

# Combining grounded theory and biographical research in midwifery science

## Methodenkombination in der Hebammenwissenschaft: Grounded Theory und Biographieforschung

### Abstract

**Aim:** This article presents an innovative methodological approach – the combination of grounded theory and professional biographical research – with the potential to create a typology of midwives and to reconstruct individual out-of-hospital career pathways. These initial results of an ongoing PhD study of midwives' career-related decision making processes regarding leaving or continuing to provide out-of-hospital obstetric care in Germany will serve as an example to demonstrate the value and relevance of the proposed combination – for the young discipline of midwifery science and regarding as yet unexplored aspects of professionalism in midwifery.

**Methodological relevance of the project:** The profession 'midwife' is an under-researched topic in Germany, even more so within the qualitative paradigm. The increasing number of midwives leaving the profession, and in particular out-of-hospital-obstetric care, has resulted in a shortage of midwifery services. So far, however, there is hardly any empirical information available in Germany as to why midwives enter, remain in or leave this field. Gaining insights into factors influencing midwives' decisions in this regard is as relevant to health science as it is to health policy. New methodological approaches are required to untangle the complexity of midwives' professional development. The methodological combination presented here provides an emic perspective and knowledge of the structural factors within which professional pathways unfold.

**Keywords:** grounded theory, biographical research, out-of-hospital birth/obstetrics, midwifery research methodology

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### Zusammenfassung

**Ziel:** Dieser Artikel stellt einen innovativen methodischen Zugang vor, um verschiedene Professionstypen unter den Hebammen herauszuarbeiten sowie individuelle Karriereverläufe außerklinisch tätiger Hebammen zu rekonstruieren: eine Kombination von Grounded Theory und Berufsbiographieforschung. Erste Ergebnisse einer laufenden Dissertation zu Entscheidungsprozessen von Hebammen, außerklinische Geburtshilfe anzubieten oder diese zu verlassen, dienen als Beispiel, um Sinn und Relevanz dieses neuen methodischen Zugangs zu erläutern. Damit kann empirisches Wissen aus emischer Sicht zum bislang qualitativ wenig erforschten Berufsstand Hebamme generiert werden. Gleichzeitig reichert die Kombination die Vielfalt methodologischer Herangehensweisen der jungen Disziplin Hebammenwissenschaft an.

**Methodische Bedeutung des Projektes:** Die zunehmende Zahl an Hebammen, die aus dem Beruf und insbesondere aus der außerklinischen Geburtshilfe aussteigt, resultiert aktuell in einen Hebammenmangel. Bislang gibt es noch kaum empirische Information in Deutschland, warum Hebammen in diesen Tätigkeitsbereich einsteigen, hierin verbleiben oder wieder aussteigen. Einblicke in derartige Entscheidungsprozesse von Hebammen zu bekommen, ist sowohl für die Gesundheits-

wissenschaft wie auch für die Gesundheitspolitik ein wichtiges Unterfangen. Um der Komplexität der Berufsverläufe von Hebammen gerecht zu werden, sind neue methodische Zugänge erforderlich. Die hier vorgestellte Methodenkombination deckt emische Perspektiven auf, verknüpft diese mit strukturellen Faktoren und entfaltet in diesem Geflecht gegenwärtige Hebammenberufsverläufe.

**Schlüsselwörter:** Grounded Theory, Biographieforschung, außerklinische Geburtshilfe, qualitative Hebammenforschung, Hebammenwissenschaft

## A new approach within midwifery science

This article presents a new approach for examining midwifery career paths from an emic perspective by combining two approaches: grounded theory methodology in line with Charmaz and biographical research [5][11]. The focus of our research, which falls within the scope of a PhD thesis, is on decision-making and professional biographical processes and transitions of midwives who attend out-of-hospital births. Hereby we consider the background of rapid current changes, primarily the current academisation process and health policy crises. We are interested in how midwives make initial and ongoing decisions about how to shape their professional career, how they transform their decisions into practice, and how professional biographies develop over the years. Emphasising an emic perspective allows us to sketch out how midwives themselves present their professional situation, associated values, changes and turning points. We focussed on those issues as they seem to influence career paths and decisions on shaping one's professional development [11]. A qualitative research paradigm presents the most suitable method to answer questions about why and how biographical processes and transitions develop. Moreover, it serves to evoke an emic perspective on how midwives themselves evaluate their professional situation and construct associated professional values ([17] pp. 155-69). Developing a methodological approach to capture the complex situation under investigation – that is to reveal motives and driving forces for entering or remaining in a personally and professionally highly demanding setting – is crucial, both politically as well as scientifically. As Kahl states, midwifery science, particularly in Germany, still lacks its own fundament and draws on other sciences such as nursing, instead of discussing and developing its own methodological approaches ([14] pp. 206-12). The proposed combination of grounded theory methodology with biographical research, as we will show in the following sections, serves to highlight turning points in professional biographies and the development of strategies within differing personal and professional contexts. The results of the study will be presented in subsequent publications, thus only a few illustrating examples are provided within the scope of this article.

