

Friction and Tiredness: A literature analysis of burnout causes in the field of software engineering

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Abstract

In this research paper we analyze existing literature regarding burnout in the software engineering field. Relevant literature was used to create a taxonomy of burnout causes for the purpose of identifying commonly researched causes of burnout and frequently occurring causes. The resulting taxonomy was then compared to existing burnout models in literature to verify its validity. Four main categories were identified; Personality, Well-being, Organizational, and Interpersonal. We found that Organizational Uncertainty and Mental Health Awareness were under-researched topics considering their prevalence in survey results. In addition, these topics are often not present in burnout models.

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1 Introduction

Burnouts have become increasingly more common in modern society, and this phenomenon has also effected software engineering roles where a recent study found over 50% of developers have professional stress or a burnout [29]. Preventing this burnout will lead to better mental health of the developers as well as a potential productivity increase. Properly understanding the causes of burnout is an important prerequisite to be able to prevent burnout. We aim to aid in this endeavor by performing a systematic literature review of recent papers in the field and identifying common causes that may lead to burnout. By identifying these common causes of burnout we aim to provide a list of factors which influence developer health such that organizations may take them into account for strategic decision making thereby reducing health risks for software development teams. This is done through the combination of a systematic literature review followed by the creation of a taxonomy of burnout categories based on this literature. As a follow up we aim to find papers addressing these burnout categories to address possible mitigation methods per category.

2 Background

2.1 Burnout

Burnout is defined as psychological syndrome of exhaustion, cynicism, and inefficacy, which is experienced in response to chronic job stressors[33]. There are three components of burnout according to Maslach et al. Exhaustion is the first component of burnout. Exhaustion refers to feelings of being overextended and depleted of one's emotional and physical resources[33]. The second component is cynicism or depersonalization. Maslach et al. 2007, cynicism is defined as a negative hostile or excessively detached response to the job [33]. The third component of burnout is inefficiency. Inefficiency refers to a decline in feelings of competence and productivity at work [33]. The word burnout first appeared in 1974 [32] in a study by Herbert J. Freudenberger about staff burnout in clinics [14]. Since then, many studies have been conducted regarding burnout in other industries as well.

The World Health Organization (WHO) recognizes burnout and classifies it as an occupational phenomenon and not a medical condition. [63]. This is in line with Maslach's et al. and their three components of burnout [32]. Despite this, research has shown that there are physical consequences of burnout that include cardiovascular disorders, insomnia, and chronic fatigue, among others [12]. There are psychological consequences to burnout as well that include anxiety, depression, and low self-esteem [12]. The consequences of burnout are seen not only on the personal level, but also on the organizational level. Burnout has been shown to have a "contagion effect" generating a bad work environment, which can lead to significant economic impact as a consequence of absenteeism and loss of efficiency [12].

2.2 Burnout and Software Engineering

There are approximately 19.6 million software engineers according to a survey conducted by JetBrains in 2024 [24]. This is an increase from 14.1 million developers in 2019 [24]. This shows us that the number of developers has been increasing exponentially in recent years. In JetBrains' "the State of Developer Ecosystem 2023" survey, 73% of 26,348 respondents said that they experience burnout [23].

Software engineers are exposed to unique stressors in the workplace. The growth in popularity of project management practices such as Scrum and Agile in software engineering [10] has led to an

increase in deadlines and pressure in the workplace [35]. Furthermore, there has been a rapid increase in remote work due to the Covid-19 pandemic, which had led to a rise of loneliness[3]. Thus, due to the ever growing pool of software engineers and the negative impact that burnout can have on them and the organization, it is valuable to study the causes of burnout in software engineers.

