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Exploring Mediating Role Of Job Engagement Between Occupational Stress And Organizational Commitment Among IT Professionals

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Abstract

The Information Technology (IT) Industry is experiencing rapid growth worldwide. On the other hand, the higher degree of workplace stress in the IT field is brought on by a greater concern for job security, heavy workloads, difficult deadlines, and other variables. Job engagement has become a significant factor in modern business, influencing employee productivity, performance, and motivation to stay with the organization. In modern times, organizational commitment and occupational stress are the most pressing concerns. This study examines occupational stress, organizational commitment, and job engagement among IT professionals, a relatively unexplored group. Job engagement was operationalized as a mediator between occupational stress and organizational commitment. The structured questionnaire and statistical techniques such as SEM to test the mediating effects quantitatively. This study analyses these dynamics in a fast-paced, technologically driven IT company, unlike past investigations that focused on employees of healthcare and non-IT business sectors. This research discovered a negative, statistically significant association between job engagement and occupational stress, and stress at work and loyalty to the business. However, a substantial link exists between involvement in the workplace and dedication to the company. Additionally, the study found that the connection between dedication to the job and stress at work organization is mediated by job engagement.

1. Introduction

The field of Information Technology (IT) is essential to fostering innovation, improving operational efficiency, and facilitating digital transformation across sectors in today's dynamic business environment. The topic of job engagement, stress level, and commitment levels of employee plays a crucial part in the IT business since employees are a significant element of such organizations. Currently, IT companies are prioritizing the efficient management of human resources to promote employee engagement, decrease occupational stress, promote organizational commitment, and reduce attrition rates [18]. Organizations in the IT industry are becoming more and more aware of how crucial job engagement is to maintaining a competitive edge and attaining long-term success as technology advances. Improvements in performance, increased job satisfaction, and reduced turnover rates have all been associated with job engagement, which is characterised as a strong sense of emotional attachment and commitment to one's job and organization [10]. Organizations that promote engagement and motivation within their staff routinely attain exceptional performance of superior quality. Contemporary firms anticipate their workers to possess excitement, initiative, and a strong sense of responsibility. They should be devoted and enthusiastic in their job [43].

Job engagement has become a significant factor in modern business, influencing employee productivity, performance, and motivation to stay with the organization. Organizations use their workforce as a means of strategic proficiency. Nevertheless, there is an increasing acknowledgment that employee engagement is crucial for the achievement of company success. Engaged employees serve as the foundation of a positive work environment characterized by competitiveness, ethics, responsibility, and accountability [19]. In modern times, organizational commitment and occupational stress are the most pressing concerns [34].The factors most commonly linked to occupational stress and organizational commitment were Workplace quality, leadership, organizational citizenship, desire to quit, psychological empowerment, and employee performance [1]. Elevated levels of Work involvement have the potential in order to lessen the detrimental consequences of work-related stress, leading to heightened organizational commitment.

The term "occupational stress" describes the physical and emotional reactions to circumstances or occurrences at work that are harmful to one's general health and well-being. It is impacted by things like independence and autonomy, decision-making in the physical environment, latitude, job security, workload, level of responsibility, the kind and tempo of work, and relationships with superiors and colleagues [46]. Information technologies (IT) are widely used in modern workplaces. Hence, within a corporate environment, employees' use of technology might lead to a multitude of psychological impacts. Occupational stress may result from technology-related chores such as file organization, format structure adjustments, program downloads and installations, and feature additions [45]. Occupational stress may also be brought on by circumstances like juggling many jobs at once, giving your all while working under pressure, and being accessible all the time after normal business hours [26].

Because of the demanding nature of their job, workers in the IT industry have a substantial risk of experiencing occupational stress. Therefore, organizational stress arises as a circumstance that impacts the level of commitment people have toward their work. Burnout, absenteeism, and lower productivity are all bad outcomes that may be caused by occupational stress, it therefore has a negative impact on organizational commitment [48]. The definition of organizational commitment is a worker's psychological connection and allegiance to their company, which may be impacted by occupational stress [8]. These workers are highly engaged, demonstrating a strong desire to stay with the company, and they are more likely to make a good contribution by exchanging expertise, working well with others, and advancing company objectives [17]. Therefore, it is crucial to promote organizational commitment among IT professionals, as it significantly influences the stability and operation of the company by enhancing employee work engagement while minimizing occupational stress.

