Abstract

Background Ecomaps are tools used in nursing practice to assess families’ social support systems. Ecomaps have been used effectively in qualitative research but little attention has been given to their use as a tool in the methodological approach of hermeneutic phenomenology.

Aim To demonstrate that the use of ecomaps is congruent with the Heideggerian philosophical foundations of hermeneutic phenomenology.

Discussion This article reflects on a study in which the researchers used ecomaps to explore how parents of children with cancer are supported with decision-making about their children’s care. Exploration of the Heideggerian concepts of ‘being in the world’, ‘being with’ and ‘temporality’ prompted reflections about how constructing ecomaps furthers understanding of participants’ unique contexts. Using an ecomap in an in-depth interview enabled interviewees to return to their experiences of being supported with decision-making; it also further developed the researcher’s understanding of how each participant’s experience was situated in their evolving relationships with others.

Conclusion Constructing ecomaps in hermeneutic phenomenology is in tune with Heideggerian philosophical concepts. Ecomaps can open a door to participants’ experiences, deepen the researcher’s understanding and find further meaning in those experiences.

Implications for practice Ecomaps are a useful way of shining a light on participants’ experiences in hermeneutic phenomenological research. The article provides practical tips to optimise their use in future research.

Keywords data collection, interviews, methodology, narrative, phenomenology, qualitative research, research, research methods, study design
Introduction

An ecomap is a valuable tool that is used in children’s nursing practice to assess and understand a family’s social support system (Hemphill and Dearmun 2010). It creates a visual representation of how the family interacts with its self-identified community and can help health and social care professionals to identify sources of support and stressful relationships that may affect the family (McCormick et al 2008).

The ecomap has also been used in more recent years as a research tool (Early et al 2000, Ray and Street 2005, Baumgartner et al 2012). Ecomaps are not commonly used in qualitative research but can improve understanding of families’ experiences of social support (Rempel et al 2007).

Manja et al (2021) presented a useful overview of how qualitative health researchers have used ecomaps. The paper’s integrative review identified that in line with Rempel et al’s (2007) position, the ecomap can shed light on social interactions and relationships, which can act as a catalyst for further lines of enquiry. It also showed there were other benefits to ecomaps, such as improved rapport with research participants.

Moules et al (2015) proposed that ecomaps may be a useful aid in a hermeneutic interview. However, little attention has been given to how the ecomap may be congruent with the philosophical foundations of hermeneutic phenomenology. In this article we reflect on the experiences of the first author (EJ) of using an ecomap in hermeneutic phenomenological interviews and discuss how consistent the ecomap is with this approach. We draw on important underpinning philosophical perspectives in Heideggerian hermeneutic phenomenology to aid this reflection: ‘being in the world’, ‘being with’ and ‘temporality’. We explore these reflections in the context of Heideggerian concepts and demonstrate that using ecomaps in hermeneutic phenomenology can shed light on the experiences of patients and families.

Background

Hermeneutic phenomenology

The aim of hermeneutic phenomenology is to illuminate a phenomenon and develop understanding of the way that we experience and exist in the world (Van Manen 2016). Heidegger is one of the most important philosophers of the 20th century and significantly influenced the philosophical movement ‘hermeneutic phenomenology’ (Van Manen 2016). He was fundamentally concerned with ontology: ‘What does it mean to be?’ He considered it inadequate to view ‘being’ as a self-sufficient entity with describable properties (Heidegger 1962).

Heidegger (1962) used a hammer as an example: the hammer exists and can be described in terms of its attributes such as its weight, dimensions and colour. Heidegger proposed that the hammer does not exist in isolation: it exists because it has a use and a meaning. The hammer is not a hammer until it interacts with other ‘beings’, such as nails, wood and the carpenter. These interactions define its purpose and this meaning is integral to the hammer’s existence.

Meaning and existence are inseparable: we attach meaning to everything we experience and this is how we come to understand the world (Heidegger 1962). Our experiences are situated in a particular time and experienced within our relationships with others (Smythe et al 2008).