2.3 Burnout categorization

Many methods or the classification of burnout have already been described in the literature [6]. One such model that aims to map stressors in the workplace is the JD-R model [2], it talks about job demands and job resources, our research mainly analyzes possible job demands which could lead to stress or burnout. We will use this model as a baseline for comparison due to its presence in the literature[15, 16, 20]. Another one of such models is Karasek's Job Strain model which talks about job demands as opposed to the job decision latitude[27]. Job demands in this context are defined by the difficulty and time workload of a given set of tasks, while job decision latitude takes skills and decision authority into account. The EffortReward Imbalance models takes another stance in regard to burnout[52]. In this model, the effort needed for a job is opposed to the reward given for the corresponding work. The model suggests that if this is not well balanced it may lead to undesired effects.

3 Methodology

This section elaborates on our methodology while performing the literature review and aims to clarify the classification process.

3.1 Research questions

With this paper, we aim to answer the following research questions to allow for improved decision making in regards to company policies on mental health.

- **RQ1:** What categories exist in the causes of developer burnout?
We aim to answer this research question through the construction of taxonomy of burnout causes which can be used to identify categories in a hierarchical manner.
- **RQ2:** Which reasons for developer burnout are most commonly researched?
This research question may be answered by identifying the burnout causes touched upon by different research papers and addressing the most commonly talked about categories.

3.2 Literature search

This literature review was performed according to the methodology specified by Kitchenham et al [28]. What follows is an outline of our search process.

To ensure exhaustive analysis of relevant papers, SCOPUS and Web of Science were queried as two of the largest online libraries of scientific papers. These databases were queried according to the following statement:

Search Query

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(software OR technology OR open-source)
AND
(developer OR engineer OR team)
AND
(burnout)
AND NOT
(steel OR material OR metal OR athlete OR concrete
OR cancer OR coal OR caregivers)
```

This query was used to gather papers from both databases on 12-03-2025 with the following additional filters:

- Published between 2001-2025
- Peer-reviewed
- English

Resulting in 192 papers on SCOPUS and 191 papers on Web of Science. After de-duplication through Zotero, 294 papers remained.

At least one author manually checked the paper for their relevance to the topic. If there was a doubt regarding the inclusion of the paper, it was discussed with the other authors until it reached a consensus. This process resulted in 42 total papers which were used to construct the taxonomy of burnout causes.

3.3 Categorization

A taxonomy is an organization of units, in our case we are constructing a hierarchical taxonomy to create broad categories of burnout causes. The taxonomy was created gradually in several rounds of discussion. The first round of discussion occurred after the authors each read 2 papers from the literature search to identify common factors and generate an initial taxonomy to build upon. After identifying all stated causes of burnout in the literature the authors re-discussed the causes and categorized them to modify the taxonomy. A consensus has to be reached by all authors to create, merge, or delete nodes in the taxonomy.

After this process, all papers were scanned again by another author to verify whether the taxonomy was able to sensibly categorize all mentioned causes of burnout. Final adjustments were made to the taxonomy to conform to any adjustments which needed to be made.

3.4 Classification

Following the creation of a taxonomy, all identified causes of burnout were classified under the taxonomy. These causes were discussed individually until a consensus was reached on their classification within the taxonomy. This was repeated until all causes had been classified. The resulting taxonomy and all steps in-between were published in an online appendix[4].

4 Results

4.1 Taxonomy compared to existing literature

The root division chosen was to split causes into either internal or external causes. Internal causes have to do with the feelings and perceptions of a developer as well as with their personality traits. External has to do with all external stressors, these include

Burnout									
Internal				External					
Personality		Well-being		Organizational				Interpersonal	
Traits	Planning	Mental Health	Professional	Uncertainty		Job Culture	Workload		Situational
		Awareness		Task	Role	Job	Time	Cognitive	Harassment

Table 1: Taxonomy of burnout causes in software developers.

workload and communication with others. This root division is common in literature across multiple fields[31][38][19].

4.1.1 Internal Internal is split up into the personality and well-being. Well-being is categorized as having to do with the current headspace and feelings of the developer. Personality is categorized as having to do with inherent traits of the developer.

Personality Personality was chosen to be split into planning, and personality traits. Planning has to do with either bad-prioritization in the developers personal life, as well as difficulties splitting personal and professional time. Personality traits are classified as all other traits inherent to a person, such as neuroticism and attitude. This choice was made due to a clear split in time-related causes and other causes.

Well-being Well-being is split into mental health and professional. Professional has to do with the current feelings a developer has with regards to their current job and their career. Mental health consists of both mental health conditions such as anxiety and depression, as well as other personal feelings like stress and loneliness. **Mental health** Mental health has a single subcategory called awareness. This has to do with being aware of one's mental state and how much they can cope.

4.1.2 External External was split into organizational and interpersonal. This split was made due to there being a large difference between interactions of people, and how the workplace is organized.

Organizational Organizational is split into uncertainty, culture and workload. We noticed during the brainstorming session that a lot of the reasons for burnout had to do with uncertainty. With discrepancies between expectations, unclear tasks and unclear job descriptions being examples of these causes. Thus the choice was made to create an uncertainty category. Another trend we noticed was that a large portion of causes was due to the demands of the job. This prompted the choice to create a category for workload related causes. Lastly there is a category called job culture. This has to do with how the company is being ran, with causes spanning from injustice to a lack of mental health information in the organization. **Uncertainty** Uncertainty is further divided into task, role and job uncertainty. Task uncertainty has to do with any uncertainty regarding specific tasks such as poor goal quality and unclear task characteristics. Role uncertainty has to do with the role of the developer being unclear leading to burnout. Examples here are role ambiguity as well as role overload. Job uncertainty has to do with job security.

