



Investigating The Relationships Between Factors Affecting Performance in IT

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ABSTRACT

Background: Information technology (IT) sector employee working can be awakening and fulfilling beneath the umbrella of a great sustaining solid working environment. In common, the working environment could be a imperative for enabling well-being at work and in common life and work satisfaction.

IT segment worker may find it fulfilling when their employments offer openings for both person development and definitive progress.

Aim: The purpose of this research is to look at the relationship between job satisfaction, job stress and performance of IT workers collectively, so that we can get information about how they generally affect each other and, also their affect on employee well-being along with the organizational tasks in the IT sector.

Methodology: This mixed method examines the confounding relationship between job satisfaction, job stress and job performance (job related factors) in the IT industry. It includes quantitative reviews and subjective interviews with 150 IT sector employees that reveal unbridled measurements of their well-being and execution.

Result: The results of this quantitative study show that job satisfaction was negatively correlated with stress and positively correlated with performance ($r = -0.538$, $p < 0.05$; $r = 0.692$, $p < 0.001$). Job stress is influenced by variables such as tight deadlines and constant demands on talent.

Undoubtedly, organizational support, including training programs and work-life adjustment, will become the main regulator of these relationships. In addition, qualitative experiences give depth to these quantitative events.

Conclusion: Adaptive components of work stress, including social back and attention as an important part to improve the well-being of IT workers, are recommended. This study contributes to a comprehensive understanding of job satisfaction and job stress in the IT industry and provides important recommendations to optimize the well-being and performance of IT workers in this energetic and challenging industry.

Keywords: Job satisfaction, Job stress, Job performance, IT sector, Employee well-being, Organizational support, Adaptive coping mechanisms

Introduction:

The Information Technology (IT) industry is widely recognized for its swift expansion and revolutionary influence on the worldwide economy. Organizations trying to stay competitive are increasingly focused on the performance and well-being of IT personnel as this industry develops. The interrelated elements of job satisfaction, job stress, and other work-related variables that influence IT personnel's work experiences are at the heart of these worries.

Job satisfaction is a critical determinant of employees' overall quality of life and performance in the workplace. In the context of the IT sector, job satisfaction reflects not only an individual's contentment with their work but also their adaptability and resilience in an environment characterized by continuous technological advancements, demanding project timelines, and intricate problem-solving. Conversely, job stress in the IT sector is often pronounced due to the high-pressure nature of the work, fast-paced project cycles, and the need for continuous skill development to stay relevant. Assessing these factors in isolation provides only a partial understanding of the complex dynamics that underlie job satisfaction and job stress among IT professionals [1-4]. To gain a comprehensive perspective, a mixed-methods approach that combines quantitative surveys and qualitative interviews is deemed necessary. At the same time, job satisfaction and job performance play pivotal roles in determining employees' productivity, retention, and overall success within organizations [5-6]. Previous studies have independently explored some of these factors, but there is a need to comprehensively investigate their interconnectedness to gain a holistic understanding of how they influence each other within the IT industry. This research aims to examine the job stress, job satisfaction and job performance collectively, so that we can gain insights into how they mutually impact each other and influence overall employee well-being and organizational performance in the IT sector.

Methodology:

This research employed a mixed-methods design, combining both quantitative and qualitative data collection methods to comprehensively assess job satisfaction, job stress, and work-related variables among IT professionals. Data was collected by using standardized scales: Perceived stress scale (PSS): to determine the stress status among IT professional [7]; Job satisfaction survey (JSS): to determine the job satisfaction level [8] and Role performance: to determine the performance of IT professionals in workplace [9].

A purposive sampling method was employed to select 150 IT professionals with diverse backgrounds, including varying years of experience, job roles, and organizational sizes. Participants were required to have a minimum of two years of experience in the IT sector to ensure a meaningful understanding of job satisfaction and stress factors. Participants were recruited from a service oriented IT company.

A. Ethical Considerations:

- Informed Consent: Informed consent was obtained from all participants, detailing the purpose of the study, data usage, and confidentiality measures.
- Anonymity: To protect participant identities, all personal information was removed from interview transcripts.
- Ethical Approval: permission was obtained from the institutional ethics committee to comply with ethical standards in research.

B. Data Collection and analysis :

1. Quantitative Data Analysis

- Descriptive Analysis: Descriptive statistics was used to summarize quantitative survey responses.
- Inferential Analysis: Inferential statistics, such as correlation and regression analysis, were employed to examine relationships between variables.
- Statistical analysis: After collecting data from study group subjects, data were entered manually in Microsoft Excel sheet of windows 2007. Statistical software (e.g., SPSS, R) was used for data analysis. Values were expressed as Mean \pm SD. Pearson co-relation coefficient was used to determine the relationship among the Job satisfaction with stress and performance. P value <0.05 and <0.001 were considered as significant and highly significant respectively.

