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The Logic of Qualitative Survey Research and its Position in the Field of Social Research Methods

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Abstract: Many qualitative studies describe the diversity of certain cognitions or behaviors in a population by means of semi-structured interviews with a small sample of population members. Up to now this type of qualitative research remains undefined in the methodological literature, however. It is argued that most of these studies may well be typified by the label "qualitative survey." While the statistical survey analyses frequencies in member characteristics in a population, the qualitative survey analyses the diversity of member characteristics within a population. The diversity of member characteristics may either be predefined or developed in open coding. Three levels of diversity analysis are defined: uni-dimensional description, multi-dimensional description and explanatory analysis, which may develop either in a concept-oriented or in a unit-oriented fashion.

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1. Introduction

Many empirical studies explore the diversity of certain behaviors or cognitions within a given population, based on some ten to fifty semi-structured interviews with members selected from that population. Typically the analysis involves the comparison of interview data for each topic inquired and then a summary of their diversity into a number of categories (themes of concern, types of behavior, attitudes, etc.). In the report, these categories are justified by quotations from the interviews. This type of research is often labeled simply as "qualitative study." Several authors have criticized the weak methodological justifications or even the confusion regarding the logic of this simple type of qualitative research (BAKER, WUEST & STERN, 1992; CAELLI, RAY & MILL, 2003; CHAMBERLAIN, 1999; SANDELOWSKI & BARROSO, 2003; REICHERTZ, 2009). They offer neither a clear diagnosis of the confusion involved nor a solution for it, however. The aim of this paper is to clarify this methodological problem by specifying the logic of this basic type of empirical research. Section 2 of this paper develops the concept of qualitative survey to define this type of research. Section 3 describes the logic of the qualitative survey through a step-by-step comparison between the qualitative survey and the statistical survey with an elaboration of three levels of analysis. Section 4 positions the qualitative survey firstly in relation to the main traditions of qualitative research as derived from CRESSWEL (1998) and secondly to the GUBA and LINCOLN (1998) scheme of inquiry paradigms. [1]

2. The Qualitative Survey

In sociology the word *survey* refers to the study of a population through observation of its members, as it has been carried out for ages in censuses. In modern times, most surveys use a sample of members to measure population characteristics, as in this definition by GROVES et al. (2004, p.4): "The survey is a systematic method for gathering information from (a sample of) entities for the purpose of constructing quantitative descriptors of the attributes of the larger population of which the entities are members." [2]

The population under study may include the inhabitants of a town or a country, or the members of a specific category like teachers or left-handed tennis players, etc. The point is that the study does not observe social interactions or communications between persons or institutions in a given population, but only characteristics of the individual members involved, e.g. alcohol consumption, political affiliation, preferred color of coat, etc. [3]

In terms of the dataset, the distinguishing feature of survey research is not the technique of data collection nor the characteristics of the data (*per se*), but "the rectangular variable by case matrix structure of the data set" and the consequential form of analysis by column inventory and consequential analysis "by matching variation in one variable with variations in other variables" (De VAUS, 2002, pp.3-7). [4]

As in the definition provided by GROVES et al. (2004) quoted above, in general methodology the word survey only covers quantitative studies that primarily aim at describing numerical distributions of variables (e.g. prevalence rates) in the population. In the case of *sample* surveys, statistical representativeness of the sample, data quality and precision of estimates (confidence limits), are the main issues in quantitative surveys. [5]

There is also a qualitative way of defining and investigating variation in populations, however. The qualitative type of survey does not aim at establishing frequencies, means or other parameters but at determining the *diversity* of some topic of interest within a given population. This type of survey does not count the number of people with the same characteristic (value of variable) but it establishes the meaningful variation (relevant dimensions and values) within that population. [6]

In short, the qualitative survey is the study of diversity (not distribution) in a population. Surprisingly, the term *qualitative survey* (and/or the alternative diversity survey) is almost non-existent both in textbooks on general social research methodology (e.g. BABBIE, 1989; ALASUUTARI, BICKMAN & BRENNAN, 2008; LEWIS-BECK, BRYMAN & LIAO, 2004) and in textbooks on qualitative research methods (CRESWELL, 1998; SCHWANDT, 1997; SEALE, GOBO, GUBRIUM & SILVERMAN, 2004). One significant exception is the paragraph on "Analysis of qualitative surveys" in FINK's book entitled *The survey handbook* (2003, pp.61ff.). FINK recommends qualitative survey analysis for the exploration of meanings and experiences; she does not specify the logic of qualitative survey as a design, however. WESTER (1995, 2000) uses the term qualitative survey (*kwalitatief survey* in Dutch) to specify one of three main types of qualitative research (besides ethnography and case study). Here I use qualitative survey in a slightly different way than WESTER. He defines it as an application of grounded theory with *theoretical sampling* and *constant comparison*, involving several empirical cycles (iteration of analysis and data collection). I propose a more formal definition that includes all studies of diversity in a population without restrictions as to the number of empirical cycles or the way of generating codes: data-driven, prior-research-driven or theory-driven (BOYATZIS, 1998, pp.29ff.). [7]

