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Rethinking doctoral wellbeing: A relational approach to the mental health crisis in academia

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Abstract

The mental health crisis among doctoral students is of pressing concern, with high rates of anxiety, depression, and burnout that severely impact candidates' academic performance and overall wellbeing. This conceptual narrative reflection on the field offers a novel contribution by reframing doctoral wellbeing as fundamentally relational and translating that lens into actionable recommendations at systemic, community, and individual levels. We synthesize evidence of the multifaceted and interdependent pressures experienced by doctoral students, including academic demands, student-supervisor relationships, financial insecurity, and cultural transitions. We also identify significant barriers to seeking help, the role of stigma, and systemic challenges within academic institutions that exacerbate mental health challenges for marginalized groups. Importantly, we demonstrate how these dynamics operate within institutional and policy environments that are characterized by complex funding models, inequity in access to campus counselling and healthcare, and the variable experiences of marginalized students. We emphasize the importance of supportive networks, intersectional identity considerations, and institutional structures in the experiences of doctoral students, illustrating how our own collaborative writing process enacted the very relational practices for which we advocate. Building on this relational understanding, we provide actionable recommendations to foster a more inclusive, supportive, and mentally healthy academic environment.

Rethinking doctoral wellbeing: A relational approach to the mental health crisis in academia

In recent years, the conversation around mental health in academia has shifted from being a peripheral concern to a central issue that demands urgent attention. Doctoral students, who are often at the cutting edge of research and innovation, face some of the highest levels of psychological distress. Numerous studies have documented the pervasive lack of wellbeing among doctoral candidates worldwide, with alarming rates of mental illness reported in this population (see, e.g., Evans et al., 2018; Lau & Pretorius, 2019; Levecque et al., 2017; Pretorius, 2024). Research has also demonstrated that the pressures of producing original research, navigating complex student-supervisor(s) relationships, and securing future career prospects create a uniquely stressful environment that academic institutions often overlook (Lau & Pretorius, 2019). These stressors are compounded by financial insecurities, caring responsibilities, social isolation, cultural differences, and the expectation to keep up with the ever-evolving academic standards (Pretorius et al., 2019; Ryan et al., 2022). In the United States, for example, the graduate deans of over 150 institutions also noted that graduate mental health was of pressing concern, committing to a statement of principles to support the wellbeing of students (Council of Graduate Schools & The Jed Foundation, 2021). This report noted the impact of complex funding models, inequity in access to campus counselling and healthcare, and the variable experiences of marginalized students (Council of Graduate Schools & The Jed Foundation, 2021). Understanding these interconnected challenges is, thus, crucial for developing effective strategies to support doctoral students' mental wellbeing.

This paper presents a conceptual narrative reflection on the field of doctoral education, focused specifically on the academic mental health crisis. It explores the complex and interconnected pressures faced by doctoral students. Importantly, this review emphasizes the relevance of supportive networks, intersectional identity considerations, and institutional structures in the experiences of doctoral students. It also identifies significant barriers to seeking help, including stigma and systemic challenges within academic institutions that exacerbate mental health challenges for marginalized groups.

By reframing doctoral wellbeing as a relational construct, this conceptual narrative review highlights the critical need for institutions to address the complex matrix of individual and systemic factors affecting student mental health, thereby promoting healthier academic environments. Importantly, this review's reconceptualization of doctoral wellbeing as fundamentally relational challenges traditional, individual-focused approaches, emphasizing the intersection of social, institutional, and cultural factors in shaping mental health outcomes. This perspective opens new avenues for doctoral education policy makers at the institutional level and doctoral students themselves to explore how academic relationships, support systems, and institutional policies collectively influence wellbeing, encouraging a more comprehensive approach to mental health research in academia. The recommendations offered here are presented at a global level, applicable to graduate schools, departments, and funders, providing a practical pathway to improve doctoral wellbeing. This conceptual narrative review, therefore, advocates for a cultural shift within academia to create collegial academic and research cultures that prioritize mental wellbeing as an essential facet of academic achievement.

Methodology

Ethical praxis

This paper formed part of a larger Monash-Warwick Alliance project that supported doctoral students in learning to co-author scholarship on issues that directly affect them (ethics approved by Monash University's Human Research Ethics Committee: Project ID 41635; informed consent obtained). Even though this paper is a literature review, ethics approval was necessary for two reasons. First, there was an inherent power imbalance between the researchers (LP and SH) and the doctoral student co-authors of this paper. As such, we needed to employ ethical praxis throughout the process of literature searching, analysis, synthesis, and manuscript development. Second, the production of the paper was itself a pedagogical intervention specifically designed to teach doctoral students about the academic publication system, in line with previous research (see, e.g., Cahusac de Caux & Pretorius, 2024; Lam et al., 2019). This pedagogical intervention involved significant additional research data collection and analysis, with meeting recordings, student reflections, as well as semi-structured interviews with students and staff

treated as empirical evidence of the approach's efficacy. Consequently, formal ethical oversight ensured that this collaborative writing process simultaneously served as a rigorous environment for the scholarship of teaching and learning, while maintaining a protected space for student development.

For this paper, five doctoral students from Monash University (EK, JC, JMH, FS and RK) and three doctoral students from the University of Warwick (EZ, FAH, and SAM) worked with staff from both universities (LP and SH, respectively) for seven months (April-October 2024). Meetings were conducted virtually using Zoom, Google Docs, and WhatsApp across different time zones. During the first meeting, all group members brainstormed the topic of the paper together and collaboratively decided on a starting structure for the paper. Subsequent meetings were dedicated to exploring various challenges associated with the collaborative writing process (e.g., decisions about advanced organizers and paragraph order, self-selecting subsections for research, or committing to deadlines). All authors provided feedback to each other asynchronously using comments and suggestions on Google Docs and discussed their feedback together during the synchronous Zoom meetings. WhatsApp was used predominantly to organize the logistics of meetings and writing, but it also acted as a space to share resources and encourage group members when they were experiencing challenges. The various meeting recordings, student reflections, as well as semi-structured interviews with students and staff were not used in this paper, but form the basis of future publications evaluating the pedagogical innovation.