Workload Workload is then further divided into time load and cognitive load. Time load is defined as causes which have to do

with there being too much work, while cognitive load has to do with the work being too hard.

Interpersonal Interpersonal is split into harassment and situational. This choice was made due to there being a difference between interactions which are meant to be harmful, and interactions which are not necessarily aimed to be harmful but still have a negative effect.

4.2 Classified Causes

We have identified burnout causes which were mentioned in the literature, the full table is available in appendix A and our online appendix[4]. The categories which contain the most causes are displayed in Table 2, the most common categories were mental well-being, organizational uncertainty and organizational workload.

In addition, we analyzed the most frequently occurring causes in the literature, Table 3 contains the relevant results.

4.3 Demographics of studies

Furthermore, we analyzed the demographics of all studies that reported the nationality of their participants. The demographic breakdown can be seen in table 4. Most of the respondents were from India, with 6 papers using solely Indian developers. 5 papers had participants from North-America with 2 containing only participants from the United States, 1 containing only Canadian developers and 2 containing a mix of North-American participants. There were 4 studies with participants spanning more than 1 continent. However, most of these participants were from one of the other regions mentioned in this table.

5 Discussion

5.1 Research Questions

Our research aimed to address three key research questions surrounding the causes and characteristics of burnout in software engineering roles.

RQ1: What categories exist in the causes of developer burnout? In our taxonomy, we identified two main branches of burnout causes: internal and external. Internal causes stem from within the individual, such as personal mental health, personality traits, and professional dissatisfaction. External causes are derived from the workplace environment or interactions with others, such as organizational culture, workload, or interpersonal issues. These categories provide a comprehensive framework for understanding burnout from multiple angles, reflecting both individual and systemic contributors.

RQ2: Which reasons for developer burnout are most commonly researched? The most frequently studied categories across

Mental Health	Uncertainty	Workload
Loneliness [62]	Unpredictability [48]	Job demand [42][11][46][53]
Anxiety [58]	Task identity [8]	Understaffing [51]
Depression [58]	Task characteristics [8]	Low job resources [46][53]
Imposter syndrome [58][18][11][17]	Poor goal clarity [30]	Unbalanced workload [1]
Subjective wellbeing [16][17]	Disparity between expectations [11]	Job crafting [20]
Lack of belonging [60][61]	Reduced supervision [11]	Time pressure [48][46][17]
Feeling insignificant [11]	Unclear rewards [11]	Haste [30]
Emotional fatigue [46]	Expectation of individual not met [11]	Deadlines [1][53]
Stress [43][56]	Inflated job expectation [11]	Irregular shifts [53]
Low coping skill [29]	Job rotation intensity [8][49]	Tech fatigue [62]
Mental health literacy [58]	Role ambiguity [8][53]	Difficult tasks [30]
	Role overload [30]	Information anxiety [37]
	Job insecurity [11]	Techno stress [11]
		Strain [11]
		Pressure [1][45]
		Computer self-efficacy [43]
		Chronic job stressors [53]
		Mundane Task [17]

Table 2: Burnout categories with most mentioned burnout causes

Cause	Category	Papers
Job demands	Organizational Workload	Pinto et al. [42] Dudkovskaia et al. [11] Rietze et al.[46] Singh et al.[53]
Imposter syndrome	Mental health	Takaoka et al. [58] Guenes et al. [18] Dudovskaia et al. [11] Graziotin et al. [17]
Work Satisfaction	Professional	Trinkenreich et al.[61] Pillai et al.[41] Jiang et al.[25] Graziotin et al.[17]
Time Pressure	Workload Time	Romano et al.[48] Rietze et al.[46] Graziotin et al.[17]
Lack of Autonomy	Organizational Culture	Massoni et al.[34] Rietze et al.[46] Augner et al.[1]
Work Engagement	Wellbeing Professional	Garg et al.[16] Gupta et al.[20] Graziotin et al.[17]
Difficulty detaching	Personality Planning	Romano et al.[48] Dudkovskaia et al.[11] Singh et al.[53]

Table 3: Most frequent burnout causes in literature

Region of interest	Number of papers
India	6
World wide	4
North America	2
United States of America	2
Taiwan	2
Brazil	2
Italy	1
Malta	1
Canada	1

Table 4: Regions of study among papers

the analyzed literature were workload (especially time-related overload), organizational uncertainty, and mental well-being as can be seen in Table 2. Papers repeatedly highlighted long hours, unclear expectations, and lack of support as significant contributors

to burnout. Mental health awareness, or lack thereof, also appeared frequently, signaling a growing recognition of its importance in the software engineering domain. The most frequently occurring causes are listed in Table 3.

5.2 Taxonomy compared to burnout models

Our findings highlight four second-level categories for the causes of burnout, namely:

- Personality
- Well-being
- Organizational
- Interpersonal

