



Developing the PhD thesis project in relation to individual contexts: a multiple case study of five doctoral researchers

Kelsey Inouye¹

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Abstract

The early phase of doctoral education is a critical yet under-researched period in PhD programs, when doctoral researchers must solidify their thesis projects prior to embarking on data collection. What makes this time particularly challenging is that new doctoral researchers synthesize their research thinking while they are still learning the expectations and nature of PhD research. This study draws on Emirbayer and Mische's (1998) chordal triad of agency to explore how PhD researchers' goals and experiences (individual contexts) influence how they approach doctoral research and develop their thesis projects during the first year of the PhD. The results of this small-scale longitudinal multiple case study of five first-year UK PhD social science researchers suggest that there are at least three approaches PhD researchers may adopt in developing their research projects, influenced by personal histories and post-PhD goals—pragmatic/strategic, idealistic, and realistic. In turn, these approaches may change over time as PhD researchers acquire experience and encounter critical events. Implications include the need for attention to a diversity of PhD researchers' needs and goals, which may necessitate additional support or training in tailored areas, and a call for questioning the capacity of PhD researchers to contribute to/stretch the structures surrounding thesis writing.

Keywords Doctoral writing · PhD education · Agency

Context

This study focuses on the individual experiences of five first-year social science PhD researchers at a UK university. In the UK as elsewhere, doctoral education has been recognized as central to the growing knowledge economy (Department for Education, 2017). The structure of UK doctoral programs has moved on from the apprenticeship model predominant in the 1980s to address concerns about attrition and career preparedness. It now includes integrated research training courses, graduate schools, research training courses, graduate schools, doctoral colleges, and doctoral training centers or partnerships (UK Council for Graduate Education, 2015). Alongside changes

✉ Kelsey Inouye
kelsey.inouye@education.ox.ac.uk

¹ Department of Education, University of Oxford, 15 Norham Gardens, Oxford OX2 6PY, UK

in training, the doctoral degree has diversified to include professional doctorates and thesis formats other than the traditional monograph—for instance, thesis by publication or integration. Current UK policy outlined in the Quality Assurance Agency for Higher Education (QAA) Characteristics Statement declares that “All UK doctorates, regardless of their form, continue to require the main focus of the candidate’s work to demonstrate an original contribution to knowledge” (QAA, 2020, p. 3) and that doctoral graduates should be able to “think critically about problems to produce innovative solutions” as well as synthesize large bodies of information and communicate with diverse audiences (QAA, 2020, p. 3). This policy statement sets the backdrop against which all UK doctorates should be assessed.

Transitioning into a doctoral program can be challenging, as PhD researchers must make the shift from consuming and analyzing knowledge to producing it (Lovitts, 2005; McPherson, et al., 2018). For those in the humanities and social sciences, engaging in a substantial piece of research also means a level of self-direction and isolation for which many PhD researchers do not feel prepared (Gardner, 2008). As such, doctoral education is often described as a transition from dependence to independence, associated with developing and taking on a new identity as a researcher (e.g., Green, 2005) and becoming part of the academic and disciplinary discourse community.

Existing research on the early stages of doctoral programs, meaning the phases prior to thesis data collection and writing, suggest that challenges of transitioning into the PhD include establishing a sense of belonging, learning the expectations of the disciplinary field, developing research and writing skills, gaining ownership over the work, and understanding the nature of the doctorate (Chatterjee-Padmanabhan & Nielson, 2018; Creely & Laletas, 2019; Fisher et al., 2020). At the same time, PhD researchers do not have identical experiences; variations in PhD researcher transitions can be attributed to diversity in prior educational and cultural experiences and ways of thinking (see analytical vs. practical intelligence, Lovitts, 2008), highlighting the importance of individual/personal factors in understanding how new doctoral researchers adapt to the PhD.

Given the often challenging and individual nature of PhD researcher transitions, this study aimed to explore how personal contexts and goals influence the experiences of five first-year PhD researchers in the UK, as they designed their social science thesis projects over the course of 1 year. At the institution in which this study took place, plans for the PhD research project are synthesized in a document (hereafter “Upgrade document”) that is submitted alongside institutional documents (e.g., ethics forms) and orally examined by two internal assessors in a process referred to as Upgrade, which typically takes place at the end of the first year. The content of the Upgrade document varies slightly by department but generally includes the questions, theoretical framework, literature, and methods guiding the thesis research.

It is important to note that in the UK, doctoral programs vary in structure across institutions and departments. The goal of this study is therefore to provide insight into the individual experiences of the participants at a single university and disciplinary cluster as they conceived of and composed their Upgrade documents in the first year of the doctorate. The research question guiding this study was:

- How do first-year PhD researchers in the social sciences (at a single UK institution) shape and negotiate their Upgrade documents over time and in relation to their prior experiences and goals?

