Understanding Doctoral Struggles: A Multi-Disciplinary Case Study of Methodological and Institutional Challenges

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Abstract:

This study examines the methodological challenges faced by doctoral students in four disciplines—Business Administration (DBA), Computer Science (DCS), Science (DSc), and Arts (DA), using an explanatory multi-case study design. The research addresses three key questions: (1) What methodological obstacles do doctoral candidates encounter during the research process? (2) How do disciplinary contexts shape these challenges? (3) What institutional or supervisory factors contribute to or alleviate these difficulties? Nine doctoral candidates were purposefully selected to ensure a diverse representation of disciplines and institutional experiences. Data were collected through semi-structured interviews and document analysis (such as thesis proposals and ethics applications) and were analysed using thematic coding and triangulation to enhance credibility and validity. The study found that while some challenges were discipline-specific, such as differing epistemological expectations, others, like supervisory misalignment, ethical approval constraints, emotional stress, and inadequate institutional support, were common across all cases. The explanatory case study design facilitated the identification of causal patterns and contextual factors that influence struggles in doctoral research. The findings offer actionable recommendations for improving doctoral education through more effective supervision, enhanced ethical training, and interdisciplinary methodological support. This study contributes empirical evidence to the

Introduction

In today's research landscape, embracing diverse suggestions, ideas, and approaches is paramount for an impactful and credible paper. This case study examines the challenges and difficulties associated with research methods, providing a structured analysis of the issues faced by researchers and the key steps involved in conducting accurate research.

In addition, Research methodology is seen as a primary prerequisite for academic inquiry, which plays a vital role in modelling the quality and integrity of research across numerous disciplines. Furthermore, its importance extends beyond individual scholars to educational institutions such

as universities, colleges, and business schools, where organized and well-defined methods enhance the pursuit of knowledge.

To fully appreciate the role of research methodology, it is essential first to understand its true meaning and purpose. Scientists can refine their approach to ensure methodological reliability and contribute to the advancement of their respective fields. This study offers valuable insights into the methodological challenges faced by researchers and best practices that shape the research landscape today. By understanding the importance of research methodology and case study, the current study focused on the primary importance of case study, followed by an examination of the difficulties and challenges faced by doctoral candidates during their research. Ideally, the researchers are in different fields as reported above.

Research Methodology in The Concept of Case Study

Case study research remains a valuable methodology across various disciplines, offering in-depth insights into complex phenomena within their real-life contexts. By acknowledging and addressing its limitations through methodological rigour and integration with comprehensive literature reviews, researchers can enhance the validity and impact of their findings. Continued discourse on best practices will further strengthen the utility of case studies in contributing to scientific knowledge (Crowe & Sarma, 2022). A case study in research is both significant and noteworthy. It is intensely focused on specific problems, and the case study shares the view that in-depth analysis, contextual understanding, the use of multiple evidence sources, flexibility in some cases, and a holistic perspective are essential. Case study research is commonly associated with qualitative inquiry and has become increasingly recognized as a valuable method for exploring complex issues in contemporary world contexts. It is particularly suitable for examining contemporary phenomena, and this chapter explores key concepts linked with this distinct research approach, emphasizing the importance of maintaining rigor in case study research (Patnaik & Pandey, 2019). In social research methodologies, the case study is the most used approach. The effectiveness of a case study research strategy can be enhanced by the various epistemological strands that determine the exact type of case study and technique to be adopted in the field. The role of the case study is surrounded by debate and different schools of thought in generating a theoretical framework with widespread application. Therefore, to add

freshness and a new body of knowledge to the methodology of case study, the writer's primary goal is to ensure the reader is squarely engaged and prompted to contribute their existing knowledge and information on this topic (Priya, 2021).

