WHAT DOES IT MEAN TO BE A RESILIENT STUDENT? AN EXPLORATIVE STUDY OF DOCTORAL STUDENTS' RESILIENCE AND COPING STRATEGIES USING GROUNDED THEORY AS THE ANALYTIC LENS

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ABSTRACT

Aim/Purpose	This study aimed to explore doctoral students' perceived resilience and the coping strategies they choose to employ to overcome challenging circumstances during their studies.
Background	Doctoral students often experience barriers which may include personal, professional, academic, and institutional-related challenges. The students' ability to recover from any burdensome situations is essential for their progress, motivation, and well-being.
Methodology	The data for this study were gathered utilising qualitative interviews conducted with a diverse cohort of thirteen doctoral candidates enrolled at a single higher education institution in the United Kingdom. These participants were deliberately chosen to encompass a range of backgrounds, including international and domestic students, varying study statuses and stages within their doctoral programs (full-time or part-time, and at the beginning, middle, or end of their studies), as well as differing funding situations (either funded or self-funded). The Grounded Theory methodology was employed as an appropriate analytical framework, providing a systematic set of procedures that facilitated the elucidation of the participants' conceptualizations and the significance they attributed to the concept of resilience throughout their doctoral pursuits.
Contribution	Empirical studies have explored the stressors and motivations of doctoral students' journeys, but little is known about the in-depth investigation of the choices students make to respond to adversity and how they demonstrate resilience. This study aimed to fill this gap in the relevant literature.

Findings	Five emergent contextual conditions represented circumstances of adversity for the study participants. These were relevant to five thematic areas: (1) supervision and supervisory support; (2) key milestones and challenges inherent to the doctoral journey (i.e., self-regulation and finding a daily working routine, data collection, and analysis, the writing process); (3) personal and family-related expectations and responsibilities; (4) study status related considerations (e.g., being an international and/or a part-time student); and (5) challenges arising from the COVID-19 pandemic. The findings demonstrated doctoral students' state of psychological capital, inner strength, and persistence that they considered in their attempt to employ varied strategies to tackle challenging circumstances.
Recommendations for Practitioners	The findings are transferable to different populations of doctoral students from diverse disciplines. Different students may be able to relate to the doctoral-related experiences that are reported and interpreted in this paper through the Grounded Theory analytic lens. This may enhance their sense of relatability with like-minded peers and help them realise that they are not alone in the challenges presented along the doctoral journey. Most importantly, the institutional-related challenges presented in this study will help raise awareness for institutions to employ strategies on human capital and academic identity by placing a stronger emphasis on practical solutions that would encourage, enable, and empower doctoral students to construct their identities.
Recommendations for Researchers	The study aims to increase the scholarly knowledge of doctoral students' resilience and coping mechanisms that they employ during the doctoral journey. Researchers can develop a resilience scale using the results of this in-depth study to understand doctoral students' perceptions and experiences on a larger scale. The scale will enable students, supervisors, and institutions more broadly to ascertain resilience/psychological capital that students may demonstrate during the doctoral journey based on targeted interventions that can be put in place to support students' work, progress, and overall doctoral success.
Impact on Society	The stressors associated with the doctoral journey may cause obstacles for students to progress and can affect timely completion to the extent that dropping out may become an unavoidable outcome and an obvious decision for some students. During academic challenges, doctoral students' well-being and mental health are likely to suffer. The COVID-19 pandemic has exacerbated academic challenges even more. It is imperative for educational scholars and researchers to explore how doctoral students perceive and respond to adversity to strategise appropriate interventions that can be designed and put into place to offer support and guidance to facilitate progress and maximise success.
Future Research	Further research can extend the study's findings with the aim to increase transferability in other educational contexts and contents. The findings offer ground for the development of a resilience/psychological capital scale by drawing on the five thematic areas and their key components. The scale can help guide the development of targeted interventions to support doctoral students' work.
Keywords	doctoral students, resilience, psychological capital, adversity, well-being, coping strategies, interviews, grounded theory

INTRODUCTION

The doctoral journey is often long and demanding which challenges and puts to the test students' inner resources and ability to cope. These stressors may cause several obstacles for students to progress and can affect their timely completion to the extent that dropping out may become an unavoidable

outcome for doctoral students. During academic challenges, doctoral students' well-being is likely to suffer. Mental health symptoms are a regular occurrence among this student population (e.g., Lai, 2019). Students may experience loneliness and social isolation often caused by inadequate socialisation with peers and others in their institutions (e.g., Barreira et al., 2018). Unfortunately, the COVID-19 pandemic has exacerbated these challenges even more.

How well students can deal with and recover from any burdensome situations encountered during their studies is essential for their progress, motivation to continue (Sverdlik & Hall, 2020; Sverdlik et al., 2020), and their emotional and mental well-being (Agteren et al., 2019; Davydov et al., 2010). There is currently a scarcity of research that provides an in-depth exploration of how students demonstrate resilience by adopting appropriate coping strategies during the doctoral journey. The aim of this study was to fill this gap by investigating doctoral students' perceived resilience and the choices they make in order to bounce back from challenging circumstances during their studies.

LITERATURE REVIEW

Doctoral students often experience loneliness and social isolation (Ali & Kohun, 2006, 2007; Barreira et al., 2018; Janta et al., 2014) at different phases of their studies. Some reasons for this may include the previously unfamiliar working patterns of the doctoral degree, problems that may occur because of lack of progress during the research, or due to students' lack of preparedness for the novel situation of having to defend their thesis at the end of their studies (Ali & Kohun, 2006; Castelló et al., 2017). Doctoral students may also experience isolation due to inadequate socialization in their departments' academic and social life with studies showing that only a small proportion of students participate actively in their community (Lovitts, 2001; Pyhältö & Keskinen, 2012; Smith et al., 2006). International students, in particular, may be more likely to experience a sense of social disconnection from their institution and a weaker academic identity (Pretorius & Macaulay, 2021). Less active students are likely to be more disengaged and may drop out as a result (Spaulding & Rockinson-Szapkiw, 2012). Castelló et al. (2017), in particular, found that a third of their sample of social sciences doctoral students in Spanish universities had considered dropping out. Similarly, survey findings (Hunter & Devine, 2016) have shown a positive relationship between doctoral students' emotional exhaustion and their intention to withdraw from their studies.

The barriers to doctoral completion are multifaceted and may include personal, professional, academic, and institutional-related challenges. In fact, the latter have the power to re-establish stronger practices, conducive to enabling the doctoral student to construct more empowering notions of human capital and academic identity. The responsibility, therefore, needs to shift to the structures, systems, and practices of the institution rather than perpetuating a blaming stance toward the individual student (Pretorius & Macaulay, 2021).

In response to the variety of challenges that can be presented, doctoral students need to be able to handle adversity effectively in order to restore a well-functioning mental and emotional state that can help sustain and further enhance the quality of their subsequent work (Agteren et al., 2019; Davydov et al., 2010). In other words, developing resilience or the perceived ability to cope with the stressors that are an inevitable part of the doctoral journey (Agteren et al., 2019) can help reinstate or maintain desired functioning (McCray et al., 2016) while acting as a protective mechanism against distress or low levels of well-being (Morales, 2000; Pyhältö et al., 2012; Stubb et al., 2011). In this sense, perceiving oneself as being capable to deal with any future stressful research-related circumstances can indicate a higher degree of perceived resilience. In contrast, lower perceived resilience would designate more or less helplessness or disempowerment in the face of adversity. In education, the construct of academic resilience can enable educational progress (Fallon, 2010; Martin, 2013). At the doctoral study level, resilience is conceptualised as the "acquisition of skills that enable students to become more assertive, confident, resilient, persistent and resolute in determining how to progress their Ph.D. while balancing their other commitments" (Mowbray & Halse, 2010, p. 657). Resilience in this

sense is related to institutional and work demands but also encompasses 'other commitments' such as family or personal issues, which together form an array of possible challenges that the student needs to address.