According to the JD-R model, many of these categories would be a part of the job-demands category, especially the external categories. Notably, many of the reasons that are defined under the personality and circumstances categories are less intuitively classified under this definition. This is due to the nature of the JD-R model as a model for job-related stressors. Previous research has already identified the gaps in the model to classify causes of burnout related to mental health, for example[50]. Recent research has proposed

additions to the JD-R model, which takes these types of stressors into account.

According to the Job Strain model, many of these categories fall under the Job demands section of the model. Interestingly, some categories can be used to define insufficiency in relation to job decision latitude, such as time workload, uncertainty, and organizational culture. Major categories in our taxonomy that are not available in the Job Strain Model are again related to Well-Being. A point that is addressed in the Job Strain model but is not available in our taxonomy is related to autonomy. The Job Strain Model mentions how autonomous decision making can have a significant positive effect which might mean that the opposite could have a negative impact on well-being. It could also be the case that problems related to autonomous decision-making are less prevalent in engineering occupations.

The Effort/Reward Imbalance model defines burnout effects as a result of an imbalance between effort and rewards. This model has limited overlap with our taxonomy due to the nature of our review being on causes of burnout and not its mitigation. In regards to Effort, we define multiple categories such as Workload and Organizational Culture. Our taxonomy expands on this part of the model by including Well-Being, Personality and Interpersonal conflicts. We do not talk about the Reward aspect however and there is much value to be gained by combining a taxonomy of stressors with an analysis of mitigation methods, either through ample rewards or by reducing stressors.

5.3 Causes

5.3.1 Uncertainty In the literature, uncertainty is one of the main contributing factors that lead to burnout. Uncertainty in this case refers to the lack of understanding and clarity with regard to their job.

There are many interconnected factors that cause uncertainty. These can be largely divided into three categories, namely task uncertainty, role uncertainty, and job uncertainty. The first type of uncertainty we see in the literature is task uncertainty, task uncertainty. Task uncertainty can arise when there is unclear clarity of goals in the context of team planning [30]. Moreover, if the identity of the task and the characteristics of the task are not well defined, it could lead to a feeling of uncertainty [7]. Da Silva et al. have also found that job rotation, which in this case has been defined as increasing task variety, increases job burnout [7]. The next type of uncertainty in the literature is role uncertainty. Role uncertainty can arise when there is role ambiguity, which is caused by confusion in an employee's job responsibilities [53]. Role uncertainty can arise when there is inflated job expectations and disparity between expectations [11]. Role overload is another factor could also further exacerbate role uncertainty when demand exceeds capacity [30]. Furthermore, the third cause of uncertainty is job turnover which could also be described as a lack of job security which could lead to an unstable and thus uncertain environment [11].

In spite of the numerous mentions of uncertainty in the burnout literature, there is no work that studies focuses on the link between uncertainty and burnout.

5.3.2 Mental Health There are extensive connections made between mental health and burnout in the literature. In today's job

environment, remote working is on the rise. This may lead to feelings of loneliness which can cause job burnout [62]. Furthermore, anxiety and depression are also contributing factors to burnout [57]. Moreover, impostor syndrome, which has been defined as the undervaluing of skills or achievements by high performing individuals, also contributes to burnout [57] [18]. Social dynamics such as feeling insignificant [11] and a lack of sense of belonging [60][61] as contributing to burnout. Stress is another factor that leads to burnout [43] along with emotional fatigue [46].

Despite the numerous mentions of the link between mental health and burnout in the literature, it can be noted that there is little mention of mental health literacy in burnout literature. Jorm et al introduced the term 'mental health literacy' and have defined it as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" [26]. A lack of mental health literacy has been linked to burnout in employees [57]. This is further backed by Kurien et al. [29] where they make a connection between low coping skills and burnout.

5.3.3 Planning Planning-related issues have emerged as a noteworthy but less explored contributor to developer burnout. Poor planning skills can manifest in several ways, such as difficulty prioritizing tasks [62], struggling with time management, or being unable to effectively separate professional and personal responsibilities [53]. Several studies mention that developers often find it hard to establish clear work-life boundaries, especially in remote or flexible work environments [41]. This lack of separation can result in overcommitment, leading to reduced downtime, increased stress, and ultimately burnout. Moreover, difficulty with task-switching or maintaining focus due to unstructured workflows can further exacerbate emotional exhaustion.