This research aims to provide a greater knowledge of how work stress contributes to job engagement and how it affects IT professionals' performance. The objective is to assess the impact of profession on a worker's level of loyalty to the company. Further, the study looks at whether job engagement among IT professionals' functions as a mediator in the link that exists between organizational commitment and occupational stress.

2. Literature Review and Hypotheses Development

2.1. Occupational Stress and Organizational Commitment

Numerous researches have shown the significant influence that occupational stress has on employee commitment to the firm. While people may perform better at work when they are under minor stress, under extreme stress might have the opposite effect [13]. This idea is well supported by the literature that is now in publication. For instance, some research revealed that stress has a detrimental effect on the degree of commitment to the company and job satisfaction [9]. The impact of employees' perceptions of the apps' usefulness and usability on their intentions to use them to manage workplace stress. Additionally, companies guarantee that their employees adopt new technologies, which boosts the efficacy of interventions and new technologies aimed at promoting well-being [37]. One important mediator in the correlation between work-related stress and organizational commitment is job satisfaction. Decreased work satisfaction may be brought on by excessive stress, and this may negatively impact organizational commitment. This implies that improving work happiness may lessen the negative consequences of stress on dedication [33].

The findings of several studies demonstrated that various organizational stresses considerably increased health problems and diminished organizational dedication. Concerns about one's work stability were associated with both physical and mental health problems, whereas job-related factors and overload were associated with mental health problems [49]. A large body of evidence indicates that stress in the workplace significantly reduces individuals' dedication to their organizations. A moderate amount of stress improves people's effectiveness on the job, while too much stress might have the opposite effect [13]. Consequently, it is critical to comprehend how Occupational stress predicts organizational commitment and work satisfaction [22]. In light of in light of this, the subsequent theory was developed.

The occupational stress, job engagement, and organizational commitment variables were chosen due to their relevance in the IT sector, where high occupational stress often impacts engagement and commitment, ultimately affecting organizational performance. The gaps in the literature also pointed to the need to study these interrelations.

Hypothesis 1**:** Higher levels of Occupational stress are negatively correlated with organizational commitment among IT professionals.

2.2. Occupational Stress and Its Influence on Job Engagement

Employee engagement was negatively impacted by occupational stress, which is mostly caused by position ambiguity and conflict as well as a lack of opportunities for professional advancement within the company [47]. Researchers found a negative relationship between work-related stress and engagement; furthermore, doctors' levels of engagement were substantially reduced by this stress, and it obstructed their otherwise favourable connection with their workplace [28-29]. Workload, job duties, and role conflict are all examples of occupational stress factors that might reduce an employee's dedication to their profession. When workers are under constant pressure, it may be difficult for them to stay engaged in their work and give their full attention to each assignment [35]. Another research also indicate that higher levels of workplace stress has a negative relationship with worker satisfaction and engagement [30].

Existing research links workplace stress to unhappiness, overwork, and personal variables. These variables may lower worker performance and increase illness risk. Encouragement to tackle difficulties may reduce psychological and bodily stress and improve personal and professional happiness, protecting workers' health. Occupational stress is linked to how a person handles disappointments or job engagement [36]. Overall, job engagement and occupational stress are closely related, with employee engagement decreasing as stress levels rise. Managing occupational stress may boost employee engagement and productivity [41].

According to the literature findings, managers may foster a positive work environment with little occupational stress and excellent employee performance by gaining an understanding of the many aspects that contribute to job engagement. However, higher Workplace stress levels might be detrimental to job engagement. Based on this information, the following hypothesis was formulated.

Hypothesis 2: Higher levels of occupational stress are negatively correlated with job engagement among IT professionals.