The study was conducted shortly after the outbreak of the COVID-19 pandemic that ubiquitously put to the test people's well-being and resilience around the globe. Students all over the world were suddenly required to learn to function in their everyday life in unexpected and unprecedented ways far removed from their familiar physical structures and routines. This novel way of living meant that doctoral students would be experiencing greater isolation, loneliness, and additional difficulties that could potentially have an unexpected adverse impact on their developing research. For instance, doctoral students' motivation to engage in academic writing has been negatively impacted by the pandemic (Cahusac de Caux, 2021), in addition to having to navigate through other challenges relevant to research design, access, workload, mental health, and finances which were often compounded by the pandemic (Donohue et al., 2021). As a major "macrosystem disaster and time-specific event within our era" (Wang & DeLaquil, 2020, p. 1347), the pandemic created unanticipated constraints in the daily life, study patterns, collaboration, and networking opportunities of doctoral students in different countries and institutional contexts (Levine et al., 2021; Xu & Tran, 2022).

The available evidence is revealing a gloomy picture of Ph.D. students' well-being (for a recent study of Ph.D. students' lived experience of mental illness, see Lai, 2019). Levecque et al. (2017) found that a representative sample of Ph.D. students (N=3659) in Belgium reported a higher likelihood of experiencing mental health symptoms compared to highly educated professionals in the general population, highly educated employees, and higher education students. Furthermore, there was a significantly higher estimate of developing depression or other common psychiatric disorders for this group of students. In a netnographic study, Janta et al. (2014) categorised doctoral students' strategies for coping with loneliness into social interaction tactics (e.g., through student-led doctoral groups, and doctoral forums), maximising opportunities for professional development and networking, and ensuring a good balance between work and private life. The underlying issue is doctoral students' need for structures of support to facilitate their heavily emotional rites of passage of the doctoral journey (Amran & Ibrahim, 2012), especially during the highly 'puzzling' liminal stage (Miller & Brimicombe, 2004, p. 409). As McCray and Joseph-Richard (2020) argued, the dynamic interplay of four resilience protection factors on a personal, professional, institutional, and environmental level can maximise the chance of successful completion.

Doctoral students are required to learn to adopt an attitude of inquiry during the highly creative doctoral process, which should culminate in a creative and original product. It is indeed "an invitation to learn, to embrace the complexity, difference, pluralism, uncertainty". (Montuori & Donnelly, 2013, p. 15). As with any other creative task, students explore options, develop choices, and consider ideas before making decisions during key milestones in their doctoral journey. They experience Wallas' (1926) four stages of creative thinking – preparation, incubation, illumination, and verification – both at the micro level of everyday, ongoing decisions (e.g., clarifying methodological issues, deciding on the focus and direction of an argument) and the macro level of decision making (e.g., deciding on the exact content of a particular chapter). The exploratory, investigative, and highly demanding cognitive stage that precedes any decision-making phase and the ability to make new connections (Balkin, 1990) can be disorientating, unsettling, disturbing, and anxiety-provoking (Montuori & Donnelly, 2013), particularly because of the crucial shift of the newly independent scholar learning to function within "uncertain processes that take place in unstructured contexts" (Lovitts, 2005, p. 138). It is important to hear doctoral students' voices in academia and to value and respect their perspectives in order to give them the agency to develop a strong sense of identity, belonging, and empowerment (Pretorius & Macaulay, 2021). This understanding can then help shift a bigger part of the responsibility to the structures and systems of the institution to facilitate smoother study trajectories for doctoral students (Macaulay & Davies, 2019).

RESEARCH QUESTIONS

Against the backdrop of the demanding doctoral journey, as conceptualised in the relevant scholarly literature, the present study sought to shed light on the phenomenon of doctoral students' resilience in tackling adversity by asking the following questions:

RQ1: What types of adversity do doctoral students experience during their studies?

RQ2: How do they choose to respond to those instances of adversity?

RQ3: How are indicators of resilience demonstrated through these choices?

RQ4: What conditions facilitate and/or constrain the students' capacity to recover quickly from adversity?

METHODOLOGY

Based on the research questions, the present study adopted an interpretive research design (Schwartz-Shea & Yanow, 2012) which aims to shed light on study participants' conceptions and the meanings they assign to the phenomenon under investigation. In this case, doctoral students' experiences, perceptions, and reactions to situations of adversity were at the forefront of the study's focus. It particularly aimed to identify instances of resilience and uncover how these were manifested in practice through the exploration of students' emotional reactions to instances of adversity (e.g., a stressful event), their resulting thoughts, and the type of actions (or lack of action) they may have decided to adopt in response to the encountered challenge. These thoughts and adopted behaviours, in particular, would help uncover the students' coping strategies in dealing with the adverse situation. Coping has been defined as "the thoughts and behaviors used to manage the internal and external demands of situations that are appraised as stressful" (Folkman & Moskowitz, 2004, p. 745). This definition indicates that emotions constitute the source of subsequent thoughts and behaviours that lead to some kind of action or lack of action. Some actions may of course be more effective and purposeful for the task at hand than others and the focus is here to explore the nature of the coping strategies that the students may choose to employ.

The factors that act to facilitate students' ability to bounce back from adversity or may constrain their ability to do so were also examined. To this end, semi-structured interviewing was employed to unravel doctoral students' perceptions and actions. The study took place in one higher education institution in the UK which has a long tradition of doctoral education and a high number of doctoral completions annually. Doctoral education follows a similar structure to other UK universities' doctoral provisions. The length of studies is 3-4 years, where the fourth year is considered the final writing year to be taken up by the student if needed. The doctoral candidate is supported by normally two or, more rarely, three supervisors. There is no formal taught component for the degree, but students have a range of development and training opportunities available to choose from according to need, relevance, and interest.

The data were analysed using the Grounded Theory approach which provided a useful framework for the analysis of the data. It also enabled the formulation of interview questions and relevant prompts to interviewees that aimed to invite their deeper reflections on the issues raised in line with the Grounded Theory Paradigm model, as discussed in the data collection and analysis sections that follow.

DATA COLLECTION

Qualitative interviewing was chosen as the most appropriate data collection approach for the study as its aim was to offer an in-depth exploration of doctoral students' experiences, perceptions, and actions in response to instances of adversity encountered during their studies. The interviews took a semi-structured form which allowed the students' concerns, experiences, and perceived reactions to

naturally emerge from the interviews. Indeed, the respondents led the conversation as any interesting issues that arose were further followed and elaborated on in detail (for a sample of the interview schedule, see the Appendix). The interview questions aimed to initiate and sustain a discussion around the nature of any situations of adversity that the doctoral students would have experienced and would choose to disclose followed by their reflections on whether and how this situation was resolved. One of the main aims here was to explore the students' thoughts, feelings, and subsequent actions. The first interview acted in essence as the pilot interview of the data collection which would determine whether any alterations to the interview schedule needed to be made. The interview questions were effective and clear in facilitating a fruitful discussion in line with the research aims and, therefore, no changes were made for the remaining twelve interviews.

