Methodological Becoming: Doctoral Students' Perceptions of Their Methodological Journeys

Abstract

Purpose - To investigate, and illustrate, the potential relationships between doctoral students' life histories and educational experiences and their methodological understanding and assumptions.

Methodology/Design - The qualitative research design consisted of life history interviews with 9 doctoral researchers in the UK in disciplines relating to the social sciences.

Findings - The study indicated that the students' methodological assumptions may be understood as a socially constructed product of their life histories and academic experiences. Experiences of postgraduate research training were presented as having the potential to unlock the methodological consciousness required to re-frame these experiences, improve understanding and resolve methodological conflict.

Originality - This paper provides an insight into the complex nature of the development of methodological understanding and a provocation for considering methodological becoming through the lens of socialisation. This may have utility for both doctoral students and educators.

Keywords - methodological journeys, philosophy of research, reflexivity, research methodology, doctoral education, postgraduate education

Paper Type – Research Paper

Introduction

The purpose of this paper is to investigate, and illustrate, the potential relationships between doctoral students' methodological assumptions and their life histories and academic experiences. The paper draws on narrative data from a doctoral study which utilised life history inquiry methods to explore the experiences and perceptions of nine doctoral students in the United Kingdom.

The concept of 'methodological becoming' captures the developmental and emergent nature of individual methodological assumptions and understanding in academic research (Houston et al, 2010; Mountz et al, 2003). As part of this 'becoming', it is clear that the doctoral process has a significant role to play, introducing new methodological questions (Drake and Heath, 2010) and relatively unique expectations of 'methodological self-consciousness' (Newbury, 2003). For doctoral students, selecting a methodological approach is frequently highlighted as one of the

most significant challenges encountered (Probert, 2006; Nagel et al., 2015), requiring careful consideration of personal philosophies to develop a framework for a rigorous piece of scholarship (Maykut and Morehouse, 2002). The view of methodology as the philosophy of research is subject to considerable commentary, guidance, and debate (Lather, 2007; Lincoln et al. 2011; Pring 2005) which may support students' thinking, yet understanding of the personal factors which influence the individual assumptions held by doctoral students is limited. Empirical research about doctoral students' methodological becoming largely consists of auto-ethnographic accounts (Probert, 2006; Quaye, 2007; Abaeian, 2018) or studies which specifically focus on the impact of research methods teaching (Coronel Llamas and Boza, 2011; Daniel et al., 2018; Nind et al, 2019). Whilst there appears to be an openness to the idea that the construction of philosophical assumptions and values in other affective dimensions, such as leadership (Sparrowe, 2005) or pedagogy (Hayler and Moriaty, 2017), may be researched as part of broader narratives, the concept of construction of methodological assumptions is frequently restricted to a more domain-specific viewpoint in empirical studies (Muis et al., 2006). From this perspective, the development of individual methodological assumptions at doctoral level is at risk of being interpreted as limited to the influence of supervisors (Moxham et al., 2013) and/or taught programmes (Coronel Llamas and Boza, 2011). Focusing on a study which explored doctoral students' methodological journeys, this paper seeks to challenge this notion, provoking consideration of the doctoral process as part of a more complex, socially constructed, journey of methodological becoming.

This paper focuses on the first stage of the study, which explored the following research question:

- How do doctoral researchers' individual life histories and experiences of postgraduate training appear to influence their methodological understanding?

The concept of 'methodological journeys' was used to explore the experiences and perceptions of nine doctoral researchers in disciplines within the social sciences. This concept was framed by

paradigmatic understandings of methodology (Lather, 2006) and theories of socialisation (Berger and Luckman, 1966). Using a qualitative approach, life history inquiry was employed to explore the students' journeys, focusing on their methodological understandings in the context of their personal, professional, and academic experiences. Whilst it is accepted that the findings cannot be generalised, this paper is intended to act as a provocation for doctoral students and educators, based on the assumption that interpretative findings may be useful for relating and applying to experience and research in other settings (Bryman, 2008).

A key consideration in relation to the contribution of the study, is that broader contextualisation of students' methodological understanding, and an acknowledgement of the diversity of student experience (Daniel et al., 2018) may have utility for those involved in delivering doctoral programmes. In the context of a growing expectation that doctoral routes will include direct teaching of research methods (Nind et al, 2019) there remains a debate regarding the extent to which this should address exploration of methodologies, as opposed to being limited primarily to practical methods and skills (Daniel et al., 2018, Onwugebugie and Leach 2005; Lather 2006). This paper aims to highlight doctoral students' perceptions of the significance of developing methodological understanding.

For doctoral students, it is also relevant to consider this study in the context of increasing value for the practice of reflexivity (Hsiung, 2008) and self-reflection (Gardner et al, 2017) in research. Reflexivity may be understood as utilising the opportunity to consider and contextualise the researcher's lens (Yao and Vital, 2018) and includes the need for 'self-awareness' and 'consciousness' of individual and cultural perspective (Patton, 2002). It has been asserted that more guidance and support (Yao and Vital, 2018; Gardner et al., 2017) is required to support students in 'doing', as opposed to valuing, reflexivity (Mauthner and Doucet, 2003). This paper may provide some illustrations and provocations in this area.

Literature Review

Conceptual Framework – The Researcher as Philosopher

The terms 'methods' and 'methodology' are often, unhelpfully, used interchangeably when discussing academic research (Cohen et al., 2013). Whilst methods may be understood as the practical 'techniques' and 'tools' applied in research, methodology can be differentiated as the study which explores the 'assumptions' and 'practices' behind these (Bryman, 2008). Methodology is therefore concerned with the 'rationale and justification' (Stierer and Antoniou, 2004, p.278) for the selection of research methods. Chilisa and Kawulich (2012) propose that this rationale is the product of a 'convergence' of a variety of decisions or questions, relating to factors including theoretical framework, value systems, and philosophical positioning. In particular, it is this personal philosophical positioning, conceptualised as an emergent and affective dimension of doctoral students' developing understanding, which was the focal point for this study. Fundamental to this idea are understandings of the researcher's awareness and positioning in relation to ontological and epistemological postulates (Lincoln et al., 2011). The concept of ontology concerns assumptions about the nature of 'social reality' (Cohen et al., 2013), whilst epistemology as the 'theory of knowledge' (Audi, 2010) concerns assumptions and understandings of what can be 'known' about this. If we understand an individual's methodology as reflecting their personal philosophy of the 'science of research' (Kothari 2004) then this may be framed as being connected to, or a product of, their understanding of social reality and knowledge.