2.3. Job Engagement and Organizational Commitment

The investigation emphasizes how crucial it is to foster a positive and encouraging work environment, match personal beliefs with company objectives, and reduce role conflict in order to boost employee engagement and organizational commitment. According to earlier research, there is an inverse relationship between job satisfaction and the desire to leave. Engagement [50] as well as a favourable association with wellbeing [16]. Divergent perspectives exist in the literature about how the link between Job engagement and organizational commitment should be conceptualized. While some research [23] proposed Job engagement as a consequence of commitment to the organization and investigated how it is impacted by organizational commitment, others [39] proposed Job We looked at engagement as a factor that precedes organizational commitment and how it affects it.

According to research that characterizes organizational commitment as an antecedent of job engagement, workers may exhibit greater levels of Job engagement if They have an affinity to their business [51]. It implies that organizational commitment comes before Job engagement and that Job engagement appears as a form of payback when workers are devoted to their companies and ready to give something back [12]. According to this perspective, workers get attached to the job as a consequence of their connection to the company. Conversely, some research contends that Job engagement may result in elevated organizational commitment [3-4]. Consequently, some research, shows that individuals who have Job engagement connect with their coworkers and at work, which helps them become committed to their company [25]. When this was taken into consideration, The following theory was formulated.

Hypothesis 3: Job engagement has a major impact on organizational commitment among IT professionals.

2.4. Job Engagement as Mediator between Occupational Stress and Organizational Commitment

Numerous research have examined the connections between professional dedication, technostress, organizational stress, individual productivity on the job, etc [15,26]. Previous literature examines the mediating function of employee engagement in the link between organizational commitment, the dependent variable, and work participation and job satisfaction, the independent variables. Additionally, the research found that work satisfaction and participation had a beneficial impact on organizational commitment [6]. An attitude or a subjective experience that a person has in relation to their employment is referred to as job satisfaction [31]. It is of utmost significance that workers be content with their jobs for them to have a sense of dedication to their corporations [2]. The perception of support from the company acts as a mediator in the link between work engagement and job performance based on the study review [42].

The majority of the research on the topic of occupational According to the literature currently in publication, research on stress, unpredictability, and commitment within organizations has been done in a variety of settings and has looked at each element separately [11]. Nonetheless, the majority of them were conducted in hospital settings or non-IT organizations and educational sector firms. When looking at these connections through the perspectives of IT professionals, very little is known. Furthermore, additional research is required to investigate the possibility that work engagement mitigates the connection between organizational commitment and work-related stress. The present investigation, however, set out to look at the relationships that exist between work engagement, organizational commitment, and occupational stress among information technology professionals. It looked at the role of the link between

commitment from companies and labour engagement mediated by occupational stress. to further the knowledge of these variables. As a result, the hypothesis that follows was proposed.
Hypothesis 4: The association between organizational commitment and occupational stress is mediated by job engagement among IT professionals.

3. Research Design

3.1. Research Purpose

This study's main goal was to look at the connection between IT professionals working across various Information-technology organizations and their level of occupational stress their dedication to the organization. Additionally, the research examined the hypothesis that work engagement moderates the connection between professional stress and organizational commitment. This research is crucial because it might help identify the percentage of variation in organizational commitment and occupational stress that results from job engagement.

3. 2 Research Objectives

These are the objectives that our research aims to accomplish:-

- The purpose of this study is to investigate the connections that may exist between organizational commitment and occupational stress.
- To identify the elements that affect employee engagement at work in the setting of occupational stress in IT organizations
- To look at how work engagement affects organizational commitment among IT professionals
- To look at how work engagement influences the relationship between vocational dedication and organizational stress among IT professionals.

3.3 Research Hypotheses

The study hypothesised that:-

(H1): Higher levels of work stress are negatively correlated with organizational commitment among IT professionals.

(H2): There is an inverse relationship between higher levels of work stress and job engagement among IT professionals.

(H3): Job Organizational commitment is significantly impacted by engagement among IT professionals.

(H4): Job engagement mediates how organizational commitment and work-related stress are related among IT workers.

3.4 Conceptual Model

On the basis of a constructed conceptual model a thorough examination of literature and logical conclusions made by the researchers. The model, seen in Figure.1, depicts the work engagement's suggested mediation role in connections between work-related stress and organizational commitment.

