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# A Study on Burnout, Psychological Well-Being, Stress, and Resilience among Ph.D. Scholars

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#### ABSTRACT

Academia is an area where the distinction between work and life may be a little hazy. Workloads that are too heavy and expectations that are too high are a formula for stress, which leads to physical and mental exhaustion. After reports of high levels of psychological discomfort and mental disease among Ph.D. students, the psychological well-being of these students has piqued attention. The present study aims to study Burnout, Stress, Psychological well- being and Resilience among Ph.D. Students. The sample consisted of 30 research students from the age group of 25 - 40. Standardized tools were used to measure Stress, Psychological Well-being, Resilience, and Burnout. The results found out that there is a positive significant correlation between Personal burnout and Stress. There is a negative significant correlation between Personal burnout and the Environment. There is a negative significant correlation between work burnout and resilience. There is a negative significant correlation between work burnout and the Environment. Purposeful monitoring and assistance can help to alleviate the causes of stress and burnout; nevertheless, coping strategies must be implemented with care.

Keywords - Ph.D. students, perceived stress, Psychological Well - being, Resilience, Burnout

## Introduction

"We are what we are because we have been what we have been, and what is needed for solving the problems of human life and motives is not moral estimates but more knowledge." –Sigmund Freud

The majority of students pursue a Ph.D. as the first step toward a good career in academics. They select these professions in part because they have the flexibility and autonomy to experiment and innovate. However, when autonomy in such things is limited or lost, as it is when financing, impact, and publishing objectives become part of institutions' official monitoring and evaluation systems, difficulties might develop. It's no wonder that many students feel unwilling to speak up to their supervisors about vulnerabilities or mental-health issues when their supervisor is also the judge of their success or failure. The rates of depression, anxiety, and stress among Ph.D. students are disturbingly high. Graduate students are six times more likely than the general population to have mental health problems. In a study by Dhirasasna et al., (2021) the findings reveal that Ph.D. students' happiness is influenced by a combination of factors including their university, financial assistance, mental and physical health, and family/friends. The research, however, reveals that the role of the drivers is dynamic and that they might act as obstacles in some situations. Almost half of the graduate students are depressed, with many expressing "higher-than-average" or "extremely high" levels of stress linked to their academics, employment, and financial problems. Cactus Communications, a scientific communications firm headquartered in Mumbai, India, performed a mental-health survey of 13,000 young researchers in 2020 and discovered that more than one-third (38%) of respondents frequently felt overwhelmed by their job environment. According to a global study conducted by the World Health Organization (WHO, 2018), 31% of Ph.D. students exhibited symptoms of a mental condition such as severe depression, general anxiety disorder, or panic disorder during their years of study. The bottom line being, mental health concerns are more prevalent among Ph.D. students than in the general population, highly educated individuals, or higher ed

#### Burnout

Maslach, Jackson & Leiter (1996) one of the most prominent definitions described burnout "as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity."

Freudenberger (1974) the basic elements of his definition of burnout described these experiences as to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources, and can still be seen in the modern definitions of job burnout.

Further, According to Schaufeli & Greenglass (2001) in a terminal stage, a state of physical, emotional, and mental exhaustion will occur from which it is hard to recover.

The study by Kusurkat et al., (2020) found three clusters/subgroups made up of Ph.D. students with comparable burnout characteristics within each cluster but distinct burnout profiles between clusters. Burnout was low in Cluster 1 (n = 199, 47 percent). Clusters 2 (n = 168, 40%) and 3 (n = 55, 13%) exhibited moderate and severe burnout levels, respectively, and were linked to poor engagement levels. Cluster 3 had the lowest motivating, engagement, needs fulfillment, and work-life balance ratings, as well as the highest burnout scores. The basic psychological needs frustration linked with the burnout paradigm was shown to be a good fit.