## Betwixt and between – developing a research methodology to analyse midwives' professional pathways

Social science including grounded theory is primarily interested in larger social systems, their stability versus change, or partial developments and coherencies within those ([9] p. 82). In contrast to this approach, biographical research places the personal much more centrally. Biographical research considers the individual experience of one's personal life course relevant for constructing theories [18]. For our research interest, both components are essential. Combining grounded theory methodology according to Charmaz with elements from biographical research appeared suitable [5][22]. We combine the advantages and opportunities of both approaches to reconstruct professional biographies of midwives and to present the individuality embedded in the transitional development of the larger professional group. For our project, the most suitable approach is the conceptualisation of how people and structures are interlinked [22]. We aim to demonstrate which resource-oriented changes and support midwives may need under various conditions to remain in the profession. The chosen approach allows us to analyse subjective perceptions, constructions, interpretations and action strategies [18]. On this basis, transferability to the collective professional level can be assumed [11].

Grounded theory is a methodology which strives to generate theories 'grounded' in the data, as opposed to verifying or rejecting prefabricated hypotheses [10][19][20]. Defining elements of grounded theory are the constant comparison, an inductive construction of analytic codes and categories from the data, and theoretical sampling with the aim of constructing a theory [15], without being representative of the wider population ([5] p. 214)[20]. Whereas the founding fathers of the methodology in the 1960s, Strauss and Glaser, assumed that data derived theories are independent from the researcher, Charmaz emphasises that researchers are part of the world they study and the data they collect. According to her constructivist approach, objective realities cannot be detected as they do not exist; rather, we construct individual realities. Thus, Charmaz does not deny the existence of reality, but stresses that everything detected is influenced by previous experiences and knowledge [4][5] p. 13).

This focus on the emic perspective of the participants, parallel to making preconceptions explicit, suits our research intention and nicely combines with a central focus on biography.

Biographical research, in turn, comprises a variety of methods and strategies which may be individually combined and adapted ([9] pp. 85-127)[22]. Our study focuses on problem-specific modes of action in particular professional areas. It is therefore concerned with the systematic comparison of different modes of action and aims to analyse how individuals respond to certain challenges [22]. This approach sees the interviewee as an emancipated person who expresses his/her own experiences instead of being a researched object [16]. According to Schütze [18] and Hermanns [11], there are three types of processual structures which can be applied to personal and professional biographies: intentionally determined careers, predetermined careers, and courses. An intentionally determined career is shaped by an active subject following intrinsic motives. Decisions are made consciously, planned, and implemented, using resources expediently. A predetermined career is characterised by following extrinsic expectations and aims to fulfil institutional norms. A course implies suffering; the individual feels s/he has no choice, living in conditions s/he neither likes nor has the ability to influence. However, our preliminary results demonstrate that this model needs adaptation. Depending on surrounding conditions, the career type might change. For example, we found that following an intentional determination can utilise so much power and resources that an individual retreats. The opposite is also possible: an individual has the option of emancipating him or herself from a course or predetermination, identifying his/her priorities and living up to them. Thus, our participants did not always demonstrate a linear professional biography, but one subject to change. Placing the individual in the centre against the backdrop of developments of the larger group is a core element of our methodological triangulation. In contrast to Baldus, who also combined grounded theory and biographical research, examining a critical incident within the transition to parenthood, and thus the personal life course [1], the focus of our project is primarily on professional biographical developments.