Outside the literature on methodology, the term qualitative survey is used in a casual way in various fields of empirical research, e.g. a biological study of combinations of house mite species in Finnish homes (STENIUS & CUNNINGTON, 1972), an anthropological study on the differences in the involvement of spouses in maternal health in Guatemala (CARTER, 2002), an educational study on the diversity in teachers' attitudes towards computer-assisted learning (DEBSKI & GRUBA, 1999) and a recent psychological study on the attitudes of Catholic priests toward bishops and ministry following sexual abuse revelations (KANE, 2008). [8]

2.1 Open (inductive) versus pre-structured (deductive) qualitative surveys

The biological example of the Finnish house mite study (STENIUS & CUNNINGTON, 1972) illustrates the need for distinction between open (or inductive) and pre-structured (or deductive) qualitative surveys. In the open/inductive survey, relevant objects/topics, dimensions (aspects of objects, variables) and categories (values at dimensions) are identified through interpretation of raw data (e.g. interview transcripts). In the pre-structured survey, some main topics, dimensions and categories are defined beforehand and the identification of these matters in the research units is guided by a structured protocol for questioning or observation. In the pre-structured case the diversity to be studied is defined beforehand and the aim of descriptive analysis is only to see which of the predefined characteristics exist empirically in the population under study. [9]

Many qualitative researchers tend to identify qualitative research with induction (open coding), thereby excluding the analysis of pre-structured data. I prefer to include pre-structured diversity analysis into the area of qualitative survey research as it is concerned with diversity as opposed to numerical distribution. As a fictitious example: an observational study on the diversity of consumer styles, in terms of predefined trademarks of clothing, shoes and drinks, and music styles among Rotterdam adolescents, would correctly be classified as a qualitative survey. [10]

Another source of confusion regards the use of quantitative (metric) data in qualitative surveys. The point here is that the qualitative-versus-quantitative nature of data is established in the analysis. It is not inherent ontology but analysis which determines whether a study is qualitative or quantitative. Again, a fictitious example to illustrate this point: a study on body length is a qualitative survey if it searches for the categories (/values) of this dimension that are present in a given population and if it uses these metric data as categorical data in further analysis. In other words: a survey is a qualitative survey if it does not count the frequencies of categories(/values), but searches for the empirical diversity in the properties of members, even if these properties are expressed in numbers. It may seem hard to imagine the relevance of such a study on the diversity of body length, but this survey could be a relevant part of a comparative study on interpretation and categorization of body images in ethnic subcultures, for example. [11]

2.2 Multiple levels of analysis

As another methodological point of interest, the STENIUS and CUNNINGTON (1972) study illustrates the possibility of different unit levels in one survey study (GALTUNG 1967, pp.37ff). The first level of analysis in their study is the population of mites living in one house. The study analyses the diversity of this population in terms of combinations of (sub-) species. The second level of analysis is the collection of houses in Finland. And the diversity to be studied at that level is the *diversity of combinations* of house mite species per house. The

explanatory aim of the study is to establish which combinations of mite species are causing allergy in humans.

Most examples in the exposition below will be derived from our study on the use of benzodiazepines by elderly people in Rotterdam (STOELE et al., 2004). Benzodiazepines belong to the category of medicine that general practitioners (GPs) prescribe very frequently to elderly people as a tranquilizer (anxiolytic or hypnotic). It is sold under many brand names, e.g. Valium, Librium and Diazepam. After two or three months of daily use, these medicines are no longer effective in enhancing sleep and/or relieving anxiety. The aim of this study was to explain why GPs keep on prescribing these medicines and why patients continue to consume them. The study consisted of three parts: a statistical analysis of cohort data on elderly patients in Rotterdam, a qualitative survey among long-term users (N=26) on their patterns of use and the meanings they attribute to it, and a qualitative survey among GPs (N=10) in the Rotterdam region.