Hermeneutic phenomenology has been developed as a research approach from Heidegger’s philosophy as a way of seeing the world by interpreting and searching for meaning (‘hermeneutics’) in our everyday experiences (‘phenomenology’) (Crowther and Thomson 2020). The application of Heideggerian philosophy in hermeneutic phenomenological research has provided valuable insights into nursing practice (Wilson 2014, Chesterton and Jack 2021).

A defining feature of hermeneutic phenomenology is that there is no prescribed method for approaching a research project (Smythe et al 2008). Everyone’s story and experiences are unique, so the way we come to understand...
participants’ stories is also unique. This permits novel methodological approaches.

The study
EJ is a PhD student undertaking a hermeneutic phenomenological study. Her study explores the experiences of parents who receive support from their network of ‘significant others’ when faced with making decisions about their children, who have cancer.

In line with the findings of the literature review (Jestico et al 2022) it was important to allow participants to self-define their ‘significant others’ rather than make assumptions about these roles based on pre-defined groups. Gage (2013) distinguished between ‘significant others’ and ‘similar others’: the significant others in this study could have been parents’ extended family and friends, while the similar others could have been parents of children with cancer with whom the participants had developed relationships since their children’s diagnoses. However, to impose a predetermined framework in this way would conflict with the ethos of hermeneutic phenomenology: the researcher should encourage participants to talk freely about the experiences that are important to them, rather than direct or guide them to talk about certain topics or relationships.

Chesterton and Jack (2021) argued it is important for nursing research to be person-centred and this can be achieved using Heideggerian hermeneutic phenomenology. We hoped that co-creating ecomaps with participants during interviews would support this, as well as enable EJ to visualise each participant’s support network and help her to direct her questions to understand the evolving relationships as participants talked about their experiences.

A fundamental aspect of hermeneutic phenomenology is for researchers to acknowledge their pre-existing understandings of a topic (Smythe 2011). They will often participate in pre-understandings interviews with a fellow researcher to help uncover their thoughts and feelings about the research topic.

In line with this approach, EJ created an ecomap at the start of the study to understand her own social support system. She repeated this process two years later, creating a new ecomap, which helped to really understand how fluid and temporal social support networks can be.

EJ also undertook four pilot interviews with fellow PhD students to refine her ecomapping skills. She gained valuable insight into participants’ experiences of constructing ecomaps from conversations with these students after these pilot interviews.

This article includes reflections in the context of Heideggerian philosophy on constructing ecomaps in the pilot interviews and then the study interviews. It also discusses how ecomaps are not only helpful ways of furthering researchers’ understanding of participants’ experiences, but they are also in tune with the methodology of hermeneutic phenomenology.

Ecomaps in interviews
Six parents of children with cancer took part in one-to-one, in-depth interviews conducted using an online videoconferencing platform. Each interview started with an open-ended question that gave the participant the opportunity to tell the story of their child’s cancer diagnosis and care. EJ also asked them to list decisions they had faced; these included social decisions and decisions about treatment and supportive care.

EJ then showed the participant an example of an ecomap and explained what the symbols represented (Figure 1). She used the videoconferencing platform’s whiteboard function to enable them to create an ecomap. EJ left the ecomap on the screen once the participant had completed their first draft, and asked them questions along the lines of: ‘Can you tell me a little more about one of the decisions that you mentioned?’; ‘What was that experience like?’; and ‘What role, if any, did the people...
on the ecomap play in your decision-making process?’ As the participant talked about their decisions in greater depth, they modified their ecomap and added to the list of decisions they felt they had made.

**Reflections informed by Heideggerian concepts**

Methodology and method need to be congruent, and we were mindful of the interplay between Heidegger’s philosophy and our interpretations of participants’ experiences. We have therefore interwoven important Heideggerian concepts with extracts from the pilot interviews and research interviews throughout this discussion to illustrate our reflections more clearly.

*‘Being in the world’*

At the foundation of Heidegger’s philosophy is the question: ‘What is it to “be” in the world?’ (Heidegger 1962) Heidegger used the German word ‘*dasein*’ (existence or ‘being there’) to express this concept of ‘*in der welt sein*’ (‘being in the world’) (Heidegger 1962).