Literature Review

Barriers and challenges that doctorate students face

Doctoral research represents the peak of academic achievement, but students often encounter multiple roadblocks that hinder their progress, well-being, and overall success. This chapter combines existing research. Ph.D. students often encounter challenges due to the complex nature of their research, which requires considerable depth (Gardner, 2009). Problems range from selecting an appropriate research design to getting the saturation points for the literature review to avoiding plagiarism. Problems with supervisor-student relationships, which may be poor or non-existent, often lead to delays in completing Ph.D. programs (Ives & Rowley, 2005). Sometimes, of course, the problem can be the student's approach, although this is not often the case (Ives & Rowley, 2005). The lack of clarity about what is required for Ph.D. programs, as well as about the expectations Psychologically, PhD candidates often experience feelings of loneliness, particularly in self-directed research settings or online learning environments, which can impact their motivation and mental health (Ali & Kohun, 2007). Impostor syndrome is a common psychological phenomenon and leads to self-doubt, the feeling of inadequacy or being a fake, despite apparent successes and achievements, which affects their self-confidence and productivity (Parkman, 2016). Stress, anxiety, and depression are evident among PhD students more than in the general population, due to the high academic demands and unpredictable career opportunities (Stanko & Henard 2017). Financially, doctoral students face challenges such as low stipends, limited grants, and high tuition fees, which may ultimately lead to a prolonged program duration or program dropout (Golde & Dore, 2001). Access to resources like specialized software, laboratory equipment, and good libraries is also restricted (Pearson et al., 2008). Juggling academic duties with job, family, and social responsibilities is a source of stress and decreased productivity for doctoral students (Spaulding & Rockinson-Szapkiw, 2012). Time management has been identified as a recurring problem, with students underestimating the required time for doctoral-level research and writing (Lovitts, 2001).

Career fears, particularly in academic areas, cause considerable stress due to the limited number of job openings and a competitive job market, which affects the morale of doctoral students when making career decisions (Nerad & Cerny, 1999). The inability to apply academic and research skills in non-academic careers further restricts employment opportunities and satisfaction (Boulos et al., 2016). In "Case Study: A Strategic Research Methodology," Noor (2008) provides a comprehensive review of the literature surrounding case study research as a qualitative methodology, highlighting its significance in social sciences. The article addresses common criticisms regarding the scientific rigor and generalizability of case studies, arguing for their suitability in exploring complex, real-life processes in depth. The researcher outlines the fundamental aspects of case studies, emphasizing their role in providing holistic perspectives on specific phenomena or events within their real-world contexts. The methodology is particularly apt for understanding details and emergent properties of organizational activities, making it valuable in fields such as sociology and anthropology, despite being underutilized. The author distinguishes between different types of case studies exploratory, descriptive, and explanatory providing clarity on how each can be applied in research settings. Noor's work highlights the significance of a well-structured approach to case study research, which entails thorough literature reviews, systematic data collection through semi-structured interviews, participatory observation, and analysis of documentary sources. This multifaceted approach, known as triangulation, enhances the validity and reliability of the findings. Furthermore, the article emphasizes the utility of multiple case studies, as proposed by Yin (2017), advocating for a replication strategy rather than sampling logic. This approach not only enhances the robustness of results but also facilitates broader generalizations across different contexts. Overall, Noor's examination highlights the crucial role of case studies in qualitative research, providing methodological insights that enhance our understanding of complex social phenomena and enrich the potential for deeper inquiry in various fields. Noor (2008) used a case study with a strategic qualitative research approach that was suitable to be applied in social sciences. Despite debates about case-study conduct, scientific rigor, subjectivity, and generalizability, the author argued that case studies allowed for the examination of complex, real-world processes, settings, and activities. The authors described the logical steps for conducting case studies and the advantages of using multiple methods and multiple cases to enhance the validity and reliability of results. Known as a systematic study of phenomena in their natural setting, this method is

based on the foundational views of both Yin and Stake. The researcher found three common varieties of case studies, namely the exploratory, descriptive, and explanatory case studies, and the purpose of each type was to answer unique research questions. The approach makes use of various types of data, such as interviews, documents, observation, and archival records, to increase the consistency of the method through triangulating different data sources and to enable an investigation of some kinds of complexity that quantitative methodologies may miss. In response to these criticisms, he emphasized the need for strong research design, documentation, and analytical generalization, rather than statistical generalization. In the final analysis, the case study is introduced not as a second-best or inferior method but, rather, as a strong modality for theory building and for answering "how?" and "why?" in the face of control and interrelated variables. This is consistent with the wider body of literature that uses case studies as dynamic tools across education, health, management, and industrial relations, particularly when studying under-theorized or context-specific topics.