Box 1: The benzodiazepine study [12]

3. The Empirical Cycle in Qualitative and Statistical Surveys

One recurring statement says that qualitative research differs from quantitative research based on the iteration of data collection and analysis in one project: the qualitative researcher starts with some data collection, analyzes them, develops a hypothesis about the subject, and then samples new units theoretically (i.e. informed by the hypothesis to be tested) for data collection and so on until a theoretical saturation of concepts (categories) or a full explanation of the phenomenon is reached. This is the logic of both grounded theory in developing and saturating concepts (GLASER & STRAUSS, 1967, pp.101-116) and analytic induction in developing and testing hypotheses (BECKER, 1998, pp.194-214; ROBINSON, 1951). In this type of qualitative research, both data collection and the research question develop in interaction with data analysis (MAXWELL, 2005). [13]

However, many qualitative studies are based on a single *one-shot, one-method* sample, sometimes for pragmatic reasons (depending on available money and time), other times because of good prior knowledge or even because of the availability of a pre-structured inventory of codes. [14]

The one-shot survey involves only one empirical cycle (research question—data collection—analysis—report) in parallel to the typical case of a statistical survey. Because of this parallel I present the stages of the research process for both the qualitative survey and the statistical survey in parallel (Table 1).

Steps	Qualitative Survey	Statistical Survey
1. Defining knowledge aims		
Topic (material object)	any topic	any topic
Aspect (formal object)	diversity	frequency distribution
Empirical domain	any population (collection)	any population (collection)
Unit of data collection	members of population	members of population
Knowledge function	primarily description	primarily description
2. Sampling		
Method of selection	diversity; by purpose	probability; by chance
Criterion for size (N)	saturation, coverage of population diversity	precision of estimate (CI)
3. Data collection		
Measurement level	any	any
Method of collection	any	any
4. Analysis	diversity analysis	distribution analysis
1st-level analysis Unidimensional description	coding data (downward and upward) in objects, dimensions and categories	counting frequencies descriptive statistics estimating parameters
2nd-level analysis Multidimensional description	*case oriented:* combinatory synthesis of diversity: property-space analysis, typology construction *concept oriented:* holistic synthesis by core concept	*unit oriented:* cluster analysis, homogeneity analysis *variable oriented:* correlation, factor-analysis, index construction, scaling
3rd-level analysis Explanation	deterministic explanation: combinatory analysis QCA, pattern analysis	probabilistic explanation: discriminative analysis, regression, LISREL

Table 1: The logic of the qualitative survey in comparison to the statistical survey [15]

3.1 Specifying the knowledge aim(s): Material object, formal object, empirical domain and unit of observation

Qualitative and statistical surveys may start from identical aims and even from identical research questions. In practice some researchers and research agencies transform any research question into a standardized questionnaire in order to measure frequencies and correlations. Others systematically opt for

semi-structured interviews, translating every research question into a question about diversity in the participants' meanings or practices. Logically speaking, however, only the translation of the research question into concrete *knowledge aims* (operationalization), may justify the choice for either the one or the other type of survey (or other designs) (DUL & HAK, 2008; VERSCHUREN & DOOREWAARD,1999). [16]

The knowledge aim first specifies the material object (i.e. the topic) to be studied (e.g. habitual benzodiazepine use) then the formal object, i.e. the aspect of this topic to be studied (e.g. diversity in meanings and patterns), the empirical domain to be covered (e.g. the elderly population in the Netherlands), and the unit to be observed (member of this population). [17]

The qualitative survey studies the diversity of a topic within a given population; the statistical survey studies the numerical distribution of the characteristics of a topic in a population. The empirical domain is the social space about which the researcher wants to draw conclusions. That is the selected population. [18]

In the field of institutional healthcare and social services in particular, the primary knowledge aim of many qualitative studies is to explore the views of participants as expressed in their own words (e.g. as a means to follow the humanistic aim of empowerment). These studies seem to dominate the common image of qualitative research (BERNARD, 2006). Formally speaking, as said before, surveys may concern any collection, not only of groups (of persons), but of any kind of units (such as animals, trees, artifacts). The population may also be a collection of complex social entities (cases) like school classes, department boards or TV programs. A survey might observe processes of playmate selection in school classes or decision making at board meetings in a multinational company, or discourses on ethnicity in soap series. However, with complex units like these, studies are most often labeled according to the type of data collection, e.g. ethnography, or to the type of analysis at the unit level, e.g. membership categorization analysis, discourse analysis, organization analysis, content analysis etc., even when it concerns a description or an explanation of diversity between cases in a specific collection of the referred units. [19]

To sum up, the logic of the (qualitative or statistical) survey as a research design applies to any diversity or distribution analysis in any collection of units, but in social research practice the label of survey is mostly applied only to questioning/conducting interviews with population samples. [20]

Both in qualitative and in statistical surveys the population concerned is analytically treated as a *tertiary collectivity* (GALTUNG, 1967, p.39), i.e. a set of loose entities that are the units of data collection. This characteristic of survey research is often referred to as *methodological individualism* (BRYMAN, 1988, pp.38-40); strictly speaking, a common social survey does not investigate social interaction but participant accounts and evaluations of social interaction. This equally holds true for qualitative surveys and statistical surveys. [21]

