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# Strain and Solitude: Understanding the Personal and Psychological Challenges of PhD Scholars

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## ABSTRACT

*PhD scholars face many psychological and personal challenges during their doctoral journey. The demanding nature of doctoral studies puts significant pressure on their mental health. Academic rigour often leads to stress, anxiety, and feelings of burnout. Extended study periods contribute to emotional exhaustion and loneliness. Balancing research workload with personal life and financial stress is difficult. High expectations from institutions, supervisors, and family add to the strain. International scholars face additional hurdles as they adjust to new cultures and support systems. This study uses empirical data from 41 respondents to explore these issues. Survey questionnaires gathered detailed information on the scholars' experiences. Statistical tools helped analyse trends and mental health patterns among them. Results show that many PhD students suffer from chronic stress and anxiety. The study highlights the need for strong peer and institutional support networks. Accessible mental health resources are crucial to improve well-being. Creating a supportive research environment ensures academic success and resilience. Universities must actively implement programs that foster community and reduce isolation. Addressing these challenges is essential for the long-term sustainability of doctoral education.*

**Keywords:** *Academic pressure, psychological challenges, Isolation, Mental health, and well-being*

## I. INTRODUCTION

Often regarded as the pinnacle of academic achievement, earning a Doctor of Philosophy (PhD) symbolises not only intellectual rigour and perseverance but also a significant contribution to the body of human knowledge. For many, obtaining a PhD represents the culmination of years of dedication and effort, opening doors to prestigious academic positions, research opportunities, and careers in various professional and industrial sectors. However, the path to this esteemed degree extends far beyond the prestige it confers; it is marked by a complex, often

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challenging process that places significant strain on the scholar's personal life, emotional health, and psychological well-being. While obtaining a PhD is widely celebrated as a symbol of intellectual growth and professional success, it is simultaneously intertwined with loneliness, constant uncertainty, and a persistent sense of worry that affects many doctoral candidates.

Unlike undergraduate and master's programs, which offer detailed curricula, structured timelines, and collaborative learning environments, doctoral studies require sustained, autonomous research and self-motivation. This independence can be liberating intellectually, but it frequently results in increased self-doubt, feelings of isolation, and a lack of clear milestones. The open-ended nature of research projects, which often lack strict deadlines, can foster ambiguity, leading to heightened anxiety, fatigue, and a tendency toward procrastination. Additionally, the deep focus on specialised academic topics often distances PhD students from their social circles, including family, friends, and peers. This separation worsens feelings of isolation and emotional instability and can erode the scholar's mental fortitude over time.

One of the most significant sources of stress for doctoral candidates is the overwhelming academic pressure that pervades every aspect of their studies. Universities, supervisors, and funding bodies expect PhD students to demonstrate their capabilities consistently by producing research outputs such as publications in reputable journals, conference presentations, and teaching experience. At the same time, the academic labour market remains highly competitive, with limited tenured or permanent positions available. This mismatch between scholarly effort and career opportunities generates a pervasive sense of uncertainty and stress. Furthermore, the constant pressure to "prove oneself" not only in academic circles but also to family and wider social communities can deeply affect students' confidence, self-worth, and professional identity.

Balancing the demands of doctoral research with personal and familial obligations presents another layer of challenge. Many doctoral candidates undertake the responsibilities of parenthood, caregiving, or other familial roles while pursuing their degrees. Managing these social roles alongside the rigorous demands of research can lead to emotional burnout and chronic fatigue. Financial insecurity further exacerbates this stress; many students depend on modest stipends or scholarships that barely cover essential living expenses. The need to pursue additional employment or rely on family financial support, combined with uneven research schedules, results in unstable income and increased anxiety. Such economic pressures can significantly hinder academic focus and progress, creating a challenging cycle of stress and reduced productivity.

Isolation is a defining and often damaging aspect of the doctoral experience. The nature of PhD-level research typically requires extended periods of solitary work focused on reading, analysis, and writing. While such solitude is necessary for deep intellectual inquiry and creative thought, it can also result in social alienation and a profound sense of loneliness. Unlike earlier educational stages characterised by frequent group projects and classroom interaction, doctoral candidates often find themselves physically and emotionally distanced from academic peers and support networks. International students face even greater obstacles due to language differences, cultural barriers, and separation from family and established support systems. This intensified isolation can have detrimental effects on mental health, exacerbating feelings of vulnerability and disconnection.

