the unique element of research. Data is considered to be strong and of high fidelity (Ilut, 1997) when measured from an objective perspective, with emphasis on validity. Constructive approaches emphasize complexity and depth, being presented in natural language, without excess of statistical data and without the pretense to account for other universes of significance than those in which they were researched.

Two major directions of analysis can be distinguished in social research, depending on the postpozitivist epistemological approach (Glaser & Strauss, 1967), (Glaser, 1992), (Guba & Lincoln, 1994), (Glaser, 2001), (Goulding, 2002), (Manuj & Pohlen, 2012) or social-constructionist. The defining idea for positivism with the value of epistemic postulate is that: *social reality is unique, independent of both the context of the investigation and the*

observer, being objective and possible to be fully known. The social-constructionist epistemological perspective questions some of these models, stating that social reality is not at all simple, it is actually multiple, having different levels of reality, being dependent on the context in which the investigation is taking place - and is modified in even the observation process of the interaction between the social environment and the observer. The social reality built is the result of negotiations on the interpretations that various communicational actors attribute to social reality (Sandu, 2016b).
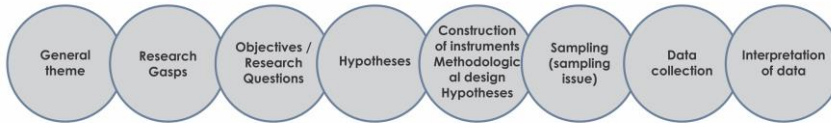
In the process of communication, individuals establish meanings in the social environment they come into contact with. Participants in the social construction process are brought together in various interpretative contexts, called "courts" of social construction. In other words, we can not comprehend the social reality in its totality, but only contextually, only certain levels of it, which may or may not communicate with each other. If reality is somewhat hierarchical, when we are on a certain level, we can observe the inferior levels, but it is more difficult to observe the superior ones. As an example, we can investigate the social construction of a chronic illness. We can understand the relationship between the patient and the medical system, but we can not understand the relationship within the medical system, the relationship between physicians and patients, unless we are at each of these respective levels of reality (Sandu, Cojocaru, Gavrilovici, & Oprea, 2013).
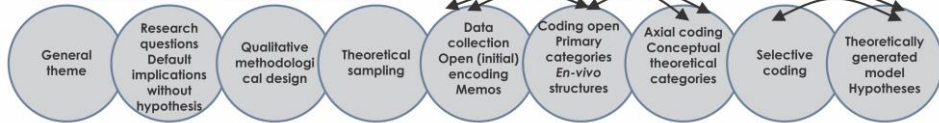
Two maps - the same territory: social reality

Postpozitivism	Social sonstructionism
Reality (including the social one) is unique	The reality is multiple, having different levels of reality
Reality is independent of the context of the investigation	Reality is dependent on the context of the investigation - it develops in the direction of the query
The reality is observer-independent	Reality is not constantly altered by the observer
Reality is objective	Reality is subjective - the result of negotiating interpretations
Reality is known	Reality is known on the basis of the levels of transparency in knowledge (Basarab Nicolescu)

GT ... when the assumptions take the place of conclusions

Classic Approach vs. Grounded Theory in Social Research (Frunza & Sandu, 2017)

Any traditional scientific approach to social research contains a series of methodological steps from the construction of hypotheses and research questions, the explanation and the operationalization of the theoretical frameworks and, coordinated with them, the assumptions of the research, the establishment of the methods, techniques and instruments used. All research is based on the analysis of some reference theories in the field of social practice. In a sociological investigation, the following steps must be followed (Mucchielli, 2002), (Chelcea, 2007), (Trasa, 2010): Determining the object of the investigation, establishing the objectives and explicitly formulating the hypotheses of the research; establishing the universe of the investigation; sample compilation; pre-inquiry; the choice of research techniques according to the research methodology; pretesting of research tools (pilot survey); finalizing research tools; field application of research tools; processing of data and information obtained; analysis of the results obtained from the previous stages of the investigation; writing the research report.

The specificity of GT research

• GT is based on a progressive identification of the semantic categories generated by the direct analysis of speeches - obtained through interview, focus group, consultation of written documents belonging to the

investigated population, extensive audio-visual texts, or any other technique of discursive data acquisition - and their aggregation into a theory.

• The purpose of Grounded Theory is to generate a theory on the studied social phenomenon rather than to verify an existing theory or hypothesis. GT is a method that is generally used in those exploratory research of social phenomena for which there is either no satisfactory previous theory to extract hypotheses from, whether it is a totally new social phenomenon, or is it supposed that the phenomenon explored is extremely different from previous social phenomena, even apparently similar, that it can no longer trust the existing theories. In these situations, a new theory is constructed, inductively starting from field data (Urquhart, Lehmann, & Myers, 2010), a theory that is generated by comparison with other theories, with more or less closely related models, tracking to what extent they may be complementary or disjoint (Suddaby, 2006). For example, migration can be analyzed in the context of current Muslim migration in Europe to see to what extent previous theories about it still have an explanatory value to the current situation, as the phenomenon can be considered to differ greatly from other previous migratory phenomena, and as such, an existing theory in the understanding of the new migration phenomenon can not be abneviated. Another hypothetical situation would be the absence of an explanatory theory on the social phenomena that can be generated by the emergence of artificial intelligence. There are currently no theories that explain or predict human behavior and socialization phenomena in relation to artificial intelligence.

• The theoretical generation process is **mainly inductive, but based on induction – deduction cycles**. Induction cycles are successive, until the construction of a **THEORETICAL MODEL** with the highest degree of generality (Chen & Boore, 2009).