As a basis for understanding, the potential contrast between the possible extremes of thinking in each of these areas is exemplified relatively efficiently by Burrell and Morgan's (1979) classic conceptual model. The 'subjective-objective continuum' presents an ontological spectrum, ranging from realism to nominalism, parallel to an epistemological spectrum ranging from positivism to anti-positivism. The ontological extremes involve an individual viewing reality as

either an external feature ‘imposing itself on… consciousness’ (Cohen et al., 2013, p.8) or an internal product of consciousness itself. The related epistemological extremes involve holding the assumption either that hard ‘factual’ knowledge can be collected about this reality or that knowledge of social reality can only ever be a subjective construct. In the context of research, the model theorises that a researcher’s broad philosophical ‘world view’ influences where on the ontological spectrum they situate their interpretation of social reality, which in turn determines their assumptions about what can be ‘known’ about it and the practical way in which they set about researching it (Burrell and Morgan, 1979). Hitchcock and Hughes (1995, p.21) suggest that this is a process of ontological views ‘giving rise’ to epistemological and likewise on to methodological.

Scotland (2012) outlines that research ‘paradigms’ then bring together, epistemology, ontology, methodology, and methods, capturing specific approaches and frameworks for research. From this perspective, methodological becoming might be understood as developing, and reflecting on, personal philosophy to find a methodological ‘home’ (Tracy and Munoz, 2011). Lather’s (2006) exploration of a paradigmatic chart reflects this understanding, identifying statements and metaphors for each of the aspects Scotland (2012) highlights, to reflect the position of four established paradigms: positivism, interpretivism, critical theory, and deconstructivism. This conceptualises a paradigmatic spectrum, progressing from positivism, which is outlined as seeing reality as ‘objective and found’ and truth as ‘one’, to interpretivism, which is understood as holding reality as subjective and assuming ‘many truths’ exist. In turn critical theory is framed as seeing reality and knowledge as constructed on the ‘basis of power’ and deconstructivism characterised as seeing reality as ‘unknowable’ and questioning the very nature of truth.

An adapted version of this chart (see Table 1), which also acknowledged Feilzer’s (2010) discussion of ‘pragmatism as paradigm’, was utilised in the interviews to provoke discussion and provide a frame for the understanding of methodology within the study. The inclusion of

pragmatism as a paradigm was significant in that it resolved the potential for conflict between the study's paradigmatic understanding and the potential for some of the students to understand methodology from a pragmatic perspective. Whilst recognising the significance, and interconnectedness, of personal, practical and contextual factors in methodological decisions (Gorard, 2002), the use of this provocation also reflected a specific focus on philosophical assumptions as foundational to personal 'standpoints' for methodology (Chilisa and Kawulich, 2012). In this regard, paradigmatic understandings were utilised to explore methodological becoming as arising from internal philosophy and thought (Bernauer 2012), distinct from, but connected to, broader contextual considerations in applying this to specific research**.** This focus on personal philosophy, and learning, privileged individual becoming and identity, which is significant in the context of existing work which places more emphasis on experiences of selection and application within a specific programme or context (e.g. Coronel Llamas and Boza, 2011; Daniel et al, 2018).

Table 1

Whilst conceptual models helped to frame the study, it was also acknowledged that frameworks and paradigms which illustrate complex concepts, particularly on the basis of 'opposing positions' can over-simplify and create a 'false dualism' (Pring, 2005). As Lather highlights, whilst such models have utility, we risk over simplification in considering a process of complex becoming 'against the limits of conceptual frameworks' (Lather, 2006, p. 40). Whilst paradigmatic understandings provide a provocation for exploring the 'messiness' of the philosophy of research, we should remain conscious of the wider spectrum of ideas and challenge the attraction of 'tidy binaries' (Lather, 2006). With this in mind, the study explored the students' understanding, response and identification with these ideas, but was not a process of simply seeking to quantify methodological perspectives with specific labels. The paradigms and approaches the students referred to themselves are provided to support contextualisation.

Theoretical Foundations - Socialisation

In an effort to develop new insights into doctoral students' methodological becoming, this study utilised the concept of socialisation as a lens for interpreting methodological journeys. Socialisation is the broad term used to conceptualise the lifelong process individuals go through in order to learn, and to adapt their behaviours, in accordance with the social group and structures around them. This may include the acquisition of values, ideologies, and norms of a particular society or group (Singh, 2015).

In considering methodological understanding through this lens, the foundations aligned with an understanding of theories of socialisation originating from the seminal works of Berger and Luckmann (1966). Berger and Luckmann's theories of the 'social construction of reality' assume a constant re-evaluation of individual understanding and expectations through interactions, for example with family, colleagues, or mass media. A powerful stage of 'primary' socialisation is seen to occur through childhood, with 'secondary' socialisation continuing throughout an individual's life. Berger and Luckmann's ideas also explicitly frame the process of developing 'expertise', detailing its potential to alter individual interpretations of aspects of reality.

This staged understanding of socialisation, in acknowledging the development and significance of 'expertise', introduces an opportunity to consider methodological understanding in relation to both broader individual life experiences and the view of the doctoral journey as a significant (Gardner, 2007), 'life-changing', process of academic socialisation (Zygouris-Coe and Roberts, 2019). This facilitated insight into the academic process as potentially re-framing, interrupting, reinforcing, or conflicting with earlier experience. In supporting exploration of the relationships between expectations and understandings introduced through postgraduate study and pre-existing

views and experiences, ideas of socialisation created a framework to understand methodological perspectives in the context of wider life journeys (Hurrelmann and Bauer, 2018).