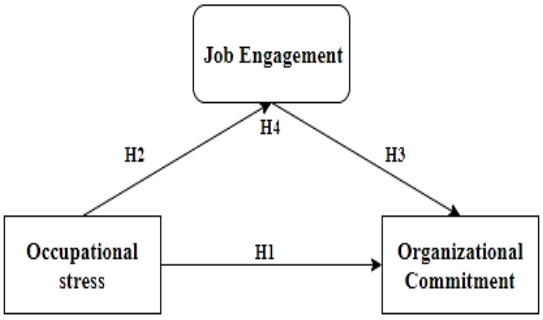

Figure 1. The theoretical mediating role of job engagement on occupational stress and organisational commitment

4. RESEARCH METHODOLOGY

4.1 Research Design

Data was collected utilizing a quantitative technique, namely through the use of a cross-sectional study design. This approach was considered suitable for examining the correlation. The relationship among work engagement, organizational commitment, and occupational stress for assessing research hypotheses. The research used a quantitative approach due to the numerical and statistical nature of the data.

4.2 Data Collection

To gather quantitative data, participants will get questionnaires. The questions will mostly concentrate on the participants' degree of comfort. In addition, the surveys will inquire about respondents' experiences with their employment in IT businesses. This research meticulously designed the survey questions to identify the key elements associated with job-related aspects like occupational stress, organizational commitment, and job engagement in IT-based organizations. The measuring tool used was using a Likert scale of one to five, where 1 meant "strongly disagree" and 5 "strongly agree." Likert-scale questions are easily standardized, making the data they produce highly suitable for statistical analysis.

4.3 Measuring Instruments

Information was gathered using a self-administered questionnaire. Study factors including occupational stress, organizational commitment, and job engagement were included in the questionnaire along with personal data. Using a questionnaire that the researcher created, the biographical data was gathered from several IT organizations. The questions asked on the interviewees' ages, genders, levels of education, prior jobs, and roles in the company, and income. To evaluate the claims, a Likert scale is used, where 1 represents severe disagreement and 5 represents strong agreement.

4.3.1 Random sampling technique

The method of picking samples from a population in such a way that each and every potential participant are known as having an equal probability of getting chosen random sampling. In many cases, a representative sample may be acquired by randomly choosing people from a bigger pool of potential candidates of the whole population. Among the easiest methods for gathering data from the whole public is the random sampling technique. When a sample is selected, Equation (1) used for random sampling:-

$$P = 1 - (N-1/N)(N-2/N).....(N-n/N-(n-1)) \quad (1)$$

4.3.2 Inclusion criteria

The sample for this research consisted of a total of 350 participants. Participants had to express their readiness to take part in this questionnaire and only work for organizations in the field of information technology to meet the participation criteria.

4.3.3 Exclusion criteria

The 350 survey respondents do not include people from non-IT backgrounds, those who are unwilling to reply, or those who are not interested in participating in the survey.

4.4 Data Processing and Analysis

SPSS version 26, a statistical software program created especially was used in the social sciences to assess the information. The characteristics of the sample were accurately represented by the use of descriptive statistics. Several statistical methodologies were used to examine the data in this investigation. This study used AMOS, the statistical software to adopt a quantitative research methodology that applied the research used structural equation modeling (SEM) to investigate the correlations among factors such as work engagement, organizational dedication as well as stress at work.

First, the internal consistency of the variables under investigation was checked using an item evaluation. The concept validity of the measuring tools was further assessed using confirmatory factor analysis (CFA). Research examining the link was carried out and multiple regression analysis between organizational commitment and occupational stress. Finally, the study used a hierarchical multiple regression method to ascertain the extent to which work engagement serves as a mediator in the association between stress in the workplace and organizational commitment.