Despite its apparent relevance, planning as a root cause is rarely examined in isolation in the literature. Most often, it's mentioned tangentially in the context of work-life balance or emotional fatigue.

5.3.4 Neurodiversity An important topic in the literature on software engineering burnout is neurodiversity, which refers to the natural variation in human brain function and behavioral traits, including conditions such as Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), dyslexia, and others [54]. Despite growing recognition of the strengths and challenges associated with neurodivergent individuals in the workplace, our literature review found that burnout literature rarely addresses neurodivergence as a factor.

Menezes et al [9] have documented some of the challenges neurodivergent people face in their daily lives as well as various strategies and methods these people employ in their day-to-day work in the software development industry. Furthermore, Tomczak and Kulikowski [59] investigated how job demands from the JD-R model can affect people diagnosed with autism, while they also linked some job resources which can help mitigate burnout.

There is a pressing need for further research in this given that neuro-divergent people can experience job demands and resources in different ways compared to neuro-typical people. Moreover, only researching neuro-typical people can result in organizational structures which are not suitable for neuro-divergent people.

5.4 Threats to validity

In this paper we have tried to mitigate as many threats to validity as possible. Listed below are the most important threats which could not be fully mitigated.

5.4.1 Internal An important limitation of our study is that we are 4 engineering students without a medical or psychological background. This could potentially lead to us misclassifying causes to categories. To solidify the findings, they should be reviewed with others, potentially people with a psychological study background. After this we would do a last revision round of the taxonomy incorporating the external specialists feedback. We did not do this due to time constraints.

Furthermore, we did not have access to all papers. This was specifically prevalent in papers from the medical and psychology fields. Without including all papers on the topic, there is a chance that certain causes are missed. Furthermore with regards to the second research question, the frequency might be skewed due to the missing papers.

In this study the choice was made to include papers which did not specifically target software developers, but targeted either STEM professionals or engineers in general. This choice was made as upon discussion we felt these papers offered perspectives which were also applicable to software engineering. However, whether these causes are also prevalent among software engineers needs to be verified to solidify the robustness of the taxonomy.

5.4.2 External Some demographics were overrepresented compared to others. From the papers that listed their demographics, most of the developers were from India or North-America as can be seen in 4. It is worth noting that there were no participants from Africa in any of the studies. There is a cross-national difference in leading causes of burnout [40]. Seeing as the nationalities encountered during our systematic literature review is limited, this raises question regarding the generalizability. Thus, while this taxonomy provides a solid foundation for studying the causes of burnout in software developers, it needs to be verified on a more broad demographic.

5.5 Implications

The results presented in this study have several key implications for future research as well as organizational practice in the field of software engineering.

Foundation for future research The taxonomy of burnout causes presented in this paper offers a template which future research can utilize to further explore burnout in a more systematic and replicable way[4]. Researchers can use our findings to either guide their studies or they can use it as a baseline to compare with and validate their results. In addition, the clear distinction between internal and external causes presents opportunities for a collaboration between the field of software engineering and psychology.

Organizational structure One of the main causes of burnout identified in our review was organizational uncertainty. We have identified several different causes, helping organizations understand the multiple aspects of burnout. Recognizing that causes can stem from both the individual (internal) as well as the environment around

them (external) can help organizations improve towards mitigating burnout in their employees. Moreover, research can be performed to devise how much each factor can contribute to the burnout of developers.