Rationale for a relational conceptual narrative review approach

Our aim was not merely to map the breadth of literature on doctoral mental health, but to reframe wellbeing as fundamentally relational and to synthesize practice-oriented implications across systemic, community, and individual dimensions. A conceptual narrative review methodology best serves these objectives because it prioritizes interpretive synthesis, theory-building, and critical integration across disciplines. In contrast, a scoping or systematic review is designed primarily to chart the extent and nature of evidence around a topic (see, e.g., Arksey & O'Malley, 2005). Scoping or systematic reviews are thus optimal for breadth, taxonomy, and research-gap identification, but are less suited to developing a unifying conceptual lens, weaving heterogeneous findings into an argument, or incorporating reflexive, lived-experience insights. Given the cross-disciplinary and multi-level nature of doctoral wellbeing, the conceptual narrative approach enabled us to read across traditions, interrogate assumptions (e.g., individualized resilience narratives), and articulate a coherent relational framework that informs actionable recommendations.

In line with our commitment to methodological transparency and reflexivity, it is critical to acknowledge that our positionality within the doctoral space directly shaped this review. We entered this project with explicit axiological commitments. The subject of our paper was carefully chosen because it reflected the challenges and experiences we had encountered in our academic journeys, making the work both personal and meaningful. As such, this review addresses a topic that resonates deeply with each of us: *The wellbeing of doctoral students*. Consequently, our conceptual narrative review was not conducted from a position of detached neutrality; rather, our prior experiences heavily informed our conceptual interest in relational dynamics. This transparency is important, as our subjective commitments acted as an interpretive and sensitizing lens during both source selection and synthesis. By openly acknowledging this orientation, we invite readers to evaluate our arguments not as an inevitable summary of all available literature, but as a purposefully situated reframing designed to challenge individualistic narratives.

To achieve our conceptual narrative approach without introducing methodological ambiguity, we explicitly note the three distinct, but interconnected, components of the methodology. First, the narrative review component establishes the macro-level theoretical landscape and highlights existing systemic gaps in the understandings of doctoral wellbeing. Second, our conceptual integration of literature informs the construction of our novel relational framework. Third, our reflexive positioning provides a sensitizing lens for us to provide suggestions for practice. By explicitly combining these three components, our conceptual narrative review methodology moves beyond a passive review of literature to document a collaborative process of academic knowledge co-creation with doctoral student voice at the center.

Conceptual narrative review literature selection procedures

After deciding on the topic of the conceptual narrative review, the eight doctoral students involved in this project s-

-et out to conduct a literature review on their chosen topic. We began with seed keywords, including wellbeing, well-being, mental health, mental illness, PhD student*, and doctoral student. We used an iterative search strategy, using our seed keywords in combined search strings, such as (“wellbeing” OR “well-being” OR “mental health” OR “mental illness”), AND (“PhD student*” OR “doctoral student*”) across databases from diverse disciplines (Google Scholar, Scopus, ERIC, EBSCO, PsycInfo, and PubMed). We also used citation chaining (backward and forward) and targeted hand searching of key authors and journals.

Our purpose for this conceptual narrative review was to reframe doctoral wellbeing through a relational lens, which required an iterative immersion in the literature rather than a rigid screening process. Inclusion was, therefore, concept-driven rather than exhaustive. Inclusion criteria were sources which:

1. Addressed doctoral students’ mental health or wellbeing;
2. Illuminated relational dynamics (e.g., supervision, peer networks, institutional structures, intersectionality);
3. Offered conceptual or practice relevance;
4. Were published in the last 20 years; and
5. Were published in English.

We did not explicitly track the total number of initial search records or document formal inclusion and exclusion decisions for each article using tools such as Covidence or a PRISMA protocol. Such systematic decision-making approaches are designed to comprehensively map the literature and would therefore misalign with our conceptual narrative review, which relies on relational, interpretive synthesis rather than exhaustive quantification. However, for clarity, our exclusion decisions were based on whether initially included studies duplicated findings without adding conceptual depth, or focused predominantly on undergraduate or postgraduate coursework contexts.

We acknowledge that the literature included in this review is restricted to English-language publications, a limitation that reflects a broader epistemic injustice within academia that disproportionately privileges Anglophonic scholarship (see, e.g., Boussebaa & Tienari, 2021; Pretorius et al., 2025; Sender et al., 2023). Within the context of this project, though, this boundary was also an intentional strategy to safeguard relationality. Since our methodology prioritized a deeply collaborative and non-hierarchical approach to knowledge co-creation, it was vital that every member of the research team could fully access, interrogate, and synthesize ideas. Restricting our scope to a shared language ensured that co-authors could engage as equal partners in the interpretive process, thereby mitigating power imbalances and maintaining the ethical integrity of our collaborative praxis.

Moreover, to ensure our review was conceptually balanced and not restricted to dominant Western paradigms, we applied a deliberate equity lens to our literature selection, actively incorporating research from Global South scholars or those focused on traditionally marginalized cohorts (e.g., Ballangarry & Pugin, 2024; Fries-Britt & Turner Kelly, 2024; Khozaei et al., 2015; Lai, 2019; Mahmud, 2025; Matheka et al., 2025; Mokbul, 2022). In this way, we enacted a commitment to citation justice. Importantly, this deliberate approach serves to counteract some of the systemic epistemic exclusions within Anglophone-dominant academia and helps to ensure that our relational approach is informed by a pluralistic array of voices and lived experiences.

Conceptual narrative review synthesis and analysis procedures

We used narrative synthesis guided by our relational wellbeing sensitizing lens. Since we consider doctoral wellbeing to be inherently relational, we made our positionality explicit. At the project outset, we shared brief identity/trajectory statements (e.g., first-generation status, international mobility, caregiving, and disciplinary homes). We kept reflexive entries to record how our meetings shaped our thinking and interpretations of the publication process. Lived experiences were not treated as data for claims made in this review; rather, it functioned as an interpretive resource that (i) sensitized us to blind spots in the literature (e.g., housing insecurity; supervision workload expectations), (ii) enriched our analysis of power and agency within supervisory and institutional relations, and (iii) sharpened the practice recommendations.