Methodology as a Journey

The study builds on a limited body of work by authors who have used auto-ethnographic approaches to conceptualise methodological understanding as part of a broader journey. There is of course significant value in this existing work, which offers 'holistic and intimate' analysis of personal experience (Chang, 2016, p.52). These include existing accounts from several doctoral students who have explored their histories in relation to the doctoral process. For example, Quaye (2007) offers an exploration of the relevance of his cultural background, identity, and early experiences, to the introduction of questions, and possibilities, in terms of 'what counts as research' at doctoral level. He characterises this as a 'merging' of home cultural values and academic expectations. These connections are echoed by Abaeian (2018), who draws links between culture, personal experience, and her journey to challenging the perceived 'status quo' in the 'academic circle' she was working in research in tourism. Probert (2006) detailed her experience of a complex doctoral methodological journey, grounded by an acknowledgement that our world view when we enter the doctoral process is impacted by experience and not 'value-free'. Similarly, more experienced academic researchers have mapped complex methodological journeys asserting the relevance of both professional and personal experience throughout their careers (Bernauer, 2012; Lather, 2007; Oakley 1999). Reflecting on these accounts served to frame, provoke, and legitimise the opportunity to explore methodology in the context of a journey in this study, highlighting personal philosophy as central to methodological becoming. A connection can also be made with the concept of 'doctoral identity', particularly research by McAlpine which explored doctoral journeys from the perspective of identities and called for

‘greater attention to how the academic is embedded in personal intentions’ for students (2012, p.45).

Research Design

Methodology and Positionality

The focus for the study emerged from personal experience and insight as a doctoral student, in this respect the research ‘positionality’ may be termed as ‘insider’ (Thorne and Bourke, 2019). The initial topic arose from experience of undertaking taught postgraduate research methodology modules and engaging in reflective dialogue with peers, which exposed the diversity of reactions to identical taught content. This sparked questions about what we were ‘bringing to the table’, which led us to interpret the same new information with such different understandings. This question is also highlighted by Bernauer (2012), who proposes that there is a need for more understanding of the relevance of histories to methodology.

A narrative methodology was adopted for the study, reflecting the ‘convergence’ of theoretical framework, value systems, and personal philosophy (Chilisa and Kawulich, 2012). This methodology was selected in response to the problematisation of more restricted understandings of the development of methodological assumptions, utilising a humanistic stance to privilege contextual understanding, participant voice, and an understanding of socialisation as a lifelong process. This rationale was influenced by the assumption that ‘knowledge’ is socially constructed and limited to interpretation, valuing and aiming to elicit different ways of understanding, assuming that learning arises from interpreting perceptions and experiences (Roos, 2005). In this respect the methodological framework contained elements associated with both the interpretivist and post-structuralist paradigms, which is reflected in the discussion of methods below.

Participants and Process

The study explored the journeys of nine students at different stages of their doctoral journeys and undertaking a variety of pathways. The students were enrolled at UK universities and studying in social science disciplines. Table 2 provides a basic profile of each students' pathway, year of study, discipline, and the term they used to describe their approach during their interview. Students were identified by circulating an email through a number of academic networks, inviting expressions of interest. Nine responses were received, which was consistent with the range of 8-12 students which had been identified as being methodologically and practically appropriate for the study (Baker and Edwards, 2012) and therefore no further sampling was required. Several students cited potential benefits to their methodological thinking as their rationale for engaging, which may be considered as relevant to their perceptions.

The study was granted ethical approval through the host university's ethics committee and pseudonyms are used here. Whilst acknowledging the problematic nature of informed consent (Miller and Bell, 2012), written consent was secured prior to each interview and attempts were made to ensure the process was made as transparent as possible and the approach was sensitive to the personal, and potentially emotive, nature of the individual stories (Eakin, 2004).

Table 2

Life History Inquiry

Life history inquiry was employed for this study on the basis that it 'explicitly acknowledge(s) the historical influence that a person's biography has on their current experiences and perceptions' (Floyd 2012, p.224). Goodson and Sikes (2001, p.18) describe life stories as detailing a social construction through 'changing patterns of time and space in testimony and action'. In this respect, a life history was understood to be 'more than just a recital of events', it

was seen as key to the students perceiving and 'organising experience' (Rosenwald and Ochberg, 1992, p.8) in the context of the study. On this basis the narrative 'elicitation technique' was adopted for these interviews (Schutze, 1977, Jovchelovicth and Bauer, 2000). This approach is based on the premise that narratives follow 'self-generating schemas' and as such do not require the structure of pre-designed interview questions. The elicitation technique consists of 6 basic phases (Jovchelovitch and Bauer, 2000):

1. Preparation – knowledge of subject

2. Initiation – presentation of topic

3. Main Narration

4. Questioning Phase

5. Concluding Talk

6. Memory Protocol of Concluding Talk

The preparation and initiation phases involved sharing, and discussing, information about the study aims and conceptual foundations. This included providing an adapted copy of a paradigmatic chart (Lather, 2006) as a provocation for consideration of methodological assumptions, along with a list of potential areas of experience for focus (personal, professional and academic). The questioning phase did not include 'why' questions or direct questions about opinions, instead questions used the words presented by the students and were framed in ways such as 'tell me more about' or 'what happened before/after' (Jovchelovitch and Bauer 2000). The direction and structure of the main narration was led by each student, with the concluding talk providing an opportunity for enhancing contextual interpretation.

The students were invited to choose a location for the interviews and typically opted for a place of work or study. A time limit of 1.5 hours was agreed for each interview, the interviews were

audio recorded and transcribed, notes were taken during the interview to support the questioning phase.

Analysis

The students' journeys were analysed using an approach informed by Czarniawska's concept of 'interruptive interpretation' (2004). This aligned with privileging different ways of understanding the same information, and may be summarised here as bridging an interpretivist focus on *what* is said, and a deconstructivist focus on *how* it is said.

The interviews were first transcribed and then organised using Gee's (1986) idea units, a linguistic approach which focuses on pauses and changes in speech to identify the distinct ideas presented within a narrative. Using an interpretative focus, the accounts were initially explored in relation to the research question to identify perceptions of factors influencing methodological understanding. These were grouped under significant areas including childhood, cultural understandings, and postgraduate education. The full transcripts were then revisited using an interruptive focus to explore ideas of plot and positionality (Riessman, 2003). Using writing as a narrative approach to interpreting and understanding the journeys (Richardson & St Pierre, 2008) an account was developed for each student, reflecting the complexity and diversity of the journeys (see Clark, 2017). This article draws on both of these processes, seeking to provide context for some of the key considerations it highlights.