5. Results and Dıscussıon

5.1 Results

Table 1 displays the research participants' demographic information in our research study titled "Exploring the Mediating Role of Job Engagement between Occupational Stress and Organizational Commitment among IT Professionals." A thorough summary of the many demographic characteristics, including age, sex, years of experience, degree of education, work position, and pay, is given in the table. Ages vary from 20 to 40, with the 20–24 age groups having the most presence (23.7%) and the 35–39 age group having the lowest (16.3%). There is a small preponderance of females (53.1%) over men (46.9%) in the gender distribution regarding schooling; the vast majority of participants have an Associate's degree (20.0%), followed by a Master's degree (23.1%). In terms of experience, the group with the greatest representation has 1-3 years (16.3%), while the group with the least representation has less than 1 year (24.0%). Entry-level professionals make up the biggest category in terms of work positions (24.3%). The salary distribution is varied, with the lowest percentage (19.7%) earning less than $18,000 and the largest percentage (24.0%) making $70,000 or more. In terms of job the average values show the level of organizational dedication and participation. Core patterns for each demographic category and emphasize the key qualities of the IT professionals polled. Table 2 presents a summary of the major descriptive data, including means and standard deviations (SDs), for the occupational stress, job engagements, and organizational commitment scales. Skewness and kurtosis scores are also used to evaluate the data set's normalcy. Additionally, Cronbach's alphas are shown. 3.6 (SD = 0.798), 2.6 (SD = 0.955), and 2.3 (SD = 0.799) were the mean ratings for occupational stress, job engagement, and organizational commitment, respectively. Additionally, the data were normally distributed and permitted additional analysis since their skewness and kurtosis vary from -2/ 2. Table 2 additionally, Using Cronbach's alpha values, illustrate the instruments' dependability. Items that correlated with an overall score of less than 0.30 were deemed weak and were not included in the study that followed [21]. Good coefficient alphas were found for all three scales ranging from 0.808 to 0.881 Among the measures, job engagement (α = 0.864) and organizational commitment (α = 0.881) had the greatest reliabilities, followed by work-related stress (α = 0.808).

Table 1. Demographic variables

Variable	Category	F	Percentage	Mean
Age	20-24	83	23.7	2.9257
	25-29	65	18.6	
	30-34	71	20.3	
	35-39	57	16.3	
	40+	74	21.1	
	Total	350	100	
Gender	Male	164	46.9	1.5314
	Female	186	53.1	
	Total	350	100	
	High School Diploma	60	17.1	

Education level	Associate Degree	70	20	3.0457
	Bachelor's Degree	64	18.3	
	Master's Degree	81	23.1	
	Other	75	21.4	
	Total	350	100	
Year of Experience	Less than 1 year	84	24	2.9200
	1-3 Years	57	16.3	
	4-6 Years	80	22.9	
	7-10 Years	61	17.4	
	10 years+	68	19.4	
	Total	350	100	
Job position	Entry Level	85	24.3	2.8886
	Junior Associate	63	18.0	
	Mid-Level	71	20.3	
	Senior/ Lead	68	19.4	
	Other	63	18.0	
	Total	350	100	
Salary	Less than 18000	69	19.7	3.0886
	18000-30000	61	17.4	
	30000-50000	74	21.1	
	50000-70000	62	17.7	
	70000+	84	24.0	
	Total	350	100	

Table 2. Descriptive statistics and reliability analysis

Scale	*M*	SD	Skewness	Kurtosis	α	N
Occupational stress	3.6	0.798	−0.615	-0.399	0.808	5
Job Engagement	2.6	0.955	0.351	−1.222	0.864	5
Organisational commitment	2.3	0.799	0.764	-0.774	0.881	5

Note: SD- standard deviation; α- Cronbach's alpha; N- Items number

5.1.1 Evaluating the fit of the measurement model

Assessing the measurement model's fit Using AMOS version 26, the goodness-of-fit of the measurement models was assessed using confirmatory factor analysis on each scale used in the study. The model fit was evaluated using a number of fit indices. An acceptable p-value of 0.000 is shown in Table 3 findings [20]. Standardized root mean square residual values below 0.05 are suggestive of a good fit, those between 0.05 and under 0.08 suggest reasonable fit, values between 0.08 and 0.10 denote mediocre fit, and values > 0.10 indicate a poor fit [14] . The excellent fit category is indicated by as well as Tucker-Lewis's index, the quality of fit, comparative, incremental, and which are, respectively, 0.93, 0.955, 0.956, and 0.944. Similarly, the normed fit index (0.925) demonstrated acceptable quality. The relative fit index (0.906) all very barely misses the 0.90 good model fit cut-off point threshold. The measurement model is shown in Figure 2.