Individual authors summarized candidate papers and created an initial synthesis of the ideas. The group then met to negotiate provisional overarching themes (e.g., supervision, workload, financial precarity, stigma, intersectionality).

-y service access). Across cycles of synchronous meetings and asynchronous drafting, we transitioned from descriptive aggregation to explanatory integration, posing questions at each stage, such as “What does a relational reading add here?” and “How do factors co-produce (or buffer) distress across different dimensions?”. Disagreements were resolved through structured collaborative discussion, and final concepts used in the review were refined iteratively.

To address the potential risk of circularity in our analytical methodology, we clarify that our synthesis followed an abductive logic of inquiry, positioning the review as an active theory-building strategy. We openly acknowledge that the value-laden nature of our investigation, as well as our prior commitment to relational dynamics, informed our selection of the literature and our interpretations. Rather than operating as a loop that merely reinforces bias, our reflexive and relational approach allowed us to map the complex interconnections among the individual, the community, and the institution. Acknowledging this iterative and non-linear pathway is thus both a matter of reflexive transparency and a methodological strength. It demonstrates how a relational approach can provide a more comprehensive, systemic explanation of doctoral wellbeing than traditional individualistic models. Importantly, it also actively responds to calls to diversify what counts as valid forms of knowledge generation by aligning with Global South philosophies which prioritize “relationality, collective responsibility, communal accountability, social justice, recognition, and reciprocity” (Udah et al., 2025, p. 2).

Although analyzing our own wellbeing was not the project’s primary aim, we observed salient relational effects of the collaboration itself. Regular check-ins, shared authorship practices (such as commenting and co-editing), and explicit norms of care (including name stories, positionality rounds, and gentle deadlines) fostered a sense of belonging, reduced isolation, and built researcher efficacy (e.g., confidence in giving/receiving feedback, navigating disagreement, and translating evidence into recommendations). Several authors demonstrated professional identity formation as researchers/mentors/advocates, developing greater empathy and an increased readiness to seek/offer support. We include these observations as a reflexive postscript: They are not generalizable findings, but they substantiate our central claim that wellbeing and scholarly growth are co-produced through relationships and structures. These are observations that will be further explored as part of the broader research project.

Conceptualizing wellbeing through the relational approach

Before exploring and analyzing the literature surrounding the mental health of doctoral students, it is important to distinguish between mental health, mental distress, and mental illness. These terms are conceptually distinct and often used differently across studies and contexts. Their meanings also vary depending on the authors’ epistemic points of reference.

In this study, we approach the mental health of doctoral students through the lens of relational wellbeing (Jiang et al., 2024; White & Jha, 2023). We understand wellbeing as a relational construct that encompasses a fusion of psychological and social dimensions, which contributes to an overall positive state experienced by an individual. As noted by Jiang et al. (2024), the subjective-objective divide prevalent in the wellbeing field is problematic because it implies “a neoliberal belief that one’s happiness is one’s responsibility” (p. 482). We concur with Jiang et al. (2024), who note that it is more appropriate to adopt a multitude of micro and macro perspectives of wellbeing (i.e., acknowledging individual experiences as embedded within a broader social context). We, thus, use the term *relational wellbeing* in this study as a human-centric notion to denote the construction of meaning that is derived through subjectivity as an act of being-in-the-world (Heidegger, 1962). Relational wellbeing captures the notion of “people as subjects of their own lives [and] subject to other forces” (White & Jha, 2023, para. 2). We aimed to present wellbeing as situated, interconnected, holistic, and symbiotic, rather than relegated to a personal, linear, or nested idea, as often theorized.

To further articulate this conceptualization of relational wellbeing, we draw on the relational approach, which provides the theoretical grounding for understanding doctoral students’ wellbeing. In the context of doctoral students, this relational view of wellbeing highlights the importance of supportive networks, meaningful connections with peers and mentors, and a sense of belonging within the academic community. This includes, for example, the interconnected impacts of graduate school policies, dissertation committees, departmental cultures, visa and work limitations, health insurance complexities, as well as racialized and gendered cultural climates. Our u-

-nderstanding, therefore, acknowledges that wellbeing is not solely an internal state but is also shaped by external factors, such as the quality of intra- and interpersonal relationships, community connections, and social support systems. This approach is particularly novel in the space of doctoral education, as it challenges the dominant narratives we have seen in academia: Those which focus on individual resilience and self-care by emphasizing the crucial role and need for communal and systemic support in fostering wellbeing.

The relational approach has evolved in response to the limitations of individualistic or medical models of mental health, which focus on internal traits or pathology. Theoretical developments, such as the relational regulation theory, propose that mental health is regulated through everyday, affectively meaningful interactions, not solely through explicit support or coping conversations (Lakey & Orehek, 2011). The “relational turn” in mental health research and policy calls for a deeper understanding of the full social context of people’s experiences, advocating for research and interventions that foreground relationships and social structures (Köhne, 2020). A relational approach conceptualizes people as inherently social beings, whose wellbeing is deeply embedded in and shaped by their interactions and connections with others (White & Jha, 2023). It emphasizes that relationships are not merely sources of support, but are the very means through which needs are met, identities are formed, and wellbeing is experienced or undermined (White & Jha, 2023). This perspective places the relational, rather than the individual, at the center of analysis, highlighting how power, agency, and context interact to shape opportunities for wellbeing (White & Jha, 2023).

In a conceptual paper articulating relational wellbeing, White and Jha (2023) listed five key concepts: (1) People are seen as *relational subjects*, who are shaped by and exist within their relationships and social contexts, rather than as isolated, independent entities; (2) Relationships are not just important for emotional support but are the means through which a wide variety of needs (material, emotional, and social) are addressed; (3) Wellbeing is influenced by the interaction of personal, societal, and environmental factors, which are called drivers of wellbeing; (4) Relationships are also seen as channels through which power operates and identities are formed; and (5) The way wellbeing is studied and represented is shaped by the concepts and methods used in research, reminding us that all understandings of wellbeing are constructed. These concepts together form the foundation of the relational wellbeing approach, emphasizing the centrality of relationships, context, and the dynamic processes that shape wellbeing.