In a study conducted by Sorrel et al., (2020) the findings revealed that burnout rates are significant among Spanish Ph.D. students, particularly in terms of emotional weariness. Various linear regression models explained between 14% and 41% of the variation in total burnout ratings and its components. In research conducted by Rico & Bunge (2020) it was found third and fourth-year students (as a group) reported much more stress than Psychological Doctoral Students (PDS) from previous years. In the burnout emotional tiredness subscale, third- and fourth-year students (grouped together) reported significantly higher scores than the rest of the students. PDS had stress levels that were comparable to the general population. PDS students in their third and fourth years of study had higher stress levels and were more emotionally exhausted.

#### **Psychological Well-Being**

According to (Diener, 2000) Psychological Well-Being has two important facets. It refers to the extent to which people experience positive emotions and feelings of happiness. Sometimes this aspect of psychological wellbeing is referred to as subjective wellbeing.

Burns (2016) Psychological well-being refers to inter-and intra-individual levels of positive functioning that can include one's relatedness with others and self-referent attitudes that include one's sense of mastery and personal growth.

In a study conducted by Urquijo et al., (2015) Emotional intelligence was shown to be positively related to life satisfaction and psychological wellbeing in graduate students. Even after adjusting for personality factors as co variables, the final model indicated a substantial route from emotional intelligence to life satisfaction and psychological well-being via perceived stress.

In research conducted by Stubb et al., (2010) the findings revealed that Ph.D. students' perceptions of the academic community in terms of sociopsychological well-being varied. More than half of the responses (56 percent) stressed the scholarly community as a source of hardship, although feelings of inspiration and empowerment were also commonly recounted (44 percent). Empowerment was linked to higher levels of study involvement and lower levels of stress, fatigue, and anxiety.

#### Resilience

Hart et al., (2016) defined resilience as overcoming adversity, whilst also potentially changing, or even dramatically transforming, (aspects of) that adversity.

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats or even significant sources of stress (APA, 2014).

Resilience is an emergent property of a hierarchically organized set of protective systems that cumulatively buffer the effects of adversity and can therefore rarely if ever, be regarded as an intrinsic property of individuals (Roisman et al., 2002)

In a study conducted by Souri et al., (2011) the findings revealed that resilience can predict psychological well-being. It also revealed that personal qualities such as resilience impact psychological well-being and that an individual's optimism, independent of his or her level of resilience, may contribute to psychological well-being to some extent.

According to the findings, half of the university students in this study had a moderate to a high level of resiliency, 70% had a depressed mood, and roughly half had a high level of perception of social support from family, friends, and others. Depression and perceived social support from friends were also found to be important predictors of resilience (Hamdan-mansour et al., 2015)

In a study conducted by Li and Nishikawa (2008) stress was not shown to be a major predictor of active coping in college students, whereas resilience was found to be the most effective predictor of active coping in high, general, and low-stress conditions. In general, a secure connection was a good predictor of active coping, but not in high or low-stress scenarios.

In research by Pidgeon et al., (2014) According to the findings of a one-way between-groups multivariate analysis of variance, perceived social support, campus connection, and psychological distress accounted for a significant portion (36%) of the difference between the high and poor resilience groups of university students. Low-resilient university students reported significantly lower levels of perceived social support, campus connection, and psychological discomfort as compared to high-resilient university students.

#### Stress

Palmer (1989) Stress is the psychological, physiological, and behavioral response by an individual when they perceive a lack of equilibrium between the demands placed upon them and their ability to meet those demands, which, over a period, leads to ill-health.

Stress, it is argued, can only be sensibly defined as a perceptual phenomenon arising from a comparison between the demand on the person and his or her ability to cope. An imbalance in this mechanism, when coping is important, gives rise to the experience of stress, and to the stress response (Cox ,1978)

In a study conducted by Toews et al., (1993) it was revealed that all three groups of 150 medical students, 154 medical residents, and 102 Masters of Science/Ph.D. graduate students reported high levels of felt stress.

In research conducted by Wang et al., (2019) it was found that throughout their Ph.D. studies, Chinese Ph.D. students faced a variety of stressors. Graduation, career prospects, relationships, and other considerations were among the four themes that were identified.