In conclusion, the case study approach is often misunderstood and undervalued, it remains an indispensable methodology in research that addresses real-life complexity and context. The strength of case study research lies in its depth, flexibility, and ability to capture the lived experiences of individuals and organisations. The literature synthesised in the paper advocates for methodological rigor, appropriate documentation, and clear boundaries to counter traditional criticisms. Ultimately, the review positions case studies not as a weak alternative, but as a strategic and robust research method for answering "how" and "why" questions in complex settings.

Research Methodology

This is a case study that reports the history and experience they faced during the study. In this case study, the researchers focused on nine candidates who pursued different postgraduate studies for doctoral programs, listed in the following order: Doctor of Computer Science (DCS), Doctor of Business Administration (DBA), Doctor of Arts (DA), and Doctor of Science (DSc). Four cases in this study focused on DBA, three cases focused on DCS, one case focused on DA, and one case focused on DSc. These cases, which studied different doctoral programs, explained the various difficulties and conflicts faced during their studies, including those related to time,

budget, sources, and virtual learning. Each group reported its concerns, and based on these concerns and explanations, the researchers analysed and provided valuable solutions to improve the program's conduct.

Discussion

The first group of this study, which focused on DBA (four candidates), is reported as shown below. The researchers then, based on each case report, determined the analysis and solution. The case one reported:

Participants were informed about the study's objectives, the publication format, and their right to review and approve the final manuscript before publication. No sensitive personal or health information was collected, and there was no coercion or inducement. The research was not conducted with the vulnerable populations or external human subjects, so the institutional ethics board did not review it under the official regulations. The research team took all contributions in a manner respectful of academic protocols and communicated the data only by scholarly dissemination.

Case 1

A Doctor of Business Administration offers a transformative experience for executives, integrating practical industry experience with academic research to address real-world business challenges. However, such difficulties as interpreting complex data and balancing executive roles with academic demands can be overcome through workshops, collaboration with statisticians, and the use of data visualization techniques. Ethical considerations and participant confidentiality are crucial in researching sensitive topics. Additionally, many DBA candidates struggle with time management as they juggle demanding careers and personal responsibilities. Creating a realistic study schedule, seeking flexible work arrangements, and prioritizing self-care are essential strategies for mitigating stress and maintaining productivity. Finally, transitioning from a fast-paced corporate environment to a theory-driven academic setting poses challenges. Executives used to quick decision-making may find the slow, methodical nature of educational research frustrating, and adapting to scholarly writing can be difficult. This paper explores these challenges and offers practical solutions to navigate them effectively.

Case 2

Pursuing a DBA or PhD involves a significant cultural shift for professionals. Candidates often face various challenges that can impact their online learning experience. One major issue is the anxiety surrounding online communication and technology, which highlights the need for more transparent communication amidst cultural differences. While online courses offer flexibility, many students may feel uncomfortable or hesitant in virtual environments due to technology challenges, such as communication barriers and technical malfunctions, which can frustrate those eager to engage. The struggle of transitioning back to academia after years of professional experience is evident in the areas of learning, writing, and research. Students face increased workload, balancing work responsibilities with academic obligations, and struggle with accessing research materials and adherence to academic standards, especially for non-native English speakers. Lastly, candidates often come from diverse backgrounds that may not have emphasized formal research methodologies, which can complicate their understanding and application of established research practices. These barriers highlight the need for accessible support and resources in online education.