Doctoral writing and supervisor feedback

Research suggests that writing is a challenge for many doctoral researchers (Aitchison & Lee, 2007; Cameron, et al., 2009; Cotterall, 2011; Lee & Aitchison, 2009), particularly in the early stages of the PhD (Caffarella & Barnett, 2000). What makes PhD writing difficult is that it not only requires an understanding of the expectations and nuances of the thesis and other academic genres, but also necessitates the synthesis of disciplinary and methodological knowledge; writing is both an expression of and tool for thinking (Bazerman & Prior, 2004; Klein, 1999; Yore, et al., 2004, 2006).

Although variation in writing practices and writing structures exist across disciplines (Carter, 2007), in general, research writing requires the writer to draw from and analyze multiple sources and concepts to create new knowledge in a process of meaning-making (Ivanic, 1998) that extends from the literature review through the writing up of results (Kamler & Thomson, 2014). In many ways, the writing process and the research process are intimately related, suggesting that researchers use writing to construct and present knowledge, vacillating between data collection, writing, analysis, and inquiry (Yore, et al., 2006, p. 116). At the same time, many doctoral writers struggle to articulate—or legitimize—their personal voices within the web of academic writing structures (Naomi, 2021).

Supervisors support the doctoral researcher’s thesis research and writing, ideally guiding them towards becoming independent researchers and experts in their relevant fields (Pearson & Brew, 2002). Although PhD researcher experience is influenced by a network of personal and professional relationships (Hopwood, 2010), the supervisory relationship is perhaps the most critical in the PhD context, often influencing the overall experience of the program (Cotterall, 2015; Pyhalto et al., 2015).

The primary pedagogical approach utilized in supervision is that of feedback, a dialogic process providing information about disciplinary and institutional expectations and facilitating critical discussion (Anderson, et al., 2008; McAlpine & McKinnon, 2012). Argument, logic, language, and genre are common foci of supervisor comments (Basturkmen, et al., 2014; Can & Walker, 2014; Xu, 2017). Several studies focused primarily on international graduate students have examined how doctoral students interpret and respond to supervisor feedback (e.g., Wang & Li, 2011; Xu, 2017; Xu & Hu, 2020), finding that PhD researchers’ prior experience is linked to supervision needs and feedback responses. For instance, PhD researchers in the early stages of their research tend to require more support, preferring “directive, specific and consistent feedback” and are more likely to respond negatively to criticism (Wang & Li, 2011). In contrast, PhD researchers with greater confidence and stronger ownership of their work exhibit more positive attitudes towards challenging or critical feedback (Wang & Li, 2011). Graduate students may also resist feedback out of a desire to promote their “own agendas” (Vehviläinen, 2009, p. 197) or a belief that changes are unnecessary (Xu, 2017), suggesting that responses to feedback may be linked to individual goals and provide evidence of agency.

PhD contexts and goals

Doctoral researchers bring their individual histories and goals for the future to their PhD study. Understanding how prior experience and goals influence perspectives of and approaches to doctoral research is important, and existing studies suggests that

biographical factors may affect the extent to which PhD researchers can access disciplinary and research training cultures (Deem & Brehony, 2000), as well as how they cope with challenges (Hockey, 1994) and respond to supervisor feedback (Inouye & McAlpine, 2017). International PhD researchers, in particular, may have more difficulty accessing academic research cultures due to differences in language, cultural norms, higher education systems, and expectations for doctoral study (Deem & Brehony, 2000). For instance, case studies and self-studies on international PhD researchers suggest that doctoral researchers from non-Anglophone contexts (e.g., China/East Asia) may experience disparities between their earlier education experiences and the expectations of their PhD programs in English-speaking countries (Li, 2018; Soong, et al., 2015). Challenges may include taking ownership over the thesis and displaying typically Eurocentric “critical thinking” (Wu & Hu, 2020; Xu & Grant, 2017). Further, PhD researchers from Confucian-influenced cultures may be more reluctant to disagree with or “push” their supervisors for additional feedback due to differing expectations of supervisory relationships (Nguyen & Robertson, 2020). Likewise, they may focus on gaining deep understanding of expert texts rather than critiquing them (Chang & Strauss, 2010; Xu & Grant, 2017), reflecting differences in academic practices and varying forms of critical thought (see Chang & Strauss, 2010; Paton, 2005).

Motivations for undertaking PhD work and career goals may also influence how PhD researchers experience doctoral research. Interview-based research on motivations for undertaking PhD work (Brailsford, 2010; Gill & Hoppe, 2009; Guerin, et al., 2015; Leonard, et al., 2005; Skakni, 2018; Taylor, 2007) indicate that preconceived notions of the PhD and goals/motivations may fall into several categories, including career considerations, professional development, and personal and intellectual fulfillment. Evidence suggests that motivation influences the strategies used to approach the PhD as well as supervision preferences (Skakni, 2018; Taylor, 2007). For example, PhD researchers motivated by career aspirations were strategic and pragmatic about the PhD, concerned with quick progress and desiring supervisors who could guide them through the institutional requirements and facilitate work opportunities (Skakni, 2018).