We have outlined our conceptualization of relational wellbeing in the doctoral context in Figure 1. This figure illustrates the conceptualization of relational wellbeing as a multi-faceted, dynamic, and web-like construct. At its core are relational subjects, who are constituted through their social relationships rather than existing as isolated individuals. Symbiotically, the relational subject engages dynamic relationships, which function both as mechanisms for garnering material, emotional, and social needs and as conduits through which power circulates and identities are negotiated. These relationships are embedded within broader drivers of wellbeing: Personal, societal, and environmental factors, whose interrelations shape individual and collective experiences of wellbeing. Encompassing all facets are research concepts and methods, which mediate how wellbeing is studied, represented, and understood, following the constructed, dynamic, and situated nature of knowledge of this domain. Together, these concepts form the foundation of the relational wellbeing approach, emphasizing the centrality of relationships, context, and the dynamic processes that shape wellbeing.

Using this relational understanding of wellbeing as a lens, we define mental health as a continuum of wellbeing co-produced by personal resources and supportive relationships within enabling social and institutional environments, which together empower individuals to navigate life’s demands, realize their capabilities, learn and work effectively, and contribute meaningfully to their communities. To reduce conceptual ambiguity, we have developed distinct definitions of mental distress and mental illness in relational terms. Mental distress refers to significant, context-dependent strain that emerges when demands arising within one’s relationships and settings (e.g., supervisory dynamics, peer cultures, institutional norms, financial, or cultural pressures) outstrip available personal and social resources. It may disrupt daily functioning, yet often eases when supports and contexts change. Mental illness denotes clinically diagnosable conditions involving sustained disturbances in cognition, emotion regulation, or behavior, experienced within, and buffered or exacerbated by, the relational and structural environments people inhabit. While diagnosis and treatment are clinical, recovery is also contingent on social connection, safety, and institutional conditions. By viewing mental health in this more relational way, we acknowledge that an individual’s a-

-bility to thrive is dependent on the relational dynamics experienced within any social context. This extends to one's multi-faced positionalities and nuanced interactions, further reinforcing the idea that true wellbeing is achieved when a range of micro and macro perspectives are nurtured. This is crucial to our relational understanding of wellbeing, as it emphasizes the importance of addressing not only the individual fluctuations in mental health but also the broader social factors and support systems that influence mental health and illness.



Figure 1. Relational wellbeing.

Factors affecting doctoral student wellbeing

The student-supervisor(s) relationship

At the center of this relational approach to doctoral wellbeing sits the student-supervisor(s) relationship, which is pivotal to doctoral students' success, given its long-recognized role as a source of both support and significant stress (Mackie & Bates, 2019). Research supervision models vary across contexts, though it is increasingly common for supervision to be conducted in teams. As such, we have used the term supervisor(s) to reflect this complexity, noting that disagreements among the supervisors can be an additional stressor in the student's doctoral journey. Supervisors generally play various roles throughout the thesis writing process, acting as mentors, cheerleaders, navigators, and critics while guiding students toward greater autonomy (see, e.g., Lee, 2008; Matheka et al., 2025). Studies suggest that the relationship with the supervisor(s) is the most influential factor affecting doctoral students' experiences and success (see, e.g., Cornér et al., 2017; Currie, 2019; Sverdlík et al., 2018). Collegial working relationships have been shown to reduce students' anxiety levels, emotional exhaustion, and intentions to leave academia, while strained relations can be a major contributor to student attrition rates (Cornér et al., 2017; Hunter & Devine, 2016; Matheka et al., 2025; Sverdlík et al., 2018; Wollast et al., 2023). Maintaining a cordial student-supervisor(s) relationship is complex, as it requires iterative recognition and working towards doctoral students' individualistic needs across different stages of the doctoral program (Matheka et al., 2025). Factors such as the number of supervisors, their disciplinary backgrounds, availability, experience, expectations, and familiarity with doctoral students' research contexts are important academic aspects that may contribute to wellbeing concerns for doctoral students (Khozaei et al., 2015). Sometimes the strain on the relationship has nothing to do with the project or its dynamics, but rather with human circumstances and the individual's (including the supervisor's) capacity to manage themselves. Importantly, although having a supportive relationship with the supervisor(s) is ideal, developing a quality relationship where both student and supervisor(s) sustain enthusiasm for the project and maintain a positive and productive dynamic can be challenging (Currie, 2019; Hunter & Devine, 2016; Lee, 2008).

These supervisory dynamics can be complicated by workload expectations, financial dependencies, and cultural differences. Supervisory relationship quality can thus become both a cause and a consequence of other wellbeing factors. Notably, in most student-supervisor(s) relationship narratives, the supervisory relationship is considered a determinant of student wellbeing, an individual trait that can be influenced externally by whether one or more supervisors is perceived as "good" or "bad." Yet, from a relational wellbeing perspective, wellbeing is shaped by the daily, affectively charged interactions between student and supervisor(s). Thus, the supervisory relationship can be understood as a site where both students and supervisor(s), as "relational subjects", negotiate needs, identities, and power, situated within the broader structures of higher education institutions.

Reframing the supervisory relationship in this way provides fresh insights into prior research. For example, findings that positive supervision reduces students' anxiety or attrition (Cornér et al., 2017) can be reinterpreted as evidence of relational regulation: Wellbeing is co-produced through everyday interactions that provide recognition, belonging, and affirmation of identity as a developing scholar. Conversely, reports of stress and conflicts within the supervisory relationships highlight not simply "deficient supervision," but the need to further investigate breakdown of relational supervision processes through which wellbeing needs are negotiated.