3.2 Sampling

The statistical survey aims at estimating/evaluating the frequencies of characteristics of units in a population. This aim requires a *probability sample*. In order to establish the statistical reliability of estimates the researcher needs to know the probability for each member of the population to be selected in the sample. Therefore, one needs a full register of population members as a sampling frame. The sample size is determined by the level of accuracy needed in the population estimates, as measured by the confidence interval (CI) and the confidence level (α). For a 100% precision (α =1) the total population should be included. [22]

A qualitative sample should represent the diversity of the phenomenon under study within the target population. This could be achieved by a large random sample, but this method would not be very efficient. It is both logical and more efficient to purposively select a *diversity sample* with the aim to cover all existing relevant varieties of the phenomenon *(saturation)*. What saturation is depends on the type and degree of diversity that is judged relevant. Take as an example, a study of the colors of coats that students wear. To be sure that all forms of diversity are covered it would be necessary to include the whole population in the sample, because the number of colors that our eyes and brains can distinguish is innumerable. However, for a single study it might be sufficient to distinguish only, say, ten colors. At that low level of detail a small sample may provide sufficient saturation. [23]

In an interview survey with open questions, each answer is unique. Here also all the members of the population under study should be included to guarantee full and detailed coverage. Therefore, in an inductive description of diversity (i.e. without a predefined coding list as in the case of colors), it seems efficient to follow the following steps: a) start with a small sample, b) perform an intermediate analysis to develop categories, c) decide on a strategy to find uncovered categories, i.e. respondents who are not represented in the categories as developed in step b, and d) define a rule as to when to stop (e.g. after five interviews without relevant new information). In a qualitative survey, saturation is an empirical question, not so much a theoretical one, as in Grounded Theory. The goal is not to detail *concepts* exhaustively for a theoretical domain (i.e. to cover all theoretical possibilities), but to cover relevant (in terms of aims) diversity in an empirically-defined population which may comprise only a small number of units (e.g. a class in school). [24]

3.3 Data collection

The data collection method is not limited by the study design in itself, nor is the type of data to be collected. Both statistical and qualitative surveys may collect data by questioning people—which is the most common type of survey—but also by observing interactions or artifacts in any kind of situation. [25]

3.4 Analysis

Both statistical and qualitative surveys are descriptive designs in the first place. In most cases researchers want to get more out of it, however, in terms of:

a. relationships between characteristics of the units, i.e. patterns of categories (in a qualitative survey) or correlations between variables (in a statistical survey), respectively, to gain compact multidimensional description of diversity/variance;
b. explanation of diversity/variance in the subject of study by contextual determinants. [26]

Here researchers may switch from a qualitative procedure to a quantitative one, especially when there is a large number of cases in the data. This is very common in market research for instance, under the assumption that correct statistical representation is not important when it comes to relationships between variables. [27]

Traditionally, statistical analysis has been classified according to the number of variables involved (e.g. by GALTUNG 1967, pp.399ff.). In practice, however, most often a dichotomous classification is used by distinguishing univariate versus multivariate analysis. Some types of multivariate analysis are descriptive (e.g. index construction) and others are explanatory (e.g. path analysis and regression analysis). [28]

In the qualitative literature the various levels of analysis are classified in terms of *depth* ranging from *superficial description* to *theoretical* interpretation (CORBIN & STRAUSS, 2008, p.50) or in terms of *distance from the data* as achieved "by cumulative steps of data transformation" (SANDELOWSKI & BARROSO, 2003, p.909). [29]

I propose to combine these two classifications into a three-level classification of qualitative survey analysis: unidimensional description, multidimensional description and explanation. Unidimensional description entails organizing data into objects, dimensions for each object and categories for each dimension, whereas multidimensional description synthesizes dimensions and/or categories into more abstract concepts and/or typologies. Explanation relates descriptive categories or dimensions to context (social, biographical, socio-historical, political, etc.). Most often, description and explanation are intertwined in the process of analysis. [30]

3.4.1 First-level analysis: Unidimensional description

In analyses of diversity three logical levels of diversity have to be distinguished: objects, *dimensions* of objects (*variables* in statistical surveys) and *categories* of dimensions (*values*). As an example: habitual benzodiazepine use is an object. Frequency, timing and dosage are three dimensions of it; variability is a sub-

dimension of all three dimensions mentioned; fixed and varying are two categories of variability.