Table 3. Structural model fit summary

Fit index	Indices
X2	195.6
p	0
Degrees of freedom	84
Goodness of fit index	0.93
Comparative fit index	0.955
Incremental fit index	0.956
Tucker–Lewis's index	0.944
Normed fit index	0.925
Relative fit index	0.906

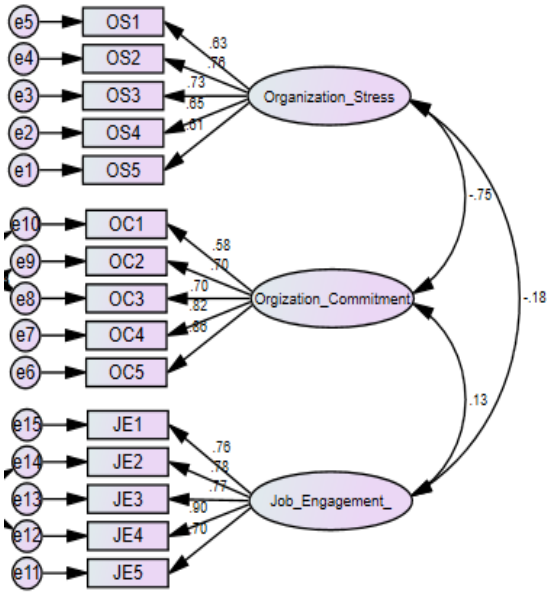

Figure 2. The measurement model

5.1.2 Validity and reliability of the measurement model

Before looking at the relationships between qualities, it is critical to evaluate the measuring model's validity, reliability, and one-dimensionality [32]. When the fitness indices in the measurement model reached the necessary level, the one-dimensionality condition in this article was satisfied. Additionally, every item had a positive factor loading. Thus, following the CFA measurement model process, each construct's validity and reliability were computed. As shown in Table 4 (Hair, 2021), all CR values were more than 0.40, indicating that the composite reliability (CR) criteria were met. By evaluating the measurement model's discriminant, construct, and convergent validity, the validity criteria was met. According to [40], It is required that every variable's variance average extracted (AVE) value be at least 0.5in order to satisfy the criterion for convergent validity. According to Table 4, every value was higher than 0.5. Furthermore, the measurement model's construct validity was also

attained when the fitness indices, as shown in Table 3, crossed the required threshold. The construct's AVE squared root is shown in the diagonal values whereas the remaining numbers display the relation between the related constructs. Since the numbers displayed in the diagonal are bigger compared to the values in the associated rows and columns, each and every mathematical construct in Table 4 have achieved discriminated validity.

Table 4. Validity and reliability

Variable	CR	AVE	MSV	1	2	3
1 Organizational commitment	0.337	0.576	0.637	1	-	-
2 Occupational stress	0.402	0.662	0.913	−0.352***	1	-
3 Job Engagement	0.417	0.682	0.639	0.141**	−0.115*	

CR, composite reliability; AVE, average variance extracted; Commitment, organizational commitment; MSV, maximum shared variance.

*, $p < 0.050$; **, $p < 0.010$; ***, $p < 0.001$.

5.1.3 Relationship between occupational stress, job engagement, and organisational commitment

Organizational commitment was the dependent variable in the multiple regression analysis, while job involvement and occupational stress were the independent variables. The findings are shown in Table 5. A stronger correlation between lower levels of organizational commitment and occupational stress is shown by the study, which finds that occupational stress is a strong inverse indicator of commitment within an organization (β = -0.710, p < 0.001). Alternatively, it may be seen the relationship between work engagement and organizational commitment (β = 0.130, p = 0.017), indicating that more work engagement is associated with higher levels of commitment. To further illustrate how each independent variable directly affects organizational commitment, the unstandardized coefficients (Beta) and standard errors (SE) are also given.