In a study conducted by Jiménez-Ortiz et al., (2019) it was found that emotional weariness, perceived high stress, and burnout was found to be present in 52.0 percent, 42.3 percent, and 17.8 percent of dentistry graduate students, respectively. Burnout was present in all students who had a high level of perceived stress.

#### Purpose of the Study

The aim is to study Burnout, Stress, Psychological Well-Being, and Resilience among Ph.D. Students.

#### Hypothesis

- 1. There will be a positive correlation between Burnout and Perceived Stress.
- 2. There will be no significant correlation between Burnout and resilience.
- 3. There will be a negative correlation between psychological well-being and Burnout.

#### Methodology

#### Sample

The study was conducted on 30 participants both male and female from Pune, Maharashtra. The sample for the analysis consisted of adults aged between 25 to 40 years.

#### Measures

Standardized tools used for this study were:

- Perceived Stress Scale (PSS) The Perceived Stress Scale was developed by Cohen (1983). It's a measurement of how stressful certain situations in one's life are regarded. Items were chosen to reflect how unexpected, uncontrolled, and overburdened respondents' lives are. A number of direct questions concerning current levels of experienced stress are also included on the scale. It has 10 items. Each item is scored on a 4-point Likert scale ranging from never to very often.
- 2. Brief Resilience Scale (BRS) The BRS (Smith, Dalen, Wiggins, Tooley, Christopher, & Bernard, 2008) is a six-item resilience test that focuses on the ability to bounce back from stress and adversity. On a 5-point Likert scale, responses range from Strongly Disagree (1) to Strongly Agree (5). The greater the respondent's mean BRS score, the more robust they are. The BRS scale is a one-factor scale.
- 3. Copenhagen Burnout Inventory (CBI) It is the most widely used measure of burnout. It was developed by Kristensen et al., (2005). The CBI consists of three scales measuring; a 22-item instrument is used to assess (via a 7-point Likert scale) personal burnout, work-related burnout, and client-related burnout, for use in different domains.
- 4. Psychological Wellbeing (PWB) Psychological well-being scale was developed by Ryff & Keyes (1995). The 18-item scale (with a 7-point scale) assesses six elements of happiness and wellbeing: autonomy, environmental mastery, personal growth, positive interpersonal relationships, life purpose, and self-acceptance.

#### Procedure

The objective of the study was explained to the participant. The surveys were filled out using Google forms. The participants were asked to participate honestly and promised that their responses would be treated confidentially. For their cooperation, each participant was thanked. All participants were given standardized scales to fill out

## Analysis of Data

## Results

N, Mean and Standard deviation data is shown in Table 1, and Table 2 shows the correlation between Burnout, Perceived stress, Resilience, and Psychological well-being.

Table 1: shows N, Mean and Standard Deviation

|                    | Personal<br>burnout | Work<br>burnout | perceived<br>stress | Resilience | Autonomy | Environmental | Personal<br>Growth | Positive<br>relations | Purpose<br>in life | Self-<br>Acceptance |
|--------------------|---------------------|-----------------|---------------------|------------|----------|---------------|--------------------|-----------------------|--------------------|---------------------|
| Ν                  | 30                  | 30              | 30                  | 30         | 30       | 30            | 30                 | 30                    | 30                 | 30                  |
| Mean               | 50.5                | 41.0            | 19.0                | 3.08       | 15.8     | 14.3          | 15.6               | 13.2                  | 14.1               | 16.5                |
| Standard deviation | 18.0                | 14.9            | 5.03                | 0.398      | 3.55     | 2.60          | 2.16               | 3.20                  | 3.16               | 2.27                |