Heidegger argued that we exist as part of a world in which we attach meaning, thoughts and interpretation to all our experiences. It is through these interpretations that we come to understand the world as we experience it. Using the word *dasein* enabled Heidegger to emphasise our unique context, as we live through our experiences rather than simply observing and describing the world that had previously been conceptualised as separate to us (Smythe 2011).

To understand our experiences of being in the world we need to reflect on those experiences and – as Heidegger emphasised – return and stay close to the experiences themselves (Smythe 2011). Participants in research may not be attuned to reflection, so researchers should not assume that returning to an experience will come easily to them.

Several conversations during the pilot interviews demonstrated that constructing ecomaps helped the interviewees to reflect on decisions and to talk in more depth about those experiences. For example, one person said: ‘I didn’t think I would have anything to say about this – but once I saw my ecomap, I realised that there was more to making the decision than I had thought. I’d forgotten about the people who I’d talked to about this.’

It was evident during the research interview with ‘Kerry’ that she initially felt alone when she made decisions about her son’s care. However, as the conversation focused more on specific decisions, EJ used the ecomap to ask her probing questions about others in her world, such as: ‘Was anybody on the ecomap with you when you made this decision?’ and ‘Did you talk to anybody on your ecomap about this decision?’

This prompted Kerry to reflect that when she had to decide whether her son should have a nasogastric tube inserted, her mother was with her and supported her decision. On another occasion, it was her sister’s offer of practical support that helped Kerry to decide whether to remove her son from nursery.

The ecomap proved a valuable tool in providing access to participants’ unique experiences, enabling them to reflect while simultaneously enabling the researcher to obtain insights into their worlds.

![Figure 1. An ecomap developed for the study interviews](image-url)
'Being with'
Each of us experiences our world uniquely, but we also inhabit and share our world with others. The world of dasein is therefore inevitably a social world (Mulhall 2005).

Heidegger used the word ‘mitsein’ (‘being with’) to emphasise the fundamental influence that other people have on our own existence: ‘Being with is an existential characteristic of dasein even when factually no other is present at hand or perceived. Even dasein’s being alone is being with in the world’ (Heidegger 1962). This does not mean that we are necessarily in the physical presence of others; rather, the existence of other people in the world – other daseins – affects our own experiences of our world (Blattner 2006) and our interpretations of it.

Heidegger proposed that our past and our present relationships with others fundamentally influences who we are (Heidegger 1962). The ecomap provides an illustration of these relationships. It identifies who these relationships are with, and the arrows and symbols on the ecomap demonstrate the direction and strength of support, which helps the viewer to understand how each relationship functions (Figure 1). Providing these details led participants to reflect on what those relationships felt like and how they affected their decision-making.

Methods of creating ecomaps are also individual. For example, EJ explained to Kerry that people usually put their household in their ecomap’s central circle. In Kerry’s case, that would be her husband (‘Tony’), her oldest son (‘Rory’), her younger son who has cancer (‘Harry’) and herself.

However, Kerry described her relationship with her husband’s parents as ‘two-way’ but ‘it’s almost like on one we put, like, a dotted line, it’s not so strong’. EJ was unsure how to represent this using the online package, so proposed using a wavy line. Kerry responded: ‘Yeah. I wouldn’t really say it’s changed that much since cancer. Like, they’ve always been supportive and I’ve always been, but, like, sort of at a distance, like physically and emotionally.’

EJ suspected that the wavy line did not fully represent Kerry’s description of her experience, so suggested: ‘How about if I indicate something like that [inserting lines across the wavy line] to say it’s kind of there but it’s not, it’s not a kind of close relationship?’ Kerry confirmed that this accurately represented her experience of that relationship.