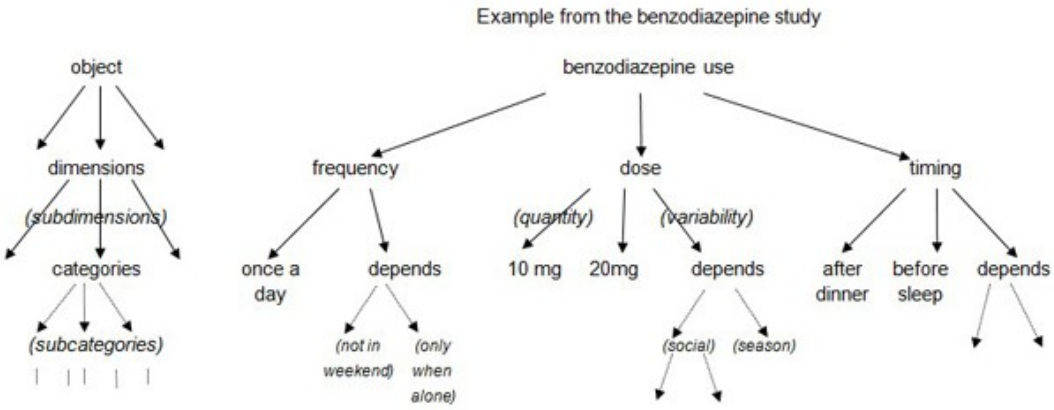

Figure 1: Organizing codes into objects, dimensions and categories [31]

Formally speaking, the coding of a data fragment may be either downward (i.e. differentiating) or upward (i.e. synthesizing). *Downward coding* specifies *diversity within* an object by distinguishing dimensions and diversity within dimensions by distinguishing categories. It moves towards a lower level of abstraction. [32]

Upward coding specifies a *commonality* with other objects, dimensions or categories, respectively. It moves towards a higher level of abstraction. For example, benzodiazepine use may be coded synthetically as a category of drug use and/or as an instance of medicalization of daily life problems. Different aims (or reasons) for benzodiazepine use like "anxiety," "to feel better," "to be more confident" as reported by respondents may be coded synthetically as tranquillizing in contrast to sleeping.

	second code	collection or structure of objects	object or superdimension	dimension
upward coding		↑	↑	↑
fragment text	first code	object	dimension	category
downward coding		↓	↓	↓
	second code	dimension	category or subdimension	subcategory

Figure 2a: Downward and upward coding of a data fragment

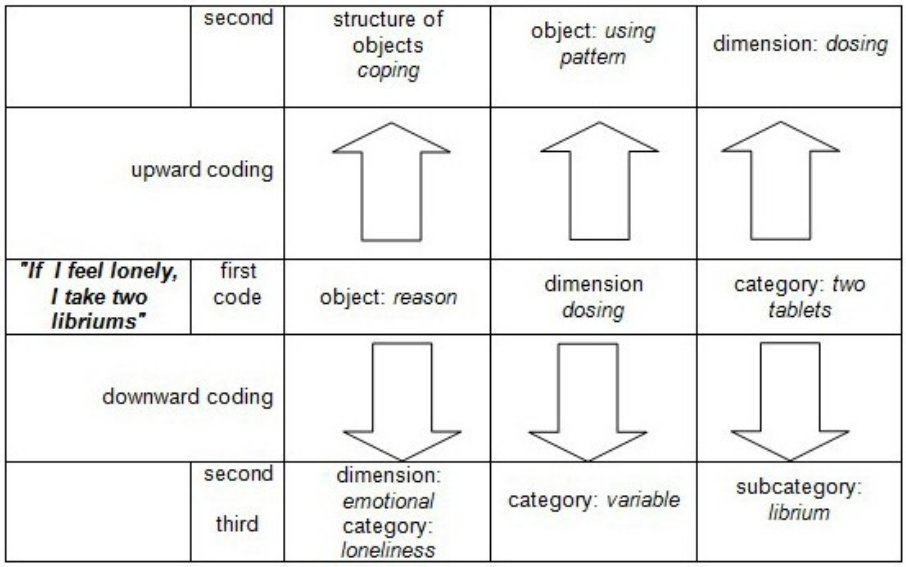

Figure 2b: Example from the benzodiazepine study[1] [33]

In some cases description may just consist of a list of topics (objects) as found in the data, whether predefined or not and whether illustrated by quotes or not, e.g. a list of reasons that general practitioners put forward not to comply to official standards (FREEMAN & SWEENEY, 2001). In those cases the analysis consists of classifying relevant data into a neat and handy list; it does not add a structure, i.e. a *higher* or *deeper* conceptual level. SANDELOWSKI and BARROSO (2003) characterize this type of research as topical survey that they do not judge worthy of the label "qualitative." I propose to qualify this type of study as simple descriptive qualitative survey. Its methodological quality depends only on the sampling and the data collection. [34]

In explorative surveys, well-performed interviews or observations may produce valuable sophisticated knowledge by concurrent validity checking (probing, replicating, triangulating). In this way much of analysis may have been performed during the data collection itself, with little need for more analysis afterwards. This may be quite suitable to the aim of the study.