Case 3

The Doctor of Business Administration (DBA) program requires an intense commitment of time, intellect, and resources to bridge the gap between theory and practice, with graduates emerging in high-level leadership positions that are typical of Executive experiences. However, DBA students have several seemingly inextricable challenges. A key challenge is to balance professional, academic, and personal and family responsibilities. The typical applicant is in mid-career and employed full-time, making it a challenge to find time for studying, researching, and conducting literature reviews. This fight can be stressful and exhausting, which hurts academic achievement. Research-related challenges are also prominent. It is not easy to come across original, industry-related insight that can be academically challenging. Student and supervisor misalignments may also complicate the research journey (Maceviciute & Wilson, 2018). Furthermore, students often experience restricted access to critical academic materials, including databases, journal access, and research software, such as SPSS or AI technologies. Such access barriers impede the quality of research, particularly in newly emerging fields that require updated tools and methods. There is also the financial strain on them, as tuition,

registration, materials, and technology fees all mount up, often with no transparent upfront disclosure. Candidates may also experience financial insecurity because of lost work hours to study (Kearney et al., 2024). The absence of scholarships or employer sponsorships means that the DBA road is out of reach for many. To address these complex issues, institutions should establish effective support structures. Flexible schedules, such as the ability to take evening, weekend, or online courses, could make a difference in helping a candidate manage their time effectively. Academic assistance should involve teaching students time management and prioritization skills that enable them to become successful at juggling competing demands. In addition to the foundational research methods courses, exposure to the work of eminent scholars and their theoretical perspectives can elevate intellectual involvement. Mentoring programs, which pair students with academic or industry mentors, provide individualized advice and guidance to inform research paths. The importance of improving access to resources cannot be emphasised enough. Libraries and research centers should provide training on data analysis, academic writing, and new technologies, such as AI and statistical software. Better journal and database subscriptions will lead to higher-quality and more equitable research. Peer communities also support partnership, minimize isolation, and enhance the doctoral endeavour. Financially, schools are encouraged to have clear pricing models with transparent fees, along with the option for flexible tuition payment. Providing scholarships for DBA students and establishing corporate sponsorships could facilitate overcoming financial challenges and diversify the pool of prospective candidates. Such actions would not only help recruit students but also retain them in college and support their success. Via a participatory case study, the fellows shared reflections on their doctoral challenges as voluntary contributors to an online case study. All ethics were covered by consent for publication of names, backgrounds, and affiliations. The results illustrate the crisscrossing nature of professional, academic, and personal stresses, which increases the challenging nature of the DBA journey (Kearney et al., 2024). The selection of a research topic and inadequate supervisory support pose challenges to students; however, these challenges can be addressed through the provision of mentorship programs (Maceviciute & Wilson, 2018). The restricted availability of digital tools and academic resources also hampers advancement in such dynamically changing areas.

Financial hardship is still a significant concern." Exorbitant fees, plus hidden costs, and potentially lost income make the DBA a risky path for many applicants (Kearney et al., 2024). If not reformed institutionally in terms of funding and support, it runs the risk of excluding qualified professionals and making a negligible impact. In short, the DBA offers a rewarding path to senior leadership and applied research; however, it needs to be addressed systematically. However, to transition the candidate experience, you need to offer flexible course delivery, improved academic support, mentorship, better access to resources, and financial aid as well. By tackling these challenges, schools can prepare DBAs to be successful graduates who will play a key role in fuelling innovation and serving as leaders in today's complex business world.

Case 4

In the fourth case of the DBA analysis, the distinctive circumstances of DBA students are demonstrated. They are full-time professionals and PhD students who must balance the demands of both their jobs and their studies. Time management becomes a paramount issue—not only scheduling, but also establishing boundaries with patients, prioritizing tasks, and avoiding burnout. Selecting a research topic is a challenge for a significant number of DBA students. Because the DBA is applied, the dynamics of this involve ongoing reflection on the extent to which theory aligns with emerging industry practice. It is also about isolation. Many of the DBA courses are self-managed, and there is little interaction or communication with fellow students or tutors, which usually results in confusion and low morale. This lack of passion can hinder research. Moreover, access to research resources remains a persistent obstacle. Students without scholarships often struggle to access critical academic databases or industry data. Even when resources are available, they may not align with the specific research needs of individual students. Time management, especially, is critical for DBA learners. Without it, they may fall behind and go numb. As Bryman and Bell (2022) note, poor planning often results in poor productivity and disjointed processes. A strong research emphasis is also essential as DBA studies require students to synthesise academic theories with practical problems. This continual dialogue between theoretical and practical understanding helps to keep the research both credible and influential (Bryman & Bell, 2022).

