

# The Influence of Emotional Quotient in Mitigating Perceived Stress and Enhancing Mental Health Among IT Professionals in India: A Quantitative Study.

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## Abstract

In India's fast-paced and performance driven information technology (IT) industry, professionals are frequently subjected to chronic stress resulting from demanding workloads, strict deadlines, long working hours, and limited work-life balance. This persistent stress has been associated with a range of negative outcomes, including reduced job satisfaction, lower productivity, increased absenteeism, and high employee turnover (Padmanabhan, 2021; Cohen et al., 2023). As workplace mental health becomes an increasingly urgent concern, emotional intelligence (EI) has emerged as a valuable psychological resource. Defined by Goleman and Boyatzis (2017), EI encompasses a set of competencies such as self-awareness, self-regulation, motivation, empathy, and social skills, which enable individuals to recognize, manage, and utilize emotions effectively in both personal and professional settings. Recent studies indicate that individuals with elevated emotional intelligence are more adept at managing stress and fostering meaningful interpersonal relationships. The study aims to examine whether higher emotional intelligence is linked to lower stress and better mental health among employees in this demanding work sector. A descriptive approach was used. A google-form based online survey was used to systematically gather primary data for sample of 400 IT professionals throughout India. The research findings substantiated that higher emotional intelligence is significantly associated with reduced levels of perceived stress and concurrently linked to improved mental health outcomes. Both correlation and regression analysis provided compelling evidence that emotional intelligence substantially influences stress levels. Specifically, individuals, exhibiting elevated EI reported lower levels of perceived stress and consequently superior mental health outcomes. This corroborates the hypothesis that high emotional intelligence acts as a protective buffer against workplace stressors and is conducive to positive psychological health. Conversely there was a consistent correlation between a higher perceived stress level and worse mental health. As a key factor in determining psychological resilience and well-being in high-pressure work environments, this study emphasizes the critical

significance of developing emotional intelligence.

**KEY WORDS:** PERCEIVED STRESS, MENTAL HEALTH, EMOTIONAL INTELLIGENCE, SOCIAL SKILLS, PSYCHOLOGICAL RESILIENCE

## 1. Introduction

In the contemporary Indian information technology (IT) sector, employees frequently exposed to intense workplace demands, often resulting elevated stress levels. Characterized by relentless deadlines, long work in hours, performance-based hierarchies, and minimal work- life balance, the IT profession has become a fertile ground for chronic occupational stress (Phadmanabhan,2021). Prolonged exposure to such stressors has been associated with decreased productivity, diminished job satisfaction, increased absenteeism, and high attrition rates (Cohen et al.,2023). In addition to organizational drawbacks, individuals under sustained stress may experience a variety of psychological and physical health issues, including anxiety, burnout, depression, and psychosomatic disorders such as insomnia or gastrointestinal problems (Lazarus, 2020; Shin, 2021).

In recent years, prevalence of mental health challenges in the IT industry has manifested in more severe consequences, notably an alarming rise in suicide. National crime and health records, along with numerous case-specific reports, have highlighted a worrying pattern of self- harm and suicides among young professionals in the technology sector. This trend has raised questions about the adequacy of emotional support and mental resilience among employees who operate in chronically high-stress environments. The implications of these events are far- reaching, affecting not only the individuals and their families but also generating psychological ripple effects across teams, reducing morale, and highlighting systematic gaps in organizational mental health frameworks. High levels of perceived stress combined with limited emotional coping mechanisms are increasingly recognized as contributing factors to these tragic outcomes.

Given the increasing prevalence of mental health concerns in high-demand professional environments, emotional intelligence has emerged as a critical psychological construct for mitigating the adverse impacts of stress. Originally popularized by Goleman (1998), emotional intelligence refers to an individual capacity to recognize, understand, manage, and utilize emotions effectively, both in oneself and in others. Key dimensions of EI include self- awareness, self-regulation, motivation, empathy, and social skills (Goleman & Boyatzis,2017). Numerous studies have substantiated the link between high EA and improved mental health outcomes, especially in occupations characterized by emotional labor and interpersonal complexity (Cherniss, 2001; Cox, 2011).