Findings

The findings of this study positioned postgraduate research methods training as key to 'unlocking' the 'methodological consciousness' (Gadamer, 1975) required for doctoral students to understand, and reflect on, their assumptions. An emerging view of methodology as 'historically

affected' was seen as linked to students' perceptions that their methodological understanding may be seen as a socially constructed product of their life histories and academic experiences. Connections were made between methodological becoming and a wide range of life experiences from childhood through to professional experience. This process offered opportunities for students to re-frame experiences, improve understanding and resolve methodological conflict. The findings are explored in two sections, progressing from an initial exploration of the students' experiences of postgraduate education to consideration of broader life histories in the context of this.

Postgraduate Education – Methodological Consciousness

The students' recollections reflected experiences of entirely pragmatic (Sarah) and positivist (Sian) research methods training, contrasted by models which clearly included paradigmatic and philosophical content (Peter, Jane and Debbie). Some of the students had undertaken multiple postgraduate research methods programmes before their doctoral studies (Debbie and Jemma), whilst others had commenced their research before engaging in any taught research methodology content at all (Imogen).

In many cases the students' narratives positioned their experiences of postgraduate programmes as having the potential to re-frame earlier experience. In this respect, understanding their reflections on their postgraduate experiences was key to interpreting the associations they made between their life histories and philosophical assumptions. Within the narratives, these new connections and questions were understood in line with Gadamer's concept of 'methodological consciousness' (1975) with new learning creating the lens required to consider the 'historically affected' nature of individual understanding.

The most powerful example of this re-framing was evident in Debbie's journey, where her doctoral studies provoked a perception that a misalignment in methodological perspective in earlier academic and professional experience was integral to her journey, sense of purpose and wellbeing:

> For years I thought I don't know what to, it felt a bit hopeless actually… but I've had a certain amount of enthusiasm, because it does feel I'm more aligned with what I'm doing, with the kind of person I am and how I see the world.

This idea of the importance of postgraduate programmes providing the space for exploring pre-existing, but perhaps unexamined, views was also echoed by others. For example, Jane framed her conscious decision to undertake a master's degree situated 'at the extreme end of interpretivism' as 'life changing'. Meanwhile Dawn credited her postgraduate training as triggering a realisation that her existing views 'actually fitted into a school of thought'. For both Debbie and Jane, who broadly aligned themselves with 'deconstructivist' assumptions, the personal and academic recognition of this academic identity (McAlpine, 2012) and the importance of methodological consciousness was framed as key to their journeys. In these cases, the exposure to paradigmatic content was perceived as providing the understanding to allow them to find the 'right' route and to reflect on the relevance of their journeys. Debbie's journey was characterised by a current sense that preceding this she was, in a sense, 'stuck' in terms of her academic journey, to the extent that she described her sense of 'relief' in discovering post-structuralism. From this perspective, these examples see training which addresses methodology as having the potential to promote the consciousness required to affirm and understand existing personal philosophies.

This perspective of alignment with pre-existing views was contrasted by Jemma's experience of a more 'accidental' transition to discovering new perspectives. Having undertaken a master's degree in Nigeria, which she described as 'purely quantitative', Jemma was offered a scholarship

for a master's degree in the United Kingdom, which she then discovered was 'purely qualitative'. She outlined that before she started studying she 'wasn't conscious of that fact', but explained that her initial struggle was followed by increased understanding and new 'questions about philosophy', which allowed her to better contextualise her experience and approach:

> I was like 'wow', there is an approach that will really allow you to focus on people…
>
> I realised there are a lot of realities here in the UK context that doesn't make sense back home. So, I really cannot situate myself in a paradigm that doesn't accommodate multiple realities.

Despite framing this as a new way of understanding, Jemma similarly then applied this new consciousness to frame her previous experience, particularly in terms of cultural understandings. In this way, the idea of methodological consciousness, was understood in line with Berger & Luckmann's (1966) analysis of 'expertise', in that it may become part of the lens through which we then see the construction of 'reality'.

In Sarah's case her engagement with a more pragmatic model was reflected in the nature of the perceived connections between her personal experiences and concept of methodology. This was perhaps best characterised by her initial dismissal of people who 'take their epistemological positions too seriously'. Yet, for some students, regardless of their own perspective, the lack of acknowledgment of other ways of knowing within the programmes they were accessing was a point of frustration. For example, economics student Imogen explained that experiences of methodological discussion with other students had led her to dedicate time to reading about the philosophy of research. This was perhaps in line with acknowledgement of the need to engage with an 'epistemologically diverse' research community (Pallas, 2001). She recalled her confusion at her supervisor's subsequent dismissal of this:

> It was sort of like a reaction like I'd said: 'well, I'm taking some tennis lessons!'

Summarising her motivation to consider philosophical questions, which she perceived hadn't been considered relevant to her quantitative research, Imogen suggested:

> It would be naïve to suggest that you're not affected by the things you're surrounded by.

Sian similarly contextualised her interest in exploring her assumptions:

> I'm very comfortable in a quantitative positivist thing, but I don't really believe that the ontology and epistemology of it is… I don't think that is reality.

Interestingly, Imogen was the only student to reference any form of misalignment in experiences of methodological supervision. This was perhaps framed by her experience contrasting those undertaking integrated doctorates. For these students, it appeared that the taught stage of these programmes, which often included the development of the research proposal before the allocation of supervisor, influenced the extent to which supervisors were then perceived to be required as 'methodological mentors' (Seibold et al., 2007) as opposed to broader 'disciplinary experts' (Gube et al., 2017).

Many of the students also recalled specific teaching activities as supporting an increase in their methodological understanding. These could be summarised as experiences which typically included aspects of active and collaborative learning. This understanding was captured by Dawn's assertion that 'it's not the lessons we go and sit through' which develop understanding. Examples of key learning experiences which the students cited as supporting their methodological understanding included a drama workshop (Peter), an opportunity for a cohort to physically align themselves on the paradigmatic spectrum (Debbie), facilitated dialogue with peers about methodological questions (Dawn), and opportunities to reflect on previous research (Peter). These examples are consistent with previous findings regarding students' value for active and reflective experiences to support learning about research methods (Nind et al, 2019). They are also situated

in the context of limited research regarding the pedagogical aspects of research methods teaching (Wagner et al., 2011).