Isolation may be undermining motivation and the quality of research. Creswell and Creswell (2017) emphasize that the lack of feedback limits the depth and quality of doctoral work. Isolation also restricts students' exposure to diverse perspectives, which is often essential for problem-solving and innovation. Additionally, due to the lack of availability of the latest records and academic resources, the research base becomes thin. According to Saunders et al. (2009), students who are hindered by these constraints may struggle to generate meaningful or applicable research findings. A structured and flexible planning approach can help students address these problems. Forming a general timetable that divides the dissertation into manageable, smaller tasks can give a sense of focus and lower the sensation of being overwhelmed (IC1, IC2). Leithwood et al. (2020) have shown that students who employ task chunking and goal-setting experience lower stress and perform better. Developing communities of practice is also key. Conferences, Webinars, and Forums: The opportunity to attend conferences, webinars, and academic forums for collaboration, feedback, and inspiration (Creswell & Creswell, 2017). Institutional backing is crucial, which seems increasingly difficult to obtain these days. The availability of library resources, research personnel, and mentorship can enhance the material and expedite progress (Silverman & Patterson, 2021). Lastly, interaction with industrial partners—through case studies, consulting, or cooperative R&D efforts—enhances the relevance and impact of the dissertation. Indeed, as Yin (2017) suggests, tightly focused case studies can bring academic investigation into a relationship with practitioner problem-solving, benefiting both parties. In summary, the DBA trip is not straightforward, characterized by strict time considerations, issue identification, suffocation, and considerable resource use. However, with deliberate planning, support mechanisms, and the right mix of academic and industry collaboration, such obstacles can be turned into opportunities for development. Here, we present the second treated category of patients, specifically the second treated group with DSC candidates, along with their respective single-case analyses and custom solutions.

Case 5

The DCS student encountered a set of closely interrelated issues during the research process, beginning with the challenge of identifying a relevant and manageable research topic in such a complex and rapidly evolving area. Finding a good empty spot in a specific field of research is often the result of vast literature mining, a task that is time-consuming and demoralizing. The

further complication of maintaining a focus for an extended period (three to five years) on a chosen topic is introduced, i.e., by the necessity of striking a balance between the area under consideration needing to be current and allowing room for further discovery. This is also compounded by the difficulty in selecting the proper technique for technically advanced problems. DCS candidates are required to work at a high level of abstraction with tools such as computational models, machine learning, and theoretical models. This level of methodological detail can lead to cognitive overload, uncertainty, and a lack of motivation, particularly when the methodological framework is challenging to integrate with the research purpose. The time crunch only intensifies these challenges. In computational social science, trains of thought and processes include a regular habit of reading, musing, and scheming, sometimes reading through multiple academic papers a day. While planning is essential, it can also lead to analysis paralysis and decreased productivity. The accessibility of resources is also an issue, with limited to no literature, validated tools, and raw data available for niche sectors. Gathering data is often hindered by participants' unwillingness, primarily when the research focuses on sensitive or private matters. There is also an intense feeling of isolation that I know people with doctorate hold, as a lot of it is individual work, and pouring over technical shit that weighs heavy on the brain, they expressed further. This leads to tiredness, disinterest, and emotional pressure. To address these issues, the candidate proposed several practical solutions. Developing a common repository of research topics through a centralised body might help facilitate the identification of gaps and support future researchers. Supervisors were advised to adopt more flexible and situational approaches, recognizing the heterogeneous methodological demands of computational inquiry. Pushing strict templates of algorithms into areas that don't require them can hinder innovation and advancement. It was also suggested that students should be grouped for their research and study the same issues to benefit from peer support, intellectual interchange, and to reduce the isolation, which students in this field usually encounter. Taken together, these strategies aim to enhance the quality of research, motivation, and academic performance of DCS candidates.