This relational framing makes visible two often-overlooked elements in the literature. First, it foregrounds the supervisor(s) as more than a static influence on student outcomes: The supervisor's own wellbeing, professional satisfaction, and subjectivity as a mentor are also relationally shaped through the iterative student supervision encounters. Second, it restores doctoral students' agency, recognizing them not as passive recipients of supervisory quality but as active participants who negotiate feedback, expectations, and recognition in constructing their wellbeing. In this sense, supervision is not merely a unidirectional determinant of student success but a dynamic, co-constructed practice where the wellbeing of both parties is continually at stake. This illuminates the interplay between power dynamics, empathy, and intersecting relationships.

Workload

Workload pressures intersect with the power dynamics explored above. The demands of a PhD are prominent contributors to mental distress and a lack of work-life balance for doctoral students (see, e.g., Levecque et al., 2017)

. A survey of 589 doctoral students at a public university in Germany revealed a significant culture of overwork (Friedrich et al., 2023). Neoliberalism and performance culture have contributed to the pressures surrounding publishing and universities' ambitions for metrics, which directly impact workload and exacerbate challenges for longevity or sustainability in research careers (Jackman et al., 2022b; Kismihók et al., 2022). Varying academic and institutional norms (e.g., prevalent pedagogical structures, preferred modes of formal and informal communication, as well as research cultures) constitute an additional workload that students from diverse backgrounds with potentially different academic customs and processes are expected to navigate independently (Li et al., 2023). Students may also enter doctoral education through varied pathways, for instance, professionals pursuing doctoral degrees, part-time students, or those with substantial caring responsibilities (Burford & Hook, 2019; Cronshaw et al., 2024). In such instances, we suggest that adopting realistic workload expectations becomes crucial to ensure wellbeing and support sustained progression and completion. Often, the institutional norms are projected onto doctoral students' abilities, mental vitality, and emotional commitment (Macaulay & Davies, 2019), as they are expected to conform to the specific institutional and departmental norms and meet pre-set expectations of achievement. For students with financial responsibilities, excessive workload becomes a survival necessity rather than a choice. This pressure may be especially pronounced in the PhD experiences of international doctoral students and those from underrepresented communities.

Financial constraints

Financial issues are a major concern that significantly impacts the wellbeing of doctoral students (Ryan et al., 2022; Sverdlik et al., 2018). Research also shows that financial support is a significant contributor to doctoral student persistence (Sverdlik et al., 2018). Maintaining a stable financial base throughout the doctoral years has been identified to directly affect students' ability to focus on their research and studies, especially when basic needs such as food and housing are unmet (Woolston, 2022). We further highlight the broader consequences of neglecting student wellbeing, which include potentially significant economic costs when promising scholars abandon their studies or careers in academia. Such outcomes not only affect the individuals involved but also undermine national efforts to sustain economic competitiveness through scientific and intellectual excellence.

Isolation

Isolation appears as a ubiquitous feature across research on doctoral student wellbeing. The structure of doctoral programs is individualized to allow sufficient scope for growth and the development of academic expertise. This self-directed nature of the program structure, which spans over years, has a significant impact on the doctoral students' wellbeing (Barry et al., 2018; Lau & Pretorius, 2019). As students persevere to develop their unique academic identities, it often becomes a challenge to foster a sense of belonging within academic communities (Beasy et al., 2021; Pretorius et al., 2019). A lack of connection with peers and colleagues frequently escalates risks of loneliness, anxiety, and depression in doctoral students (see, e.g., Evans et al., 2018; Levecque et al., 2017; Pretorius et al., 2019). The recent COVID-19 pandemic further intensified isolation, necessitating an abrupt shift to online spaces for work and social interactions (Cahusac de Caux et al., 2022). Not only did this shift require doctoral students to acquire new competencies in record time, but it also fragmented the collaborative and social spaces essential for collegial interactions and academic community bonding (Cahusac de Caux et al., 2022). The sense of isolation, as Berry et al. (2021) argue, is further exacerbated for doctoral students who manage multiple responsibilities, such as caring responsibilities and work-related commitments, or for those who are geographically and culturally separated from their core support networks.

Intersectional factors

Proponents of intersectionality explain that identities such as race, gender, sexuality, ability, and age are interconnected, with each influencing and shaping the other (Collins & Bilge, 2016; Crenshaw, 1991). Intersectionality often leads to compounded experiences of oppression, racialization, and/or tokenization, which, within academia, significantly impact the wellbeing of doctoral students (see, e.g., Park & Bahia, 2022; Ramos & Yi, 2020; Stewart et al., 2024). For instance, doctoral women from diverse ethnic backgrounds often face the dual burden of racism and sexism, experiencing microaggressions or offensive behavior, underestimation, and tokenization to meet diversity quotas (Fries-Britt & Turner Kelly, 2024; Ramos & Yi, 2020; Stewart et al., 2024). Moreover, these women are frequently excluded from professional development opportunities and can encounter

unsupportive relationships with faculty, exacerbating their marginalization and negatively impacting their wellbeing (Nash & Moore, 2024; Ramos & Yi, 2020). Further intensifying the equity issues associated with intersectionality are identities surrounding parenting, particularly the notion of motherhood, as doctoral students balance caring responsibilities with their studies (Cronshaw et al., 2024).

Similarly, Indigenous doctoral students face unique equity challenges due to disparities, such as limited representation and a lack of academic capital, despite bringing a wealth of cultural capital and unique perspectives. For example, in Australia, First Nations students represent only one per cent of the doctoral cohort in Australian universities, and are frequently the first in their families to pursue a doctoral degree (Anderson et al., 2022). These students' academic challenges are exacerbated because they often have to straddle cultural dichotomies and relocate away from their Country (Anderson et al., 2022). In this context, Country (intentionally capitalized) refers to the entirety of the First Nations students' ancestral domains: "A word for all the values, places, resources, stories and cultural obligations associated with that area and its features" (Jetta, 2022, para. 20). Moving away from Country can result in feelings of displacement, limited community support, specialized mentorship, and/or Elder guidance for First Nations' students (e.g., Anderson et al., 2022). These challenges, combined with academic pressures, can lead to increased emotional strain, feelings of isolation, and exacerbated mental health concerns for Indigenous students (Ballangarry & Pugin, 2024; Park & Bahia, 2022).