## Population and sampling strategy

The sampling strategy of the combined methodology aims to enable the presentation of comprehensive pictures of individual career biographies as well as to demonstrate categorical results which have a degree of transferability within the population. Therefore, theoretical sampling was applied to our project, in line with grounded theory. Theoretical sampling is sometimes used in biographical research, but weaker sampling strategies such as snowball sampling are common ([9] pp. 235-45). We believe that theoretical sampling offers a broader range of participants, and therefore applied this method to gain richer

data. Inclusion and exclusion criteria were developed within our research interest and the first participants recruited. Our interviewees are midwives who attend births at home or in midwife-led birth centres, or those who have left this sector within the four years prior to the beginning of recruitment. 23 midwives have been interviewed since July 2015. After conducting and simultaneously analysing initial interviews, we gained an understanding of the phenomenon, including the close relationship between personal and professional biographies. We therefore chose participants whose personal circumstances contrasted with those already interviewed, for example in terms of different living areas (rural vs metropolitan), different family models and number of children, different work models (e.g. team or sole practitioner) or varying networking and social support situations. This enabled us to maximise contrasts and dimensions and to potentially reach deviant cases ([3] pp. 57-8). Currently the focus is increasingly on midwives who remain in the profession and their strategies for dealing with professional and personal challenges. This approach will aid in identifying potential strategies and thus benefit other midwives. Nevertheless, the perspective of those who leave is relevant to determine needs currently not being met and enable the development of strategies to retain more midwives in private practice.

## Data collection

Problem centred interviews (PCI) are a useful data collection tool with which to reconstruct and contrast biographical orientations and action models in the health sector. PCIs are common in grounded theory studies as well as in biographical research [21], which makes them particularly useful for this combination of methods. As they allow participants to narrate freely and for as long as they wish [21], PCIs enable the establishment of trusting conversational situations oriented towards what the participant finds meaningful [16]. The use of open questions is essential for discovering personal patterns of subjectivity [13], thus reflecting rich emic perspectives. Usually the interviewer begins the conversation with an open introductory question which aims to stimulate rich narrative data. Hereafter, an interview guideline is introduced with open-ended questions designed to specifically explore aspects which have been identified in the literature and from other sources of knowledge; answers from previous participants are also incorporated [21]. These ad hoc questions allow the interview to flow naturally, thus maintaining a natural and sensitive conversational situation. In our specific project, the rich narratives served to gain a source of multiple facets in complex decision-making processes and in detecting personal skills in the generation and utilisation of resources to make one's professional biography work [12]. The interviews were recorded digitally and transcribed according to Dresing and Pehl [7]. Notes/memos were then made, usually on the same day of the interview. This is another important

element in the selection of further participants, and a first analytic step ([5] pp. 162-91). A brief questionnaire on demographic data also supports our sampling strategy.

## Data analysis

Data analysis is undertaken from two perspectives and on different levels to serve the combined approach. First, analysis according to grounded theory is undertaken as follows: data coding and the development of concepts focusing on individual turning points in order to construct categories. The collection and analysis of data are performed simultaneously, going back and forth ([5] p. 15). In biographical research, however, systematic thematic analysis, cross-cutting analysis, or sequential analysis according to Schütze (in the purely narrative approach) are utilised [9][18]. In Schütze's approach, a single or very small number of cases are common for a study; this approach is therefore not appropriate for the larger number of participants required for our research. On the other hand, cross-cutting analysis, which is used for larger cohorts, tends to remain more superficial than analysis according to grounded theory [9]. For this reason, we initially chose to primarily apply grounded theory analysis and add Schütze's core elements in order to focus on turning points, signs of insecurities, inconsistencies and the processual structure of cases [18]. This enabled the inclusion of as much depth as possible, at the same time as allowing transferability to the greater group under investigation.

Coding is a core aspect of both methods and constructs the framework within which the data driven theory is construed. Coding defines what happens in the data behind the obvious phenomena and aims to capture the meaning in terms of more general concepts ([5] pp. 113-5). For the initial phase of our research we chose the option of incident to incident coding, primarily due to the large transcripts generated when using PCIs. In the second phase, we performed focused coding, which means that the most significant initial codes are used to synthesise and organise the data ([5] pp. 138-40). Our concepts derive from those codes and are merged into categories. Thus, for example, "feeling of insecurity" became a category and has been expanded to different dimensions, comprising such aspects as "forensic", "financial", "legal", "relational", "work-model wise", and the contrasting "to rely on positive developments". Another example category is that of "ambiguity in decision-making". This category has thus far been found to be particularly applicable to midwives who remain. These midwives often suffer from multiple conflicts and experience ambivalence. The categories are then compared to and merged with individual biographical sequences to detect whether specific categories accompany certain life sequences. At the time of the interview, the midwives were at some point in their decision-making phase; further developments are open to change and new turning points might be provoked by various crises in the professional

and/ or private life courses. Part of those like ageing processes or starting a family are common within life courses, whereas others are more unpredictable like early onset of chronic diseases or judicial prosecution.