Case 6
The DCS doctoral student describes the specific methodological and intellectual challenges in the rapidly evolving field of AI. With AI transforming industries and creating new frontiers for

technology, computer science doctoral research requires not just academic rigor but the capacity to engage with professional research trends. The candidate emphasises that research in this field is not only systematic but also a creative process, which takes time, patience, and a design-thinking approach. The only thing to lose by haste is the richness and relevance of the research, particularly in a field as complex and rapidly evolving as AI. One of the primary concerns is the substantial workload associated with conducting a literature review. Keeping up with AI's exponential expansion, changing techniques, and potential applications is a daunting challenge, one that demands both a fundamental technical understanding and continued engagement over time. Finding a research question in this fast-moving context is especially challenging. Moreover, the broader adoption of AI in research workflows raises its own set of challenges, including technical skill requirements, ethical issues, algorithmic bias, and concerns regarding interpretability. Expertise in AI, machine learning, and data analysis tools is necessary, but many researchers struggle to overcome learning curves. The candidate also emphasizes the importance of transparency and ethical standards in safeguarding the trust and credibility of AI-enabled research. In considering these challenges, the candidate calls for a "marathon mindset." Excelling in AI research requires stamina, flexibility, and a steadfast commitment to lifelong learning. On the one hand, researchers need to keep pace with technological developments, but on the other, they must focus on a research question that is manageable and has some significance. In a sector where information is rapidly outdated, flexibility and ongoing upskilling are essential. The importance of patience is also underscored, as is the virtue of resilience, which is crucial for maintaining motivation and achieving positive results.

In response to these difficulties, the candidate advocates a more holistic and student-centred approach to research. Institutions and PIs should honour flexibility and refrain from rating capacity, as some effort cannot be easily measured in terms of time spent, given the profound mode of cognition that sets in during AI research. Self-study schemes and online technology resources can put students in the driver's seat to learn, taking them through key skills in data analysis, machine learning, and AI systems. As machines continue to take over mundane tasks, scholars are encouraged to add value by original thought, creative expression, and theoretical breakthroughs. Instead of fighting against automation, scientists should harness it, creating space that can be filled with more cerebral efforts and insights.

Case 7

The pursuit of a PhD presents numerous challenges and issues, and selecting and implementing an appropriate research methodology can be particularly difficult. The maze of qualitative, quantitative, and mixed-method approaches confounds many doctoral students, causing self-doubt, procrastination, and demotivation (Clark, 2017). A big focus of this group is that students seem to struggle with the confusion of research paradigms and a lack of knowledge (skills) in tools needed for data collection and analysis, such as SPSS, NVivo, or R (Bryman & Bell, 2022; Saunders et al., 2009). Other obstacles include understanding challenging datasets and coding of qualitative information. Ethical gatekeeping raises additional hurdles, particularly in terms of consent, confidentiality, and institutional regulation (Punch & Oancea, 2014). Additionally, some doctoral students struggle to juggle academic demands with professional and personal obligations, particularly given weak institutional support, mentoring, or access to resources (Jerome et al., 2017). From a theoretical point of view, according to Cognitive Load Theory (Sweller, 2011), storage overload or storage cost arises when students are provided with a high amount of methodological information, thus surpassing their processing capabilities to the extent that productivity and quality of decision-making decline. According to Vygotsky's Zone of Proximal Development (1978), structured mentoring is crucial in guiding students as they navigate the complexities of research. The social constructivist model, as outlined by Lave and Wenger (1991), emphasizes collaborative learning, peer interaction, modeling of behaviors, and mentorship. Secondly, Zimmerman's Self-Regulated Learning Theory (2002) states that motivation, time management, and self-discipline are essential attributes for successful doctoral research. Address these tensions by providing scheduled support in the form of workshops, online modules, and focused training in methodology, ethics, and data analysis (Creswell & Creswell, 2017). Providing scheduled mentorship, timely feedback, and writing services (academic writing centers, journal submission services) also contribute positively to the development of research skills (Kamler & Thomson, 2014). Such provisions can alleviate the sense of isolation and enhance learning outcomes by establishing opportunities for students to network academically, attend conferences, and participate in collaborative projects (Lave & Wenger, 1991). Also, stress and time management wellness workshops could help students manage scholarship and non-scholarship responsibilities.