Recent research highlights an alarming rise in mental health concerns among PhD students worldwide. Studies from across Asia, Europe, and North America reveal high levels of anxiety, depression, and burnout in doctoral populations. Reports in prominent academic journals indicate that PhD students experience psychological distress at rates significantly higher than the general population. Alarming statistics show that nearly one in three doctoral candidates suffers from severe mental health problems. Instances of stress-related physical illnesses and suicidal ideation have been documented, underscoring a systemic failure to adequately support student well-being within academic institutions.

In addition to intellectual and emotional challenges, social and cultural expectations heavily influence the doctoral experience. In many cultures, earning a PhD is not only a personal or intellectual pursuit but a social emblem of status, bringing family pride and elevated social standing. This social pressure, combined with the intrinsic difficulties of doctoral study, creates compounded strain for students. Female scholars often face heightened psychological burdens as they navigate gender-based expectations, balancing academic ambitions with household responsibilities and societal roles. This intersection of academic and cultural pressures calls for sensitive and nuanced approaches to student support.

Addressing the multifaceted challenges faced by doctoral students demands comprehensive institutional strategies. Universities and research institutions must recognize the profound human costs of doctoral education and expand their focus beyond traditional academic performance metrics. Ensuring access to robust mental health services, flexible funding options, peer support networks, and structured mentorship programs can significantly buffer the psychological strain experienced by students. Cultivating an academic culture that values well-being alongside scholarly productivity is imperative. Supervisors play a critical role as mentors, and effective supervision has been shown to lower stress, foster resilience, and improve doctoral

outcomes.

This study aims to deepen the understanding of the psychological, social, and economic challenges experienced by PhD candidates by highlighting the interconnected nature of isolation, financial hardship, academic pressure, and work-life balance struggles. By emphasising the importance of mental health and personal well-being in academic success, it advocates for institutional reforms that nurture a more supportive, empathetic, and sustainable research environment. Recognising the “strain and solitude” intrinsic to the doctoral journey is a necessary step toward reshaping academic culture into one that genuinely supports holistic scholar development.

Ultimately, addressing these challenges is essential for making the pursuit of a PhD not only an intellectual endeavour but a personally sustainable and fulfilling experience. Doctoral education profoundly influences individuals’ identities, relationships, and mental health. By acknowledging these dimensions and embedding compassion, support, and balance into academic structures, the scholarly community can ensure that the quest for knowledge enhances rather than undermines the well-being of those who undertake it.

#### **A. Statement of problem**

Pursuing a PhD is one of the most demanding academic paths, requiring intellectual rigor, creativity, and perseverance. While it is associated with success and innovation, it often brings challenges such as stress, anxiety, depression, and burnout. Much of the existing research focuses on productivity rather than the emotional well-being of doctoral scholars. PhD students operate under high expectations from supervisors and institutions, facing long program durations and uncertain career prospects. The pressure to produce original research, publish, and manage additional responsibilities frequently leads to exhaustion and self-doubt. Balancing academic work with financial, family, and caregiving duties, along with the isolation of research, deepens these struggles. Thus, there is a pressing need for institutions to build supportive frameworks that protect mental health and promote sustainable academic success.

#### **B. Review of literature**

The mental health and well-being of PhD students have emerged as critical areas of research over the past two decades. An increasing number of studies highlight the psychological challenges faced by doctoral candidates, who experience elevated levels of stress, anxiety, depression, and social isolation compared to the general population. These challenges stem from a complex interaction of academic demands, social contexts, and personal responsibilities. Understanding these factors is crucial to developing institutional policies and support

mechanisms that enhance doctoral students' well-being.

Levecque et al. (2017) identify academic pressure as a primary source of stress, noting that the demanding nature of research, publication requirements, and expectations from supervisors and institutions contribute to heightened psychological distress among PhD students. Similarly, Stubb, Pyhalto, and Lonka (2011) emphasise that ambiguous expectations and continuous evaluation exacerbate anxiety and reduce motivation, particularly for early-stage candidates. Kinman and Wray (2018) further highlight that the relentless pursuit of academic recognition often leads to burnout and declines in mental health.

Isolation is another significant contributor to the psychological strain experienced by doctoral students. Palto et al. (2012) outline how the solitary nature of doctoral research leads to loneliness, decreased self-confidence, and disconnection from academic communities. Sawir et al. (2008) note that international students face additional layers of isolation due to cultural and language barriers, as well as separation from family and familiar support systems. The transition from collaborative undergraduate or master's study to largely independent doctoral work compounds these challenges.

Work-life balance also plays a significant role in doctoral students' mental health. Evans et al. (2018) document links between poor work-life balance and mental health issues, including chronic stress and emotional exhaustion, with female scholars facing greater pressure due to societal expectations and caregiving responsibilities. Financial insecurity compounds these stresses, especially for those relying on stipends or part-time jobs.

