An Analytical Study on Association between Job Satisfaction, Burnout, Work-Related Stress and Work Environment among IT Sector Employees

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Abstract

Purpose: The present study examined the association between job satisfaction, workplace stress, burnout, and work environment for IT workers in a private IT company in Maharashtra.

Research Methodology: This was a cross-sectional studyinwhich 1080male and female IT employeesin Maharashtra state were invited to participate. Researchers sent invitations via both traditional and online modes. The response rate of 84.35% means 911 professionals were ready to participate in the survey. However, only 889 filled-out questionnaires were found appropriate for the analysis.Substantial correlations between the variables were found using MLR (multiple linear regression) analysis.

Findings: The results of this survey indicate that professionals employed by private firms were most satisfied with the management support they received, which enabled them to fulfil their duties. This survey revealed that the three areas in which IT professionals were most satisfied were autonomy, professional connections, and professional standing. Further findings from the study showed a substantial correlation between improved job satisfaction and a higher-quality work environment.

Practical implications: The study's findings are crucial for policymakers as they formulate plans for the well-being of workers and their families.This is essential for developing interventions and strategies to enhance outcomes, even though it is more pertinent in developing settings.

Originality/value: In order to develop policies that prioritize the health of IT employees, the Indian government, and IT organisations should take note of this study.

Keywords: Burnout; Work-placed stress; Work-Life Balance; Job satisfaction; IT Professionals.

Introduction

The ever-evolving nature of the IT industry, characterized by relentless technological advancements and tight deadlines, often leaves professionals struggling with the demanding task of achieving work-life balance. This precarious equilibrium requires achieving a complex goal where professional demands compete with personal well-being. While IT professionals serve to ensure the seamless operation of critical systems, data flow, and continuous innovation, the burden of this responsibility can exact a significant toll on their personal lives (Pandu, Balu, & Poorani, 2013; Banu, 2014; Goswami, 2014). Burnout is a condition characterized by physical and psychological exhaustion, which iscaused by long-term exposure to a physically and mentally demanding work environment (Cooper et al., 2001; Aiken et al., 2002; Kalliath et al., 2002; Piko, 2006). Individuals employed within the information technology (IT) sector are subject to undue pressure to deliver services efficiently and cost-effectively. This demand presents significant stress, potentially contributing to the development, exacerbation, or persistence of various health issues(Padma et al., 2015). Stress in the workplace is associated with physical and psychological health outcomes, job satisfaction, and even burnout.

For IT professionals, the path toward burnout can be paved by a multitude of stressors. Inadequate supervision, interpersonal conflicts with colleagues demanding clients and mandatory or excessive overtime pushes individuals towards the emotional exhaustion that defines burnout (Panda, 2019; Singh, 2019; Fey et al., 2022). Peer coaching promotes proactive work and well-being among employees at a self-managing digital engineering business in Finland. Organizational Dynamics, 51(3), 100864). The Maslach burnout inventory model (MBIM) states that emotions of emotional tiredness, social alienation, and a sense of personal success can result from prolonged exposure to both internal and external pressures (Maslach, Jackson & Leiter, 1997)

Low job satisfaction has also been linked to work-related stress, which can be caused by issues with staffing, such as a labor shortage, or increased workloads (Piko, 2003; Malinauskien et al., 2009; Graham et al., 2011). In India, a high level of burnout has been found in IT professionals working in different IT or non-IT organisations (Liu& Chou, 2006; Maier, Laumer & Eckhardt, (2015). Research on the thorough diagnosis of burnout amongIT professionals is needed. Based onthe above discussion, researchers have tried to assess the determinants of burnout in IT professionals such as job satisfaction, work-related stress, work environment, etc..

Literature Review: The IT profession can lead to burnout due to the demanding nature of the day-to-day work and the high level of stress that comes with it (Pawlowski, et al., 2007). While being an IT professional is one of the top jobs in society it also comes with a heavy burden that can lead to burnout. Burnout is a condition of extreme mental, emotional, and physical tiredness brought on by prolonged involvement in stressful situations (Pines & Aronson, 1988; Koutsimani et al., 2019). It is crucial to distinguish between burnout and workplace stress since burnout is not necessarily the result of stress; stress may also result in depression, boredom, and tiredness. External factors that contribute to anIT worker's life satisfaction and risk of burnout include time constraints, a high workload, a difficult working environment, emotional stress, and difficult working relationships with colleagues. Numerous studies have found that the most frequent physical effects of work-related burnout include depression, sleeplessness, antidepressant and psychotropic medication usage, hospitalization for mental illness, and psychologically depressive symptoms.