Particularities of social research through GT

Grounded Theory, either approached epistemologically in a post-positivist or social-constructive manner (Guba, 1990), (Charmaz, 2000), (Charmaz, 2006), reverses this logic of research (Markey, Tilki, & Taylor, 2014), (Glaser & Strauss, 1967), to the degree of generalization that allows the construction of an interpretative model of the social phenomenon studied (Charmaz, 2006). This model is constantly compared throughout inductive processes with those in the literature to clarify concepts and identify the key elements of the final model.

Grounded Theory, like other research methods, starts with a series of research questions that guide the direction of research, identifying the different aspects of it. The GT operates with assumptions - which must be declared as such in the research report - but not hypotheses. Presumptions have the role of directing research - the investigative approach itself - in general, without substituting hypotheses that are to be validated.

In the construction of the research, a qualitative methodological design will be followed, based on the elaboration of some interview axes, focus group, etc. These axes are elaborated according to the research objectives and do not overlap with the interpretative ones obtained in the process of coding the obtained qualitative data.

In terms of sampling, this is a *theoretical* one, which means that one can not know in advance how many interviews should be made in order to construct an explanatory theory of a social phenomenon, until the so-called pattern obtained is saturated. The interrogatory data collection process will be repeated until new interviews generate significant additional information, in other words, until the new data collected no longer changes the interpretation we bring to the model.

As the data is collected, it is subjected to the interpretation process, the first stage being called *open* or *initial encoding* (Cheer, MacLaren, & Tsey, 2015). In this first stage, memos are written, the data are divided into semantic categories, which are considered by the researcher to be the same semantic units because they refer to the same thing in about the same terms. The other coding steps, called *axial coding* and *selective coding*, aim at establishing the predominant semantic categories in the interviewees' speech, respectively the relations between these categories, possibly revised, and the construction of the interpretative model.

In the axial coding process, the primary codes obtained in the open coding stage begin to be hatched to establish a central category that is the key to understanding the data, starting to synthesize them in a theoretical model and constantly comparing the constituent elements of model with those from other theoretical models already existing in the literature. At the selective encoding stage, we return to the categories set up, and it is intended to raise them to a model of the highest degree of generality that is as independent as possible from the context in which the research was conducted, and which can be considered as having power to explain similar phenomena arising in other social or geographic contexts. The generated theory would have a higher degree of generality, which would no longer be a regional, local one, but one with generalization and replication potential. The built model is operationalised by identifying a system of interdependence

between categories, formulated in the form of assertions that may have the value of hypotheses in future research. In this example, the physician-patient relationship in the context of chronic illness (Sandu et al., 2013) is to be analyzed from the perspective of chronic diabetic disease, but the generated model should contain elements that can be generalized on the doctor-patient relationship in general, from the perspective of the need for trust in the therapeutic process.

Finally, a theoretical model with the highest degree of generalization is reached. For the construction of the theoretical model, the comparison with the theoretical models in the literature is absolutely necessary, here a significant difference between the GT and the classical research occurs, the literature review elements being included in the data analysis part and not as a separate stage of documentation before the run the actual stages of research. It is precisely the comparison between the researchers' own analyzes of the collected data and the comparison with other similar analyzes existing in the literature, which is the key element that allows the construction of a theoretical model with the highest degree of generality.

An important issue, treated differently in the post-positivist approach (Kelle, 2005; Lincoln & Guba, 1985) , compared to the constructive socialist of Grounded Theory, is the validity of the results obtained. Constructive research affirms the dependence of the results both on the research context, and on the researcher. The entire GT research process seeks to achieve the credibility of the constructed theoretical models and not the statistical validity of the data. In order to obtain the greatest credibility of the model, it is possible to use triangulation of interpretations - researchers - in other words, the same data is interpreted by several researchers and then confronted with these interpretations.

Another approach that ensures the credibility of the model is the methodological triangulation consisting in comparing the data obtained by different techniques, eg by focus group, with those obtained through observation and interview. The data thus obtained should be complementary and convergent. It also aims to triangulate data sources - with the same thematic axes, interviews of different population categories apply. For example, the same questions are addressed to both doctors and patients to see the relationship between them. In order to ensure that the built-in model is in line with the population's view, people are provided with preliminary reports so that they can be understood by subjects who are asked for an opinion on the proposed model, whether or not it agrees with their own vision of the studied phenomenon. The social-constructionist approach of GT states the importance of highlighting possible biases (Manuj & Pohlen,

2012), leaving the reader to decide: *It could be so! Could it be different? If so, then how? This is the result of the research team and the reader has the freedom to adhere to the proposed model or not.* The triangulation of researchers and data sources ensures verosimilitude of the model. Subsequent quantitative verification, from transforming key model assertions into assumptions for new investigations, can also ensure the validity of the extrapolated model.

The model resulting from inductive processes can be schematized by extracting statements that may be hypothesis for a quantitative approach, designed to validate the model on a broad population and in different social and geographical contexts. Possible quantitative validation of the model involves identifying key assertions of the generated model, and transforming them into assumptions for a quantitative investigation. For this reason - the transformation of key model ideas into possible assumptions for new research - it can be argued that in GT, assumptions take the place of conclusions.

Methodological clarifications on GT research

GT aims at anchoring social theory into perceived reality, being sensitive to the social context in which individuals build their own social reality. The theory derives from experiential data and not from previous theories. There were a number of influences from phenomenological sociologisms and symbolic interactions (Creswell, 2012) in GT's development.

GT is usable in research:

- to address the *contextualized specificity of social processes*:

Ex: *Social construction of chronic illness* (Sandu, 2013), *Social construction of probation counselor* (Sandu, 2016a), *Supervision in Social Assistance* (Sandu, Unguru, Ponea, & Cojocaru, 2010), (Caras & Sandu, 2014).