Interviews were carried out with thirteen doctoral students from one higher education institution in the UK. The sample of respondents was selected purposefully (Lincoln & Guba, 1985) representing "*information-rich cases* … about issues of central importance to the purpose of the research" (Patton, 1990, p. 169). The purposeful recruitment of participants centred around the intention to gather the experiences of a small but targeted population of doctoral students around the following criteria: students at different research stages (full-time/part-time), students from a variety of backgrounds (international/non-international), funded and self-funded students as well as those studying full-time or part-time (see Table 1 for more detailed participant information). At the time of interviewing, the thirteen participants were at different stages in their research. Seven students were around the mid-point of their journey, three students were at the beginning (finishing their first year) and another three were approaching the end of their studies. There were seven full-time and six part-time students, seven non-international and six international students. Five of the thirteen participants were funded students holding prestigious doctoral scholarships. Eight students were self-funded. Almost all of the interviewees were female, and one was a male student. The study did not purport to explore gender differences and, therefore, recruiting equal numbers of male and female students was not one of our aims. All students expressed an interest to be interviewed when invited to participate in the research.

Table 1. Participant information

Participant Pseudonym	Stage of Research (Beginning, Middle, End)	Study Status (Full/time, Part/time)	Background (International Non-international)	Funded Self-Funded	Gender (Male/Female)
Mona (P1)	end	F/T	Non-international	Funded	Female
Sarah (P2)	beginning	F/T	International	Self-Funded	Female
Carmen (P3)	beginning	F/T	Non-international	Self-Funded	Female
Caroline (P4)	middle	F/T	Non-international	Funded	Female
Thomas (P5)	middle	F/T	International	Funded	Male
Natalia (P6)	middle	P/T	Non-international	Self-Funded	Female
Phoebe (P7)	middle	P/T	International	Self-Funded	Female
Maria (P8)	middle	P/T	International	Self-Funded	Female
Lara (P9)	end	F/T	International	Funded	Female
Helen (P10)	middle	P/T	International	Self-Funded	Female
Georgia (P11)	end	P/T	Non-international	Self-Funded	Female
Maddy (P12)	middle	P/T	Non-international	Self-Funded	Female
Jenna (P13)	beginning	F/T	Non-international	Funded	Female

The interviews were conducted online via Microsoft Teams, a cloud-based team collaboration software. They lasted between 35 and 50 minutes and were audio and video recorded using the Microsoft Teams system. Interviewing was carried out from May to June 2020 during the first wave of the COVID-19 pandemic in the UK. Even though the online nature of the conversations could not offer the direct bodily reciprocity of face-to-face interaction, it was an inevitable alternative that had, nevertheless, a number of benefits, such as cost-effectiveness, participant recruitment reach, and inclusivity (Oliffe et al., 2021) in addition to software in-built recording and transcription facilities. Indeed, the online nature of the interviews allowed the recruitment of part-time students who were physically located in different parts of the world.

Ethical approval was gained from the School of Education Ethics Committee, at Durham University. All recommended ethical guidelines outlined in the British Educational Research Association (BERA, 2018) have been adhered to. Before participation in the study, all doctoral students were informed of the aims of the research, its intended use, and purposes. They were informed that their participation was fully voluntary, that anonymity would be preserved, and that they would be able to withdraw from the study before the transcripts were anonymised if they wished to do so.

DATA ANALYSIS

The study employed the Grounded Theory approach as a useful analytic method that was well suited to the inductive nature of the topic under investigation (see Glaser, 1978; Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998). Two key systematic procedures for conducting qualitative research, in line with the main premises of Grounded Theory, were employed in this study. The first refers to theoretical sensitivity which is an essential attribute that allows the researcher to make sense of the data by perceiving the subtle nuances and meanings in data, recognizing similarities, delicate differences, and the connections between concepts (Strauss & Corbin, 1990). Knowledge of the relevant literature, the analytic process itself, and the researcher's professional and personal experiences around the processes, requirements, and stages of the doctoral journey offered increased insight and understanding during the research process.

The second procedure refers to the application of detailed and well-developed coding processes. The first *open coding* stage involved the close examination of the data in order to give names and categorise the emergent phenomena in the data. The second *axial coding* stage involved coding around a single category by linking the emergent themes at the level of properties and dimensions. In other words, the focus here was on identifying relationships around a single category with the application of the Grounded Theory Paradigm Model: exploring the conditions that gave rise to a category, the action/interactional strategies that participants chose to adopt in response, and the consequences of those strategies (Strauss & Corbin, 1990). The phenomenon of resilience was presented in terms of its contextual conditions; in other words, the set of circumstances to which the study participants had to respond through some kind of action and the intervening conditions that acted to either facilitate or constrain each particular contextual condition. Following the axial coding step of the analysis, the final analytic step (selective coding) aimed to tie all themes together in an attempt to offer theoretical insights developed through a holistic overview of the results (Strauss & Corbin, 1990).

RESULTS

The analysis of the interviews revealed ten categories (Figure 1) which represented a set of conditions that created circumstances of adversity for the study participants. These were relevant to five thematic areas: (1) supervision and supervisory support; (2) key milestones and challenges inherent to the doctoral journey (i.e., self-regulation and finding a daily working routine, data collection, and analysis, the writing process); (3) personal and family-related expectations and responsibilities; (4) study status related considerations (e.g., being an international and/or a part-time student); and (5) challenges arising from the COVID-19 pandemic.
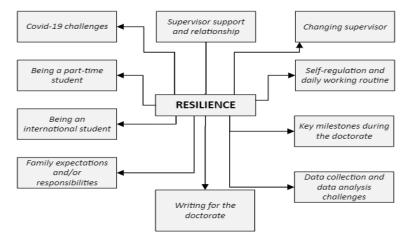
**Figure 1. Contextual conditions that pertain to the phenomenon of resilience
as conceptualised by the study participants**

Each of these sets of conditions (contextual conditions) created circumstances that required the doctoral students to respond by taking some kind of action. Their ability to do so demonstrated their resilience in dealing with particular stressful events. Each of the five thematic areas that represented the ten contextual conditions, as shown in the figure, is presented next through the analytic lens of the Grounded Theory Paradigm Model.

SUPERVISORY RELATED ADVERSITY

Some difficult situations that arose for the study participants during their studies related to supervisory issues (Figure 2). Four interviewees raised such concerns. These instances of adversity had strong initial emotional repercussions for the students before giving rise to some sort of strategic action in response to the stressful situation.
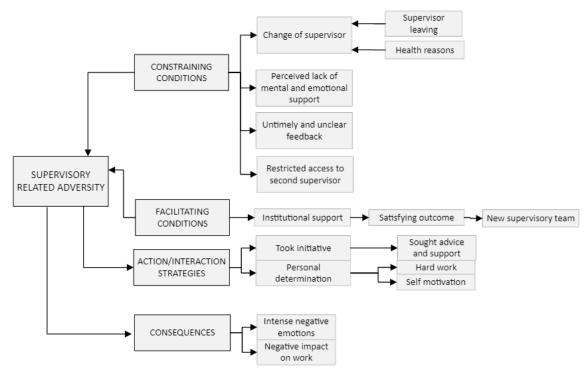

Figure 2. Supervisory related adversity – contextual conditions

Three participants found themselves in the unsettling situation of having to change their supervisory team due to supervisors leaving the university or because of serious health reasons. Maddy (P12), for example, experienced intense negative emotions (a lot of stress and sadness) during two challenging months after her supervisors left the university and felt that this period greatly affected her ability to focus on her work and her progress:

> *"I had like a block … a complete kind of block, it was very stressful. It hit quite hard."* (Maddy, P12)

Hoping to identify suitable supervisors for her project, Maddy then took the initiative by approaching key members of staff to seek advice and support. The problem was resolved with the identification of an "inspirational" supervisory team through encouragement and appropriate support, but this period was perceived as "a very stressful time … it was the biggest hurdle").