The co-creation of this new symbol is consistent with Heidegger’s view that dasein does not exist in isolation and our everyday way of being in the world is one of engagement – we are always in relation with other daseins and other entities. However, if dasein is absorbed in its concern towards others, it becomes subsumed by ‘das man’ (‘the they’). It is no longer authentically itself – something Heidegger called ‘uneigentlichkeit’ (‘inauthenticity’) (Heidegger 1962). As Scott (2010) explained: ‘If I relate to myself as one is expected to do, if I see myself the way others see me, if I go along to get along, I make choices as though I were not my own life. I intend what they intend for me. We talk as one does.’

For example, the pull of das man compels us to laugh because they laugh and clap because they clap. Dasein might bathe their children before bed because that is what ‘they’ (other parents) do. We might not be feeling fine but if someone asks, ‘How are you?’, we might respond, ‘Fine, thank you,’ because this cultural norm is what ‘they’ do. The everyday self of dasein is subsumed into das man (Heidegger 1962) and it loses its authentic potential of choosing to choose. This was exemplified by ‘Tom’
in our study. While he was constructing his ecomap, he talked emphatically about the supportive role that church communities played in his life. As he talked about decision-making in more depth, he said: ‘All our lives, we have been in the church, because we were born into the church. So, we know how our leaders would always say to follow the best medical advice. They wouldn’t ever encourage you to sort of paddle your own canoe and try something unless it got really desperate.’

Nevertheless, the potential for *eigentlichkeit* (‘authenticity’) is always present (Taylor and de Vocht 2011). A moment of disruption releases *dasein* from its fixed habits to make the transition to authenticity (Heidegger 1962).

Kerry explained in our study that she was fearful of nurses’ decision to allocate her son a bed in a communal bay rather than in a side room, and provided an example of how the family members who featured on her ecomap were not always supportive: ‘I would always speak up for Harry and I will always say: “I don’t care what you think of me, I’m not here to make friends, I am not putting Harry in the bay.” And I know they [my family] don’t agree with me, they wouldn’t have backed me up, which is kind of all the more reason why I will speak up in the moment because I know if I went home and said, “Oh, you’ll never guess what happened at the hospital today,” that people would fly off and say, “Oh well, you should be grateful for the NHS” and “Maybe it was just busy”, and people would sort of try and talk me out of speaking up.’

Tom and Kerry demonstrated that our relationships may pull us away or push us towards a position of authenticity. Our actions and decisions as *dasein* are situated in the context of our complex relationships with others; the ecomap can represent and aid rich conversation about the role these relationships play.

‘Temporality’

It is *dasein*’s openness to time that enables its potential authenticity to be realised (Heidegger 1962). *Dasein* seizes in the present the constraints and possibilities predetermined by its cultural-historical past, allowing it to project itself into the future authentically: ‘The future is not later than having been, and having been is not earlier than the present. Temporality temporalises itself as a future which makes present in a process of having been’ (Heidegger 1962).

In other words, we physically exist in the present moment, but *dasein* has a unique ability to consider the past and the future as well. We can reflect on past experiences – both our own and those that preceded our existence – and can look to the future and consider the consequences of our present moment.

‘Saira’ described the changing levels of support in the ‘Cancer Mum’ WhatsApp group she belonged to: ‘I think just time has changed. Just, you know, a couple of the kids have finished their treatment, a couple of us are still on it… You realise as well that everyone’s got their own journey and that you have got an understanding that other people [outside the group] don’t have, and so it’s a place really, just, it is sometimes active, it’s sometimes not.’

Looking to the future and considering how new relationships would become significant in the context of making the next treatment decision, she added: ‘I think this is probably the point at which we need to access some other kind of resources, I guess. And, you know, maybe sort of spread the net a bit wider to help us.’

It is important to stress that the ecomap cannot definitively represent each participant’s network – with every revealing, there is also concealing (Heidegger 1962). We need to understand as we make sense of people’s experiences that they undergo a constant process of revealing and concealing when they tell their stories (Davis 2010). This is not necessarily a conscious decision, as
experiences that are omitted may be less important to the person telling their story. Several factors played a part when participants described ‘significant’ people. These included the topic and context of what they were discussing. Participants mentioned people who played roles in their lives while their children were receiving cancer treatment. However, people who may have been significant at other times of their lives or in other circumstances did not appear on the ecomap.