2. Qualitative Data Analysis:

Data Collection:

- Semi-Structured Interviews: In-depth semi-structured interviews were conducted with each of the 20 participants. The interview guide was developed to explore their experiences related to job satisfaction, job stress, and relevant work-related variables.
- Interview Duration: Each interview lasted approximately 45 minutes to 1 hour, allowing for a comprehensive exploration of participants' perspectives.

Data Analysis:

- Thematic Analysis: Thematic analysis was utilized to identify common themes and patterns within the qualitative data. This method allowed for a systematic and rigorous examination of interview transcripts.
- Coding: The transcripts were coded independently by two researchers to ensure intercoder reliability. The coding process involved identifying key themes, subthemes, and illustrative quotes.
- Data Saturation: Data saturation was monitored throughout the data collection process, and interviews ceased once no new significant themes emerged.
- Software: Qualitative data analysis software (ATLAS.ti) may be used to facilitate the coding and analysis process.

C. Integration of Quantitative and Qualitative Data:

- Findings (Quantitative and qualitative) were triangulated to provide a holistic understanding of the research questions, allowing for a deeper exploration of the relationships among variables.

Results:

The work related descripton (quantitative data), collected from 150 samples working in IT industry, was depicted in Figure 1. Further, we have carried qualitative study only on 50 randmoly selected people with equal number of male and female from various types of job type and observed the below mentioned findings.

Figure 1: Presentation of Demographic Profile of IT sector employee (Quantitative analysis only) (N= 150)