Whilst it is perhaps inevitable that, to some extent at least, students who had opted to engage in the study would have some interest in the philosophy of research, these experiences provide examples of the perceived value of paradigmatic understandings for some doctoral students (Lather 2006). This is noteworthy in the context of assertions that 'reflective' and 'reflexive' opportunities are typically limited to qualitative research methods teaching (Kilburn et al., 2014). Whilst Etherington (2004) suggests that students often select programmes because of the methodologies they embrace, these examples equally suggest that some students may begin their studies with limited understanding of their own, or the institutions, methodological perspective.

Life Histories

The perceived connections between broader life histories and current methodological perspectives were diverse and covered a variety of life stages and areas of experience. This included notable experiences relating to early childhood, personal relationships, cultural understandings, and professional roles. These also ranged from more practical considerations, such as personal strengths and interests, to more emotive considerations, such as responses to loss or injustice. This section is intended to offer a small sample of these to illustrate the diversity of some of the connections highlighted in the journeys.

In several of the narratives, direct connections were drawn between childhood experiences and methodological perspectives, aligning with ideas of the significance of 'primary socialisation' (Berger and Luckman, 1966). For example, Debbie saw her struggle with an 'illogical binary' in the constructions of gender expectations at primary school as significant. Meanwhile Sian highlighted her parents' academic expectations and her 'schematic' childhood personality as a

potential foundation for a preference for a positivist methodology. In Sarah's narrative her summary of her childhood experiences was similarly aligned with a pragmatic focus on action and purpose:

> Most of it was spent at strikes and on picket lines… We have these fantastic photos of me with placards at age 3 wandering around London.

Whilst these examples were consistent with socialisation reinforcing a specific world view, a more complex link to childhood experience was explored by Jane. Jane positioned her initial alignment with positivist methodologies as part of an emotional reaction to more traumatic experiences and feelings of uncertainty:

> There were these indisputable facts and there were answers, and there was certainty. An armour, a little armour.

This emotional aspect was also present in Jane's perceptions of a later experience of working abroad as an au pair, when the death of a child in the local community was cited as prompting her to challenge and question these 'reductionist' world views:

> I remember writing home to my parents at that time, that there was more to life than just existing.

These examples may be seen to have consistency with more complex ideas of identity formation, and the idea of 'crisis', within socialisation (Berger and Luckmann, 1966).

Relationships and emotional aspects were also at the forefront of a memory Peter shared, where he outlined the impact of his relationship with his elderly father-in-law as challenging his views. He recalled:

> He was often thought of as difficult and eccentric… as I got to know him better I realised how much more he had to offer, his insight and perspective… but also his pain, humanity and vulnerability.

He contextualised this as demonstrating the depth of information needed to really understand an individual person and identified that it helped him to explain ‘how did I come to this qualitative?’ Again, perhaps framing methodology as a new ‘expert’ lens for analysing this reflection.

Similarly, Dawn reflected on learning from her grandparents as helping her to see some disconnect in the idea that she might transfer her ‘hard science’ background to research which reflects and, importantly, influences society:

> Well, because they lived through the Mexican revolution… of course you can read the books… (which say) killed 9,000 people, it’s impersonal. Talking to them was like living through their stories.

The potential for connections between ontological assumptions and experiences of different cultural ‘realities’ featured in a number of accounts. The most significant links were made by Peter, Jemma, Imogen, and Dawn, all of whom had spent sustained periods in different countries, where they saw contrasts in cultural understandings. For Jemma, this was cited as both the catalyst for an ontological ‘realisation’ and the source of epistemological conflict. She indicated that the contrast between life in Nigeria and the United Kingdom had exposed the socially constructed nature of reality, but also revealed a tension between a personal ‘love’ for interpretivist methodology and a sense that quantifiable findings were ‘a big deal back home’. This understanding was seen to align both with ideas of academic identity (McAlpine 2012) and with other journeys which have talked of conflicting cultural expectations (Albaein, 2018).

Further links were presented which framed a sense of ontological ‘doubt’ created by experiencing different cultural realities:

> ‘So, I was very English and different in Zimbabwe, but then I came to England and I was very Zimbabwean and different.’ (Peter)

> It's not just because that person was born there and I was born here. It was the context, it was bigger… it was not geographic, more than that it's the social construction.' (Dawn)

References to experience of undertaking research reflected the 'mutually reinforcing' (Hsiung, 2016, p.17) nature of 'doing', and studying, research. For example, Peter outlined the significance of the challenge he encountered in trying to evaluate a bushcraft education programme:

> I realised gosh, it's not about the learning of bushcraft is it? It was way more than I envisaged… I struggled to capture it all, but I did my best.

Debbie also reflected on the systematic nature of her experience as a social worker as contributing to the idea that she was in the 'wrong place':

> It was basically about doing assessments… and I just didn't want to be in that position. It was quite traumatic, because I'd been working towards this for years.

Connections were also made between epistemological understandings and personal experience of success and failure. These examples spanned across educational journeys, from childhood to postgraduate studies. The most significant being Jemma's reflection on her failure to obtain the required physics grade to study medicine. This was positioned as integral to her journey and had been re-framed to question the social consequences of using narrow, quantifiable measures of ability:

> It shook me and it shook me badly, it changed the way I saw myself….

Jemma highlighted that this challenge to her identity provoked an aversion to similar 'absolutist' ways of representing people. In terms of social identity, this may be understood as highlighting a more complex methodological question, or one of social acceptance and approval (Berger and Luckmann, 1966). It may also be linked to Bernauer's (2012) suggestion that whether educational experiences lead us to see ourselves as a 'math person' or language person may impact on our preference for certain methodologies. Indeed, Sian, Sarah, and Imogen all highlighted their

perception of their mathematical ability as being relevant to their initial preference for, or avoidance of, quantitative methods.

The breadth and individualised nature of the experiences which the students perceived were relevant to their understandings, highlight the complexity of these understandings. However, they also create a sense that through the lens of methodology previous experience may offer significant contextualisation and learning in terms of individual methodological understanding. In this respect it is not so much the accuracy of individual accounts, memories, or connections which are significant, but the 'meaning' which arises from this (Small, 2007). If the objective in terms of methodological understanding at doctoral level is to establish consistency and conceptual understanding (Maykut and Morehouse, 2002, p.3) then this reflexive interpretation of the methodological 'ground on which you stand' (Glesne, 2011, p.126) has significant value. These examples therefore offer illustration of the potential scope of personal consideration which doctoral students may benefit from exploring.