International doctoral students also face additional hurdles, including language barriers, unfamiliarity with the host country's healthcare system, and cultural differences in how mental health is perceived and addressed (Cahusac de Caux et al., 2022; Pretorius et al., 2019). These students often encounter unique stressors, including higher academic demands, social isolation, financial constraints, and unfamiliarity with new educational practices, all of which can exacerbate feelings of alienation and psychological distress (Sullivan & Kashubeck-West, 2015). Moreover, the nature of doctoral programs, which require significant independence, self-direction, and engagement in research, can further complicate efforts to build supportive social networks, potentially leading to feelings of loneliness, displacement, and homesickness. These intersectional factors reaffirm that doctoral students' wellbeing is relational and shaped not only by individual attributes but also situated within cultural, social, and structural supports.

Stigma

Addressing mental health issues among doctoral students is fraught with complexities due to academic or family pressures, culture-related stigmas, and a lack of awareness about its importance (see, e.g., Berry et al., 2021; Lai, 2019; Mokbul, 2022; Pretorius, 2024). Many students hesitate to acknowledge their struggles due to fear of being judged, perceived as weak, or not being considered for essential academic opportunities (see, e.g., Lai, 2019; Mokbul, 2022). The academic environment, which values excellence, intellectual rigor, and independence, can leave little room for self-care or the prioritization of mental health (Beasy et al., 2021; Cahusac de Caux et al., 2022; Pretorius et al., 2019). Doctoral students may internalize these pressures, feeling that they cannot take a break or seek help without jeopardizing their progress. This dynamic is particularly harmful, as it reinforces a culture of silence around mental health and discourages students from accessing available resources (Beasy et al., 2021). Moreover, students who are perceived as falling behind due to mental health struggles may experience feelings of confusion, inadequacy, and guilt, further exacerbating their distress (Barry et al., 2018). Additionally, students from certain ethnic or cultural backgrounds, such as Black, Asian, and Middle Eastern populations, may experience heightened stigma, making it even more difficult to seek mental health support (see, e.g., Lai, 2019; McCallum et al., 2022; Mokbul, 2022). Hence, this pervasive stigma permeates the entire web of doctoral relationships, affecting help-seeking in supervisory relationships, peer connections, and institutional support services, thereby further isolating students and deepening their distress.

Wellbeing support provision

A critical issue in addressing mental health challenges within the doctoral context is the availability of, or in many cases, the lack of adequate mental health services, mentoring programs, and peer support groups within universities. Many institutions offer resources and support through mental health services; however, these services are often overwhelmed, with long wait times and limited resources specifically tailored to the unique needs of graduate students (see, e.g., Moghimi et al., 2023). Importantly, help-seeking from professional services can be an e-

-xpensive endeavor, further compounding the financial burden associated with doctoral studies. Also noteworthy are mentoring programs, which can play a pivotal role in supporting doctoral students through personalized guidance and career development (see, e.g., National Academies of Sciences, Engineering, and Medicine, 2019). A lack of widespread institutional support of such programs, however, can leave students without the necessary emotional and academic scaffolding to thrive in their doctoral programs.

These factors operate as a dynamic web where challenges in one area inevitably affect others. For example, supervisory relationships may influence how PhD students manage their workload; financial stress and/or cultural marginalization may exacerbate workload pressures; and stigma may prevent them from seeking appropriate help across all domains. This interconnected nature means that effective interventions entail addressing multiple nodes simultaneously rather than targeting isolated problems.

Strategies for improvement

While the need to address the academic mental health crisis is undeniable, it is crucial to recognize the intricate and interconnected nature of its contributing factors. This complexity underscores the need for a coordinated, multifaceted approach to effectively tackle the issue. The following section outlines strategies and actions that can be taken to address the mental health crisis in doctoral education, as summarized in Table 1.

We discovered that the intersections between our individual experiences and the concepts explored in this paper not only shaped our understanding of the topic but also fostered our growth as scholars. Engaging with the issues of wellbeing allowed us to see ourselves as change agents more clearly, reinforcing our commitment to this work. We found that our collective insights enriched the paper, transforming it into a powerful vehicle advocating for change in academia. This project has not only advanced our academic development but also strengthened our resolve to contribute positively to the broader discourse on social issues within academia, underscoring the importance of collaborative scholarship in driving meaningful change. The nature of our supportive collaboration has inherently fostered a relational dynamic that enriched our sense of wellbeing as important co-contributors to the topic.

In particular, we have come to the conclusion that, to mitigate the mental health crisis in doctoral education, institutions (e.g., higher education providers, governments, and psychological service providers), supervisor(s), and students need to work collaboratively to create a supportive environment that fosters wellbeing. Addressing these conditions relationally reduces attrition, strengthens research quality, and widens equitable participation in the research workforce. Institutions should not only expand the availability of counselling services, but also ensure that these services are specifically tailored to the unique challenges faced by doctoral students. Institutions could also offer workshops and seminars that focus on stress management, work-life balance, and resilience-building, while providing regular mental health check-ins to identify students at risk of burnout early. Importantly, institutions should promote mental health literacy, such as “the knowledge of and/or belief about mental health conditions that can help with their recognition, management, and/or prevention” (Moss et al., 2022, p. 1170). These programs should be embedded within doctoral education to encourage open conversations about wellbeing and diminish the stigma linked to mental health issues and seeking support. Importantly, within every action, the student voice should be active to engage a relational dynamic that encompasses the student’s circumstances, identities, abilities and/or backgrounds.