Despite these insights, research gaps remain. Most studies focus on academic pressures rather than the broader social, cultural, and personal factors influencing doctoral well-being. Many rely on cross-sectional data, failing to capture how stress and coping mechanisms evolve. Moreover, limited studies assess the effectiveness of institutional supports such as mentorship and counselling from the students' perspectives, particularly underrepresenting the experiences of women, international students, and those with additional personal obligations.

### **C. Research gap**

Existing literature highlights challenges faced by PhD students, such as work-life balance, loneliness, and academic pressure, but there are still gaps in understanding their psychological and emotional experiences. Most studies emphasise academic factors like supervision quality and publication pressure, while personal and social contexts are often overlooked. Limited attention has been given to how family responsibilities, financial constraints, and cultural expectations affect PhD students' well-being. There is also a lack of qualitative research

exploring their feelings of stress, loneliness, and coping strategies. Therefore, more comprehensive studies are needed to understand the holistic experiences of PhD scholars and promote their overall well-being.

#### **D. Objective of the study**

1. To analyse the major sources of academic stress among PhD scholars and their impact on mental health and performance.
2. To study how isolation, work-life imbalance, and personal responsibilities affect emotional well-being and confidence.
3. To evaluate the role of institutional support and suggest measures to strengthen mental health and resilience among doctoral students.

#### **E. Method of study**

This study uses a non-doctrinal research approach focusing on empirical data and real-life experiences of PhD scholars rather than theoretical analysis. It collects primary data through questionnaires from 41 diverse participants across universities and disciplines, covering academic pressures, financial concerns, work-life balance, and personal responsibilities. Purposive sampling ensures inclusion of male and female scholars and those with caregiving duties. Secondary data from research articles and institutional reports supplement the study. Quantitative data will be analysed using percentages and frequencies, while qualitative responses will be summarised to identify common themes. Ethical standards such as informed consent, confidentiality, and voluntary participation will be maintained. This approach aims to provide practical insights and recommendations for universities, supervisors, and policymakers to improve doctoral students' mental health, resilience, and work-life balance.

## **II. DATA INTERPRETATION**

**Table 1 - Stage or year of PhD**

<b>Sl no</b>	<b>Particulars</b>	<b>No of respondents</b>	<b>Percentage</b>
1	1 <sup>st</sup> year	10	24.6%
2	2 <sup>nd</sup> year	15	36.6%
3	3 <sup>rd</sup> year	6	14.6%
4	4 <sup>th</sup> year	5	12.2%
5	5 <sup>th</sup> year	5	12.2%
	<b>Total</b>	41	100

Table 1 shows the distribution of respondents according to their current stage or year in the PhD program. Among the 41 participants, the largest group, 36.6%, is in their 2nd year, followed by 24.4% in the 1st year, indicating that most scholars are still in the early phases of their doctoral journey. This suggests that many students are in the process of familiarising themselves with research methodologies, defining their study objectives, and adapting to the rigorous demands of PhD-level work. The number of respondents decreases in the later stages, with 14.6% in the 3rd year and 12.2% each in the 4th and 5th years, reflecting the smaller proportion of scholars who have progressed to advanced research or are approaching the completion of their dissertations. Overall, 61% of the participants are in the initial stages (1st and 2nd years), while 39% are in the advanced stages (3rd to 5th years). This distribution indicates that most PhD scholars are likely encountering early-stage challenges such as managing coursework, establishing research direction, handling academic expectations, and balancing personal responsibilities alongside scholarly demands. The data also suggests that fewer students reach the later stages, possibly due to extended research timelines, attrition, or the intensive nature of advanced research work, highlighting the need for continuous support throughout the doctoral program.

**Table 2: Impact of PhD Work Pressure on Personal Well-being and Relationships**

Sl no	Statement	particulars	No of respondents	Percentage
1	The pressure from PhD work has caused conflict or tension in home or personal relationships.	Yes	13	31.7%
		Maybe	7	17.1 %
		No	21	51.2%
		<b>Total</b>	41	100
2	Burnout or emotional exhaustion has been experienced during PhD studies.	Yes	30	73.2%
		No	11	26.8%
		<b>Total</b>	41	100

**Source:** Primary data

The data indicate that about one-third (31.7%) of PhD scholars have experienced conflicts at home due to pressure from their doctoral work, while a majority (51.2%) reported no such conflicts, and 17.1% were unsure or experienced occasional conflict. This highlights that academic stress can impact personal and family relationships for a significant portion of students, stressing the importance of effective stress management and support to balance

research demands with home life.