Overlooked burnout causes Our research has shown that famous frameworks such as the JD-R model often overlook causes related to mental health. This suggests that more research is needed in order to relate such models with people's personalities and mental health. As a consequence, there is an underrepresentation of causes like neuro-divergency and mental health literacy in the literature.

5.6 Future Work

5.6.1 Linking Causes to solutions We have identified many burnout causes in the literature. A logical next step would be to link these causes to mitigation and coping strategies to aid in burnout prevention.

5.6.2 Research regarding sparse areas in the taxonomy The resulting taxonomy has some nodes like Mental Health Awareness which are underrepresented in the literature. Future research into the effect of mental health awareness on burnout would be interesting.

5.6.3 Neuro-divergence Future work can explore:

- (1) How specific neuro-divergent conditions influence the perception and experience of job demands.
- (2) The role of inclusive organizational practices and accommodations in mitigating burnout.
- (3) Whether current burnout models and taxonomies sufficiently reflect neurodivergent experiences or require expansion.

6 Conclusion

To conclude, we have conducted a systematic literature review on the causes of burnout in software engineers. This systematic literature review has led to a taxonomy that categories the causes into 2 major sub-groups i.e. internal factors and external factors. We were also able to further drill down on the internal and external causes of burnout. We found that internal burnout causes can be further divided into personality causes and well being. In addition, the external causes could be further grouped into organizational and interpersonal causes.

Furthermore, the taxonomy reveals gaps in the literature with regards to burnout in software engineers. The first gap we have identified is the lack of research in the affect that uncertainty has on the burnout of software engineers. We have also found that there is a lack of research on the mental health literacy of software engineers and it's impact on burnout. In addition to the above, we found that burnout frameworks such as the JD-R model often overlook some causes of burnout. More research is required in these areas.

Ultimately, software engineers constitutes a large part of the modern workforce. Understanding the causes and impact of burnout would allow organizations and software engineers themselves to understand maintain productive and keep healthy. Through our systematic literature review, we provide a solid base for further research in the causes of burnout in the field of software engineering.

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A Full classification

The full classification[4]

Personality-Planning	Personality-Traits	Wellbeing-Mental Health	Wellbeing-Mental Health-Awareness	Wellbeing-Professional
No personal time [62]	Low empathy [5]	Loneliness [62]	Low coping skill [29]	Work engagement [16, 17, 20]
Bad prioritization [62]	Cognitive inflexibility [29]	Anxiety [58]	Mental health literacy [58]	Intrinsic motivation [43]
Difficulty detaching [11, 48, 53]	Attitude [62]	Depression [58]		Work satisfaction [17, 25, 41, 61]
	Introversion [55]	Imposter syndrome [11, 17, 18, 58]		
	Neuroticity[36, 55]	Subjective wellbeing [16, 17]		
		Lack of belonging [60, 61]		
		Feeling insignificant [11]		
		Emotional fatigue [47]		
		Stress [43, 56]		

Table 5: Categorization of Internal categories

Organizational	Organisational-Uncertainty	Organisational-Uncertainty-Task	Organisational-Uncertainty-Role	Organisational-Uncertainty-Job
Technical debt [13]	Unpredictability [48]	Task identity [8]	Job rotation intensity [8, 49]	Job insecurity [11]
Long-term Remote work [41]		Task characteristics [8]	Role ambiguity [8, 53]	
		Poor goal clarity [30]	Role overload [30]	
		Disparity between expectations [11]		
		Reduced supervision [11]		
		Unclear rewards [11]		
		Expectation of individual not met [11]		
		Inflated job expectation [11]		
Organizational-Workload	Organizational-Workload-Time	Organizational-Workload-Cognitive	Organizational-Culture	
Job demand [11, 42, 46, 53]	Time pressure [17, 46, 48]	Tech fatigue [62]	Lack of mental health info in organization [62]	Team vs Company culture [62]
Understaffing [46]	Haste [30]	Difficult tasks [30]	Lack of autonomy [1, 34, 46]	
Low job resources [46, 53]	Deadlines [46, 53]	Information anxiety [37]	Inadequate organizational support [11]	
Unbalanced workload [1]	Irregular shifts [53]	Techno stress [11]	Procedural injustice [11]	
Job crafting [20]		Strain [11]	Past achievements [11]	
		Pressure [1, 45]	Power struggle [11]	
		Computer self-efficacy [43]	Perceived lack of comparable pay [45]	
		Chronic job stressors [53]	Generative organizational culture [61]	
		Mundane task [17]	Limitation on development [17]	

Table 6: Organizational Factors Affecting Burnout

Interpersonal	Interpersonal-Harassment	Interpersonal-Situational
Interpersonal relations [11]	Toxicity GitHub issues [44]	Isolation [29]
	Conflicts with coworkers [11]	Interacting with coworkers [48]
	Toxicity issues [39]	Lack of respect and acceptance from colleagues [21, 22]
		Group conflicts [53]
		Interacting with clients [53]
		Communication challenges [11]
		Mental well-being apps lack social interaction [62]
		Under-performing colleague [17]

Table 7: Interpersonal Factors Affecting Burnout