1 Note that the choice of first codes is free ("open") within the limits of the knowledge aims of the study. Each data fragment may be loaded with numerous codes. The substance of coding is not methodology but theory.

> In our interviews of general practitioners we found two basic treatment policies among general practitioners with regard to sleeping problems: medication first or discussion first, with a third category of general practitioners who say that they decide in each case on the basis of other symptoms or prior experience with the patient or on the basis of circumstances like time pressure. So the descriptive report simply consists in summarizing these three categories of treatment policy, and these categories are illustrated by some typical quotes from the interviews, like:
>
> (Time pressure)
>
> "If I am busy, then it is easier to satisfy patients with a prescription; if I have more time, then they often don't need medication." (Translated from STOELE et al., 2004, p.69)

Box 2: A simple description of treatment policies [35]

Usually, however, the synthesis of diversity is produced in an explorative analytic process after the data collection. It starts with coding, i.e. segmenting data (dividing data into meaningful parts) and attributing topical, dimensional and/or categorical labels to segments. Many authors have provided guidelines for coding; all have their personal preferences, e.g. GLASER and STRAUSS (1967), MILES and HUBERMAN (1994), BOYATZIS (1998), DEY (2004), CORBIN and STRAUSS (2008). These may be helpful. But these guidelines are always secondary to the core task in coding, which is to determine the relationship between the data fragment and the knowledge aims of the study. Therefore the quality of the coding is not so much a technical methodological issue, but involves theoretical sensibility and creativity. [36]

Coding may be performed in several cycles with iterations of upward and downward coding. The ruling principle is to create a consistent, well-defined and well-ordered scheme of objects, dimensions and categories which should all be legitimated by their relationships to the research aims. The process may be structured along the lines of open, axial and selective coding according to the rule of constant comparison in grounded theory (CORBIN & STRAUSS, 2008). [37]

3.4.2 Second-level analysis: Multidimensional description

In the analysis of relationships between characteristics, the difference between qualitative and statistical survey appears in the choice of either *categorical variation (diversity)* or gradual variation (*gradation)* in handling dimensions of topics. In other words, between categorical versus gradual interpretation of values. It does not matter whether or not the values themselves are displayed in numbers or text, nor whether respondents consider the values metrical or categorical. [38]

In quantitative analysis multidimensional (or multivariate) description is performed by grouping variables (items) into scales and sub-scales on the basis of statistical correlations among variables. These correlations are explored in factor analysis and/or inspection of item-total correlations with the "reliability" program in SPSS or other software. [39]

Qualitative multidimensional descriptive analysis proceeds in either or both of two directions: concept (dimension/variable) oriented or unit (case) oriented synthesis (RAGIN, 1989; MILES & HUBERMAN, 1994; BECKER, 1998; YIN, 2009; see Box 3)

Simple hypothetical example of a coded data matrix (i.e. property space) with five cases and three dichotomous dimensions.

	Dimensions		
case NR	D1	D2	D3
1	y	y	n
2	n	n	y
3	n	y	y
4	y	y	n
5	n	y	y

Case-oriented analysis: Compare rows

Combinations of properties per row are: yyn (case 1 and 4), nny (case 2) and nyy (case 3 and 5).

So there are 3 clusters of identical cases, i.e. 3 types in this sample of 5.

Dimension-oriented analysis: Compare columns

	y D2	n	y D3	n		y D3	n
y D1	2	1	0	2	y D2	2	2
n	1	1	2	0	n	1	0
	I		II			III	

I. D1 x D2: low positive correlation.

Probability conditioning: If D1=y, D2 more likely to be y (compared to condition D1=n)

II. D1 x D3: perfect negative correlation.

Sufficient conditioning: If D1=y, D2=n; If D1=n, D3=y; D1y is a sufficient condition for D3n.

III. D2 x D3: strong negative correlation.

Necessary conditioning: D3y is a necessary condition for D2n

Box 3: Case (or unit) oriented versus dimension- (or concept-) oriented analysis [40]

Concept-oriented synthesis consists of compiling (explicitly or implicitly) a number of dimensions and/or categories into one abstract core concept, while *case-oriented synthesis* consists of grouping similar cases into types (categorical classes). [41]

It is typically the strategy of grounded theory to develop one core concept that synthesizes the relevant behavioral diversity of actors. The classical example is

the concept of awareness context with four categories (open, mutual pretence, suspected and closed) as the ruling principle of interactions in hospital departments where patients are dying (GLASER & STRAUSS, 1967). [42]