The social context means the peculiarities through which the research was carried out:

- *with a strong exploratory character*:

Ex: *Constitutive values of social assistance* (Frunza & Sandu, 2017)

- *focusing on interaction*:

The doctor-patient interaction (Sandu, Necula, Frunza, Unguru, & Damian, 2017), peculiarities of migratory phenomena, the subjective quality of life (patients suffering from a certain condition), etc.

Through Grounded Theory, one can notice the ways in which individuals perceive their own social interactions.

GT - full / abridged version

Qualitative GT research can be used as a full-scale research method, including the data collection phases that run through GT-specific strategies, targeting theoretical sampling, saturation of the theoretical model, etc. Data collection techniques are generally specific to the research of any kind of qualitative research, being represented by interviews, focus groups, analysis of official or private documents coming from people belonging to the population surveyed, audio-visual materials, etc.

GT can be used as a method of qualitative analysis of data already collected: especially as a document analysis or as a secondary analysis of the qualitative data obtained in another research, which the researchers believe did not sufficiently explore, with remaining semantic categories not included in the research report - usually those that refer to aspects that do not belong to the subject of interest of the first research, as well as those that show the phenomenon of serendipity - data that indicate social phenomena not included in the research object but which, by their nature, are worth observing and theorizing upon. Secondary data analysis typically pursues an objective other than that of the original survey, in which the data were collected.

For example, the analysis of informed consent forms in Iasi hospitals, which included a secondary analysis of interview and / or focus group data, analysis of observation reports, analysis of personal journals, analysis of oral history testimonies (Xenofontov, 2011), analysis of documents produced by a public institution, etc.

Research objectives

The research objectives / questions guide the research, based on implicit assumptions, but without hypothesis. There is no clearly defined Research Gaps in terms of classical research to be formulated from the in-depth study of literature in the field (Gibbs, 2013). This does not mean that there is no interest in knowledge but it does not come from identifying gaps in knowing a certain social phenomenon, but from the need to explore the social phenomenon in terms of the discursive positions of the social actors involved in its production.

The research objective therefore does not appear as an intention to validate a hypothesis, but rather on the need to produce an interpretative model on the social phenomenon as perceived by the social actors and how they translate it into their own discourse. Research objectives are modifiable

over time according to the peculiarities of the phenomenon that data suggest. Obviously, this does not mean that all the goals will change completely during the research, or that this change will be absolutely necessary. Kathy Charmaz (Charmaz, 2002) points out that in the constructive version of Grounded Theory, the literature review is made after the first structure of a set of categories, and references to literature should be correlated with their own considerations derived from the interpretation of the data.

Once the research objectives are established, the constituent axes (directions) of the theme to be explored are proposed, which will guide the exploratory approach. Initial thematic axes are designed to guide the research and construction of research tools, and do not overlap with conceptual thematic axes generated by axial coding. The initial conceptual axes may be in the form of research questions: *What does the good doctor mean? What does it mean to be a good professional in social services? What does it mean to have a particular concern? How does this concern in everyday life manifest itself?* These directions, as thematic axes, contribute to the construction of the research tool, for example, the interview guide. The thematic axes as research directions are rebuilt as the data are gathered and the first interpretations and first assumptions about the discursive categories will be reexamined and rebuilt. During this category review process, it is intended to fill them with significant informational content, following whether they are supported, or the data collected presupposes the construction of other discursive categories that better describe the studied phenomenon. In the course of this interpretive process, research tools can be changed to get more data in one area or another of research, and to make the data as consistent as possible to then generate the theory that best explains the phenomenon studied.

As particularities of the research approach through GT, we mention:

• Research objectives and its directions are rebuilt as data is collected and analyzed.

• The research questions, and implicitly those addressed to the interviewed persons, are mainly aimed at HOW? ... rather than WHAT?

Some examples of research questions that have been taken from research: Lifestyle and Health Behavior in People with Chronic Illness(Cojocaru et al., 2001):

• What is the role of medical-social services in the construction of individual responsibility and autonomy, especially for the patient's self-care behavior (diabetic)? The analysis unit is the social and medical services system in Iasi County.

• How does the organization of care and the patient's path through the medical-social system influence the construction of the responsibility for its own health condition and its autonomy?

• How to build the patient's autonomy and responsibility for their own health condition in the doctor-patient relationship?

• How is self-care in the daily life of the patient (diabetic) built and managed?

• How does the family experience the chronic illness condition of one of its members?

All of these may be research questions, not necessarily as questions in the interview guide. Very few of the research questions, the thematic axes of the actual research, are transposed as such in the interview guide.

There are a number of *implicit assumptions* in the development of research questions, but these are not hypotheses:

• medical-social services have a role in the construction of individual responsibility and autonomy. Because of this assumption, it is to be expected that the answers received will manage the idea that medical-social services really have a role, and as such, it will be very difficult, if not impossible, to notice in the speech of interviewees, the idea that they may not, in fact, have any role.

• the organization of care and the path through the medical-social system **influences** the construction ... It is formulated affirmatively, and as such the theoretical construction will encompass this assumption, which will make it more difficult to identify data on the organization of the care process that does not influence the construction process.

• Autonomy and responsibility are social constructs, and as such will be sought to identify the mechanisms of social construction of the two values. This assertion puts research into the sphere of the social-constructional paradigm, and consistency with this theoretical paradigm rejects research methods that would place autonomy and responsibility for the health condition as actually measurable and quantifiable social realities.

Medical technology has a role in the social construction of autonomy and responsibility, a role that will be pursued to be highlighted.

The process of interrogating data and classifying it into discursive categories will be based on these assumptions. The fact that the assumptions assumed by the researcher are implicitly included in the research design, and influences the type of results it is sensitive to, makes the researcher particularly important in constructive research. The assumption assumed by researchers will influence both data collection and interpretation, and as

such they should be acknowledged and mentioned as such in the research report in the form of an indication: these were the initial assumptions that might possibly be a bias, and what measures have been taken to minimize these possible bias.