Relational wellbeing in doctoral education

For doctoral students to be able to thrive within and beyond the academic space and manage the competing demands of the workload, it is incumbent upon institutions to provide academic upskilling, along with transparency in procedures, in consultation with the student (Charles et al., 2022; Jackman et al., 2022a; Mackie & Bates, 2019). Higher educational institutes can offer structured, interconnected academic learning environments characterized by clear expectations and communication, constructive advice and feedback, and skilled mentorship that considers the student’s perspective (Haider & Dasti, 2022; Mackie & Bates, 2019; Wollast et al., 2023). This can include dedicated workspaces for doctoral students to conduct independent research but also engage in community with other colleagues. One example of such an environment is the implementation of collaborative spaces, such as writi-

-ng groups and targeted projects, to help students understand academic expectations (see, e.g., Cahusac de Caux & Pretorius, 2024; Hradsky et al., 2022).

Table 1. Strategies to address the academic mental health crisis in doctoral education.

Strategies	Key Actions
Foster supportive supervisory relationships	Provide structured academic learning environments that offer clear communication and timely feedback. Ensure regular, open communication. Manage workload expectations effectively. Encourage quality over quantity in publications. Learn to identify mental health challenges. Share personal challenges to foster rapport and empathy.
Participate in academic development	Undertake professional development. Develop cross-cultural collaborative research skills. Engage in mentor relationships with more experienced colleagues.
Create and participate in student peer support programs	Establish formal peer support groups to help reduce feelings of isolation. Create writing groups and study circles. Facilitate student-led academic groups. Encourage cultural connections or support groups.
Maintain self-care practices	Engage in physical activities, mindfulness, and hobbies. Maintain work-life balance by setting realistic goals and healthy boundaries. Socialize outside academia.
Address structural challenges	Create clear guidelines for doctoral processes. Reduce emphasis on rigid performance metrics. Implement flexible deadlines. Promote balanced workloads. Promote cultural sensitivity and communication. Encourage taking leave without stigma. Provide equitable access to scholarships, stipends, and grants. Offer equity grants for marginalized students. Consider housing or financial aid for living expenses.

Finally, doctoral programs are becoming increasingly transnational as doctoral students are expected to present at international conferences, participate in relevant summer schools, undertake internships and placements, or opt for relevant overseas institutional visits (Henderson, 2015; McLeod & Bloch, 2010). This requires doctoral students to constantly gauge and perform effectively in an agile and often interdisciplinary research context. Therefore, institutions should invest in developing cross-cultural collaborative research skills and opportunities to work together, such as establishing or arriving at shared approaches to research, negotiating epistemic standpoints, maintaining a good work ethic and research culture, and managing time (Vertovec, 2009). Culturally sensitive practices can enhance this interdisciplinary space through shared dialogue and collaboration, thereby contributing to relational wellbeing.

Addressing the unique challenges faced by marginalized doctoral students requires a multidimensional approach that accounts for individual identity factors and broader socio-cultural contexts. Institutions need to recognize the compounded impact of intersecting identities and implement targeted support systems such as collaborative mentoring programs that embrace cultural awareness. In doing so, academia can take meaningful steps toward creating a more inclusive and supportive environment, in which mental health initiatives are responsive to the diverse needs of all its doctoral students.

Institutions should also address the structural issues that contribute to student stress and burnout, particularly in workload management and the pressure to publish. One recommendation is to implement more flexible deadlines and reduce the emphasis on rigid performance metrics, allowing students the time and space to manage their workload sustainably. Institutions should encourage supervisors to prioritize the quality of research over the quantity of publications, thereby reducing the pressure on students to constantly produce output at the expense of their wellbeing. Additionally, creating more explicit guidelines and expectations around the doctoral process, from supervisory relationships to publication expectations, can help alleviate the uncertainty and anxiety many students experience during their doctoral journey.

Financial support is another crucial area that must be addressed to reduce stress among doctoral students. Financial insecurity is a significant stressor that impacts students' ability to focus on their research, and alleviating this burden can substantially enhance both their academic performance and mental wellbeing (Claridge & Ussher, 2019). Educational institutions and governments should continue to provide and expand equitable access to scholarships, stipends, and grants, particularly for students from underrepresented or marginalized backgrounds. Equity grants assist students who have faced significant hardship, such as those from lower socio-economic circumstances or who are from underrepresented or marginalized backgrounds, to promote equitable opportunities (Macqueen et al., 2023). These grants support increased diversity and inclusivity within the academic environment.

Lack of access to safe, comfortable, and affordable accommodation can have significant impacts on individuals' wellbeing. Finding suitable accommodation is a common challenge for many students, particularly international students. While some countries offer student accommodation or related support, many students must turn to the private rental sector. This sector can be inaccessible to those without prior rental histories, and it can also add a significant financial burden (see, e.g., Ramia et al., 2024). Even where student housing is available, demand frequently outpaces supply (Wilkinson & Greenhalgh, 2022). To address these issues, institutions should consider providing or expanding subsidized housing or financial aid to cover living costs, especially for international students navigating higher expenses in a foreign country.

In relation to supervisors, they play a crucial role in shaping the doctoral experience and, by extension, the mental wellbeing of their students. Research demonstrates that effective student-supervisor(s) relationships are crucial for student satisfaction and success (see, e.g., Sverdlik et al., 2018). This emphasizes the need for supervisors to be equipped with the necessary skills to support their mentees effectively. Supervisors would benefit from having the tools to identify early signs of distress, understand the mental health challenges doctoral students face, and provide appropriate guidance and support. Another useful strategy for attending to students' emotions is having the supervisor(s) share their own challenges to build rapport and trust (see, e.g., Pretorius, 2024). By fostering such supportive relationships, supervisors can significantly reduce feelings of isolation and stress, ultimately contributing to a healthier and more productive academic environment for their students.

Instead of applying a uniform approach or making assumptions about students' needs, effective supervisors tailor their supervisory practices to meet the unique needs of each individual student (Szorenyi & Payne, 2025). Therefore, it is essential for students and supervisor(s) to actively foster self-advocacy by initiating open discussions about the supervisory process and creating opportunities to explore collaborative ways of working. In this context, self-advocacy becomes a shared process of mutual exploration and development within a supportive and relational academic environment (Szorenyi & Payne, 2025).