Regression study of the link Table 6 shows the relationship between work engagement—the dependent variable—and occupational stress. The study finds a strong negative correlation between job stress and job engagement. This is shown by the unstandardized coefficient (β = -0.232, SE = 0.080), which indicates that higher levels of work stress are negatively correlated with lower job engagement levels which supports the hypothesis 3 of the study.

The statistically significant negative association the relationship between reduced work engagement and occupational stress is underscored by the standardized coefficient (β = -0.186), which also shows how strong this relationship is. The p-value of 0.004, which is much less than the usual cut-off of 0.01 (p < 0.01) and suggests that the observed influence is statistically significant and doubtful to be the product of chance. This study demonstrates the harmful consequences of workplace stress on worker engagement and highlights the need of managing workplace stressors in order to promote increased worker engagement and overall organizational well-being. According to the findings, companies should give priority to treatments that lower occupational stress in order to improve job engagement and, as a consequence, organizational dedication.

Table 5. Multiple regressions with dependent and independent variable

Model	Unstandardized coefficients		Standardized coefficients (β)	*p*
	Beta	SE		
Occupational stress	-0.987	0.110	-0.710	0.000**
Job Engagement	0.136	0.057	0.130	0.017*

Note- Dependent variable: Organizational commitment; Independent variable: occupational and stress Job Engagement SE- Standard error; β- Regression coefficient.

Table 6. Regression with Job Engagement as the dependent variable and occupational stress as the independent variable

Model	Unstandardized coefficients		Standardized coefficients (β)	*P*
	Beta	SE		
Occupational stress	-0.232	0.080	-0.186	0.004**

Dependent variable: Job Engagement

Note: SE, standard error; β, regression coefficient; *p* explained. **, $p \leq 0.01$.

Table 7. Mediating role of job engagement on the relationship between occupational stress and organizational commitment

PATH			Co-efficient	C.R.	p
Job engagement	<--	Occupational stress	-.145	-2.734	.006
Organizational Commitment	<--	Occupational stress	-.518	-13.197	***
Organizational Commitment	<--	Job engagement	.384	9.790	***

5.1.3 Mediating role of job engagement

Table 7 displays the investigation of how work engagement functions as a moderating element in the connection between corporate loyalty and occupational stress. Significant direct and indirect effects are shown by the studies. More specifically, a negative association has been shown between work stress and job engagement (β = -0.145, C.R. = -2.734, p = .006), suggesting that increased levels of stress lead to a decrease in job engagement. Additionally, there is a

strong and detrimental direct relationship between professional stress and organizational commitment. (β = -0.518, C.R. = -13.197, p < .001). This implies that as stress levels rise, the level of commitment to the organization decreases dramatically. The relationship between organizational commitment and work engagement is positively statistically significant. (β = 0.384, C.R. = 9.790, p < .001), indicating that higher levels of job engagement led to a stronger commitment to the company. These findings indicate that work engagement contributes to the partly moderating relationship between organizational commitment and occupational stress. Specifically, greater levels of job engagement may help alleviate some of the adverse effects of stress on commitment. These results emphasize the crucial significance of job engagement in sustaining organizational commitment, particularly in settings where occupational stress is widespread.

5.2 Discussion

This study aims to examine the mediating part that work engagement plays in the connection between IT professionals' organizational commitment and occupational stress. The results largely supported the hypotheses of this study by showing that job engagement mediated the connection between organizational commitment and occupational stress among IT professionals. A statistically significant effect was found between job engagement, professional commitment, and organizational stress.

5.2.1 Reliability and validity of instruments

The measurement tools employed in this investigation demonstrated high levels of internal consistency reliabilities. All three scales achieved Cronbach's alpha coefficients (α) that met the recommendation of α > 0.70, indicating satisfactory reliability. The measures with the strongest reliabilities were job engagement (α = 0.864), organisational commitment (α = 0.0.881), and stress at work (α = 0.808). The study used confirmatory factor analysis to evaluate the relationship between the variables and the observed data, as stated in a measurement model. This technique included generating classified-fit indicators to assess the degree to which the model and data agree. With every single model fit indices over 0.05, the idea validity was determined. Based on the average variance explained, the findings indicate that each component was assessed efficiently using its indicator. more than 0.05. Convergent validity and discriminant validity were successfully attained.