PhD researcher agency: individual goals and contexts

This study draws on Emirbayer and Mische’s chordal triad of agency (1988) to examine how PhD researchers make decisions about how to develop their Upgrade documents in relation to the personal, institutional, and disciplinary contexts that influence their experiences of early-stage doctoral research and, more specifically, the Upgrade document. In social science, agency is typically understood as the capacity of individuals to act independently and has been theorized in different ways depending on the extent to which social structure is believed to facilitate or constrain that capacity. Aldrich (1999) succinctly described the problem of agency as “how much scope...people have for independence and creativity in the face of social structural constraints on their understanding and behavior” (p. 23). Research on PhD researchers’ agency has explored how PhD researchers exercise agency to develop their scholarly identity-trajectories (McAlpine, et al., 2014) and address academic and cultural hurdles through establishing and drawing on relationships (Cotterall, 2015; Hopwood, 2010), sharing their research (Nguyen & Robertson, 2020), and negotiating supervisory relationships and supervisor feedback (Inouye & McAlpine, 2017). Such studies provide a counter-narrative to traditional framings of PhD education that position

doctoral researchers as undergoing a one-way socialization process into the institution and relevant discipline (see Hopwood, 2010).

The chordal triad of agency developed by Emirbayer and Mische (1998) builds upon the work of Mead (1932), defining agency as:

...the temporally constructed engagement by actors of different structural environments—the temporal-relational contexts of action—which, through the interplay of habit, imagination, and judgment, both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations. (1998, p. 970)

Agency is thus expressed through human action in response to a given temporal-relational context. In each act of agency, three elements are at play: iteration, projectivity, and practical-evaluation. Iteration represents the past and is characterized by habitual acts in response to similar situations—schemas for action developed over time. Projectivity represents the future: the person's plans and desires. As people encounter new situations, they adapt existing schemas in relation to their goals and imagine possible outcomes. Practical-evaluation represents the present, acknowledging the ways in which actions are embedded in the current evolving situation, representing “the capacity of actors to make practical and normative judgments among alternative possible trajectories of action” (p. 971). Most importantly, practical-evaluation provides for reflection, insight into one's particular circumstances in relation to past and future, which may lead to changes in behavior.

Applied to PhD researchers, the chordal triad lends two key things. First, the iteration and projectivity elements draw attention to how prior experience and imagined futures/goals influence individual PhD researchers' actions as they shape their plans for their thesis projects. Second, the practical-evaluation element allows for consideration of how PhD researchers' temporal-relational contexts (e.g., new knowledge, additional feedback, and upcoming deadlines) change over time and influence how they evaluate and gain insight into their particular circumstances, which may potentially lead to changes in behavior: exercising agency to alter one's contexts. In other words, as PhD researchers learn over time the expectations for the thesis project through supervisor feedback and other relevant interactions and experiences (the temporal-relational context), they adjust their actions in response to the new knowledge and in relation to prior experiences and goals.

Methods

This paper draws from a longitudinal (Ployhart & Vandenberg, 2010) multiple-case study in which each participant constituted a case. The study involved five participants from three social science departments at a large research-intensive university in the UK. At this institution, social science departments require first-year PhD researchers to submit a written document (“Upgrade document”) for oral assessment by two examiners, usually from the same department. Successful completion of this milestone—hereafter referred to as “Upgrade”—marks the PhD researcher's transition into the data collection phase of research and confers full doctoral status. Although all academic departments require an Upgrade examination, the specific timings and requirements vary across disciplinary areas—for instance, the Upgrade document in natural science departments tends to be much shorter. In the three social science departments in which this study took place—Education, Geography, and Sociology—Upgrade typically occurs between 8 and 12 months

after commencement of the PhD program. The submitted Upgrade document is a lengthy document of roughly 10,000 words, containing a literature review, conceptual framework, research questions, and methodology/research design. Upgrade can result in three possible outcomes, pass, minor corrections, and resubmit, and a PhD researcher has two opportunities to successfully complete Upgrade.

Data collection took place from October 2018 through December 2019. The participants were first-year PhD researchers. Four participants were recruited through email solicitation and one via snowball sampling. This study received ethical approval from the institution. Demographic characteristics of the participants are displayed in Table 1.

Data included (1) a five-item demographic questionnaire, (2) semi-structured interviews, (3) drafts of the Upgrade document and other related writings, (4) written feedback from supervisors and, if relevant, peers, and (5) recordings of supervision meetings. However, for the purpose of this paper, the results will focus primarily on findings from the participant interviews.

Interviews

Three types of interviews were conducted: (1) background interviews, (2) Upgrade document process interviews, and (3) concluding interviews. Background interviews, which took place shortly after each participant joined the study, focused on the participant's prior experiences with writing, feedback, and social science research, as well as their reasons for doing a PhD, perceived challenges, and post-PhD career goals. The purpose of these interviews was to establish each participant's individual historical context.