On the other hand, professional consequences include expectations of work, job resources, job demands, job unhappiness, and absenteeism (Demerouti etal., 2000; Salvagioni et al., 2017).It's important to realize that low work satisfaction and burnout are linked to several health issues (Hobfoll, 2004). Although there hasn't been much research on this issue, there seems to be an adverse relationship between burnout and work stress. It has been demonstrated in the past that social neglect, a lack of coping

strategies, and unpleasant emotions including somatization, exhaustion, and weariness are the main causes of burnout and their negative effects on health (Hobfoll, 2001; Gorgievski &Hobfoll, 2008).It is essential to understandthe connections between work issues and burnout, the working environment, job satisfaction, and the overall health of employees, particularly in developing countries, as manystudies examining these relationships have been observed in developed settings (Uddin, Ali, & Khan, 2020). Furthermore, due to the inherently stressful work environment, burnout among IT workers in developing countries is reported to be greater than in other countries (Alpar, 2020). Job effectiveness, employee deterioration, and turnover rates are all significantly impacted by this (Lo, 2015; Tulili, Capiluppi& Rastogi, 2023).

Research Gap: Drawing on the existing studies, it was determined that only a few studies had been conducted to evaluate the reason for burnout among IT professionals, especially in India. Research on the thorough diagnosis of burnout amongIT employees is still needed. To bridge this gap, the present study seeks to assess the determinants of burnout in them, such as job satisfaction, work-related stress, work environment, etc. working in private organisations in the state of Maharashtra, India.

Objective of Study: The current study examined the relationships between IT employees from a privateorganisation in the Indian state of Maharashtra and workplace stress (job difficulties), burnout, and job satisfaction.

Research Methodology

Research Design: In addition to measuring job satisfaction and the work environment, this cross-sectional study assessed employees' levels of burnout and stress connected to their jobs.The data was examined using IBM-SPSS Statistics Version 20, which utilizes descriptive statistical analysis (DSA) to determine frequencies. To identify meaningful correlations between variables, multiple linear regression analyses were employed.

Research Participants (Demographic Profile): For this cross-sectional study, 1080 male and female IT employees were invited to participate from ten IT companiesin Maharashtra, India.The researchers sent invitations both offline and online. Data was collected from October2022 to March2023 through the convenience sampling method. Participants were given appropriate time and assistance to increase the response rate. The response rate of 84.35% means 911 employees were ready to participate in the survey. However, only 889 filled-out questionnaires were found appropriate for the analysis. The researchers got prior authorization from the companies' administration before beginning data collection. This study included participants between the ages of 25-60 years (mean age 42.5 years) who have worked more than one year in the same company.Amongthe participants, females were (80%) and the remaining were males. The majority of participants were between25-50 years old (70%). At the education level, 75% of participants helddiplomas or certificateswhereas only 25% had a bachelor's degree. Furthermore, just 32% of participants had been employed for over 20 years. A typical participant's weekly workload was between 35 and 45 hours.

Research Instruments: Different variables were measured using standardized scales published in previous studies as follows:

Job Satisfaction (JS): The Job Descriptive Index (JDI) was used to measure employee satisfaction. This scale measures how satisfied an employee is with a variety of areas of their work, including the actual task, supervision, compensation, prospects for advancement, and coworkers. It has been used in studies involving IT professionals (Nanjamari, 2013; Nhung & Linh, 2021).

Job-stress scale: The present study measured the participants' work-related stress using the Job-Stress scale, which was created by Shukla & Srivastava (2016). The 27 questions on the scale were divided into five categories: "Time" (8 items), "Anxiety" (5 items), "Role expectation conflict" (5 items), "Coworker Support" (4 items), and "Work life balance" (4 items). The categories included stress resulting from different reasons.