Presumptions are NOT hypotheses and will not be validated within the research, but will form the context of research!

Methodological design

In GT-based research, the construction of the interview guide is based on research questions (Sandu, 2017).

As an example, we present the interview guide for a diabetic patient in the research of *Social construction of self-sufficiency and responsibility for the health of the chronic diabetic patient* (Cojocaru et al., 2001; Sandu, 2012).

• Method[1] of application: semi-structured interview. The operator is free to apply the questions in what order he considers necessary and to apply the additional questions arising from the context of the interview, including the introduction of additional clarifying questions. It is therefore preferable that the interviews are conducted by the main investigator or even by the research team.

• Objective of the interview: understanding the strategies of adapting the individual to the situation of life.

The aimed result: a case study on the development of autonomy in the young person with diabetes.

1. **Describe an ordinary day in your life**

• Indications for the operator - clarification questions are added on: how to administer insulin and other medicines; structuring daily activities around the therapeutic act; diet. They insist on responsibility for their own diet and resistance to food temptations, adapting family members to the diabetic life (are the other members of the family also eating dietetic?). How to adapt to society (when attending a city trip with friends, does he adapt his daily schedule to the hours of injecting insulin?). Do they use the glucometer? Do they adjust their insulin doses according to the meter readings? Are there daily activities that are impeded or difficult to execute? Do the school or work colleagues know about his medical condition? Has he noticed a change in their behavior towards him? It should be insisted on the story of the subject and the way in which it makes sense to one's own life.

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[1] Taken after Sandu, A. (2012). *Metode de cercetare în ştiinţa comunicării*. Romania: Lumen Publishing House.

2. **Tell us about a day in your life that you think you have had a great success, relative to your health**.

• Indications for the operator - clarification questions are added as to: what does the subject mean by keeping his health under control. What he considers to be a success in adapting to life with diabetes. Success in other areas of professional, social, family. How can the successful strategy be transferred to the adaptation to the chronically ill condition. How can a successful strategy be used to increase the individual's social autonomy.

3. **How did you adapt to your situation as a person with diabetes?**

• Indications for the operator - add clarifying questions about: Which life activities he / she believes he / she has to give up. If, how and by whom was the decision to give up those activities influenced? If, how and from who was he/she informed about the disease. Does he/she consider that special attention needs to be paid by others and have additional rights due to the health condition? Does he/she consider herself a disabled person? Is he/she viewed as a person with disabilities? How does he/she feel about it? How does he/she integrate into the everyday life the situation of social disadvantage, if it exists? What other strategies for adapting to the social disadvantage of chronic illness can be further identified in relation to the situations described in the previous questions? What is the subject's relationship with friends, relatives, colleagues, and how did this relationship change from chronic disease? It is insisted on encouraging the subject's descriptions of how he interprets life situations and makes sense from them. It is given freedom to the subject to describe any experience that he/she considers an adaptation to the situation of a person with diabetes.

Data Collection & Open Coding

The data collection process is concurrent with the open coding process (Sbaraini, Carter, Evans, & Blinkhorn, 2011) and involves the following operations:

• *Data collection* (semi-structured interviews, focus group, observation, documents).

• *Transcripts* of interviews, focus groups, etc.

• *Primary data analysis* as they are collected. Open (initial) encoding is performed as transcripts of interviews, focus groups, etc. are actually performed. Once the transcripts are made, it is possible to identify the orientation of the discourse of the investigated person, the researcher aiming to apply a series of "labels" to the various fragments of the discourse and

then to group those labels to track discursive fragments that converge in the same direction. Charmaz (Gibbs, 2013) shows that the initial encoding process is a line-by-line reading of interview transcripts, accompanied by annotations in the form of memos. This *line-by-line reading of interview transcripts* familiarizes the researcher with the respondent's discourse universe.

• *Memos.* It is a series of explanatory notes that the researcher makes on the transcribed material, reflecting on the meanings it assigns to the various discursive elements present in the material under analysis (Frunza, 2017). For example, the researcher can note that *the respondent talked about power, the relationship of trust, etc. Trust is a relationship of power.* Memos offer a first degree of generality to actual understanding of data, being a first step from lifting from simple data to generalization, which in the next steps will lead to a theoretical construction.

• Coding is a process of data operationalization (meaning identification and data conceptualization).

• *Open coding.* Analyzing the transcripts of interviews, documents in general, it is done phrase by phrase, and the use of qualitative data analysis software, such as NVivo, is recommended[2].

• Identify key concepts in respondents' speech (eventually the frequency with which they appear in the speech).

• Selection of in-vivo structures in which keywords appear.

• Identify links between in-vivo structure-based concepts.

• Significance of data.

Open coding is at an empirical level, but at this level, ideas that may have a high degree of generalization are formulated, the researcher aiming to rise to an increasing degree of generalization, expressing concepts and connections that do not come anymore directly from the collected data, being the results of generalizations of the identified constructive processes.