Implications

Whilst accepting that a range of different doctoral pathways exist (Park, 2005), given the increasing numbers of programmes which include integrated taught content (Nind et al., 2019), this paper offers an assertion that doctoral routes should embrace the delivery of paradigmatic content, and avoid limiting focus to research skills. Importantly this may be considered both in terms of its academic value (Lather, 2006) and its impact on students' wellbeing and readiness for the research community (Pallas, 2001). If we accept the assertion that for some students their assumptions may be grounded in pre-existing, but unexamined, understandings, acknowledgment of a diverse range of methodological understandings may almost be framed as relevant to the inclusivity of programmes (Quaye, 2007). The student's experiences also offer an insight into related pedagogical considerations, with active, reflective teaching exercises perceived to be of

most value for enhancing understanding. This would indicate that 'front-loading' well considered activities which encourage personal reflection and confront philosophical issues may have most value for doctoral students.

In addition, it is not insignificant that the process of engaging in the study itself was highlighted as having value for a number of the students. This indicates that considering the 'historically affected' nature of personal methodology through reflective dialogue may help to improve methodological understanding and therefore enhance ability to offer a clear 'rationale and justification' for the selection of methods (Maykut and Morehouse, 2002). Students working across the research paradigms may therefore benefit from taking time to engage in similar opportunities for reflection. As Bernauer (2012) highlights, this itself may have potential to improve understanding of different forms of research, promoting collaboration, rather than 'paradigm wars' (Oakley, 1999).

Further research, exploring a wider range of doctoral disciplines may be beneficial in developing understanding of the personal and contextual factors which influence students' methodological understanding and decisions. Particularly in the context that certain disciplines may be perceived as less receptive of methodological diversity than those related to the social sciences (Abaeian, 2018).

Conclusion

This qualitative study offers an insight into the methodological journeys of nine doctoral students in the United Kingdom. It aimed to investigate, and illustrate, the potential relationships between the students' methodological assumptions and their life histories and academic experiences. 'Methodological becoming' was viewed as a socially constructed product of educational experiences and individual life histories. The study explored potentially complex connections

between the students' personal histories, academic understanding, and their methodological assumptions. This exploration indicated that experiences of postgraduate research methods training have the potential to 'unlock' the methodological consciousness required to re-frame personal experiences, improve understanding and resolve methodological conflict.

As a final note, the rationale for this study was highlighted as arising from personal insight as a doctoral student, interested in the origins of the diversity of perspectives which existed in my cohort and beyond. In response to this, the process of undertaking the research has embedded an understanding that personal histories should be seen as highly relevant to the methodological assumptions we hold. The process of listening to, and analysing, the journeys of the students was both a great privilege and an insightful opportunity for contextualising understanding.

References

Abaeian, V. (2018). "When in Rome Do as the Romans Do"? A Reflective Account on Methodological Approach During PhD Journey. In *Asian Qualitative Research in Tourism* (pp. 289-304). Singapore: Springer.

Audi, R. (2010). *Epistemology: A contemporary introduction to the theory of knowledge*. Abingdon: Routledge.

Baker, S.E., Edwards, R. (2012). *How many qualitative interviews is enough?* Working Paper. National Centre for Research Methods, http://eprints.ncrm.ac.uk/2273/

Berger, P. & Luckmann, T. (1966). *The Social Construction of Reality*. London: Penguin Books.

Bernauer, J. A. (2012). The Unfolding of Methodological Identity: An Autobiographical Study Using Humor, Competing Voices, and Twists. *Qualitative Report*, *17*, 69. https://nsuworks.nova.edu/tqr/vol17/iss35/1/

Bryman, A. (2008). *Social research methods. (3rd ed).* Oxford: Oxford University Press.

Burrell, G., & Morgan, G. (1979). Two dimensions: Four paradigms. *Sociological paradigms and organizational analysis*, 21-37.

Chang, H. (2016). *Autoethnography as method*. New York: Routledge.

Chilisa, B. & Kawulich, B. (2012). 'Selecting a research approach: paradigm, methodology and methods', in Wagner, C. Kawulich, B.& Garner, M. (eds.) Doing Social Research: A global context. London: McGraw-Hill Education.

Clark, T. R. (2017). *Exploring the social construction of philosophical assumptions: the methodological journeys of doctoral researchers in the social sciences* [Doctoral dissertation, University of Reading]. http://centaur.reading.ac.uk/73245/

Cohen, L., Manion, K. & Morrision, K. (2013). *Research methods in education (7th ed).* London: Routledge Falmer.

Coronel Llamas, J. M., & Boza, Á. (2011). Teaching research methods for doctoral students in education: Learning to enquire in the university. *International journal of social research methodology*, *14*(1), 77-90. https://doi.org/10.1080/13645579.2010.492136

Czarniawska, B. (2004). *Narratives in social science research*. London: Sage.

Daniel, B., Kumar, V., & Omar, N. (2018). Postgraduate conception of research methodology: implications for learning and teaching. *International Journal of Research & Method in Education*, *41*(2), 220-236. https://doi.org/10.1080/1743727X.2017.1283397

Drake, P., & Heath, L. (2010). *Practitioner research at doctoral level: Developing coherent research methodologies*. London: Routledge.

Eakin, P. J. (Ed.). (2004). *The ethics of life writing*. London: Cornell University Press.

Etherington, K. (2004). *Becoming a reflexive researcher: Using our selves in research*. Gateshead: Jessica Kingsley Publishers.

Feilzer, M. Y. (2010). Doing mixed methods research pragmatically: Implications for the rediscovery of pragmatism as a research paradigm. *Journal of mixed methods research*, *4*(1), 6-16. https://doi.org/10.1177%2F1558689809349691

Floyd, A. (2012). Narrative and Life History in A. Briggs, M. Morrison, M. Coleman (Eds). *Research Methods in Educational Leadership and Management*. London: SAGE

Gadamer, H. G. (1975). *Truth and method* (W. Glen-Doepel, Trans.). London: Sheed and Ward.