5.2.2 The relationship between occupational stress and organisational commitment

Using correlations of association, the researchers sought to ascertain the nature of the relationship between stress in the workplace and organizational commitment. The study's initial hypothesis that there is a significant inverse relationship between organizational commitment and occupational stress is supported by the research's results. The results indicate that the degree of occupational stress and organizational commitment are negatively correlated. According to several studies, employees who experience high levels of stress are also more likely to be less committed to their companies [33,38]. On the other hand, the research conducted by [5, 52] shown that there is no relationship between organizational commitment in the workplace and occupational stress. An argument for occupational stress being a significant predictor of commitment to organization as well as a previous indication of it might be made based on the facts. The fast pace of technical advancements may help to explain this, since workers may feel more technological stress from always having to pick up new skills and adjust to new processes, instruments, and systems.

5.2.3 The relationship between occupational stress and job engagement

This study examined the relationship between the occupational stress levels of IT professionals and their levels of involvement on the job. The results provide credence to the study's second hypothesis (H2), which states shows a negative relationship exists between work engagement and occupational stress. Occupational stress and work performance are significantly negatively correlated engagement is shown by the findings, which show that engagement reduces dramatically as stress levels rise. This lines up with what is already known from research, which shows that when people are under a lot of stress, they are less invested in their work, which in turn lowers their motivation, productivity, and happiness on the job [27-28].

5.2.4 Relationship between job engagement and organizational commitment

Additionally, a strong positive correlation between organizational commitment and work engagement was shown by this research. That is, IT workers become more committed to their firm as their level of job engagement rises. This result is consistent with the outcomes of previous studies that have been carried out [24, 44]. This shows that IT Workers who are more enthusiastic about their work are likely to create an emotional link to their firm, leading to increased organizational commitment. Job engagement boosts work happiness, which boosts loyalty and devotion. IT workers' commitment to the organisation increases as they feel more connected and respected, contributing to organisational stability and success.

5.2.5 Job engagement as mediator of occupational stress and organisational commitment

The findings confirm hypothesis 3, that work engagement modulates organizational commitment and occupational stress. Findings revealed stressed workers are less engaged to their professions. Job engagement modulates the relationship between stress and corporate loyalty for IT workers, according to the findings. Organizational commitment is inversely

related to occupational stress, meaning stressed workers are less dedicated to their companies. Stressed workers are less engaged in their occupations, according to previous research. Occupational stress negatively impacts commitment, however work involvement may attenuate or increase this effect [7].

A limitation of this study is its cross-sectional nature, which precludes causal inferences. Future research could adopt a longitudinal design to capture better the dynamics of stress, engagement, and commitment over time.

6. Conclusıon

In conclusion, this study sheds light on IT workers' job engagement, organizational commitment, and occupational stress. Job engagement is a key mediator between organizational commitment and work-related stress, and higher job engagement reduces the negative impacts of stress on organizational commitment. A strong negative correlation was identified between occupational stress and organizational commitment, suggesting that stressed workers are less committed to their companies. However, job engagement boosts organizational commitment, suggesting that motivated individuals are more likely to form deep bonds with their employers. These findings demonstrate the importance of job engagement in reducing work-related stress and improving organizational commitment. Among other disadvantages, the study's small sample size and cross-sectional strategy suggest more research into these associations. Larger sample numbers and longitudinal approaches may increase generalizability. The research concludes that job engagement is crucial to IT professionals' company loyalty under stress.

Author contributions

Ruchi Jain: Conceptualization, Data collection, Methodology and Writing-Original draft preparation. **Amita Chourasiya:** Editing draft and Validation. **Manoj Kumar Gupta:** Visualization and Investigation. **Anukool Manish Hyde:** Writing-Reviewing and Editing.

Conflicts of interest

The authors declare no conflicts of interest.

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