Mona (P1) and Helen (P10) faced a similar adverse situation of having to be allocated a new supervisor due to the health-related challenges of the original supervisor. In both cases, the outcome was very satisfying with a "really supportive" and "brilliant" new supervisor being allocated by the institution. They both felt very "lucky" for the positive result but had to grapple with the deeply upsetting feelings of losing their first supervisor and the unsettling period until the resolution of the problem. As Helen put it,

> *"It was not too long, but long enough when you really need someone desperately. Yes, I mean both those two months, it seemed like two years waiting to find out what was going to happen."* (Helen, P10)

Another supervisory-related adversity concerned the perceived lack of much-needed support from the supervisor during a crucial milestone of Thomas' (P5) Ph.D. journey. The challenging situation with the supervisor occurred as a result of a particularly demanding progression review meeting which aimed, firstly, to ascertain the progress that the student had made during their first year of study and, secondly, to provide constructive feedback regarding the next phase of the research project. Thomas felt that he "got too much criticised" during his review and "couldn't manage the stress" as a result. To his disappointment, he did not get the mental and emotional support from his supervisor that he felt he desperately needed. As a result, he felt that the supervisory relationship seemed to break down. He felt "blamed", "discouraged" and "alone". Coupled with this disheartening situation following his review, Thomas encountered two more supervisory-related obstacles which created unfavourable conditions for his subsequent progress. The first perceived obstacle was related to untimely and unclear feedback on his work which did not give him the opportunity to make appropriate changes when needed. The second obstacle concerned a perceived restriction to communicating with the second supervisor freely as, according to Thomas, the first supervisor acted as a gatekeeper between the student and his second supervisor. As Thomas explained the significance of this second concern:

> *"I need to be free to talk with my second supervisor … because it's getting a different perspective to help me and to extend my horizon."* (Thomas, P5)

He showed personal determination, however, by employing his own resources in studying very hard and making slight changes to his topic following his progression review. Furthermore, he tried to carefully handle the situation with his supervisor while striving to motivate himself along the way. The major motivating force that urged him to keep going was his desire to "finish on time" and take up a job in his country as expected of him following the end of his scholarship.

KEY MILESTONES AND CHALLENGES INHERENT TO THE DOCTORAL JOURNEY

This set of contextual conditions pertained to participants' accounts of their attempts to address the demands encountered at various time points during the doctoral journey. The challenges here were

associated, on the one hand, with significant milestones, such as collecting and analysing the project data and being successful in reviews of progress. On the other hand, participants reflected on their efforts to develop more habitual patterns of behaviours that would support and empower them, both mentally and emotionally, during the process of their studies. The focus here was finding an effective daily working routine, getting into a good writing rhythm, and engaging in a process of learning new skills throughout the doctorate (Figure 3).
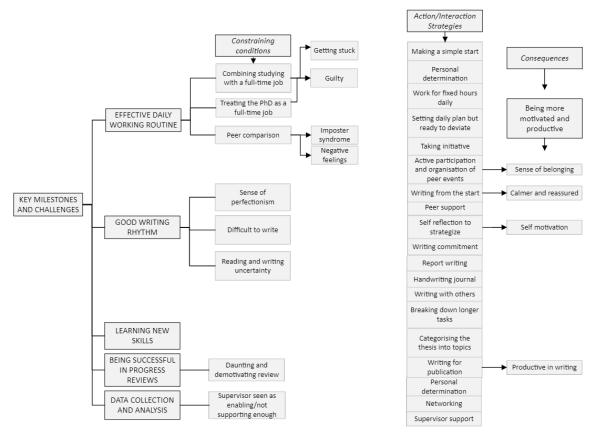

Figure 3. Key milestones and challenges – contextual conditions

Firstly, the importance of forming and maintaining an effective working routine was raised by some of the study participants as a challenge that had to be addressed. As a part-time student, Natalia (P6) quickly realised that combining her full-time job with her studies on a daily basis was mostly an impossible task and she decided to commit to her project on weekends, on holidays, and during the longer summer break. However, her inability to spend time on her research more regularly led to constant feelings of "guilt" and "getting stuck" to what she was not able to do. One of her motivating strategies, her "cure and way out", was to make a start and work on something simple that she could cross off her list – "a little goes a long way" (Natalia, P6).

Similar feelings of guilt were experienced by Sarah (P2), a full-time student, who did not have to juggle competing work and study demands. Sarah immersed herself fully in her studies from the start aiming to treat her research as a full-time job following advice that she had been given during the program induction. She adopted that steady routine, but this did not deter her from feeling that she could have been more productive. As she said, "It was always in the back of my mind, even though I used to go out and I did read a lot … I couldn't stop thinking that I should read more, or I should write more". Attempting to deal with that internal conflict, Sarah took the following action. She initially persevered in her efforts to challenge herself showing personal determination to work daily for

a 'fixed' number of hours. Setting a daily plan helped her to focus strategically on specific tasks, such as reading a number of relevant academic articles. At the same time, she appreciated that her daily work cannot always go according to plan, and she accepted having to occasionally deviate from what she anticipated to achieve on each day. As Sarah said,

> *"Obviously it doesn't go right every time because some of the articles are not too relevant and others take longer to read and analyse, but at least I know that these are the basic points or the basic things I need to cover for the day. I don't think you can ever get away from the feeling ... have you done enough for the day? It's just that I made peace with it that these are the things I will be doing today. And there's always another day and I'll read about that another day. So now ... it's getting in the flow."* (Sarah, P2)

Social comparison with peers, however, can impede students' perceived progress by creating emotional blocks to their belief in their own competence and ability to succeed. This was evident in the accounts of two participants, Carmen (P3) and Sarah (P2), who raised two types of obstacles associated with peer comparison in the context of the doctoral journey. Carmen's recollection of being socially and academically intimidated strongly alluded to experiencing imposter syndrome which led to her feeling "lost" and "kind of quite separate". As she said, "everybody seems to know a lot more than I do" (Carmen, P3). Aiming to tackle these negative emotions, she took the initiative to participate in social events and organise peer support groups. These encounters helped her to gradually acquire a stronger sense of belonging by connecting with others on a personal level while creating opportunities to support one another academically. For Sarah (P2), the projection of happy moments on social media by fellow students created unwanted comparisons with others resulting in feelings of negativity about her own progress. She thought that the pressure created through unavoidable peer comparison in social media leads to negativity which can become unsettling emotionally as a student strives to maintain a good working rhythm. To counteract the potentially impeding power of social media pressure, Sarah chose to engage in a process of self-reflection with the purpose of "strategizing what works to keep motivating" herself. One of her chosen strategies was to create a vision board that helped provide a constant reminder of her ultimate goal:

> *"I created a vision board from society posters and old newspapers… with me travelling and then finishing my Ph.D., why this is important, and then I just pasted it in front of my bed. So the first thing I used to see in the morning was that vision board that inspired and motivated me."* (Sarah, P2)