Upgrade document process interviews comprised most interview data in this study. These interviews were scheduled every 2 months at a mutually convenient time and place and focused on the participant's ongoing work in relation to the Upgrade document, using written drafts of the Upgrade document and if relevant, other notes and documents, to provide examples of specific feedback and revisions. Finally, concluding interviews took place following each participant's successful completion of the Upgrade examination. These interviews focused on the participants' experience of Upgrade and reflections on the first year of the PhD.

Drafts and supervision recordings

In addition to the interviews, I collected drafts of the participants' Upgrade documents and recorded supervision meetings with supervisor consent. Each participant was given the

Table 1 Participants

Participant	Discipline	Gender	Age	Nationality	First language
Ben	Education	Male	26–30	European	European language ^a
Charlie	Sociology	Male	21–25	Chinese	Chinese
Ethan	Education	Male	26–30	British	English
Natalie	Geography	Female	40+	British	English
Shankar	Education	Male	26–30	Indian	English

^aDue to anonymity concerns, the specific country and language have been redacted

option to self-record their supervisions or to have me attend and record the supervisions. All interviews and supervision recordings were manually transcribed. Using MaxQDA 12 software, I created five separate folders, one for each participant. Each folder served to store the collected data, which were chronologically organized. The data were analyzed via a combination of a priori and emergent coding, situated within an overall narrative analysis. Data were analyzed first within-cases to capture variation in individual experience and then across cases to detect emerging patterns.

A priori coding

A priori codes (Saldana, 2013) were based on relevant department guidelines for a successful Upgrade and Emirbayer and Mische's (1998) chordal triad conceptualization of agency: iteration, projectivity, and practical-evaluation to identify evidence of past, future, and present factors in participants' decision-making. These codes were applied throughout the dataset for each individual participant.

Emergent coding

Following a priori coding, I analyzed the interview and supervision transcripts via emergent (open) coding. Using the "spiral" approach (Creswell, 2013), I began by reading through the entire dataset for each participant, taking notes. I wrote case summaries for each participant 3, 5, and 8 months into the data collection process. To develop codes, I reviewed case summaries and notes to identify possible codes and analyzed the dataset of the individual participant using initial codes and definitions. These codes were refined over several iterations. I repeated this process for each participant, resulting in five sets of emergent codes, one for each participant. Example codes included explanation/justification (for responses to feedback), supervisor feedback (with subcodes including direction, confirmation, suggestion/guidance), and strategies (feedback-seeking, questioning, networking), and Upgrade experience. Throughout the analysis process, the definitions of each code and examples were discussed and verified with colleagues familiar with both qualitative analysis and the topics of writing and doctoral education.

Narrative analysis

The patterns that emerged through coding alongside relevant excerpts from the documents were situated within a narrative analysis that allowed each case to be presented as a linear whole, rich with "thick description" (Riessman, 2008). The narrative was supported by the results of the coding and specific examples from the transcripts and documents. Because this study is concerned with what participants say rather than how they say it, in constructing the narratives, I formatted participant quotes by excluding stutters and pauses for clarity.

Cross-case analysis

Having completed within-cases analyses of each participant's experience, I conducted a cross-case analysis to identify any patterns. I began by re-reading my notes and all five case summaries, taking note of similarities and differences (Eisenhardt, 2002). From this

process, I identified three key themes: approach to the PhD, compliance with and resistance to supervisor feedback, and the Upgrade exam as significant event. These themes reflected larger patterns in agency characterized by the individual's considerations of past, present, and future action in relation to their changing contexts.

Participant feedback

Participant feedback, also known as member checking, was used to provide participants with an opportunity to express concerns about anonymity (see Thomas, 2017) and identify factual errors. Following their participation in this study, each participant was sent a copy of their draft case summary for feedback on (1) factual accuracy, (2) concerns about identifiability, and (3) opinions on how their experiences were interpreted. Participants were also given the option of changing their assigned pseudonyms.

Results

The analysis gave rise to two key findings. First, the participants adopted three approaches to navigating the construction of the Upgrade document—pragmatic/strategic, idealistic, and realistic/compromising, each reflecting agentic decision-making influenced by prior educational experiences and perceptions of doctoral education, as well as post-PhD career goals. These approaches were primarily conveyed in how the participants drew upon feedback to create research proposals for Upgrade. Second, the oral Upgrade exam was a critical structuring event that led participants to reassess their practices and, in some cases, alter their approaches to their thesis research. This section begins with brief descriptions of the participants' relevant individual contexts followed by a discussion of the approaches adopted by each, ending with an exploration of whose approaches shifted over time.

Ben

Ben was a first-year doctoral researcher in Education. Prior to the PhD, he completed a Master's in the USA and worked at a think tank. Although English was his second language—he was born in a non-Anglophone European country—Ben was comfortable writing in English given his experience studying in the USA. In his previous work at the think tank, Ben developed the practice of reaching out to his colleagues for substantive feedback, though he always critically assessed received comments, based in part on the expertise of the person providing the feedback. Following the PhD, Ben planned to pursue a career in policy at an international organization. Ben had three supervisors.