Burnout: An employee's perception of their job is evaluated in terms of three primary dimensions by the Maslach Burnout Inventory (MBI) (Maslach, Jackson & Leiter, 1997), which was included in the part of the online survey that measured emotional exhaustion (i.e., the feeling that one is weak mentally and emotionally drained by the job itself); i.e., a cold, disconnected behavior toward clients) as well as personal accomplishment (that is., the feeling of becoming proficient and fortunate in a specific area of work). When personal accomplishment exceeds 40 and emotional weariness exceeds 10, depersonalization scores more than 28 indicate a significant level of burnout.

Data Analysis andInterpretation:

In this study, the respondents reported high degrees of burnout (see Table 1). The majority of them (83%, n = 738) reported high levels of emotional tiredness, and 78%, n = 693, reported high raised depersonalization levels; just 39%, n = 346, reported high levels of personal success.

Table 1:Participants Response Frequency to Burnout Scale (Entire Sample, N=889)

Burnout sub-scale	Low	Moderate	High
EE (Emotional Exhaustion)	2%	15%	83%
DP (Depersonalization)	2.5%	19.5%	78%
PA (Personal Accomplishment)	35%	26%	39%

Source: Author's calculation

Work-related stress (staff issues) &burnout: According to multiple linear regression, the most common factors that contribute to work-related stress (job issues) are best linked to different parameters of staff burnout. All models ranged from 0 to 100% (p< 0.05). Responses from participants were examined on depersonalization (low motivation among coworkers), finishing deadlines (personal success), emotional tiredness, and other aspects of burnout.Emotional exhaustion is the most common issue among employees (highest variance,14%), followed by depersonalization (variance, 11%) and personal success (variance, 9%) after controlling for some demographic variables (See Table 2).

Table 2: Colleagues-related issues& burnout

Variables	Dimensions	B	SE B		t-Statistic	Description
Emotional Exhaustion	Personnel Management	0.30	.05	.29	7.39 *	$R^2 = 0.14$, F (9, 849) = 17.69 (* $p < 0.05$)
	Inadequate & Poor Equipment	0.13	.05	.13	3.06 *	
Depersonalization	Personnel Management	0.18	.04	.19	4.89 *	$R^2 = 0.1\ 1$, F (9, 849) = 12.99 (* $p <0.05$)
	Stock Control	0.10	.05	.12	2.79 *	
	Poorly Motivated Coworkers	0.10	.05	.11	2.29 *	
Personal Accomplishment	Personnel Management	- 0.13	.05	- 0.16	- 3.79 *	$R^2 = 0.09$, F (9, 849) = 10.69 (* $p < 0.05$)
	Adhering to Budget	- 0.20	.04	- 0.20	- 5.39 *	
	Meeting Deadlines	- 0.08	.05	- 0.10	- 1.99 *	

Source: Author's calculation

Descriptive statistics (Job satisfaction, work-life balance & burnout):

Table 3 provides descriptive statistical data as well as reliability and validity measurements for respondents'burnout, work environments,& job satisfaction. The mean values of all these variables areabove average. Based on the Workplace Performance Index (B-PEM) ratings, they found that management support was the best aspect of the workplace overall, scoring a M= 3.69 (SD= 0.71).The Job satisfaction (JS score) was also really high (mean values of all variables of JS are more than average) meaning rated themselves as happy with their job in all areas, but they rated themselves as least happywith their pay (M=3.49,

SD=1.10).According to the MBI Score, all of the sub-scores demonstrated significant levels of self-depersonalization (M=12.91, SD=6.49), low levels of personal success (M=38.89, SD= 7.35), and high levels of emotional weariness (M=29.61, SD=11.91) in comparison to the normal (Stamps 1998).The degree of correlation between variables is determined by AVE, CR, and Cronbach's alpha. All of these indicators were found to be in line with what's recommended.AVE (average variance extracted) is greater than the recommended value, i.e., 0.5 (Ruvio, Shoham, &Bren i , 2008).According to Fornell et al. (1981), a sample's composite reliability is typically greater than 0.7, and its Cronbach's alpha should also be greater than 0.7.