In qualitative research, codes are the *key attributes of a narrative sequence* - a verbal communication (Curry, 2015). Coding is a process of organizing data, structuring it. The structure of the codes identifies the particularities of the respective discursive units, with examples **(in vivo) of the way the codes are found in the discourse.**

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[2] http://www.qsrinternational.com/nvivo/nvivo-products

Table³ Analyzing the description of the social workers' position on supervising responsibilities

GENERAL CATEGORIES Axial coding Axial coding (INDUCTION 2)	CODES (PRIMARY CATEGORIES) Open coding - Open coding (INDUCTION 1)	KEYWORDS Open coding - Open coding (INDUCTION 1)	THE FORM OF LIFTING (in vivo) Open coding (INDUCTION 1)
Supervision process	Collaboration with different specialists	Collaboration	"we collaborate with many centers that have different programs in which different specialists work"
Supervision process	Work of the coordinator	Coordination	"I am executive coordinator and I coordinate both the work of the medical assistants, as well as the work of the social workers"
Frameworks of supervision	Practice of supervision	Supervision	"I don't know if we can call it supervision, but informally, it's still that, even if there are no standards in our country, but we still supervise their work"
Frameworks of supervision	Existing content in the social workers' job description	Social workers' job description	« it is very well defined » « there are the local attributions that they fulfill, based on the beneficiaries » « more formal rather than informal » « they are work instruments » « it is filled in by the executive coordinator, with which we basically evaluate their work » « plans of intervention, monitoring file, annual and monthly statistics »

³ Taken from Sandu, A., Unguru, E., Ponea, S., & Cojocaru, S. (2010). Analysis of professional competencies in social services supervision. *Social Research Reports, 17*, 3-56.

HOW IT APPEARS (in vivo) Open coding (INDUCTION 1)	Memos	KEYWORDS Open coding (INDUCTION 1)	CODES (MAIN CATEGORIES) Open coding (INDUCTION 1)	GENERAL CATEGORIES Axial coding (INDUCTION 2)
each day is a special situation		special situation	special	Normal and special in the doctor's life
each person can be greeted like that	Continuing from the previous paragraph	special situation	special	Normal and special in the doctor's life
we were also educated as spectators to some television shows, especially those that don't have family relationships regarding how is the actual life of a specialized doctor.		educated as spectators to some television shows the actual life of a specialized doctor.	Meaning of the life of a clinical doctor	
The laitmotiv in the clinic is overcrowding		overcrowding	Meaning of the life of a clinical doctor	

Adapting

The analysis of the resulted categories involves the continuous comparison of own data with the results presented in the scientific literature, and with the discourse of the interviewed persons (Manuj & Pohlen, 2012).

The category "The specific of the relationship probation adviser-supervised person"

• The relationship between the probation counselor and the client is considered to be of trust and help, based on the fact that the supervised person sees the *actual help* the counselor is providing, and the later one sees that the *beneficiary* fulfills the obligations imposed by the law.

„*Well, as long as the person sees he is receiving my help, we can establish a relationship of trust and mutual help. I trust him when I see he respects the measures and*

he does something in this regard, and he, through simply noticing that he needs my legal help, because that's all I can help him with. And the fact that he sees he is being helped and perceived as a human being, and not as a convict, for him it is very important" (IRO04)[4]

Axial coding (Second induction)

The model revised by Glasser (2001) replaces the axial coding with the theoretical coding (which also involves using the bibliography during the analysis) (Charmaz, 2006; Corbin & Strauss, 2008; Glaser, 1992; Glaser & Strauss, 1967).

• *Theoretical conceptual categories* appear in generated form – different from those resulting in the process of open coding.

• *Link between categories* – the connections that are visible beyond the empirical level are presented. The researcher aims to identify what are the categories that underly an explanatory model, developing a first model of analysis. The resulting model is presented to the interviewees, but also to different stakeholders, in order to obtain different opinions on the explanatory power of the model under construction, and its adequacy with the respondents' opinions.

An axial coding model:
Thematic axes and categories obtained from axial coding[5]
Thematic axis I. Instrumental and institutional framework
• Category 1. Regulatory framework
• Category 2. Institutional framework for operation
• Category 3. Evolution of Probation Practice in Romania and Moldova
Thematic axis II. Developing human resources
• Category 1. Tasks of the probation counselor in relation to the types of beneficiaries
• Category 2. Professional socialization
• Category 3. Professional identity of probation counselors
• Category 4. Dilemmas and professional problems in the practice of probation

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[4] Extracted from the article Sandu A. (2016b). Cadre normativ-instituţionale ale construcţiei sociale a profesiei de consilier de probaţiune în zona de N-E a României şi în Republica Moldova. *Sociologie Românească, 14*(1), 23-43.
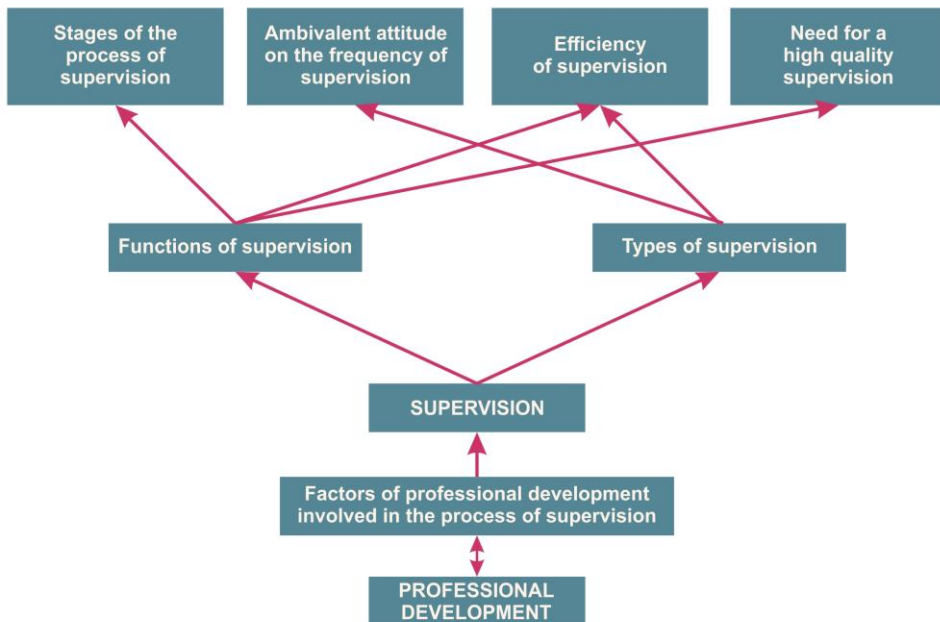[5] Extras din articolul Sandu A. (2016b). Cadre normativ-instituţionale ale construcţiei sociale a profesiei de consilier de probaţiune în zona de N-E a României şi în Republica Moldova. *Sociologie Românească, 14*(1), 23-43.