Ultimately, one of the most challenging aspects of doctoral research is mastering research methodology. However, with targeted institutional support, active participation, and self-regulated learning approaches, doctoral students can overcome these hurdles and advance toward successful degree completion.

Case 8

DA candidates face personal, academic, and institutional challenges that can hurt their progression. A possible challenge is time management, as students usually have research, teaching, or personal commitments. It is all about planning and setting scheduled tasks to meet deadlines and maintain a healthy work-life balance. Academically, posing a research question that is original, relevant, and methodologically doable adds yet another layer of challenge. Candidates must also decide whether to use qualitative, quantitative, or a combination of both methods, and they must arrange for participants to participate, which requires careful planning and testing. Isolation, depression, and anxiety are also common and can be pervasive for decades to come." Long hours of individual research, time constraints, and the need for quality, in terms of original contributions, can cause stress, isolation, and burnout. In addition, institutional characteristics, such as revised research policies, restricted funding opportunities, or sporadic supervision, may pose obstacles to progress. Pressure to publish in peer-reviewed journals further compounds this requirement, necessitating a high level of academic writing expertise and significant time commitment. To overcome this challenge, DA applicants are strongly advised to view their DA work as full-time work and establish clear timelines with interim, manageable goals. Digital productivity tools can be helpful, as can setting aside blocks of time for reading, writing, and revising. Originality should be evaluated: Search for the literature might be performed.) Consult with your supervisors and peers. This methodological rigour can be further enhanced by participating in research workshops, consulting with faculty experts, and pre-testing of instruments. To acquire resources, candidates will use university libraries, databases, and open-access journals, as well as research scholarships. Initiate partnerships with organisations or communities that can facilitate both data generation and cultural relevance. Registering for writing workshops and finding mentors who can provide guidance are also important for your thesis or articles. Breaking down the thesis or other articles into different sections and setting deadlines can help prevent stressing out. Collaboration in writing can also offer feedback, shared

responsibility of work, and raise the quality of work among students. In summary, although DA students' challenges are distinctive and diverse, they can still be minimized through meticulous time management, methodological support, efficient resource utilization, and emotional resilience. Candidates find a way to adjust to authority (in most cases, a doctoral contestation) and complete the process of becoming PhDs, contributing to knowledge in their field with the support of appropriate institutional and peer resources.

Case 9

The research, undertaken by a doctoral student in Health Psychology, encountered difficulties in advancing the psychological models within primary care research. These tasks involved formulating a straightforward research question, selecting a suitable methodology, addressing recruitment and retention issues, and handling ethical dilemmas. These are manifestations of more general difficulties that face health psychology, where psychological and physiological factors interact in ways that require accurate and sensitive methods in order to ensure validity and appropriateness. The clarity of the research question was a critical methodological problem. Too general questions often result in unfocused searching, and too specific ones can limit transferability. Restrained moderation is necessary to facilitate functional hypotheses, which direct both study design and conduct. Research questions should stem from extensive knowledge in the literature (and other sources) to prevent duplication and ensure originality (Barroga & Matanguihan, 2022). Models such as PICO or PEO are valuable in organising questions systematically and increasing clarity and specificity. For instance, "In hypertensive adults (Population), does daily meditation (Intervention) versus no intervention (Comparison) result in reduction of blood pressure (Outcome)? Guarantees a focused and testable investigation (Watson & Koers, 2025). Selecting an effective method is another challenge. It is essential to ensure a match between the research goals and the research process; otherwise, it can result in ambiguous or even deleterious information. Qualitative methods are suitable for understanding lived experiences; however, quantitative methods are more suitable for understanding behaviour or prevalence. The issue of sample size estimation is also critical. Small samples can lead to Type II errors in quantitative research, while data saturation is necessary in qualitative research to ensure valid findings. While time and funding limitations often lead authors to settle for such messy compromises. Integrated water resources approaches need to be considered in planning and