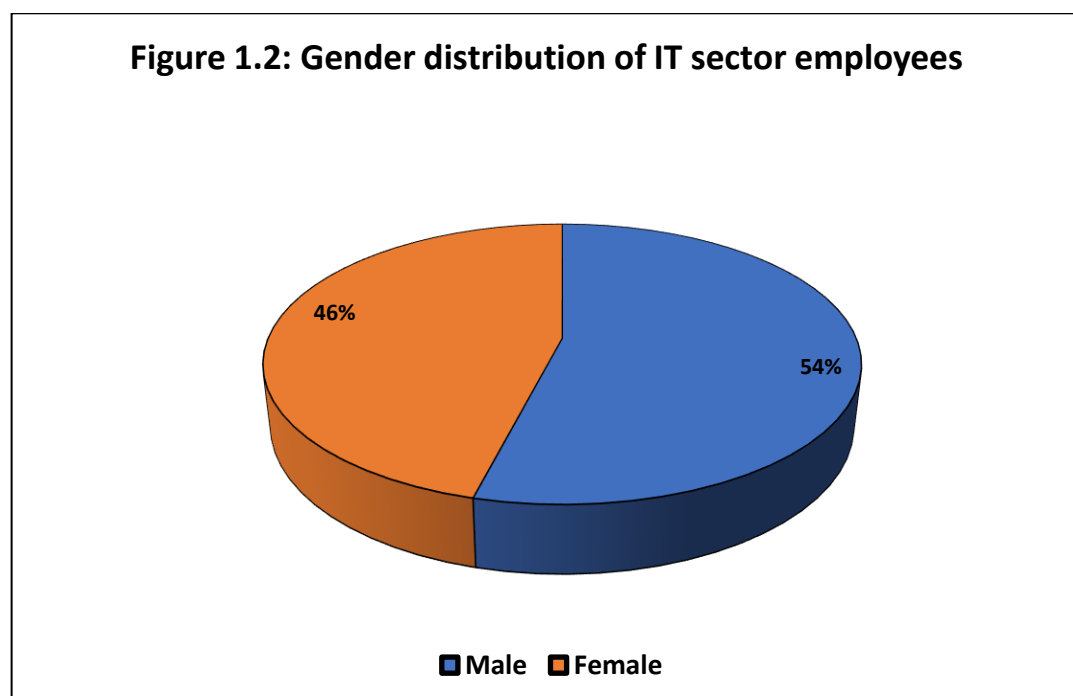
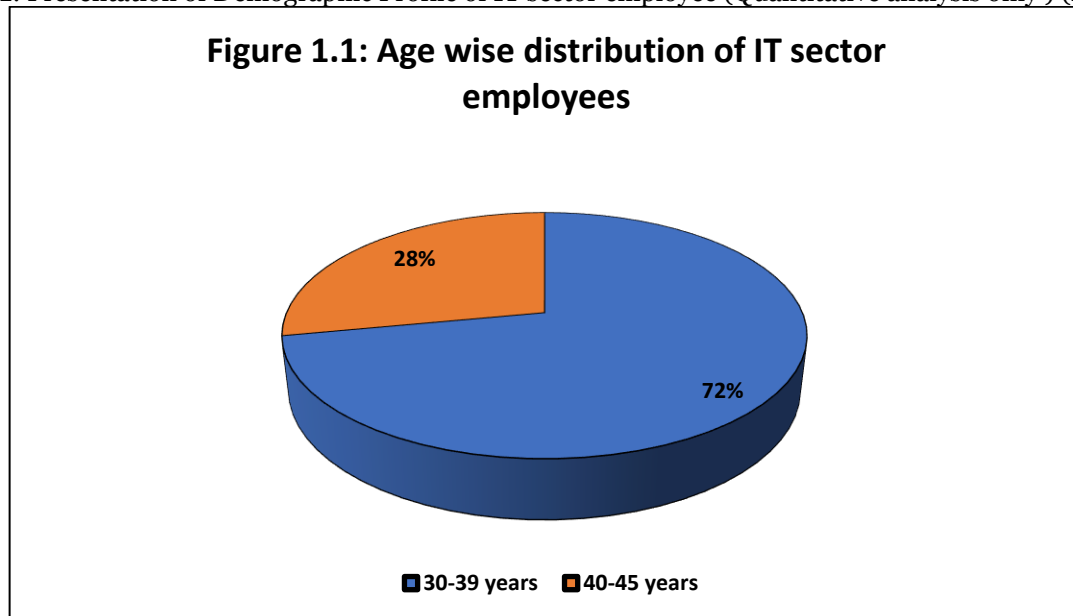
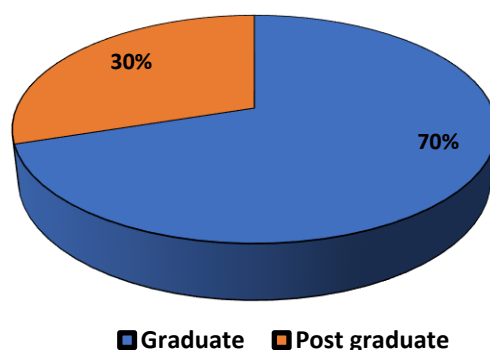
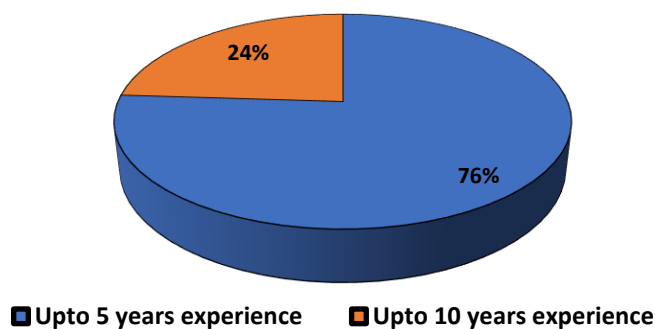
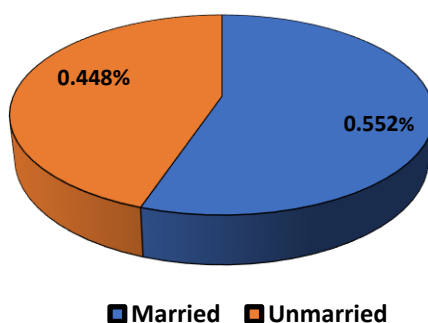


Figure 1.3: Education status of IT sector employees**Figure 1.4: Job experience status of IT sector employees****Figure 1.5: Marital status of IT sector employees****Table 1:** Correlation coefficient (r) between Job satisfaction with Job stress and Job performance in IT sector employees.

Factors	Job stress	Job performance
Job satisfaction	-0.538 (p < 0.05)	0.692 (p< 0.001)

Job Satisfaction Levels: The quantitative survey reveals that a substantial percentage of IT professionals report moderate to high levels of job satisfaction. Factors contributing to higher job satisfaction include supportive work environments, opportunities for professional growth, and positive relationships with colleagues and supervisors.

Qualitative interviews reveal that IT professionals derive job satisfaction from opportunities for skill development, challenging and meaningful work, and recognition of their contributions. A supportive

organizational culture and flexible work arrangements are also mentioned as key contributors to job satisfaction.