Thematic axis II. Development of human resources

• Category 1. Attributions of the probation counsellor in relation to the types of beneficiaries

• Category 2. Professional socialization

• Category 3. Professional identity of the probation counselors

• Category 4. Dillemas and professional issues in the practice of probation.

Selective coding (Third induction)

Within the 3rd stage of coding, the selective one, the central category and the relationship between categories are established, redefining them based precisely on the highlighted relationships, changing their name, joining similar categories or dissociating categories that are considered as being different from a semantic point of view. A process of identifying certain discoursive patterns and transforming them into explanatory models, occurs.

Schema taken after Caras, A., & Sandu, A. (2014). The Role of Supervision in Professional Development of Social Work Specialists. *Journal of Social Work Practice: Psychotherapeutic Approaches in Health, Welfare and the Community*, *28*(1), 75-94.

Memos - accompany all encoding processes

• Introducing memos allows researchers to record ideas on the evolution of the process of theoretical generation at the level of all processes of open, axial and selective coding (Creswell, 2012).

• Memos are theoretical notes on a particular set of data (their association with more categories, the convergence/divergence with the results in the literature, correlations between categories).

• The elaboration of memos is considered to be the central activity of the process of theoretical generation, without which the research is not GT (Glaser, 2001).

The emphasis on the communicational dimension of the Romanian probation system makes it be oriented towards the therapeutic side, rather than the punitive one, while the Moldavian system is rather oriented towards social work, based on identifying and facilitating the beneficiaries' access to community resources[6].

The respondents consider communication to be the key element of the relationship with the supervised persons. The communication should be beyond any labeling or resentment regarding the convicted person's deeds.

The awareness of the perpetrator that all the probation counselor's actions are in the best interest of the supervised person, is a moment of professional satisfaction for the counselor[7].

To sum up, the process of coding can be described starting from the following algorythm:

• line-by-line reading of the interviews' transcripts.

• identifying the codes included in that text. They can take the form of keywords (selected because they are repeated in the discourse, because one way or another, the person interviewed has emphasized that word, it is unusual or unexpected, it correlates with other keywords from the discourses of other interviewees, etc.), in-vivo structures (fragment considered to be significant because it transmits a key idea, because it can be connected to a theory, or simply because it draws the researcher's attention in any way).

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[6] Taken from Sandu A. (2016b). Cadre normativ-instituţionale ale construcţiei sociale a profesiei de consilier de probaţiune în zona de N-E a României şi în Republica Moldova. *Sociologie Românească, 14*(1), 23-43.

[7] Taken from Sandu A. (2016b). Cadre normativ-instituţionale ale construcţiei sociale a profesiei de consilier de probaţiune în zona de N-E a României şi în Republica Moldova. *Sociologie Românească, 14*(1), 23-43.

• labelling with codes of memos. In line with the selected codes, there should be labels (memos) that would present a reaction of the researcher to the code, a correlation with other codes, a possible explanation of the meaning, etc.

• grouping the codes into primary categories, based on the common meaning identified by the researcher.

• constant comparison of the resulting categories, among each other or with similar results in the literature.

• labelling primary categories and identifying a significant name for them.

• abandoning codes that prove to be redundant, either due to the inclusion of many codes under the same label, or their insufficient representation in the discourse. In this situation, the model's saturation should be verified. A code is incompletely represented if it can be correlated with other similar codes, it needs to be outlined by returning to the stage of data collection and conducting special interviews for explaining the insufficiently represented codes. It is preffered that the interviews for clarifying certain codes would be conducted with those persons in whos' interview the original codes were found.

• grouping primary categories into analytical categories – axes.

• establishing certain relationships between the categories and shaping the model (Löfgren, 2013).

Generating the theory

The theoretical model generated (Charmaz, 2006; Corbin & Strauss, 2008; Glaser, 1992; Glaser & Strauss, 1967) is developed around a main category:

• theoretical constructions are formulated, with role of hypotheses for future theories.

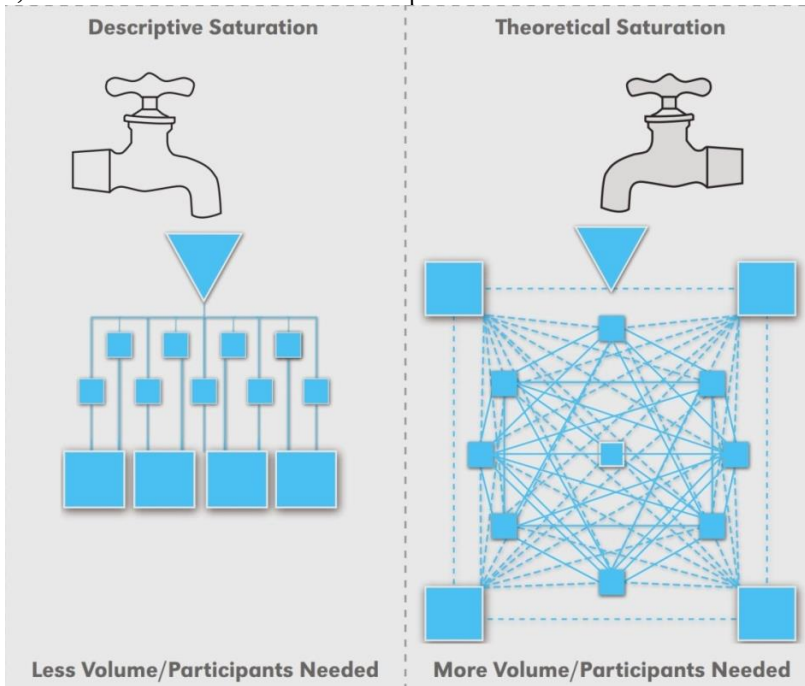• the emphasis is on the verisimilitude of the model, and its explanatory power.