research design. Recruitment and retention of participants remain difficult obstacles in health psychology, especially for people who are vulnerable or stigmatized. Mental illness, chronic disease, and poverty can limit participation through stigma or practical issues (Olafsdottir, 2011). 33. Participant burden—either in the form of lengthy questionnaires or multiple follow-ups—also diminishes motivation to participate. Longitudinal data attrition can lead to biased estimates when dropouts are not random. Retention is also influenced by competing life demands, language barriers, and access problems. To address these challenges, researchers should consider employing community engagement methods. Collaborating with physicians and patient support organizations fosters confidence and encourages involvement (Patino et al., 2016). Providing flexible modalities such as remote surveys, home visits, or telehealth mitigates participant burden. Motivational incentives, such as gift cards or free health screenings, lead to better retention (Olafsdottir & Marcus, 2011) simple, low-tech strategies, including reminder calls, thank-you notes, or personalized contact, are also effective. For example, Kristman et al. (2004) noted marked improvement in follow-up completion in a smoking cessation trial with personalized intervention contact. Ethical issues are critical in sensitive research. Informed consent, confidentiality, and potential emotional harm are essential considerations. We need research that protects participants' rights and care without sacrificing evidence-based science. Ethical protections, including Institutional Review Board (IRB) approval, secure, de-identified data storage, and debriefing with access to referral services, promote a lower risk of harm and engender trust from participants. Ultimately, incorporating inquiry into the psychological aspects of healthcare into research necessitates a nuanced balance of methodological rigor, participant welfare, and ethical accountability. Researchers can address these challenges by developing and aligning strategic plans, working collectively with the community to collaborate, and sharing best practices with a strong sense of ethical commitment, thereby ensuring the field of health psychology moves forward.

Discussion

With ethical challenges and considerations, as this research often involves vulnerable populations in the health sector, information science, management, and Human Resources, among others, making ethical considerations paramount becomes crucial. Ethical concerns are particularly significant due to the sensitive nature of the data and interactions with vulnerable

populations. Consequently, one of the key ethical challenges, as highlighted in this case study, is the protection of personal information. However, understanding these obstacles and adopting positive strategies can lead to a more fluid research path. With effective time management, searching for mentorship, utilizing institutional resources, and seeking emotional support, candidates can navigate doctoral research effectively and introduce valuable knowledge in the field.

Conclusion

Research on doctoral students in Business Administration, Computer Science, and other academic disciplines revealed methodological challenges, including complexity of study designs, supervisory tensions, ethical tensions, time-tabling, and institutional-level access. These obstacles were contextual and influenced by each candidate's academic culture. The study highlights the importance of flexible doctoral structures and reflexive, experience-driven research in enhancing doctoral experience and research, providing valuable insights for policy-making and institutional support.

Recommendations and Limitations of the study

Beauchamp & Childress' research emphasizes the importance of selecting the appropriate methodology based on the research objectives and contextual limitations. They recommend using qualitative, quantitative, mixed methods, and ethical approval applications. Clear consent forms, secure data storage, and psychological support are also crucial for ethical research, especially when dealing with sensitive topics like trauma or illness.

The research requires an in-depth understanding of the methodological aspects, which can be achieved through organized workshops and training sessions. Obtaining advice from research advisors and methodological experts, developing a detailed research proposal, conducting a pilot study, revising data collection methods, and utilizing secondary data sources are also suggested. The research on DBA students faces key limitations, including limited resources, a small sample size, selection bias, geographic limitations, response bias, subjectivity of data interpretations, potential technological issues, and confounding factors. These factors may lead to results lacking statistical significance and not applicable to the broader population, as well as to DBA students in different locations or countries with different educational systems and cultural contexts.

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