Job Stress Levels: The survey also indicates that job stress is prevalent in the IT sector. Highest form was moderate stress followed by mild. Job satisfaction was very low. Job satisfaction was found to be negatively correlated with stress and positively correlated with performance ($r = -0.538$, $p < 0.05$; RBPS $r = 0.692$, $p < 0.001$) as represented in Table 1. Thus, Stress were present in all the employee. Key stressors include tight project deadlines, the need to continuously acquire new skills, and high-pressure work environments. However, organizational support and work-life balance measures play a crucial role in mitigating stress levels.

Job performance : The job performance was impacted by the satisfaction and stress at job. Further, it was found that performance have high association with work related variables like salary issue, downsizing, poor communication with seniors followed by inflexible working hours, promotions issues and work pressure.

Correlations: Statistical analysis demonstrates significant correlations between job satisfaction, job stress, and work-related variables. Higher job satisfaction is associated with lower perceived job stress and increased work engagement. Factors like organizational support and effective work-life balance strategies positively correlate with job satisfaction.

Discussion :

The qualitative analysis reveals that job satisfaction among IT professionals is closely tied to the challenging and meaningful nature of their work, recognition for their contributions, a positive work culture, and opportunities for growth. Coping mechanisms for job stress primarily revolve around seeking support from peers, practicing mindfulness, and utilizing organizational stress-relief programs.

Furthermore, organizational support in the form of training, clear career pathways, work-life balance initiatives, and effective leadership plays a significant role in mediating job satisfaction and stress levels. This underscores the importance of organizational policies and practices in fostering employee well-being in the IT sector.

These qualitative findings provide valuable context to the quantitative data, offering a deeper understanding of the subjective experiences and coping strategies of IT professionals in the face of job stress and job satisfaction. The results of this mixed-methods study shed light on the intricate relationship between job satisfaction, job stress, and work-related variables among IT professionals. The integration of quantitative survey data and qualitative interview insights provides a comprehensive view of the factors influencing the well-being and performance of individuals within the IT sector.

Job Satisfaction and Its Determinants:

The findings align with existing research highlighting the significance of job satisfaction in the IT sector. Factors such as skill development opportunities, challenging work, recognition, and a supportive work culture emerged as strong determinants of job satisfaction. These results emphasize the importance of organizations creating an environment that fosters continuous skill growth, acknowledges employees' contributions, and promotes teamwork.

Coping Mechanisms for Job Stress:

IT professionals employ a range of coping mechanisms to manage job-related stress. Social support from colleagues and peers emerged as a crucial coping strategy. Encouraging teamwork and facilitating open communication channels within IT teams can strengthen this valuable support network. Additionally, mindfulness practices and stress-relief programs, when provided by organizations, were reported as effective stress management tools. Organizations should consider incorporating such programs into their employee wellness initiatives.

Organizational Impact on Well-Being:

The impact of organizational support on employee well-being cannot be overstated. The qualitative findings emphasize the role of organizations in promoting job satisfaction and mitigating job stress. Training and development programs, career advancement opportunities, and work-life balance initiatives were positively associated with employee satisfaction. Moreover, the influence of leadership on well-being is evident, with effective leaders who demonstrate empathy and provide guidance positively affecting employee job satisfaction and stress levels.

Satisfied employees tend to be more engaged, motivated, and collaborative, contributing to improved team effectiveness and job performance [10,11]. Other researchers also focused on the impact of good job environment leads to better productivity [6, 12].

Our findings results matches various studies which suggest all work related variables will be impacted by individual and organizational factors [1,13,14]. Findings our contradictory to the study conducted by Susanto et al. [6].

The integrated findings from both quantitative and qualitative data confirm the complexity of the relationship between job satisfaction, job stress, and work-related variables in the IT sector. While the sector offers opportunities for job satisfaction through challenging work and growth, it also presents unique stressors. Organizational support, leadership, and work-life balance practices play a pivotal role in mediating the impact of these stressors on job satisfaction and overall well-being.

Conclusion

On the basis of findings of the present study, it has been concluded that when qualitative and quantitative data are merged, a more comprehensive image of the field is presented, indicating a wide-ranging impact and correlation between various variables. Employers should view their staff members as individuals with feelings, personal problems, and the organizational climate taken into consideration in order to maximize productivity and employee satisfaction. The practical ramifications of these findings extend to IT workers and industry groups. To improve the performance and well-being of IT workers, companies should place a high priority on skill development, provide clear career paths, and foster a positive work environment. They ought to think about encouraging work-life balance and putting stress-relief programs into action. Furthermore, to promote a healthy work atmosphere, IT organizations should concentrate on showing empathy, offering mentorship, and acknowledging employee efforts. Seeking out social support, practicing mindfulness, and partaking in stress-relieving activities outside of work can all be beneficial for individual IT professionals.

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