Following open coding of essential passages and analysis of biographical sequences, constant comparison is performed according to grounded theory: codes are compared to other codes from the same and other interviews and to categories evolving from codes. Individual biographical structures and sequences are included in this process in order to understand the whole, categories are compared and contrasted to one another, to interviews as whole constructs and to pre-existing literature ([5] pp. 132-3). Background literature is increasingly integrated into the whole model in terms of theoretical sensitivity so as to reach a logical concept and develop a rich theory. This means literature is not fully searched before, but parallel to data collection, and thus at all stages of the research ([20] pp. 31-8). The going back and forth between different codes, sequences, categories and sets of data, gaining new data, and searching literature in a circular way is known as the hermeneutic circle. Understanding smaller parts such as individual biographies helps to enhance and change understanding of the whole, and vice versa. Understanding expands on repeating the circle over and over again ([3] p. 48). The information as to whether types of leavers versus remainders will be generated, and whether different types apply specific strategies to make their professional biographies work is still pending in the current project. A model of components such as strategies at different stages and turning points in the personal life course might be more appropriate and open to dynamic changes and changing needs. So far it has been found that in order to remain in the job, midwives require stable resources to compensate for current challenges. This might more adequately reflect various biographical courses, turning points and needs. Examples of turning points identified in this study are the development of severe health challenges, the ageing process, having a baby, partner/relationship crises, experiencing liability consequences or judicial prosecution. We will continue to collect and compare data until the data becomes redundant to adequately reflect the participants' views and to reach a comprehensive picture. Complete data saturation cannot be reached as everything is subject to ongoing change. For this reason, like Charmaz, referring to Dey, we prefer the alternative term "theoretical sufficiency" ([6] p. 257).

## Limitations of the method

Our specific combination of methods may have inherent limitations. The biographical part focuses primarily on offering individual details rather than exclusively general concepts, detracting from generalisability; but generalisability is neither possible nor the aim within this approach. On the other hand, having a larger sample does not allow reconstruction of single cases in as much depth



as with the typically very small samples of biographical research alone. In principal, the combined method would still be suitable to reconstruct individual career paths. However, as the specific group under investigation within the current project is rather small and some careers contain very distinct aspects, provision of anonymity is challenged. It is therefore not clear yet whether there will be an appropriate way to provide individual reconstruction of single cases or not. Moreover, as in other qualitative research, the inherent potential for bias of the researchers makes reflection about preconceptions and a clear decision trail essential ([3] p. 115-41). Theoretical sampling strategies may produce a biased sample, as it is questionable how those who participate differ from those who do not. This could influence data and thus the results [2]. Moreover, when using new approaches, several limitations might occur within the course of the research project. This requires ongoing reflection on specific challenges to maintain quality within the research. Still, credibility is aimed at by demonstrating a clear decision trail and transparency as to how the study is conducted. Subjectivity is acknowledged, particularly when researching a group the researcher formerly belonged to. However, deep reflections and open discussion regarding the researcher's preconceptions at each step of the research enhance credibility.

## Relevance of new methodologies in a developing discipline: German midwifery research

The midwifery profession in Germany is not just currently facing major political health challenges, but is also still in the early stages of the academisation process. Moreover, as professional healthcare providers, midwives are underrepresented in German health research and lack their own specific theoretical and methodological designs, but draw almost solely on other scientific approaches. Professional emancipation through the development of suitable scientific methods to address specific, midwifery relevant questions and engagement in theory discourse are therefore essential to strengthen the scientific side of the profession. Our research approach serves as an attempt to develop and adapt methods with which to gain adequate empirical knowledge about the development of self-image and the realisation of individual biographies within the midwifery profession. The combination of grounded theory and biographical research presented here may fill a gap in methodological needs and not only be suitable for use in researching midwives' biographies, but also those of other health professionals whose work is vital to maintain the health system in general. Biographical research alone allows the detailed analysis of very small numbers of participants or a single case [18], but this would not sufficiently satisfy a research interest aimed at gaining an understanding of the upheaval of an entire professional group. Grounded theory fo-

cuses less on individual turning points in biographies, but rather strives for greater generalisation ([19] p. 8). The combination of the two methodologies fulfils the aim of a focus on individual strategies and types which can subsequently be transferred to the greater professional level.

## Notes

### Ethical considerations

The University of Witten-Herdecke Ethics Committee approved this research project; it is financially independent from industrial or health organisations [8].

### Competing interests

The authors declare no conflict of interest.

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