For example, Kerry said: ‘I have felt over the years that a lot of people haven’t even acknowledged Harry has been through what he’s been through. Like, people who I would have thought would have cared more haven’t. And then people you think would never care have. Like, there’s a friend that I was friends with about ten years ago I’ve, like, reconnected with because of Harry. He’s reached out and said, like, you know, ‘Can’t believe what you’re going through.’ And then other people who I worked with for, like, seven years, have never said a single word.’

Understanding the concept of temporality highlighted the importance of using the ecomap to reflect the evolving nature of relationships. The ecomap was therefore adapted to represent this using different colours, with red text for new relationships that had emerged since the cancer diagnosis. It became apparent as each interview progressed that participants’ relationships were ever-changing and that while the different colours on the ecomap could represent a degree of evolution, they could not fully portray the dynamic and contextual nature of relationships.

For example, ‘Maggie’ said: ‘It’s funny because I think if you would have done this [drawn the ecomap] when we were having the bone-marrow transplant, it probably would have been much more one-way from them giving me support. But I feel like now we’ve kind of like balanced out again.’

Combining the construction of the ecomap with an in-depth conversation therefore allowed for a deeper appreciation of the subtle changes in relationships that were occurring over time.

**Discussion and implications for practice**

Understanding our relationships with others (being with) and how these evolve and are situated in time (temporality) can fundamentally enhance our understanding of individuals’ unique existence in the world (being in the world).

Ecomaps provided a valuable opportunity in this study to shed light on research participants’ unique contexts. The ecomaps completed during the study varied significantly and demonstrated each participant’s unique social network of support and tension. The purpose of the ecomaps was not to draw comparisons between participants or derive generalisations, because this is not the purpose of a hermeneutic phenomenological study.

Just as we exist in time and are defined by time, our relationships are also situated in time. Every relationship is shaped by past relationships and we look to the future as we make decisions about how our relationships function. It is not always easy to represent visually the fluidity of relationships in time. However, the process of constructing each ecomap furthered conversation in all the interviews and contributed to a deeper understanding of the complexity of the decision-making these parents experienced.

**Important considerations when using ecomaps in hermeneutic research include:**

» The value of undertaking a pre-understandings interview, whereby you can create your own ecomap to understand the context in which you may come to interpret your participants’ social support systems.

» It can be helpful to show participants an example of an ecomap. However, it is important to stress they can use symbols and content flexibly when creating their own ecomaps.
The creation of an ecomap should be an iterative process. It is important to remain open to adding and removing people and changing symbols as the interview progresses.

Relationships are dynamic, so each ecomap created will not be a definitive representation and is not generalisable. Using ecomaps in hermeneutic phenomenological research can help to illuminate people’s experiences and the nature of their relationships. By enhancing this understanding, healthcare professionals can consider patients’ and families’ support needs and ensure that processes are in place to empower patients and provide patient- and family-centred care.

Conclusion

Ecomaps are a useful research tool to elicit the complexity of social relationships and provide participants with the opportunity to create a visual representation of their perceived stressors and support networks. As a standalone illustration, the ecomap does little to further understanding; but when it is used as a tool within the context of an in-depth interview, an iterative dialogue can develop whereby participants provide deeper clarity about the ecomap’s presentation. This process assists in obtaining richer descriptions of their experiences and their social networks.

Ecomaps can help participants reflect and talk in depth by opening a door to their experiences. Researchers can combine their understanding of Heideggerian philosophical concepts with ecomaps to help deepen their understanding in their search for meaning in the experiences of others. In the context of this study, ecomaps helped in understanding the temporal nature of relationships and how this informs participants’ experiences of decision-making.

Exploring the use of ecomaps within a hermeneutic phenomenological study has demonstrated that using this approach is attuned with Heideggerian philosophical understandings. The ecomap can shine a light on our experiences by illustrating our unique context, situated through our relationships with others in a particular time, therefore furthering our understanding and insight into phenomena.

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