Table 2: shows the correlation of all variables

|                     | Personal<br>burnout | Work<br>burnout | perceived<br>stress | Resilience | Autonomy  | Environm<br>ental | Personal<br>Growth | Positive relations | Purpose<br>in life |
|---------------------|---------------------|-----------------|---------------------|------------|-----------|-------------------|--------------------|--------------------|--------------------|
| Personal<br>burnout | _                   |                 |                     |            |           |                   |                    |                    |                    |
| Work<br>burnout     | 0.667 ***           | _               |                     |            |           |                   |                    |                    |                    |
| Perceived stress    | 0.434 *             | 0.248           | _                   |            |           |                   |                    |                    |                    |
| Resilience          | -0.224              | -0.412 *        | -0.248              | _          |           |                   |                    |                    |                    |
| Autonomy            | 0.011               | 0.037           | 0.060               | 0.048      | _         |                   |                    |                    |                    |
| Environme<br>ntal   | -0.536 **           | -0.394 *        | -0.339              | 0.336      | 0.152     | _                 |                    |                    |                    |
| Personal<br>Growth  | -0.093              | -0.097          | -0.116              | 0.140      | 0.594 *** | -0.080            | _                  |                    |                    |
| Positive relations  | -0.258              | -0.322          | 0.201               | 0.148      | 0.019     | 0.452 *           | -0.127             | —                  |                    |
| Purpose in<br>life  | 0.362 *             | -0.035          | 0.247               | 0.298      | 0.149     | -0.036            | 0.196              | 0.288              | _                  |

*Note.* \* p < .05, \*\* p < .01, \*\*\* p < .001

#### **Discussion of Results**

The results found out that there is a positive significant correlation (r=0.667, p < .001) between Personal burnout and Work burnout. There is a positive significant correlation (r = 0.434, p < .05) between Personal burnout and Perceived stress. There is a negative significant correlation (r = -0.536, p < .01) between Personal burnout and Environment. There is a negative significant correlation (r = -0.412, p < .05) between work burnout and resilience. There is a negative significant correlation (r = -0.394, p < .05) between work burnout and Environment. Further, on the dimensions of Psychological Well-Being, there is a positive significant correlation (r = -0.394, p < .05) between Autonomy and Personal growth, a positive significant correlation(r = -0.452, p < .05) between environment and purpose of life. In research by Bazrafkan et al., (2016) it was found that Ph.D. students are exposed to stress and anxiety from a number of sources, and they use a variety of coping strategies, both successful and unproductive. In a study conducted by (Shadid et al., 2020) it was found that medical students had a high degree of stress and a high rate of burnout, resulting in significant fatigue, cynicism, and low academic performance. Overall exhaustion and a lower grade point average GPA had a statistically significant positive connection. Stress was shown to have a statistically significant positive association with pupils who had a lower GPA. In a study conducted by (Kotzé and Kleynhans 2014) according to the findings Burnout (particularly, Emotional Exhaustion and Cynicism) and resilience were statistically significant predictors of academic performance among university students. In a review study conducted by (IsHak et al., 2013) it was found that burnout is common in medical school, with large multi-institutional studies in the United States indicating that at least half of all medical students would experience burnout at some point during their study. Burnout has been linked to mental prob

#### Conclusion

Advancement in one's career may be exhilarating but also hard, causing tension and anxiety in students at all levels of school. The academic obligations of a PhD student, in particular, can be stressful if they are not effectively managed. Chronic stress and burnout, on the other hand, can have a negative impact on a person's health and quality of life. Stress and burnout can have long-term impacts on physical and mental health. The aim of the research was to study Burnout, Perceived stress, Psychological wellbeing among Ph.D. students. The study was conducted on 30 Ph.D. students from India. Standardized measures were used to administer the variables through Google forms. The results showed a positive significant correlation between Personal burnout and Work burnout and there is a positive significant correlation between Personal burnout and Perceived stress. We can understand how burnout is a significant factor threatening Ph.D. students' well-being. To address this widespread problem, educators must first increase their knowledge and comprehension of burnout, as well as the variables that contribute to it. During university, interventions aimed at promoting wellbeing are strongly encouraged. Secondly, PhD students and administrators must raise their awareness of the pressures and learn to apply stress management methods effectively. Finally, both faculty members and students must find strategies to reduce stresses while also improving their ability to deal with them. Faculty and supervisors should analyze the stresses and use critical thinking and problem-solving techniques to assist Ph.D. students to manage.

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