Charlie

Charlie was a first-year doctoral researcher in Sociology. Prior to the PhD, he did a Master's in the UK. Charlie was originally from China but had been in the UK since high school and thus felt comfortable writing in English, though he sometimes struggled with reading complex texts. Charlie viewed feedback as generally helpful but viewed "abstract" comments such as "the research question is too broad" as less helpful when not accompanied by details on how to improve. He did not have concrete career plans when he began

the PhD but hoped the degree would broaden his employment opportunities and allow him to explore academia. Charlie had two supervisors.

Natalie

Natalie was a first-year doctoral researcher in Geography from the UK. Prior to the PhD, Natalie completed Master's degrees in related fields and had worked in several sectors. One of her careers involved writing, and thus Natalie had experience in certain genres of writing but viewed herself as a novice in academic writing. She valued feedback, including criticism, from a range of sources and was concerned that her work involved public outreach. Following the PhD, Natalie hoped to teach at a university and write a book based on her doctoral research. Natalie had one supervisor (an anomaly, as most social science PhD researchers at the institution had two or more supervisors).

Shankar

Shankar was a first-year doctoral researcher in Education from India. The PhD was Shankar's first educational experience outside of India, having completed his undergraduate study and a Master's there. He also spent several years teaching in rural areas of India prior to the doctorate. Shankar considered English his first language as his parents spoke it at home. He had little experience receiving feedback on his work, because his previous Master's research was largely independent. Following the PhD, Shankar planned to return to India and teach at a university. Shankar had two supervisors.

Ethan

Ethan was a first-year doctoral researcher in Education from the UK. Prior to the PhD, Ethan taught in primary schools and completed a Master's degree. He enjoyed writing and viewed himself as a "perfectionist" when he wrote. Ethan embraced critical feedback so long as it was constructive and believed that his positive response to criticism was related to the nature of his supervisory relationships. For instance, he had a good relationship with his Master's supervisor who "valued the good bits" but would also "happily tear a piece of work to shreds" (November 2018, Interview). Following the PhD, Ethan hoped to work in academia or at a think tank. Ethan had two supervisors.

Pragmatic/strategic

The pragmatic/strategic approach to the PhD, adopted by Ben and Charlie, was characterized by an orientation towards the feasibility or practicality of the research in terms of time to completion, financial constraints, or whatever would most facilitate quick and effective success: the PhD as a means to an end. Both Ben and Charlie expressed their pragmatic/strategic approach through (1) pursuing learning opportunities during the PhD in relation to career objectives and (2) their assessment and use of feedback.

Ben and Charlie pursued PhDs to further career goals. Ben, who had a clear objective—work at an international organization—believed that doctorate would assist him in developing research skills that would increase his employability. Ben thus framed the PhD as a vehicle for advancing his career. While he wanted to produce a quality

thesis, he was not emotionally attached to the work and noted, unlike some of his op-eds and reports, the thesis would not be read by a wide audience. As such, Ben made sure to attend conferences, find research assistant work, and expand his networks: “I think I need to be part of a broader policy debate because that’s my aim overall...so I need to go [to conferences]. Everything is part of [an] overall design of me getting better [as a researcher]” (February 2019, Interview). Further, because he was only partially funded, Ben was determined to finish within 3 years and designed his research timeline accordingly.

Like Ben, Charlie viewed the PhD as improving his career opportunities. However, Charlie was uncertain about his future and hoped the PhD would allow him to explore possibilities. Charlie was also self-funding and therefore applied for various scholarships and internships alongside his PhD work. New to sociology, Charlie spent the first few months of the PhD program gathering information towards the goal of understanding what was expected of him:

[W]hen I [am] doing my PhD how do I structure my research, how do I progress... how do I develop my ideas? And...in general, how [do] we develop theory, [and] use the theory to explain things in data?...I try to find out the answer by auditing lectures...[and reading] books. (December 2018, Interview)

Charlie thus focused on understanding his discipline and the nature of PhD research while figuring out what “can be asked and answered in a PhD thesis” (October 2018, Email to supervisor). At the same time, he consulted peers for emotional support and enrolled in additional research training courses to further his learning and improve his employment prospects.

Ben and Charlie also expressed their pragmatic/strategic approach to the PhD in how they assessed and used feedback on their Upgrade documents. Ben, who had a clear vision for his project and prior knowledge of the topic, maintained the critical stance towards feedback developed before the PhD:

You need to be really convincing for me to change what I’ve written because in the end it’s going to be my name. But I will say that I’m quite open to accept feedback from people who know [more] than me about a topic. (November 2018, Interview)

Because Ben viewed his supervisors as knowledgeable in their fields but lacking expertise in his specific topic, he relied on them for literature recommendations and to discuss his overall research design and the Upgrade process, using only suggestions that he believed furthered his goal of successful Upgrade and timely thesis completion. However, for substantive feedback on his methods and subject matter, he approached others, including post-docs in relevant departments, and often went long stretches without seeing his supervisors, preferring to work on his own and receive feedback on complete drafts of his work.