Getting into a good writing rhythm was a key indicator of progress for the study participants and a central component of an effective daily working routine. Focused writing was thought to be a motivating factor because it provided tangible evidence of the student's work. Writing from the start of the doctorate, in particular, was a goal that they were all striving for. Those who managed to keep up their writing from the start felt calmer and more reassured that they were moving in the right direction. Mona (P1), for example, maintained a healthy habit of writing from the very start and this was conducive to a sense of well-being:

> *"I prefer to write sort of mini essays rather than note form because I would have found it quite difficult if I had pages and pages and pages of notes without anything being sort of slotted together, so I prefer to write in prose. I know that not all of it will be included in the final version, but it is a way of sort of measuring what I've done. I get anxious looking at nothing – it just made me feel better that there was something there."* (Mona, P1)

Even though writing throughout and from the very beginning of the degree was generally considered good practice and a requirement for demonstrating progress, all interviewees recounted the difficulties they experienced in their attempts to maintain or get into an effective writing habit. Their explanations for their inability to keep writing as desired were associated with a sense of perfectionism (Phoebe, P7), perceived difficulty of "putting things down on paper" (Carmen, P3), uncertainty about how to navigate the relationship between reading and writing (Caroline, P4), particularly when

one holds the perception of being a slow reader and a slow writer (Natalia, P6), or with finding the task of writing "daunting due to a long break from academic writing" (Maddy, P12).

Notwithstanding these writing challenges, all students showed strong will and commitment to overcome what they felt was holding them back from making good progress in writing. Phoebe was appreciative of her supervisors' feedback on her writing but recognised her own hesitation as the main obstacle. The task of writing a report for her review of progress gave her the drive to keep her writing up: "I felt good about it … I'm gonna get over it now." Maddy decided to tackle her fear of writing in an academic style by recording her thoughts and readings by hand in a journal writing format which she perceived as liberating and allowing her to be more creative:

> *"Writing by hand uses a different part of your brain and quite often you are able to put down creative thoughts that you wouldn't have on a computer because you have to really think about it, you can't just erase it and start again. … I feel like I write maybe less lengthy stuff, but it's got more depth to it."* (Maddy, P12)

Others, like Carmen and Caroline, realised that breaking a longer, possibly overwhelming, writing goal down into smaller, achievable tasks set within specific time frames can pave the way for more regular, more productive writing time. For Carmen, the most challenging part of writing was making a start on a draft. Writing with others in groups provided that impetus to focus solely on the task of writing within designated time slots. As Carmen said,

> *"The writing group has been really good because we're all trying to write and it kind of makes you do that."* (Carmen, P3)

An effective strategy that worked for Caroline was the categorization of the whole thesis into topics for the purpose of recording thoughts and notes from readings into a meaningful and well-organised structure. Caroline was happy to identify a suitable computer program designed for notetaking, organising, and archiving relevant information:

> *"You can have different tabs for different topics … I have one workbook for theory, one workbook for the context of my study, one for methodology … I then use my notes to just fill the plan in order to write around the different things that I noted in bullet points. It was good when I figured it out."* (Caroline, P4)

Sometimes, gentle encouragement from the supervisor to the student to extend some parts of the work beyond the purposes of the thesis can be a strong motivating force, as Natalia recounted in her comment below:

> *"I had scattered notes everywhere … very unorganised. And then my supervisors encouraged me to try to write a paper for publication about some aspects of the methodology. I thought that was a bit crazy. I wouldn't have done if they hadn't told me. And I did write this paper, I forced myself to do it – it was a good learning experience."* (Natalia, P6)

Last but not least, challenges associated with key milestones of the doctoral journey, such as collecting and analysing the research data, surviving reviews of progress, and immersing oneself in a continuous process of learning new skills throughout the doctorate were key considerations for the study participants. The latter, in particular, was emphasised by Lara, an international student, who recounted her focused efforts and her determination to overcome her lack of confidence and limited knowledge of statistics that she needed to master in order to analyse her research data. She was successful in her endeavour to develop the required skills. Approaching the end of her studies, Lara said:

> *"I studied Arts and Humanities for my BA degree and for my Ph.D., I chose to do a different area, so I needed to learn a lot of mathematics and how to conduct statistical analysis. That actually posed a lot of challenges because sometimes I got frustrated … I tried to attend some online courses and I tried to apply for some funding too. If we try to be positive and try to actively solve that problem, we can learn a lot … It's just no use to sit there and do nothing. I find that if I try to learn actively, actually I can just gain the skill."* (Lara, P9)

Progression reviews were experienced very positively by some students. Mona (P1) and Lara (P9) recollected their first formal review of progress as a motivating and empowering experience that enabled a constructive dialogue with the reviewers. Others, however, were not as positive. Maddy remembered a particularly "daunting" and "messy" review of the progress meeting which left her feeling demotivated and disempowered – "it was not the discussion that it was meant to be; in the moment itself I felt I knew nothing" (Maddy, P12). The negative feelings that resulted from her review were quickly overcome with the supervisors' support who were there to support and guide Maddy through the subsequent steps in her work following the review.

The processes of collecting and analysing data were raised as key considerations by some interviewees that led to significant obstacles during the research journey. The supervisor was perceived here as a key enabler in assisting the student to overcome these challenges or as not acting to facilitate the process as expected. Thomas, for example, expressed disappointment in not receiving the support and guidance he was expecting from his supervisor in his efforts to access schools and consider the most suitable methods of data analysis. Maddy, on the other hand, went through a very difficult time in securing schools willing to participate in her research project but she felt that she received valuable support from her supervisors in the process. She also showed strong persistence and determination to create valuable contacts by participating in professional conferences. Her attempts were soon proven to be successful as she managed to recruit more schools for her data collection.

FAMILY-RELATED EXPECTATIONS AND RESPONSIBILITIES

Most of the study participants reflected on the invaluable support offered by their families during their doctoral journey. Family support was perceived as a key motivating force behind the students' efforts and perseverance. There were also challenges, however, associated with family-related responsibilities and pressures to complete or even feeling discouraged from pursuing the doctoral degree altogether (Figure 4). On the one hand, a student with a young child often felt stressed due to lack of time leading to her inability to maintain the mental space that she needed to fully concentrate on her work. The COVID-19 pandemic exacerbated this situation even more. As Jenna said,

> *"Even when I have time, it's not consistent anymore. I used to go to the library every Monday and do a writing retreat and we would sit in the library from 8:45 till 4:45 and we'd write in silent blocks and get a lot done."* (Jenna, P13)

However, Jenna and other students in a similar position felt extremely lucky to have a funded studentship that provided financial security for the duration of their studies. On the other hand, the family's inability to understand the student's desire to pursue doctoral studies meant that, for one of the study participants, extra personal resources had to be recruited in order to retain a strong sense of commitment and persevere with hard work from the start and for the duration of the doctoral degree. In response to perceived pressure from the family that studying at "a high Ph.D. level" is unnecessary for a woman who should be looking to get married and have a family of her own, Sarah (P2) experienced a variety of emotional upheavals and had to act toward realizing her study aspirations. After a short period of self-reflection that confirmed her wish to pursue a doctoral degree, she knew that she had to adopt a firm approach to others' objections ("I had to put my foot down, I really fought against the wind"). She was successful in her efforts to convince her parents, but this came with emotional repercussions which she thought affected to an extent her ability to motivate herself and avoid feelings of guilt when her progress was not always as evident as she would have liked. In her own words:

> *"I'm very harsh on myself sometimes and I cannot motivate myself, I am demotivating myself in a way. I over judge myself too harshly … I mean I have to do good because it's a lot of expectations now. I sometimes feel guilty thinking that I could have worked harder to dedicate more hours towards reading … it did affect the few of my productive hours in Ph.D."* (Sarah, P2)
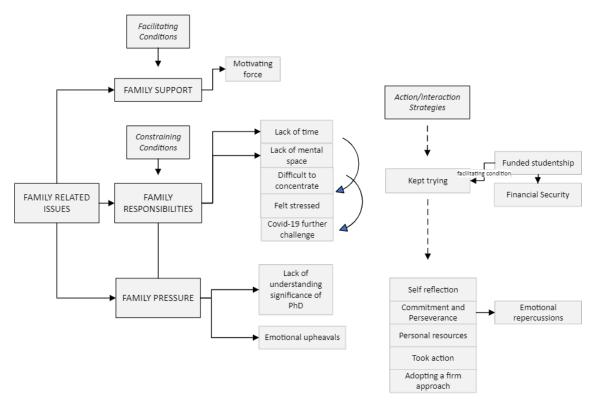
Figure 4. Family-related issues – contextual conditions

STUDY STATUS-RELATED CONSIDERATIONS

Some instances of adversity were raised that were relevant to some of the participants' international or part-time study status (Figure 5). Lara, in particular, reflected on the emotional and social challenges that she and her international peers go through at the beginning of the doctoral journey. She described her experience as follows:

> *"I am an international student and I found that international Ph.D. students and home students kind of encounter different difficult situations because, for us, we came all by ourselves and it's a totally new experience for us. So, we need to adjust to this environment a little bit because at first I felt shy talking to people from other countries or home students because before that I did not have much experience in a very international environment."* (Lara, P9)

Because of her proactive attitude and determination to tackle those challenges, Lara experienced a range of positive outcomes as a result. She decided from early on to "get out there in the PGR community", become active, regularly liaise with peers and members of staff, share ideas, and learn from others. She frequently participated in postgraduate research seminars and other events considering these as a valuable basis for communication, enhancing a sense of community, peer support, and the exchange of ideas. She thought that her actions and interactions brought about emotional, social, and cognitive benefits. She experienced "warmth and support" from peers and members of staff that made her feel "less nervous" and more relaxed. Furthermore, the intellectual exchanges that she initiated "broadened" her mind and gave her inspiration and "a lot of confidence".
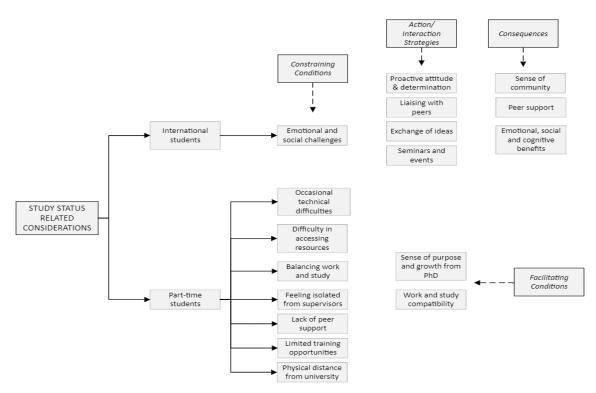
Figure 5. Study status-related considerations – contextual conditions

The part-time students that took part in the study raised particular constraints in their doctoral journey that were relevant to balancing work and study demands, feeling isolated from the supervisory team and their peers, or having difficulties in accessing useful resources from the university. Both Natalia (P6) and Maddy (P12) were part-time students who lived and worked around the vicinity of the university. They raised the difficulties they experienced in maintaining a regular study pace while keeping up with the demands of their job. Maddy, for example, mentioned that she had started to "fall behind" on her study schedule feeling that she could "not do both very well – I was very tired after a full working afternoon". Natalia found it difficult to focus on her studies during term time using the holidays and the longer summer break as dedicated study periods. However, despite the time-related challenges, they both appreciated the connections they could draw between the subject matter of their jobs and their research project. Maddy could try out her developing ideas from her readings and her study findings with her own students and Natalia felt fortunate that she had the opportunity to collect data for her research project as part of her full-time job. As a result, she appreciated how "compatible" her research was with her other commitments as she was enabled to "enter the field from the very beginning". Others, like Phoebe (P7) and Georgia (P11) who were both part-time students living abroad and far away from the university, commented on the challenges associated with balancing studying with their daily full-time job, but mainly concentrated on the sense of purpose and growth that their doctoral work gave them. This is illustrated in Phoebe's words as follows:

> *"When there are stressors at work, you feel like you have something to look for in the future with your studying. It's like you have your own baby and you can take care of that baby. You have more hope for something better for yourself, for the future."* (Phoebe, P7)

Physical distance from the university was overall perceived as a challenge due to occasional technical difficulties or inability to access a "physical library" (Maria, P8), problems in accessing resources, such as interlibrary loans, lack of accessibility to peer support and connectivity (Helen, P10; Georgia, P11), limited access to training opportunities and "losing touch with the supervisors" (Georgia, P11).

On reflection and as she approached the end of her studies, Georgia thought that she should have "pursued" the connection with her supervisors more actively.

CHALLENGES ARISING FROM THE COVID-19 PANDEMIC

About half of the interviewees (N=6) raised the COVID-19 pandemic in the discussion and reflected on the impact it had on their progress. Concerns were raised about the lack of freedom in accessing physical spaces to study, health-related worries, setbacks in accessing study participants, uncertainty about the job market following the doctorate, and unavoidable changes to initial research plans (Figure 6).

Figure 6. COVID-19 challenges – contextual conditions

Health-related concerns were common among all participants, as echoed in Natalia's words: "lockdown was a shock, there was too much information, everything was confusing". On top of the health-related dangers, for most of the students, the adversity caused by the pandemic was disorientating and shook their familiar working structures and routines. Caroline, for example, "felt stuck" due to being unable to study away from home if she needed to:

> *"I have some periods when I'm happy working from home almost all week, but I also have some periods in my life when I'm like, OK now I'm done with my home. I want to be in cafes, libraries I wanna just change the surrounding and just before lockdown I had that moment when I realised that I actually didn't want to work from home that much anymore. I needed that break from home and then lockdown happened and so I was a bit overwhelmed with that."* (Caroline, P4)

Using online advice and getting support and reassurance from her supervisors, she quickly adjusted to a new routine and found an appropriate study structure. Lara (P9) also felt "very nervous" with the onset of the pandemic but "gradually adapted to this life". Approaching the end of her studies, she additionally experienced anxiety about her career direction and the employment opportunities that now seemed more limited and harder to access as a result of the pandemic. She decided to stay

hopeful, focus on finishing her PhD and trust that normal face-to-face interaction would resume in due course opening up new and exciting opportunities for the job market.