Additionally, the finding that 73.2% of PhD students have experienced burnout or emotional exhaustion underscores a widespread mental health challenge in doctoral education. This high prevalence is consistent with broader research showing that chronic stress, heavy workloads, and emotional fatigue are common among graduate students. The data draws attention to the need for institutional measures such as quality supervision, mental health resources, and workload management to reduce burnout and support the well-being of doctoral candidates. Only a minority (26.8%) reported no experience of burnout, indicating that emotional exhaustion is a prevalent issue in this population.

**Table 3: Concerns and Pressures Experienced During PhD Studies**

Sl no	Statement	Particulars	No of respondent	Percentage
1	Concern about securing a job or position in the field after graduation.	1	9	22%
		2	8	19.5%
		3	3	7.3%
		4	7	17.1%
		5	14	34.1%
		<b>Total</b>	41	100
2	Pressure to publish research papers or produce academic results during PhD studies.	Never	5	12.2%
		Rarely	6	14.6%
		Sometimes	15	36.6%
		Often	12	29.3%
		Always	3	7.3%
		<b>Total</b>	41	100
3	Feeling of isolation from friends or family due to research work.	Never	9	22%
		Rarely	5	12.2%
		Sometimes	12	29.3%
		Often	6	14.6%
		Always	9	22%
		<b>Total</b>	41	100

**Source:** Primary data

The level of concern among PhD scholars about securing a position after graduation reveals mixed but significant anxiety. While 22% of respondents reported being not at all worried (rating 1), a larger portion, 34.1%, indicated extreme worry (rating 5), and an additional 17.1% rated their concern at 4, suggesting that over half of the scholars experience considerable uncertainty about their future careers. This anxiety likely reflects competitive job markets, limited academic positions, and unclear career trajectories, common challenges highlighted in global studies about PhD career security. A notable group (19.5%) expressed mild concern, and a small minority (7.3%) indicated moderate worry, reflecting variability in confidence and preparedness for post-PhD employment.

Regarding pressure to publish or produce results, the data shows that most scholars face some level of stress related to academic output. Around 36.6% sometimes experience this pressure, and nearly 30% often do, while 7.3% feel this pressure continuously. Conversely, about 26.8% reported rarely or never feeling pressured, indicating varied experiences with publication demands. The widespread presence of this pressure emphasises how publication expectations are integral to doctoral studies but can contribute substantially to stress and burnout.

Lastly, the frequency of feeling isolated from friends or family due to research activities indicates social challenges embedded in doctoral work. While 22% never feel isolated, and 12.2% rarely do, a significant portion experience isolation sometimes (29.3%), often (14.6%), or always (22%). This distribution shows that two-thirds of scholars face at least occasional social isolation, which can negatively affect mental well-being and highlight the importance of fostering peer support and maintaining work-life balance during PhD training.

**Table 4: Academic Stressors and Personal Well-being Among PhD Scholars**

Sl no	statement	Particulars	No of respondents	Percentage
1	Major academic stressors faced by PhD scholars.	Deadlines	14	34.1 %
		competition	11	26.8%
		Supervisor expectations	16	39%
		<b>Total</b>	41	100
2	Hours per week dedicated to personal or family time.	None	4	9.8%
		1-5 hours	15	36.6%
		6-10 hours	11	26.8%

		11-15 hours	5	12.2%
		16+ hours	6	14.6%
		<b>Total</b>	41	100
3	Struggles faced between prioritising research tasks and maintaining personal relationships.	Prioritising research tasks	26	63.4%
		Maintaining personal relationships	15	36.6%
		<b>Total</b>	41	100
4	Comfort level in discussing mental health struggles with different groups.	Peers	17	41.5%
		Supervisors	5	12.2%
		family	19	46.3%
		<b>Total</b>	41	100

**Source:** Primary data

The major academic stressors affecting PhD scholars, as shown by the data, are primarily supervisor expectations (39%), followed by deadlines (34.1%) and competition (26.8%). This indicates that interpersonal pressure from supervisors, the need to meet strict timelines, and rivalry among peers are key sources of stress during doctoral studies. Research supports that clear communication with supervisors, manageable deadlines, and a collaborative rather than competitive academic environment can help reduce such stress.

Regarding time dedicated to personal or family activities, most scholars spend limited hours weekly, with 36.6% allocating 1-5 hours and 26.8% spending 6-10 hours. Nearly 10% reported no personal or family time, illustrating how demanding the PhD workload can be and the struggle to maintain work-life balance.