Case oriented empirical synthesis is performed by grouping cases (not characteristics) on the basis of corresponding combinations of characteristics into one or more types (DOTY & GLICK, 1994; KLUGE, 1999, 2000). In simplification of KLUGE (2000), this is a three stage process: 1) selecting relevant dimensions and categories; 2) analyzing and interpreting empirical category combinations; 3) selecting and labeling a covering set of category combinations. [43]

A formal method of analyzing combinations of characteristics at the case level is the *boolean* method of case comparison that was originally developed by LAZARSFELD (1962). BECKER calls it "Property Space Analysis" (PSA) (1998, pp.172ff.), KLUGE (2000) writes "attribute space." An important technical device for this type of analysis is the *truth table*, i.e. a table with a column for each dimension and rows for all possible combinations of characteristics (KLUGE, 1999, 2000; RAGIN, 1989). [44]

In the benzodiazepine study we typified cases on the basis of the categories of the dimensions "cycle," "timing," "dosage" and "reflection" into a typology of *using patterns* with three types: routine use (daily use, at fixed times, in fixed doses, without reflection), preoccupied use (daily use, at different times, in various doses, with complex reflection) and responsible use (intermittent use, at fixed times (if using), in fixed doses, with simple reflection). Table 3 shows the truth table that we used to evaluate the coverage of this typology in the sample.

Dimensions of benzodiazepine consumption					
Cycle	Timing	Dosage	Reflection		
day (D) week (W)	fixed (F) variable (V)	fixed (F) variable (V)	complex (C) simple (S)		
Logically possible combinations of categories				Type (defined)	N found
D	F	F	C		
D	F	F	S	routine	10
D	F	V	C		-
D	F	V	S	?	1
D	V	F	C		
D	V	F	S		-
D	V	V	C	preoccupied	4
D	V	V	S		-

Dimensions of benzodiazepine consumption					
Cycle	Timing	Dosage	Reflection		
day (D) week (W)	fixed (F) variable (V)	fixed (F) variable (V)	complex (C) simple (S)		
W	F	F	C		
W	F	F	S	responsible	5
W	F	V	C	?	2
W	F	V	S		-
W	V	F	C	?	1
W	V	F	S		-
W	V	V	C		-
W	V	V	S		-
Raw sample size 26		Incomplete data: 3		Net sample	23
Covered by typology					19
Coverage rate					19/23 = .82

Table 3: Truth table of benzodiazepine consumption patterns [45]

The label attached to each type (Stage 3) is a synthetic statement about the combination of characteristics involved. Furthermore, the inherent claim of a typology is its relevance to the (theoretical or practical) problem of interest. So in the end the empirically-grounded typology is not only descriptive but (at least implicitly) also explanatory. [46]

Often one or two types classify problematic or rather success cases. For example, most readers of GLASER and STRAUSS (1967), will probably judge the open awareness context to be the most ethical one and therefore the most desirable one (= success).

> In crafting the typology of benzodiazepine use patterns, the label "preoccupied" is a theoretical statement about the core principle of one specific pattern of use. At the same time the label is expressing a hypothesis about the practical problem under study, e.g. the persistence of frequent benzodiazepine use. The distinction between routine, responsible and preoccupied benzodiazepine use only makes sense by its claim of relevance to the solution of the problem of benzodiazepine overconsumption in the Netherlands. It is suggested that “preoccupied” users need more intensive care than routine users to enable them to stop taking benzodiazepines. In that sense this typology implies a practice-oriented theory.

Box 4: Typology and explanatory theory [47]

Most often typologies do not cover all cases, i.e. not all cases fit into it. Therefore one of the criteria to evaluate a typology is its *empirical coverage*, both statistically (the proportion of cases that fit into the typology) and qualitatively: which varieties of cases do not fit? It should be noted that the data covered by the qualitative sample cannot be generalized statistically, because of the unknown numerical distribution in the population. In order to enlarge the coverage, one may want to reconsider the selection of dimensions and categories (see Table 3). [48]

3.4.3 Third-level analysis: Explanation

Statistical causal analysis aims at explaining (technically, not theoretically) gradual variation (variance) in the dependent variable (representing the object of study) on the basis of independent variables by techniques like discriminant analysis, multiple regression analysis and linear structural relations (LISREL) analysis. [49]

In a qualitative survey, one may analyze relationships between types (from multidimensional description) and selected contextual conditions with a conditional matrix, as is sometimes done in grounded theory studies (CRESWELL, 1998, p.57). [50]

For the aim of causal analysis the qualitative survey is handled as a parallel multiple case study with combinatory pattern analysis as a test for hypotheses (HAK & DUL, 2009; YIN, 2009). RAGIN (1989, 2007) developed QCA as a computerized technique for conditional causal analysis of small samples with a high number of dimensions. This type of analysis is often used in international comparative politicology (GOERTZ, 2006) with nations as units. QCA may be seen as a sophistication of classical property space analysis. [51]