• possible future check.

Theoretical sampling and the saturation model

Theoretical sampling (Sbaraini et al., 2011) represents the reiteration of collecting data, including new participants in the research until the saturation of the theoretical model is obtained. This is reached when the introduction of new data (eg. new interviews) doesn't generate new semantic

categories (codes or topics). In the literature, there are two types of saturation described (Keen, 2013).

> • Descriptive saturation – no new categories appear;
> • Theoretical saturation – no new relationships between categories

appear; the mode is coherent and complete.

Retrieved after (Keen, 2013)

Saturation grid

In the qualitative data analysis through GT methodology, the theoretical sampling is considered, including a new respondent in the sample being done only after the analysis of data obtained from previously interviewed persons, new members being elected until the saturation of the model. In order to ensure data saturation in order to construct the theoretical model, a saturation grid is used according to the methodology exposed by Brod, Tesler and Christiansen (2009), Rubin and Rubin (2012), Onwuegbuzie and collaborators (2012). The saturation grid is designed as a table in which the vertical line contains the categories inductively obtained, and the orizontal one contains the respondents to interviews and focus group. In order to be able to notice the saturation of the sample, it is important to highlight the fact

that the contribution of the last respondents to the table of categories doesn't exceed the categories already obtained for n-2 respondents.

A table (matrix) with horizontal horizons arranged horizontally and vertical interviews (Brod et al., 2009):

Interviewees	Categories								
	C1	C2	C3	C4	C5	C6	C7	C8	C9
I01	x	x	x	x	x	x	—	x	—
I02	—	x	x	—	x	x	x	x	x
I03	—	x	x	x	—	—	x	x	x
I04	—	—	x	x	—	x	—	—	x
I05	x	x	—	—	x	—	—	—	x
I06	—	x	x	—	x	—	—	—	x
I07	x	—	x	—	x	—	x	—	x
I08	—	x	x	—	—	—	—	—	—
I09	x	x	—	—	x	—	x	—	x
I10	x	x	x	—	x	x	x	x	—

Redundancy - new data no longer contributes to the construction of the model.
Variation - the maximum variation of respondent categories included in the sample, including atypical, particular situations.
Theory - the generated theoretical model is complete, coherent and has maximum explanatory power.

Instead of conclusions

The qualitative research conducted starting from the GT methodology is more and more used, especially regarding researches with a high explaratory nature. For this approach to be able to be used, it is necessary to know and follow a series of steps, that are significantly different from those in the classic research – based on testing the hypotheses. The particularity of this research method is the exploratory nature, the explanatory theoretical construction starting from data collected on the field, and not from a series of hypotheses taken from the literature, or developed starting from missing areas of knowledge identified in it. The social-constructionist nature emphasizes the dependence on context for the results obtained and the interpreative model generated.

Acknowledgment

Sandu, A. (2018). New Rights of the People, Deriving from the Content of the Right to Peace. *Logos Universality Mentality Education Novelty, Section: Economy and Administrative Sciences, 3*(1), 73-100. https://doi.org/10.18662/lumeneas/06

An extended version of this article, in Romanian, is available at: http://lumenresearch.net/research-reports/workshop-in-research/.

Fragments on the topic of Grounded Theory can be found in other articles where this research technique has been used, and cited in the References.

Fragments from other articles of the author have been used as examples in this article.

References

Brod, M., Tesler, L. E., & Christiansen, T. L. (2009). Qualitative research and content validity: Developing best practices based on science and experience. *Quality of Life Research, 18*(9), 1263-1278. doi:https://doi.org/10.1007/s11136-009-9540-9

Caras, A., & Sandu, A. (2014). The Role of Supervision in Professional Development of Social Work Specialists. *Journal of Social Work Practice: Psychotherapeutic Approaches in Health, Welfare and the Community, 28*(1), 75-94. doi:https://doi.org/10.1080/02650533.2012.763024

Charmaz, K. (2000). Grounded theory: objectivist and constructivist methods. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Charmaz, K. (2002). *Constructing Grounded Theory* (2nd ed.). London, UK: Sage Publications.

Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis* (1st ed.). London: SAGE Publications Ltd.

Cheer, K., MacLaren, D., & Tsey, K. (2015). The use of grounded theory in studies of nurses and midwives' coping processes: a systematic literature search. *Contemp Nurse, 51*(2-3), 200-219. doi:10.1080/10376178.2016.1157445

Chelcea, S. (2007). *Metodologia cercetării sociologice. Metode cantitative și calitative* (3rd ed.). Bucharest, Romania: Editura Economică.

Chen, H., & Boore, J. R. P. (2009). Using a synthesised technique for grounded theory in nursing research. *Journal of Clinical Nursing, 18*(16), 2251-2260. doi:https://doi.org/10.1111/j.1365-2702.2008.02684.x

Cojocaru, D., Damian, R., Damian, S., Gavrilovici, O., Iliescu, L., Macarie, G., . . . Sandu, A. (2001). *Stil de viaţă şi comportament în sănătate al persoanelor cu boli cronice* (POSDRU/89/1.5/S/61879). Retrieved from

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research. Techniques and Procedures for Developing Grounded Theory* (3rd ed.). Thousand Oaks, CA: Sage Open.

Creswell, J. W. (2012). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches* (3rd ed.). California, SUA: SAGE Publications, Inc.