Gardner, S. K. (2007). "I heard it through the grapevine": Doctoral student socialization in chemistry and history. *Higher education*, *54*(5), 723-740. https://doi.org/10.1007/s10734-006-9020-x

Gardner, S.K., Hart, J., Ng, J., Ropers-Huilman, R., Ward, K. and Wolf-Wendel, L. (2017), Me-search: Challenges and opportunities regarding subjectivity in knowledge construction, *Studies in Graduate and Postdoctoral Education*, 8 (2), 88-108. https://doi.org/10.1108/SGPE-D-17-00014

Gee, J. P. (1986). Units in the production of narrative discourse. *Discourse processes*, *9*(4), 391-422. https://doi.org/10.1080/01638538609544650

Glesne, C. (2011). *Becoming qualitative researchers: An introduction (4th ed.).* Boston, MA: Pearson.

Goodson, I. and Sikes, P. (2001). *Life History Research in Educational Settings: Learning from Lives*. Buckingham: Open University Press.

Gorard, S. (2002). Political control: A way forward for educational research?. *British Journal of Educational Studies*, *50*(3), 378-389.

Gube, J. C. C., Getenet, S. T., Satariyan, A., & Muhammad, Y. (2017). Towards "operating within" the field: Doctoral students' views of supervisors' discipline expertise. *International Journal of Doctoral Studies*, *12*, pp. 1-16. https://doi.org/10.28945/3641

Hayler, M., & Moriarty, J. (Eds.). (2017). *Self-narrative and pedagogy: Stories of experience within teaching and learning*. Springer.

Hitchcock, D. H., Hitchcock, G., & Hughes, D. (1995). *Research and the teacher: A qualitative introduction to school-based research*. Psychology Press.

Houston, S. D., McLean, D. J., Hyndman, J., & Jamal, A. (2010). Still methodologically becoming: collaboration, feminist politics and 'Team Ismaili'. *Gender, Place & Culture*, *17*(1), 61-79. https://doi.org/10.1080/09663690903522339

Hsiung, P. C. (2008). Teaching reflexivity in qualitative interviewing. *Teaching Sociology*, *36*(3), 211-226. https://doi.org/10.1177%2F0092055X0803600302

Hsiung, P. C. (2016). Teaching Qualitative Research as Transgressive Practices: Introduction to the Special Issue. *Qualitative Inquiry* 22 (2): 59–71. https://doi.org/10.1177%2F1077800415617204

Hurrelmann, K., & Bauer, U. (2018). *Socialisation during the life course*. New York: Routledge.

Jovchelovitch, S. & Bauer, M. (2000). Narrative interviewing in P. Atkinson, M. Bauer, G. Gaskell (Eds) *Qualitative Researching with Text, Image & Sound: A Practical Handbook* (pp. 57-74). London: Sage

Kilburn, D., Nind, M., & Wiles, R. (2014). Learning as researchers and teachers: The development of a pedagogical culture for social science research methods?. *British Journal of Educational Studies*, *62*(2), 191-207. https://doi.org/10.1080/00071005.2014.918576

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Lather, P. (2006). Paradigm proliferation as a good thing to think with: Teaching research in education as a wild profusion. *International journal of qualitative studies in education*, *19*(1), 35-57. https://doi.org/10.1080/09518390500450144

Lather, P., (2007). *Getting lost: Feminist efforts toward a double (d) science*. New York: Sunny Press.

Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. *The Sage handbook of qualitative research*, *4*, 97-128.

Mauthner, N. S., & Doucet, A. (2003). Reflexive accounts and accounts of reflexivity in qualitative data analysis. *Sociology*, *37*(3), 413-431. https://doi.org/10.1177/00380385030373002

Maykut, P., & Morehouse, R. (2002). *Beginning qualitative research: A philosophical and practical guide (Vol. 6)*. London: Routledge.

McAlpine, L. (2012). Identity-Trajectories: Doctoral Journeys from Past to Present to Future. *Australian Universities' Review*, *54*(1), 38-46. https://pdfs.semanticscholar.org/256c/29363c420291fa8e1ca02858383e208e7fdd.pdf

Miller, T. & Bell, L. (2012) Consenting to what? Issues of access, gate-keeping and 'informed' consent in T.Miller, M.Birch, M.Mauthner & J.Jessop (Eds) *Ethics in Qualitative Research* (pp. 61-75). London: Sage.

Mountz, A., Bonds, A., Mansfield, B., Loyd, J., Hyndman, J., Walton-Roberts, M., Basu, R., Whitson, R., Hawkins, R., Hamilton, T. & Curran, W. (2015). For slow scholarship: A feminist

politics of resistance through collective action in the neoliberal university. *ACME: An International Journal for Critical Geographies*, 14(4), 1235-1259. https://acme-journal.org/index.php/acme/article/view/1058

Moxham, L., Dwyer, T., & Reid-Searl, K. (2013). Articulating expectations for PhD candidature upon commencement: Ensuring supervisor/student 'best fit'. *Journal of Higher Education Policy and Management*, *35*(4), 345-354. https://doi.org/10.1080/1360080X.2013.812030

Muis, K. R., Bendixen, L. D., & Haerle, F. C. (2006). Domain-generality and domain-specificity in personal epistemology research: Philosophical and empirical reflections in the development of a theoretical framework. *Educational Psychology Review*, *18*(1), 3-54. https://link.springer.com/article/10.1007/s10648-006-9003-6

Nagel, D. A., Burns, V. F., Tilley, C., & Aubin, D. (2015). When novice researchers adopt constructivist grounded theory: Navigating less travelled paradigmatic and methodological paths in PhD dissertation work. *International Journal of Doctoral Studies*, *10*, 365-383. http://informingscience.com/ijds/Volume10/IJDSv10p365-383Nagel1901.pdf

Newbury, D. (2003). Doctoral education in design, the process of research degree study, and the 'trained researcher'. *Art, Design and Communication in Higher Education*, 1(3), 149-159. https://doi.org/10.1386/adch.1.3.149

Nind, M., Holmes, M., Insenga, M., Lewthwaite, S., & Sutton, C. (2019). Student perspectives on learning research methods in the social sciences. *Teaching in Higher Education*, 1-15. https://doi.org/10.1080/13562517.2019.1592150

Oakley, A. (1999). Paradigm wars: some thoughts on a personal and public trajectory. *International Journal of Social Research Methodology*, *2*(3), 247-254. https://doi.org/10.1080/136455799295041

Onwuegbuzie, A. J., & Leech, N. L. (2005). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality and Quantity*, *39*(3), 267-295. https://doi.org/10.1007/s11135-004-1670-0

Pallas, A. M. (2001). Preparing education doctoral students for epistemological diversity. *Educational researcher*, *30*(5), 1-6. https://doi.org/10.3102%2F0013189X030005006

Park, C. (2005). New variant PhD: The changing nature of the doctorate in the UK. *Journal of higher education policy and management*, 27(2), 189-207. https://doi.org/10.1080/13600800500120068

Patton, M. (2002). *Qualitative research and evaluation methods (3rd ed.).* Thousand Oaks, CA: Sage Publications.