Furthermore, difficulties were encountered in recruiting study participants and in having to change initial research design plans because of challenges caused by the pandemic. For Phoebe, the COVID situation exacerbated an already difficult situation. She kept trying for a long time to make her research known to relevant stakeholders with a view to recruiting participants for her study, but then "COVID-19 came" and she had to stop trying to collect further interview data. After discussing the issue with her supervisors, she decided to give herself "more time" and potentially consider putting her "Plan B" in action at a later stage. Another doctoral student, however, described a particularly emotive situation that she experienced as a result of the "uncertainty" and the high levels of stress caused by the pandemic:

> *"I think that the uncertainty of what was going to happen for a project that I cared so much about, and how things were going to progress was really stressful as part of COVID. … I threw myself into normality to start off with and I sort of refused to engage with the fact that everything had changed and I think that that manifested itself in me becoming quite ill over Easter with anxiety."* (Jenna, P13)

Jenna was obliged because of COVID-19 to change direction in her data collection and explore the possibility of moving this stage of her research online. This long delay and slow negotiations with key stakeholders created unwanted tension and a sense of being stuck in the pre-data collection phase. Because of this adverse situation, Jenna's pre-existing mental health conditions were aggravated resulting in a real mental struggle coupled with an inability to enjoy her work that she so deeply cared about. In response to these challenging circumstances, Jenna "reached outwards" and established connections with like-minded peers and academics through actively engaging with social media and attending important conferences in her field of study. Her networking attempts proved fruitful in giving rise to positive opportunities, such as collaborating with others on writing articles for publication and benefitting from "two mentoring sessions with an established academic". Jenna also took on board her supervisor's support to start writing a diary. It started as a space to record the impact of COVID-19 on her day-to-day work, but it became a useful thinking and reflective tool: "It has just become a space where I write my thinking down and that's really helped me to sort of frame some arguments and think about what I need to look into more …" (Jenna, P13).

For another doctoral student, however, COVID-19 presented a "godsend" opportunity in giving Maria time "to sit and to read and reflect" allowing her to do "a tremendous amount of reading during this time" (P8). This was a critical time in her studies when she needed to take a step back and make important decisions about the direction that her writing needed to take:

> *"I probably wouldn't have done it because I would have panicked and I would think I need to write, I need to write, but in a way, it's forced me to go back; and move forward again."* (Maria, P8)

Despite this window of opportunity as perceived by Maria, the pandemic increased her sense of isolation, her inability to occasionally visit the university which was "so valuable" to her as a part-time student, and her frustration in not always being available to attend online events because of the long time difference.

DISCUSSION

The interview findings revealed specific instances of adversity experienced by the study participants during their doctoral studies. In response, the students demonstrated resilience through the range of coping strategies that they chose to employ. Across the five thematic areas that the analysis uncovered, these coping strategies included: (i) personal resources and attributes, (ii) strategic behaviours and purposeful actions, and (iii) networking and seeking external support. The doctoral students' ability to bounce back from these challenging circumstances not only demonstrates their resilience,

i.e., their inner strength and resourcefulness but also depicts a broader, more holistic positive developmental state that includes more than resilience. The students indicated in their responses that, under difficult circumstances, they could be efficacious by tapping into a range of strategies, actions, and internal and external support, they could be hopeful and optimistic by showing personal determination, self-motivation, perseverance, and trust. These are the key features of psychological capital, which, according to Luthans et al.'s (2015) definition, includes an individual's sense of confidence (self-efficacy), positive attributions about succeeding (optimism), persevering to achieve goals (hope) and bouncing back from adversity (resilience) to achieve success. In other words, psychological capital is a useful theoretical construct that helps not only explain but also broaden the meaning of what a resilient doctoral student looks like to a more holistic psychological state of development. This is the meta-theme that arises from the analysis of the data using the Grounded Theory approach (Figure 7).
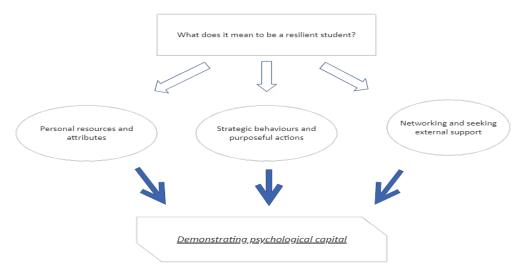

Figure 7. Psychological capital – meta-theme arising from the Grounded Theory analysis

The types of adversity experienced during the course of the doctoral studies by the study participants were related, firstly, to key milestones of the degree and research-related challenges. Situations that had to be dealt with here were achieving and maintaining an effective daily working routine and sustaining a good writing rhythm while addressing any challenges arising in the empirical and analytic stages of the work. Feelings of guilt, a perceived inability to make progress, and exhibiting negativity or doubting one's abilities through an unintended comparison to others were all unwanted emotions that led to taking some kind of action. Indicators of resilience were demonstrated by setting realistic goals and devising a purposeful plan of action, such as committing to a daily plan of fixed working hours, breaking down longer tasks into manageable chunks of action, tapping onto peer and supervisory sources of support while sustaining a personal determination to keep going and maintain a writing routine. The study participants' desire to find and sustain a good writing rhythm initiated the employment of a range of strategies to help them achieve their writing goals. This was indicative of their attempts to develop resilience by adopting productive patterns (Odena & Burgess, 2017) and writing profiles that serve and help them to grow. Lonka et al. (2019) coined the term "Growth-Transforming" writing profile which seems to lead to the highest productivity and greatest satisfaction in the writing process. According to the authors, working on their epistemic beliefs as writers, doctoral students can view writing as a creative act, as a constant cycle of drafting and redrafting, and as an opportunity to make appropriate use of feedback to improve their writing further.

The doctoral journey has been well conceptualised as a demanding process in the scholarly literature. Kearns et al. (2008), for example, discussed a number of self-sabotaging behaviours that are linked with maladaptive self-perceptions (e.g., imposter syndrome, see Pretorius et al., 2019; Sverdlik et al.,

2020), may work against a positive forward trajectory for the doctoral student, such as putting insufficient effort, procrastination, perfectionism, and disorganisation among others. The aforementioned indicators of resilience as exhibited by the study participants are well aligned with research findings that have highlighted the positive association between goal commitment and the investment of academically engaged time with study progress (Martinsuo, 2007; Martinsuo & Turkulainen, 2011). Time commitment coupled with peer and supervisory support seems to act jointly to promote positive progress outcomes.

Supervisory-related concerns were also raised by the interviewees in the unexpected event of changes in the supervisory team or experiencing difficulties in accessing and getting the support needed to move forward with the research. This finding is well aligned with previous research that highlighted early-stage doctoral students' stress and discomfort resulting from perceived difficulties in accessing or communicating with supervisors and with an identified conflict between co-supervisors (Cornwall et al., 2019). In turn, supervisory support is a strong predictor of students' positive emotions, persistence, and perceived progress in their doctoral work (De Clercq et al., 2019) leading to decreased emotional exhaustion and counteracting students' intentions to withdraw from their studies (Hunter & Devine, 2016). Students who feel cared for and who can communicate openly and constructively with their supervisors will experience more empowerment and better mental health (Barreira et al., 2018; Evans et al., 2018).

The initial response to supervisory-related adversity was of a strongly emotional nature with negative repercussions on the students' work. However, the subsequent action was imbued with a desire to overcome the presented challenges with personal drive and willpower. The students chose to rise to the challenge here by demonstrating such indicators of resilience as taking initiative seeking advice and support and showing personal determination through hard work and self-motivation.

Furthermore, adverse circumstances related to family pressure and responsibilities, considerations around the students' study status, and COVID-19 challenges preoccupied the doctoral students and featured in their accounts. In all three sets of challenging situations, the immediate shorter or longer-term reaction was one of an emotionally, mentally, and/or socially related struggle. Both full-time and part-time students, for example, had to learn to cope with important transitions, such as striking an effective work-life balance (see Cornwall et al., 2019) or dealing with work-family conflict (Levecque et al., 2017). This challenge, however, as shown in this study and supported by the relevant literature, can be eased if it is associated with an underlying sense of purpose and growth in the doctoral journey, as a vision of a possible, future desired self is on its way of being materialised (Hiltz-Hymes et al., 2015). Pychyl and Little (1998) interestingly put this as a "trade off between manageability and meaning" (p. 424), as a conscious intention to strive purposefully in pursuit of higher order meaning that can help maintain a sense of well-being in life.