In contrast, because of his lack of experience in sociology, Charlie positioned his supervisors as experts who were best placed to guide him through the thesis and, specifically, the Upgrade phase of the PhD. Charlie thus tended to adopt all feedback his supervisors offered. Upon reflection, Charlie noted that he always agreed with his supervisors’ suggestions (“we think similarly”—July 2019, Interview), explaining the intent behind his choices to implement feedback; he believed adopting feedback benefitted the project or Upgrade document. Thus, both Ben and Charlie assessed and used feedback in ways they believed furthered their Upgrade documents—and ultimately their PhDs—in most efficient ways.

Idealistic

This approach was characterized by a romanticized, optimistic framing of the research process, including a preoccupation with “big” ideas and the desire to create a deeply impactful or meaningful project, closely tied to personal passions or philosophies. Shankar and Natalie, who adopted an idealistic approach, expressed this orientation through (1) their perceptions of research/the PhD and (2) tendencies to resist traditional genre conventions of the Upgrade document.

Both Shankar’s and Natalie’s research projects grew from personal experience, and it was apparent in supervisions and interviews that they were passionate and intellectually engaged with their topics to the extent that narrowing the scope of their interests to a feasible doctorate was a significant challenge—both participants had a tendency to think and talk about their projects in broad ways, exploring avenues of inquiry that connected elements of history, philosophy, language, and politics. Natalie also insisted that her project take an ethnographic approach in which research questions emerge from the fieldwork and thus was hesitant to narrow her topic too early—a desire supported by her supervisor (but cautioned against by her course instructors). As a compromise, Natalie constructed three broad research questions that indicated her areas of interest. For example, “Are cities the agrarian worlds of the future?” (Upgrade document draft).

Shankar and Natalie were creative in how they structured their Upgrade documents; Natalie’s Upgrade document was organized by themes rather than discrete sections for literature review, method, etc., and Shankar used “metaphorical signposting,” adding subtitles to each of his sections that corresponded to parts of a tree—for instance, the literature review was called “the seeds” (Upgrade document draft). Although he appreciated critical comments, Shankar struggled to implement supervisor feedback on defining terms in relation to existing literature and following citation practices. He tried to negotiate comments on his Upgrade document and incorporate aspects of feedback towards the goal of finding his own writing style. Shankar acknowledged that his writing was a “little bit of this, little bit of that,” an “amalgam of the kind of quality of writing which would be appreciated in India” that included anecdotal evidence (April 2019, Interview). These writing and research choices stretched the boundaries of the expected Upgrade document genre and reflected Natalie and Shankar’s personal preferences for writing and self-expression, indicative of an idealistic view of doctoral writing. However, both needed to re-evaluate their practices when they were asked to resubmit their Upgrade document after the initial Upgrade exam. This is elaborated upon later.

Realistic/compromising

The realistic approach lay between the pragmatic/strategic and idealistic approaches, characterized by compromise and accommodation: passion for the topic and desire for it to be impactful on a larger scale, while also being cognizant of institutional expectations and willing to shape the project accordingly. Ethan adopted the realistic approach, which was evident in his assessment and use of feedback.

Ethan worked to strike a balance between creating a project he was passionate about and crafting a document that satisfied his supervisors:

There's been varying points this year where I thought, am I doing the right thing? Would I be better off doing other research?...I think it's the first time where, I'm very cognizant of this is all mine [so] that's been quite a big defining feature of it. The independence. (November 2019, Interview)

Ethan's understanding of the need to manage his goals with supervisor approval may be linked to his previous Master's experience, specifically his familiarity with the research process and supervisor feedback. Indeed, though Shankar and Natalie had completed Master's in their fields, both described the experience as involving little supervisory contact.

What Ethan most appreciated about his supervisors was their shared interest in school policy and their shared experiences as teachers, which allowed him to speak openly about his concerns about education and engage in critical discussion. In such supervisory discussions—and in early drafts of his Upgrade document—Ethan expressed political views that were tied to his teaching experience and the inception of his thesis, revealing Ethan's desire for impact and change. At the same time, he acknowledged the “authority” of his supervisors and gladly incorporated their feedback, which helped him to define a feasible research topic and demonstrated an understanding of the PhD as requiring negotiation between the desire to shape a large and important study and the need to meet institutional standards. Further, both of Ethan's supervisors were careful to explain the reasoning behind their feedback while also being explicit about examiner expectations, which may have contributed to his willingness to compromise.