Pring, R. (2005). *The Philosophy of Education*. London: Continuum

Probert, A. (2006). Searching for an appropriate research design: A personal journey. *Journal of Research Practice*, 2(1). http://jrp.icaap.org/index.php/jrp/article/view/24

Quaye, S. J. (2007). Voice of the researcher: Extending the limits of what counts as research. *Journal of Research Practice*, *3*(1), M3-M3. http://jrp.icaap.org/index.php/jrp/article/download/60/129/0

Richardson, L., & St Pierre, E. (2008). A method of inquiry. In N. Denzin & Y. Lincoln *Collecting and interpreting qualitative materials* (pp.473-500). London: Sage.

Riessman, K., (2003). Analysis of personal narratives in. J.Holstein & J.F. Gubrium (Eds) *Inside interviewing: New lenses, new concerns* (pp. 331-346). London: Sage

Roos, J. P. (2005). Context, authenticity, referentiality, reflexivity: back to basics in autobiography. In R. Miller (Ed), *Biographical research methods* (pp. 163-172). London: Sage.

Rosenwald, G. C., & Ochberg, R. L. (1992). *Storied lives: The cultural politics of self-understanding*. Yale University Press.

Schutze, F. (1977) *'Die Technik des narrativen Interviews in Interaktionsfeldstudien'*. Unpublished, Bielefeld University, Department of Sociology.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English language teaching*, *5*(9), 9-16. http://dx.doi.org/10.5539/elt.v5n9p9

Seibold, C., White, S., & Reisenhofer, S. (2007). The supervisor-student relationship in developing methodology. *Nurse Researcher*, *14*(4), 39. https://doi.org/10.7748/nr2007.07.14.4.39.c6042

Singh, A. (2015). Social Psychology, Delhi: PHI

Small, J. (2007). *Memory-work: An introduction*. Unpublished manuscript. School of Leisure Sports and Tourism, University of Technology, Sydney, Australia. https://pdfs.semanticscholar.org/5baa/ccada62b8b3c89bc6192accae1061f51b4c5.pdf

Stierer, B., & Antoniou, M. (2004). Are there distinctive methodologies for pedagogic research in higher education?. *Teaching in Higher Education*, *9*(3), 275-285. https://doi.org/10.1080/1356251042000216606

Sparrowe, R. T. (2005). Authentic leadership and the narrative self. *The leadership quarterly*, *16*(3), 419-439. https://doi.org/10.1016/j.leaqua.2005.03.004

Thorne, R., & Bourke, B. (2019). Online research supervisor engagement: Fostering graduate student researcher positionality. In K. Walters, & P. Henry (Eds.), *Fostering multiple levels of engagement in higher education environments* (pp. 1-20). Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-5225-7470-5.ch001

Tracy, K., & Muñoz, K. F. (2011). Qualitative Methods in Interpersonal Communication. In M.Knapp & J. Daly (Eds). *The SAGE handbook of interpersonal communication* (pp. 59-86). Sage

Wagner, C., Garner, M., & Kawulich, B. (2011). The state of the art of teaching research methods in the social sciences: Towards a pedagogical culture. *Studies in Higher Education*, *36*(1), 75-88. https://doi.org/10.1080/00071005.2014.918576

Yao, C. W., & Vital, L. M. (2018). Reflexivity in international contexts: Implications for US doctoral students international research preparation. *International Journal of Doctoral Studies*, 13, 193-210. https://doi.org/10.28945/4005

Zygouris-Coe, V., & Roberts, S. K. (2019). A Situated Framework for Socialising a Scholarship Mindset with Doctoral Students. *International Journal of Doctoral Studies*, *14*, 567-580. https://doi.org/10.28945/4406

Table 1. Paradigmatic Chart

	Positivism	Pragmatism	Interpretivism	Critical Theory	Deconstructivism
Ontology	Reality is objective and 'found'	Reality is layered and 'experiential'	Reality is subjective and constructed	Reality is subjective and constructed on the basis of issues and power	Reality is ultimately unknowable; attempts to understand subvert themselves
Epistemology	Truth is one	Truth is relative	Truth is many	Truth is many and constitutes a system of socio-political power	"Truths" are socially constructed systems of signs which contain the seeds of their own contradictions
Questions	What is true? What can we know?	What is useful? What is the best fit?	What is heuristic? What can we understand?	What is just? What can we do?	Is there a truth? What constitutes truth?
Methods	Quantitative	Mixed	Qualitative	Qualitative, but may include quantitative and mixed methods	Qualitative
Purpose	Knowing the world	Informing the world	Understanding the world	Changing the world	Critiquing the world

Note: Adapted from Lather (2006)

Table 2. Doctoral Student Profiles

Name	Programme (taught + research)	Discipline	Methodology	Stage of Study
Sarah	University Funded PhD	Health & Social Science	Pragmatism	Completed
Sian	Integrated PhD (1+3 yrs)	Social Work	Positivism	Year 1
Jane	EdD (2+3 yrs)	Education	Deconstructivism	Paused in Yr 1
Peter	Integrated PhD (1+3yrs)	Social Work	Pragmatism	Year 2
Jemma	Integrated PhD (1+3 yrs)	Education	Interpretivism	Year 2
Dawn	Integrated PhD (2+3 yrs)	Education	Critical Theory	Year 3
Debbie	Integrated PhD (1+3 yrs)	Education	Post Structuralism	Year 3
Heather	PhD by Publication	Social Science & Law	Participatory	First Paper of 3
Imogen	PhD by Publication	Economics	Positivism	First Paper of 3