When asked about which they struggle with more, 63.4% identified prioritising research tasks, while 36.6% found maintaining personal relationships more challenging. This reflects that managing academic responsibilities and research deadlines is the dominant difficulty, though a significant portion also struggles with relationship maintenance, suggesting dual pressures on time and emotional energy.

Finally, regarding comfort in discussing mental health struggles, respondents felt most comfortable talking to family (46.3%) and peers (41.5%), with only 12.2% feeling comfortable discussing these issues with supervisors. This highlights the importance of social support networks outside the supervisory relationship and indicates a need for fostering more open,

supportive, and empathetic communication within supervisory roles to better address PhD scholars' mental health needs.

### **III. FINDINGS**

- Early-stage concentration – Most respondents are in their 1st or 2nd year, adjusting to research demands, with fewer in later stages due to attrition or extended timelines.
- Career uncertainty – Over half worry about post-PhD jobs, driven by a competitive market, systemic barriers, and doubts about financial stability.
- Supervisor pressure – Expectations from supervisors are the top stressor, followed by deadlines and competition, with scholars more comfortable sharing struggles with family and peers than supervisors.
- Publication demands and burnout – Most face pressure to publish, and nearly three-quarters have experienced burnout, worsened by constant performance expectations.
- Work-life imbalance and isolation – The majority spend little personal or family time, struggle with task prioritisation, and report varying degrees of isolation or domestic conflict.
- Peer and family support – These networks help reduce stress and build resilience, but institutional mental health and career support remain insufficient.

### **IV. LIMITATIONS**

Studies conducted in specific geographical areas, such as Karnataka, may not fully capture the diverse challenges faced by PhD scholars across different cultural, institutional, or academic contexts, making it difficult to generalise findings to other regions. Self-reported data often used in such research can be affected by biases, recall errors, or social desirability, influencing the accuracy and reliability of results. While non-doctrinal or qualitative approaches provide deep insights into personal experiences, they rely on subjective perspectives and lack causal relationships or statistical generalisations. Excluding international students further limits the scope, as their unique struggles with cultural adaptation, language barriers, and academic adjustment remain unaccounted for. Moreover, cross-sectional studies fail to capture changes in stress levels, coping mechanisms, and support systems over time. Differences in academic disciplines, external factors such as policy shifts or global events, and unmeasured variables like financial strain or family responsibilities also significantly impact the experiences of PhD scholars. Thus, the study's focus on Karnataka further narrows its generalisability to broader academic contexts.

## **V. SUGGESTIONS**

Universities should establish dedicated counselling centres exclusively for PhD scholars, offering comprehensive services such as individual therapy sessions, stress management workshops, and group therapy to enhance mental well-being. These centres must provide easily accessible and strictly confidential mental health programs tailored to address academic pressures, anxiety, and burnout commonly faced by doctoral students.

Institutions should encourage the creation of peer groups or study circles where scholars can share experiences, seek guidance, and offer mutual support. Supervisors must also receive training to provide both research mentorship and emotional support, fostering open communication and a culture of trust.

Universities need to help scholars maintain a healthy work-life balance through flexible schedules and awareness programs that promote self-care and mental wellness. Career counselling and mentorship programs can guide scholars toward academic and non-academic career opportunities, thereby reducing career-related uncertainty and stress.

Financial support systems, including stipends and research grants, should be strengthened to minimise economic pressures. Departments can also encourage participation in extracurricular activities and informal gatherings to build social connections and relieve stress.

Regular workshops on time management, research planning, and productivity can improve efficiency, focus, and confidence. Ultimately, fostering a supportive, stigma-free environment through open discussions, mentorship, and community engagement can significantly enhance both the mental well-being and overall experience of PhD scholars.

## **VI. CONCLUSION**

The PhD journey involves complex personal and psychological challenges beyond academics, as doctoral education, while developing research skills and critical thinking, also brings significant stress and uncertainty. High productivity demands often lead to self-doubt and emotional exhaustion, while balancing research with personal life remains a persistent struggle for many scholars. Isolation during extended research periods deepens emotional strain and loneliness, and the availability of peer and supervisor support varies widely among students. Some benefit from strong mentorship, whereas others navigate their studies without consistent guidance, increasing their vulnerability to mental health issues. Institutional interventions are therefore vital, with counselling, career guidance, and stress management workshops providing essential assistance. Networking opportunities and financial stability can further enhance

scholars' well-being, while promoting work-life balance boosts creativity and sustained research engagement. Ultimately, adopting a holistic approach to doctoral education ensures that scholars' mental health is protected alongside their academic success.

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