Ethan's greatest struggle was his self-described “flowery” writing style. His supervisors referred to his writing as “journalistic” and “rhetorically beautiful” but not appropriate for the Upgrade document genre. Beautiful writing was of personal value to Ethan, and he initially hoped to reach a compromise and find “the line” defining the extent to which he could write descriptively—though, he acknowledged, “[my supervisors and I] may or may not agree where that line is” (June 2019, Interview). For Ethan, writing became a matter of “trial and error” (June 2019, Interview) in which he continually refined his style over several drafts, a process facilitated by the pruning down of his document prior to Upgrade. Later, Ethan noted that the improvement in his writing was the most concrete change from the first year of his PhD. The realistic/compromising approach therefore reflects an understanding of genre, disciplinary, and institutional requirements and the need to negotiate and adapt for the purposes of the Upgrade document.

Changes in approach over time

The approaches discussed above were not clear-cut categories; rather, each given approach reflected the general overarching way in which the participants structured their actions and communicated their thinking about their research, writing, and the PhD. These approaches were driven primarily by the iterative element of agency—patterns of behavior acquired over time from prior education and work experience, particularly in regard to responses to feedback. At the same time, participant approaches were not static; success or lack thereof at the Upgrade milestone either reinforced successful participants' approaches or significantly changed the approaches of those who were unsuccessful.

For Natalie and Shankar, who were asked to revise and resubmit their Upgrade documents, Upgrade prompted reflection on PhD expectations and the research process, which led them to move from an idealistic to a pragmatic/strategic approach. Natalie, for instance, remarked that she had been “naïve” about doctoral work and following the Upgrade exam began to view the PhD as a “box-ticking exercise” she needed to work through in order to

pass (pragmatic approach). Similarly, Shankar noted that the Upgrade exam highlighted gaps between his former schooling and the expectations of his PhD university, leading him to alter his Upgrade document in accordance with examiner feedback and conform to institutional expectations, which he described as putting on “clothes in a wardrobe”:

...it seems to me that the, what this whole program is about, or at least my experience of it [is] a particular way of...relating to knowledge. It's a particular way of...looking at it and interpreting it and presenting it. (June 2019, Interview)

For Shankar, the way the examiners expected his literature review to be presented and the depth of detail required in the methods section conflicted with his prior experiences of writing and structuring arguments. Despite prior conversations with his supervisors about the purpose of the Upgrade document, the high-stakes nature of the Upgrade exam was a significant experience that catalyzed a shift in his approach to the Upgrade document—and his thesis research generally.

In contrast, for Charlie and Ethan, passing the Upgrade exam reinforced their preexisting pragmatic/strategic and realistic approaches, as success indicated that their previous strategies were effective. Ben, the outlier, did not alter his view of the PhD or approach to research and writing despite a revise and resubmit result; rather, he attributed this outcome to ineffective or late supervisor feedback, consistent with his belief that his supervisors were not experts in his particular field and methodology. Further, Ben was not emotionally affected by the result, viewing it as an inconvenience and choosing to comply with examiner feedback and resubmit quickly; he did not want to alter his timeline for data collection, in keeping with his pragmatic outlook.

Thus, the Upgrade exam was a critical structuring event capable of transforming or reinforcing how the participants understood PhD research and writing expectations, demonstrating how evolving temporal-relational contexts (Upgrade results) may affect agentic decision-making. Importantly, successful Upgrade required participants to negotiate their prior expectations and experiences and future goals with institutional and disciplinary conventions, showing the need for clarity around genre-based expectations for doctoral education and the extent to which PhD researchers can work within those boundaries.

Discussion

This longitudinal multiple case study employed Emirbayer and Mische's (1998) chordal triad of agency to examine how five first-year social science PhD researchers created their Upgrade documents towards the goal of successful Upgrade. According to the chordal triad, the individual, as agent, (re)acts in a temporal-relational context, with three elements at play: the past (acting in response to similar situations developed over time), the future (adapting existing schemas in relation to goals and imagined outcomes), and the present (making judgments among alternative possible actions in light of the current evolving situation). The approaches the participants used to create their Upgrade documents—pragmatic/strategic, idealistic, and realistic—represent three possible ways in which PhD researchers may navigate the doctoral thesis in relation to individual contexts. What this research contributes is (1) new insight into the role of agency in PhD researchers' behaviors, (2) the importance of significant milestones (like Upgrade) in influencing/altering thinking and behaviors, and (3) the value of a longitudinal perspective in examining PhD researcher development.

Results suggest that a projective (future) orientation motivated participants to think about larger PhD and post-PhD goals, contributing to how they initially conceptualized the PhD and approached their research (and Upgrade documents), consistent with prior interview-based studies (Brailsford, 2010; Gill & Hoppe, 2009; Guerin et al., 2015; Leonard, et al., 2005; Skakni, 2018). What this study adds is an empirical account of how both goals (projectivity), prior contexts and experience (iteration), and the present situation (practical-evaluation) influence how doctoral researchers view the PhD and subsequently tackle the Upgrade documents, respond to feedback, and employ strategies in relation to their overarching purposes and perceptions of the doctorate.