Both in statistical analysis and in qualitative analysis the boundaries of multidimensional description and explanation overlap, and in the practice of searching for maximal explanation there is often an explorative iteration of descriptive and explanatory analysis. [52]

4. The Position of the Qualitative Survey in the Field of Qualitative Research

Many authors have proposed classifications of qualitative research; none of them includes the qualitative survey as an explicit category. For the aim of positioning the qualitative survey in the field of qualitative research, I take the well-known typology by CRESWELL (1998). This typology seems to represent the mainstream thinking quite well. I shall also shortly discuss the paradigmatic status of the qualitative survey. [53]

4.1 The qualitative survey related to the five traditions

CRESWELL (1998) distinguishes five types of qualitative research that represent long-lasting traditions in social science: biography, phenomenology, grounded theory, ethnography and case study. [54]

The problem with *grounded theory* (GT) in this classification of qualitative research is that GT functions in scientific discourse in two different meanings. On the one hand it is a general idea of generating concepts—which applies to most types of research that are labeled as qualitative. On the other hand, however, it is a sophisticated intensive research model for the generation of explanatory theory (CHARMAZ, 2007) of circumscript social practices. In this sense GT requires iterating multi-source and multi-site data collection and analysis. CRESWELL typifies data collection in GT as: "Interviews with 20-30 individuals to 'saturate' categories and detail a theory" (CRESWELL, 1998, p.65). This is very much like the typical mode of qualitative surveys, but hardly realistic in relation to GT as a research model for generating explanatory theory. [55]

Most qualitative survey analyses are inductive indeed, but neither iterative and not multi-source nor very sophisticated theoretically. It is, first of all, a simple research design, not for the study of social structures and processes but for the study of diversity in a population. One or more qualitative surveys may be part of a GT project, especially in the first stages. In the classical book (GLASER & STRAUSS, 1967) many illustrative quotes are from interviews with nurses who estimate and construct social loss. This part of the project was in fact a qualitative survey of *social loss attribution* practices by nurses. [56]

In a sense, *ethnography* is the opposite of the qualitative survey. The ethnographer searches for steady patterns of interactions in a certain community, not for diversity among individual members. The community as studied in ethnography is not a set of unconnected persons but a system of interactions and meanings. Nevertheless, ethnographic projects may, just like GT projects, contain one or more qualitative surveys. [57]

In *empirical phenomenology,* unrelated individuals are interviewed, as in a qualitative survey. These individual persons are not selected because of their membership in a given population, however, but because of their experience with the topic of study, e.g. drug dependency, divorce, or being recently in love. The study does not primarily aim at a coverage of the diversity, but rather at conceptualizing the common essence in these experiences (BAKER et al., 1992; MASO & SMALING, 1998). [58]

Typically a c*ase study* is an "in depth analysis of a single case or a small number of cases" (CRESWELL, 1998, p.65), with multiple sources of information and repeated observation. Most often the cases are organizations or institutional interactional practices, not populations (DUL & HAK, 2008; YIN, 2009). In a multiple case study, cases are selected on a theoretical basis. As stated above a

simple qualitative survey might be handled in analysis as a multiple case study, but it is a very limited one in terms of data sources and time span. [59]

Biography is "exploring the life of an individual" (CRESWELL, 1998); as such it has very little in common with qualitative survey research, although a survey could be the analysis of a collection of biographies. [60]

4.2 The paradigmatic status of the qualitative survey

A different way of grouping research branches is to classify them according to underlying paradigms, i.e. clusters of epistemological and philosophical beliefs. A well-known and broadly accepted example is the classification by GUBA and LINCOLN (1998). As BRYMAN (1988, pp.104ff.) has argued extensively, methods are not per se paradigmatically bound. This also holds for qualitative survey research in particular. In terms of GUBA and LINCOLN (1998), the qualitative survey may be useful in a *positivist* or *post-positivist project* (including ontological realism and epistemological objectivism), but it could also be performed in the context of *critical theory* or *constructivist* projects. For example a constructivist feminist project could use a qualitative survey to analyze the diversity of constructions regarding economic equality in couples. The critical or feminist character of the study is produced by interpretations at a higher sociological level by relating the empirical results to general societal structures that are far beyond the reach of the survey. [61]

5. Conclusion

In this article I have introduced the label *qualitative survey* as a research design and explicated its logic that is clearly different from other types of qualitative research. It is a simple research design that has quite often been reported under the labels of grounded theory or unspecified qualitative research. I hope future researchers may profit from this label and the explication of its logic for designing their projects and for justifying it both in the arena of qualitative and quantitative research. [62]

Of course a better label does not warrant better research. The recipe cannot do the cooking but it may provide a reference for reflection on the taste of the cake. [63]

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