Curry, L. (Producer). (2015). Fundamentals of Qualitative Research Methods: Data Analysis (Module 5). Retrieved from https://www.youtube.com/watch?v=opp5tH4uD-w

Dey, I. (1999). *Grounding Grounded Theory: Guidelines for Qualitative Inquiry*. UK: Emerald Group Publishing Limited.

Frunza, A. (2017). *Supervizarea si dezvoltarea profesionala a asistentilor sociali* (1st ed.). Iasi, Romania: Editura Lumen.

Frunza, A., & Sandu, A. (2017). Values Grounding the Informed Consent in Medical Practice: Theory and Practice. *SAGE OPEN, 7*(4). doi:https://doi.org/10.1177/2158244017740397

Gibbs, G. R. (Producer). (2013, Feb 4, 2015). A Discussion with Prof Kathy Charmaz on Grounded Theory. Retrieved from https://www.youtube.com/watch?v=D5AHmHQS6WQ

Glaser, B. G. (1992). *Basics of Grounded Theory Analysis*. Mill Valley, CA: The Sociology Press.

Glaser, B. G. (2001). *The Grounded Theory Perspective: Conceptualization Contrasted with Description*. Mill Valley, CA: The Sociology Press.

Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Piscataway, NJ: Aldine Transaction.

Goulding, C. (2002). *Grounded Theory: A Practical Guide for Management, Business, and Market Researchers*.

Guba, E. G. (1990). The alternative paradigm dialog. In E. G. Guba (Ed.), *The Paradigm Dialog*. Newbury Park, CA: Sage Publications.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin; & Y. S. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks: Sage Publications.

Ilut, P. (1997). *Abordarea calitativa a socioumanului*. Iasi: Polirom.

Keen, A. (2013). Saturation in Qualitative Research. Distinguishing between Descriptive and Theoretical Saturation. Retrieved from https://matrix.rcn.org.uk/__data/assets/pdf_file/0003/511464/Research2013Th39.pdf

Kelle, U. (2005). Emergence vs. forcing of empirical data? A crucial problem of grounded theory reconsidered. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 6*(2).

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage.

Löfgren, K. (Producer). (2013). Qualitative analysis of interview data: A step-by-step guide. Retrieved from https://www.youtube.com/watch?v=DRL4PF2u9XA

Manuj, I., & Pohlen, T. L. (2012). A reviewer's guide to the grounded theory methodology in logistics and supply chain management research. *International Journal of Physical Distribution & Logistics Management, 42*(8), 784-803. doi:https://doi.org/10.1108/09600031211269758

Markey, K., Tilki, M., & Taylor, G. (2014). Reflecting on the challenges of choosing and using a grounded theory approach. *Nurse Researcher, 22*(2), 16-22. doi:https://doi.org/10.7748/nr.22.2.16.e1272

Mucchielli, A. (Ed.) (2002). *Dictionar al metodelor calitative in stiintele umane si sociale*. Iasi, Romania: Editura Polirom.

Onwuegbuzie, A. J., Leech, N. L., Slate, J. R., Stark, M., Sharma, B., Frels, R., . . . Combs, J. P. (2012). An Exemplar for Teaching and Learning Qualitative Research. *The Qualitative Report, 17*(1), 16-77.

Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data* (3rd ed.). Thousand Oaks: Sage.

Sandu, A. (2012). *Metode de cercetare in stiinta comunicarii*. Iasi, Romania: Editura Lumen.

Sandu, A. (2013). The Social Construction of Autonomy and the Meanings of Autonomy for the Diabetic Patient from Doctor's Perspective. *Procedia - Social and Behavioral Sciences, 93*, 2130–2135.

Sandu, A. (2016a). Cadre normativ-institutionale ale constructiei sociale a profesiei de consilier de probatiune in zona de N-E a Romaniei si in Republica Moldova. *Sociologie Romaneasca, 14*(1), 23-43.

Sandu, A. (2016b). *Social Construction of Reality as Communicative Action*. UK: Cambridge Scholars Publishing.

Sandu, A. (2017). *Constructia sociala a profesiei de consilier de probatiune*. Iasi, Romania: Editura LUMEN.

Sandu, A., Cojocaru, D., Gavrilovici, C., & Oprea, L. (2013). Trust: an Ethical Dimension of Healthcare in Chronic Disorders. *Revista Romana de Bioetica, 11*(1), 190-205.

Sandu, A., Necula, R., Frunza, A., Unguru, E., & Damian, S. (2017). A qualitative inquiry in social construction of chronic illness Case study

on diabetes mellitus. Doctors perspectives. *Archive EuroMedica, 2*, 18-23.

Sandu, A., Unguru, E., Ponea, S., & Cojocaru, S. (2010). Analysis of professional competencies in supervision field of social services. *Social Research Reports, 17*, 3-56.

Sbaraini, A., Carter, S. M., Evans, R. W., & Blinkhorn, A. (2011). How to do a grounded theory study: a worked example of a study of dental practices. *BMC Medical Research Methodology, 11*(1), 128. doi:https://doi.org/10.1186/1471-2288-11-128

Suddaby, R. (2006). From The Editors: What Grounded Theory Is Not. *Academy of Management Journal, 49*(4), 633-642.

Trasa, L. (2010). *Metode si tehnici de cercetare în psihologie*. course synthesis. Universitatea Spiru Haret, Bucuresti.

Urquhart, C., Lehmann, H., & Myers, M. D. (2010). Putting the 'theory' back into grounded theory: Guidelines for grounded theory studies in information systems. *Information Systems Journal, 20*(4), 357-381. doi:https://doi.org/10.1111/j.1365-2575.2009.00328.x

Xenofontov, I. (2011). *Razboiul sovieto-afghan (1979–1989). Studiu de istorie verbala. Perceptii. Documente*. Iasi, Romania: Editura LUMEN.