Table 3: Descriptive statistics (Job satisfaction, work environment & burnout)

Dimensions	Scale of Dimensions	Descriptive Range, Validity & Reliability Measures					
		Mean	SD	SLF	CA	CR	AVE
Job-Stress scale (JS)	Time Anxiety Role expectation conflict Coworker Support Work-life Balance	3.49 3.71 5.41 4.91 4.11	1.10 1.09 0.91 1.01 1.11	.849 .869 .851 .849 .869	.819	.888	.728
Burnout	Emotional Exhaustion Depersonalization Personal Accomplishment	29.61 12.91 38.89	11.91 6.49 7.35	.808 .799 .872	.788	.866	.698

Sources: Authors' Own calculation

Where, * Standard Deviation, * Standardized Factor Loading, * Composite Reliability, * CA, * Average Variance Extracted having low levels of personal success, depersonalization, and extreme emotional tiredness are the hallmarks of burnout. According to Maslach, 1997 (MBI scores), burnout is indicated by low levels of emotional exhaustion (low   16; average 17–27; high   28), depersonalization (low   5; average 6–9; high   10), and personal achievements (low   40; average 39–34; high   33).

Co-relation among variables:The association among work environment (WE), satisfaction with work (JS), stress connected to the job (job problems), and burnout is displayed in Table 4. Job satisfaction and work environment quality were substantially associated (r=.71; p < 0.01). Lower levels of workplace stress have been associated with a smaller work environment (r=-0.39; p<0.01). Higher levels of emotional exhaustion were negatively correlated with overall work satisfaction (r=-0.59; p<0.01). Similarly, a higher level of work-related challenges (stress) is correlated negatively (r=-0.53; p<0.01) with total job satisfaction.

Table 4: Co-relations among job satisfaction (JS), work environment (WE)& burnout

	Job satisfaction	Staff-related issues	Emotional exhaustion	Personal accomplishment	Depersonalization
Job satisfaction	1				
work-related issues (stress)	_0.53*	1			
Emotional exhaustion	_0.59*	0.49*	1		
Personal accomplishment	0.31*	_0.19*	_0.19*	1	
Depersonalization	_0.29*	0.36*	0.51*	_0.15*	1

Sources: Author's Own calculation
* 2-tailed analysis: correlation is statistically significant at p < 0.01

Conclusion: This study looked at the relationship between burnout risk and the standard of employment, satisfaction with work, and stress levels amongIT workers working in private IT companies in Maharashtra, India. According to a study, an encouraging work practice environment is critical for both work satisfaction and retention (Farooq et al., 2022). According to the study's findings, professionals employed by private companies expressed the highest levels of satisfaction with the managerial assistance that allowed them to carry out their responsibilities. Previous studies have shown that management assistance can working environments (Brokalaki et al., 2001).According to this survey, the things that IT professionals were most satisfied with were their autonomy, professional relationships, and prestige as a profession. The study also discovered a strong link between improved work environments and better levels of job satisfaction. Lower levels of workplace stress correlated with a less stressful workplace. The total level of satisfaction with work was inversely linked (r=-0.59; p<0.01) with higher degrees of emotional tiredness. Similarly, a higher level of work-related challenges (stress) and overall job satisfaction are negatively correlated (r=-0.53; p<0.01). The study also observed that emotional exhaustion is the most common issue among employees (highest variance,14%), followed by depersonalization (variance, 11%) and personal success (variance, 9%) aftercontrolling for some demographic variables.

Limitation of Study: The majority of burnout indications among IT workers have been attempted to be included in this study; however, it is crucial to emphasize that, like other studies, it has limits.The primary limitation is that the study was conducted.Only private companies were included in this study; however, the scenario may be different for government organisations.Hence, the results from the present study cannot be generalized to professionals working in a government setup.Furthermore, the research was conducted in the state of Maharashtra only, which may not apply to other states. Furthermore, only a limited number of parameters and demographics were taken into account. The authors of this study will strive to overcome these limitations in further research related to the IT sector.

Practical implications: The outcome of this study is important for IT companies, the government of India, and policymakers for making strategies related to employees' welfare.

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Declaration of Conflicts of Interests

Authors declare that they have no conflict of interest.

Declarations

Author(s) declare that all works are original and this manuscript has not been published in any other journal.

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