The subsequent response, however, was one of action rooted in the students' personal investment and commitment to their doctoral research. Responding to family pressure, for example, action meant the recruitment of personal resources and the adoption of a firm approach to persevere and keep making progress. In response to COVID-19 related challenges, indicators of resilience were demonstrated by such actions as reaching outward and engaging with peers and key scholars in the field, seeking the supervisors' reassurance, and acquiring an attitude of hope, trust, and openness to deviating from the original research plan. Studies have shown that students' collaboration and engagement with peers and scholarly networks can greatly contribute to their doctoral experience (Bieńkowska & Klofsten, 2012; Sugimoto, 2011), can enable students to cope with isolation and loneliness (Janta et al., 2014) and shield them against undesirable outcomes such as being unproductive and making no progress or even withdrawing from the doctorate altogether (Pyhältö et al., 2012). One particular type of peer engagement that is featured in this study but is currently quite underreported in the literature (Cahusac de Caux, 2021), is the potential of virtual writing retreats to enable students to work productively with others in motivating social settings. Writing groups, in any form,

constitute a powerful learning practice that enhances collaboration, academic identity, a sense of belonging, feedback, and productivity (Chakraborty et al., 2021; Hradsky et al., 2021). Furthermore, when these networks open up opportunities for the students to publish their work, positive shorter and longer-term outcomes can ensue, such as successful degree completion and ulterior academic advancement as part of a future career in research (Larivière, 2012).

Similarly, a proactive attitude and determination to liaise with peers for the fruitful exchange of ideas in postgraduate seminars and other events were key indicators of international students' resilience in their effort to bounce back from emotional and social challenges encountered at the start of their doctoral journey. International students' heightened vulnerability to stress and proneness to mental health problems due to a variety of stressors and pressures has been discussed in the relevant literature as a particular threat to their well-being compared to domestic students (see, for example, Han et al., 2013; Wu et al., 2015) even though some studies found no difference between the two groups of students (Agteren et al., 2019; Khawaja & Dempsey, 2008).

The study findings revealed a number of key conditions that acted to facilitate the students' capacity to recover quickly from adversity. Some of these key enablers were external to the individual and involved others' support, such as from the student's family, the supervisory team, and the institution, including financial support opportunities. Most facilitating conditions, however, were rooted in the personal significance of the doctoral degree for the students that served to ignite their drive to recruit their own resources and demonstrate personal agency and determination to move forward. These internal factors evidenced the students' state of psychological capital and included, in Sverdlik et al.'s (2018) study, academic identity, students' motivation, writing skills, and their strategies for self-regulation of their own learning. Part-time students, for example, were motivated through an identified sense of personal and professional growth that urged them to overcome the presented challenges and move on to the path to completion. It is evident, in line with Liu et al.'s (2017) multi-dimensional model of resilience, that overall resilience can be shaped by the interaction of an event with an individual's core (trait) resilience and other interpersonal and socio-ecological factors that holistically shape their response to adversity. In other words, social interactions with significant others, such as family, peers, the institution (Posselt, 2018; Schmidt & Hansson, 2018), and the overall academic community (McCray & Joseph-Richard, 2020) can facilitate or hinder the students' well-being, acting as protective factors (Morales, 2000; Stubb et al., 2011) against disengagement or lead to a "downward spiral" (Schmidt & Hansson, 2018, p. 8).

STUDY STRENGTHS, LIMITATIONS, AND POINTS FOR FURTHER RESEARCH

The study's strength lies in documenting in depth some doctoral students' discourse about the perceived factors that create adversity during their studies and about the steps they take to show resilience and continue purposefully on the route to successful completion. However, it is limited in its scope and does not purport to make broad generalizPrations across different educational contexts and geographical areas. It was conducted in one higher education institution with a purposeful sample of thirteen students but offered rich and insightful findings which will hopefully steer further attention and resources to facilitating and supporting the demanding doctoral journey. Other higher educational institutions that provide doctoral student support will be able to relate to the findings and adapt them for their own needs and pedagogical priorities (Bassey, 2001).

The findings offer a solid base for the development of a resilience/psychological capital scale drawing on the five thematic areas, the students' coping strategies, and the conditions that acted to facilitate or constrain their actions. The scale will enable students, supervisors, and institutions more broadly to ascertain the degree of resilience/psychological capital that the students may demonstrate at a particular time point so that targeted interventions can be put in place to support students' work, progress, and overall doctoral success.

CONCLUSION

The study findings revealed the students' psychological capital, inner strength, and persistence that they recruited in their attempt to employ a variety of strategies to tackle the challenging circumstances encountered during the doctoral process and the ensuing emotional upheavals. The data provided evidence of the doctoral degree as a learning process that invites the student to develop mental, behavioural, emotional, and social skills through often unsettling milestones in pursuit of the junior academic's advancement and mature status (Amran & Ibrahim, 2012). Many of these challenges are an inherent part of the doctoral journey and provide valuable life and academic lessons. Indeed, they can be associated with well-being if they are coupled with an ability to connect to others and a sense of growth, meaning, and purpose (Kashdan & Biswas-Diener, 2014).

However, these demands can be alleviated through appropriate institutional support and purposeful advice which can help moderate the impact of external forces on the students' sense of well-being and their understanding of the degree expectations. One important area of consideration is an explicit focus on writing, its process, and expected stages so that students develop adaptive rather than maladaptive conceptions of writing (Castelló et al., 2017) that can enable them to move forward and grow as writers alleviating unnecessary anxiety. Other crucial considerations include targeting areas that may fall within the control of the institution, such as helping promote a vibrant peer community, creating opportunities for the constructive exchange of ideas, facilitating students' immersion in the broader academic community, and offering vital support in major instances of adversity, such as in unavoidable supervisory changes or other situations that may be outside of students' control.

The findings overall suggest that doctoral students are resourceful, hardworking, and strategic but these qualities need to be supported by strong systemic support that has the students' needs at its core (Schmidt & Hansson, 2018). Such a student-centered approach has the potential to enable those qualities to flourish in an environment that provides the right resources for doctoral students to become more competent, autonomous (Lynch et al., 2018), self-efficacious (Overall et al., 2011), empowered (Pretorius & Macaulay, 2021) and continue to thrive on route to completion.

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APPENDIX: INTERVIEW SCHEDULE

What stage are you at the moment in your studies?

Can you think of a particular situation where you experienced adversity during your studies, a situation that was difficult or particularly stressful?

(Can you please briefly talk to me about it? What was it about? What happened? How did you feel? What were your thoughts? What did you do?)

Can you remember any other incidents (major or minor) that may have affected your work?

(Did this affect your reading, your writing, your data collection, or any other parts of your work in any way? Was your work negatively affected in any way? How? In what way?)

Was it resolved? How? What/who helped? Did you seek support or was it resolved unexpectedly?

What did you learn from this incident?

If you were to deal with a similar situation now, would you respond differently and why?

Are there any other stressful/difficult situations that you went through that you would like to mention?

Which areas of your work do you generally feel you are better able to cope with and which ones are you finding it harder to do so?

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