Currently, the iterative (past) element provided the underlying writing, feedback, and disciplinary knowledge drawn upon to do the work. For instance, Shankar's educational history influenced his writing choices, echoing studies finding disparities between international PhD researchers' prior educational contexts and PhD expectations (Li, 2018; Soong, et al., 2015; Wu & Hu, 2020; Xu & Grant, 2017). Further, in preparing their Upgrade documents, all five participants used previously developed strategies to respond to feedback. Ben, for example, continued to seek feedback from a range of sources and critically assessed the usefulness of comments, while Charlie and Natalie accepted all supervisor feedback in line with their self-positioning as novices in the field and previous practices.

As in other work on supervision and supervisor feedback, the results suggested that PhD researchers with greater ownership over their work (e.g., Ben) were more likely to resist critical comments that conflicted with their goals (see Vehviläinen, 2009). Yet, the participants did not express negative emotional reactions to criticism—they accepted, evaluated, and at times rejected suggestions (see Wang & Li, 2011). Where the results diverge from Wang and Li (2011) is that the participants in this study were in the earliest stages of the PhD, conflicting with Wang and Li's suggestion that new, less experienced PhD researchers are more likely to respond negatively to critical feedback. This discrepancy reinforces the finding that responses to feedback and ownership over the thesis may be linked not only to research and writing experience, but perhaps more powerfully to individual contexts/goals (see also Inouye & McAlpine, 2017).

Practical-evaluation, the element of agency representing the present, was perhaps the most complex but important aspect of agency captured in the participants' decision-making. Given the nature of the PhD as an ongoing process fraught with information, particularly during the first year, participants were continually assessing their research goals and practices in relation to the new knowledge and feedback they received from texts, instructors, and supervisors—"the demands and contingencies of the present" (Emirbayer & Mische, 1998, p. 994). For example, assessment of supervisor and other feedback often invoked a combination of practical-evaluation and projectivity as students evaluated comments within the evolving supervisory relationship and stage of their Upgrade documents, choosing to accept or reject changes in relation to what they believed would lead to the best outcome. At the same time, practical-evaluation and iteration co-occurred as students assessed feedback and their own writing and chose to continue accepting supervisor comments or write in a certain way. Importantly, the Upgrade exam, a new context, was the only event that led to substantial changes in the participants' actions and approaches. These results suggest that experience contributes to a pattern of action that is less likely to change significantly unless the actor encounters a critical incident.

Finally, to revisit Emirbayer and Mische's definition of agency, agency "both reproduces and transforms those structures in interactive response to the problems posed by changing historical situations" (1998, p. 970). As reflected in the results, Natalie's and Shankar's desire to create Upgrade documents that did not strictly conform to typical conventions

was unsuccessful in transforming the structure of Upgrade; the examiners failed to recognize their initial documents as fulfilling Upgrade requirements (cf., Naomi, 2021). Thus, while the participants developed their Upgrade documents in creative ways, ultimately, the documents they produced—the documents that were eventually approved—reproduced the existing Upgrade document genre. Their experiences raise questions about the extent to which PhD researchers are able to bring creative approaches to their research and research writing and what counts as acceptable doctoral writing.

Limitations

First, this was a small-scale study of five first-year doctoral researchers at one UK university. Therefore, the results are specific to the particular institutional and disciplinary circumstances surrounding their experiences. Given the variation in milestone procedures and expectations across departments and institutions, the findings cannot be generalized to the wider UK PhD population, nor to the social sciences as a whole, or even to the population of PhD researchers within the participants' specific departments. Rather, the study provides detailed insight into the individual experiences of the participants, providing examples of how agency may manifest in relation to personal contexts. Second, I was unable to capture the full range of data involved in the participants' creation of the Upgrade document and focused primarily on supervisor feedback, meaning that additional sources of influence—e.g., readings, peer feedback, blogs, and social media—were not explored. Finally, the choice of the chordal triad of agency, while useful in exploring temporal changes in behavior, offered a limited discussion of how agency is developed within one's larger personal trajectories, which may preclude exploration of how approaches to the doctoral Upgrade document are situated within the participants' broader lives.

Implications

This study has shown the value of micro-level longitudinal research that encourages us to think biographically through time in relation to the individual's specific context. Future longitudinal studies on doctoral writing and education, perhaps across disciplines, may be useful in enhancing our knowledge of the relationships between personal factors, disciplinary cultures, supervision, and examination processes and expectations. Studies covering the entire doctoral program would also be helpful in better understanding how PhD researchers' conceptions of the doctoral research and writing change over time.

Further, academic research cultures are not accessed equally by all doctoral students (Deem & Brehony, 2000), and doctoral training does not always address research culture as an additional challenge for PhD researchers entering programs from different contexts. More studies on international and intercultural PhD education are required to better understand the needs and contributions of PhD researchers with diverse experiences.

Conclusion

Doctoral experience varies across individuals. Recognizing the role of personal contexts and goals in shaping doctoral researchers' perspectives and practices is important, particularly during the early stages of the PhD when they are still developing their understanding of the PhD and their capacity for agency in shaping the research.

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Declarations

Conflict of interest The author declares no competing interests.

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