To mitigate the challenges associated with the power imbalance within the student-supervisor(s) relationship, it is crucial to prioritize emotional intelligence within the training and support systems for both students and supervisor(s) (Twinley & Letherby, 2022). In this context, emotional intelligence refers to the capacity to recognize, understand, and respond appropriately to one's own emotions and those of others, particularly in high-stakes academic interactions. For supervisors, this involves demonstrating empathy, managing difficult conversations sensitively, and being attuned to signs of distress or disengagement. For students, it includes developing confidence in communicating concerns, managing stress, and constructively navigating feedback. Cultivating these skills can foster mutual trust, reduce the potential for conflict or miscommunication, and support a more equitable and emotionally supportive supervisory relationship. Open and transparent communication about responsibilities and expectations is key to developing mutual respect and understanding, as well as preventing potential conflicts. Supervisor training should also focus on role clarity, managing expectations, promoting a balanced workload, and fostering a supportive relationship that prioritizes the student's personal and professional growth. Supervisors who are actively engaged in their students' wellbeing can significantly reduce feelings of isolation and stress, especially when they are dually aware of the cultural differences and unique intersectional positionalities that doctoral students embody. Students and supervisor(s) should mutually establish effective means and modes of communication. This mutual agreement becomes essential considering material differences (for instance, internet availability) and differences in cultural norms of communication.

While supervisors are central to academic guidance and project oversight, mentor relationships and peer support systems offer complementary support that enhances the wellbeing of doctoral students through more informal and dynamic interaction. Mentors can provide students with tailored advice on navigating the unique challenges of academia, drawing from their own experiences to help students balance their work-life responsibilities, manage stress, and overcome obstacles (McLaughlin, 2010; Vauterin & Virkki-Hatakka, 2021). By sharing coping strategies and anecdotes from their own academic journeys, mentors and peers can inspire students, equipping them with tools to better manage their wellbeing (see, e.g., Hradsky et al., 2022; McLaughlin, 2010; Pretorius, 2024). Additionally, peer support networks provide an invaluable resource by creating spaces for doctoral students to share their experiences, mitigate cultural and communication barriers, promote a sense of belonging, and improve overall wellbeing (Hradsky et al., 2022; Walsh, 2010). Positive interactions with culturally competent and supportive mentors have also proven particularly beneficial for marginalized doctoral students in navigating academic spaces and reducing feelings of isolation (Fries-Britt & Turner Kelly, 2024; Mahmud, 2025; Ramos & Yi, 2020).

Therefore, the academic community should create and support different forms of mentoring and peer support opportunities within the doctoral education space. Additionally, the academic community should prioritize student-led initiatives, as this will give students the opportunity to activate their own agency to shape their experiences. Research demonstrates that student-led groups can significantly enhance academic skills and provide emotional support as well as cultural connection (see, e.g., Hadjioannou et al., 2007). By building and supporting mentor and peer networks, the academic community can create a more inclusive academic environment where students feel empowered to thrive both academically and personally.

Students themselves could be encouraged to take proactive steps to safeguard their wellbeing. It is essential that doctoral students are made aware of the variation in doctoral program structures, as they differ significantly from other higher education programs that students might have pursued earlier. The doctoral program structure is substantially individualized as per the requirements of the research project and the training needs of the student. This would mean that each doctoral student utilizes the available avenues according to their individual educational needs, and drawing parallels might lead to varied outcomes. Practicing self-care, establishing boundaries, and reaching out for help when necessary are crucial for achieving a healthy balance between academic responsibilities and personal life. Students should be encouraged to participate in physical activities, mindfulness practices, and h-

-obbies that allow them to disconnect from academic pressures and recharge mentally (Espiritu & Smith, 2021; Jackman et al., 2022b; Kalenjuk, 2022; Marais et al., 2018). The satisfaction that comes with pursuing hobbies can help increase motivation, mood, and productivity (Marais et al., 2018). Journaling, meditation, and regular exercise, especially in nature, have been shown to reduce stress, improve mental focus, and foster intra- or interpersonal relationships, which can lead to more productive and fulfilling academic work (Espiritu & Smith, 2021). Finally, students should set realistic goals, take leave, or apply for extensions when needed without fear of discrimination (Berry et al., 2021; Espiritu & Smith, 2021). By fostering a culture of self-care and resilience, students can actively participate in mitigating the mental health crisis within the doctoral landscape.

Conclusion

The mental health crisis in doctoral education demands urgent and sustained action. Evidence across supervision, workload, financial precarity, stigma, and intersectional disadvantage shows that distress is not merely an individual problem, but is co-produced by relationships, cultures, and structures within universities. Reframing doctoral wellbeing as relational clarifies this point: Students' capacity to cope and thrive depends on the quality of supervisory practices, peer communities, institutional policies, and material conditions that enable or constrain wellbeing.

Addressing the crisis, therefore, requires coordinated action across various dimensions. Systemically, universities should embed mental health literacy, equitable financial support, humane workload expectations, and assessment metrics that prioritize quality over quantity. Moreover, departments should cultivate inclusive cultures, robust supervision and mentoring, and peer networks that reduce isolation and normalize help-seeking. Individually, students' self-care and boundary-setting must be supported, not substituted for, by institutional responsibility. This multi-faceted, shared-responsibility stance moves the sector beyond treating symptoms towards addressing the underlying conditions.

Finally, progress must be made visible and accountable. Institutions should co-design wellbeing initiatives with doctoral students, rigorously evaluate their impact, and report outcomes (including equity effects) alongside traditional performance indicators. By adopting a relational approach and acting across systemic, community, and individual domains, the sector can reduce attrition, enhance the quality and integrity of research, and foster a scholarly culture in which future researchers can flourish personally and professionally.

Statements, declarations, and data availability

All authors contributed to the conceptualization, investigation, data curation, formal analysis, methodology, and writing (both draft and final version) of this study. Elvira Kalenjuk, Jessica Coventry, Jimena de Mello Heredia, Fatona Suraya, and Dr Lynette Pretorius also contributed to the visualizations used in this study. Sara Hattersley and Dr Lynette Pretorius also contributed to the funding acquisition, project administration, resources, and supervision of this project.

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