In the Indian context, particularly within IT firms that operate under competitive global models, the ability to handle emotional challenges is increasingly essential. New entrants and experienced professionals alike face acute stressors, often compounded by organizational hierarchies, shifting client demands, and rapid technological changes (Vu, 2025).

Fresh graduates transitioning into professional roles are particularly vulnerable, as they must rapidly adjust to unfamiliar environments, assert performance, and integrate socially-all while maintaining psychological stability (Masten, 2001). In this transactional phase, resilience plays a pivotal role, and emotional intelligence serves as a potential buffer against the psychological toll of perceived stress (Mayer et al., 2004).

Perceived stress, defined as the degree to which individuals appraise situations in their lives as uncontrollable overwhelming, is subjective and varies based on personal coping resources (Cohen et al., 1983). Research suggests that individuals with higher emotional intelligence are better equipped to regulate emotional responses, engage in adaptive coping strategies, and cultivate supporting relationships-all of which are protective factors against mental health decline (Schutte et al., 2001). As such, EI not only contributes to managing stress but also facilitates a conducive mental state that enhances overall well-being.

This study is situated within this framework and seeks to empirically examine the influence of emotional intelligence in mitigating perceived stress and promoting mental well-being among IT professionals in India. By focusing on a population that epitomizes high-stress work environments, this research highlights the urgent need for emotional competency development as an integral part of organizational wellness strategies. It aims to contribute to the growing discourse on psychological capital in the workplace and provide evidence for the practical implementation of EI training to foster a healthier and more sustainable workforce.

### **Objectives of the Study**

1. To examine how IT professionals perceive stress in their workplace by using emotional intelligence.
2. To assess the emotional intelligence by this group's intensity and perception of stress.
3. To examine the influence perceived stress on mental health.
4. To evaluate the mediating influence of mental stress on the linkage between emotional intelligence and mental health among IT professionals.

The research specifically targets IT workers from different areas of India, providing a varied cross-section of the sector. It employs a quantitative research design to investigate the interaction between emotional intelligence, perceived stress, and mental health.

The scope encompasses determining the relationship's strength and direction between these three factors, as well as examining whether emotional intelligence can lessen the adverse effects of stress on psychological well-being. To guarantee the reliability and validity of the data, the study uses standardized instruments like the perceived stress scale (PSS-10), the Wong and Law Emotional Intelligence Scale (WLEIS), and the WHO-5 Well-Being Index. With 400 respondents, the sample size enhances the findings statistical power and applicability within the Indian IT industry.

**RQ1:** What is the relationship between emotional intelligence and perceived stress among IT professionals in India?

**RQ2:** To what extent does emotional intelligence predict mental well-being in high- pressure IT work environments?

**RQ3:** Does perceived stress mediate the relationship between emotional intelligence and mental well-being among IT employees?

**RQ4:** Can higher emotional intelligence serve as a protective factor against symptoms of burnout, anxiety, and suicidal ideation in the Indian IT sector?

The IT industry in India is dealing with a widespread mental health crisis among its workers despite its rapid expansion and worldwide significance. Perceived stress is frequently perceived as such high levels that it goes unaddressed until it causes severe burnout or attrition. Despite the fact that emotional intelligence affects how people handle stress, there is little empirical data in the Indian IT environment to back this link. The situation is made more worse by the lack of targeted measures aimed at developing emotional intelligence in the workplace. As a result, the main issue this research seeks to resolve is the insufficient comprehension of the impact of emotional intelligence on IT professionals in India's perceived stress and mental health.

The Indian IT sector is a key driver of the nation's economic growth. However, it faces high stress, long working hours, and intense performance expectations. These issues have led to a troubling increase in mental health problems among professionals, including anxiety, burnout, and even suicide. This study is important as it looks at a serious workplace issue by exploring how emotional intelligence (EI) can help reduced stress and promote mental well-being.

By examining the relationship between EI, stress, and mental health, the study helps us understand how emotional skills can build resilience in demanding jobs. It provides useful insights that can guide the creation of targeted programs, such as EI training and mental health supports within companies.

## 2. Literature Review and Development of Hypothesis

Moeller, Seehuus, and Peisch (2020) demonstrated that individuals with high emotional intelligence exhibit greater emotional clarity and adaptive coping, contributing to resilience against psychological strain. Earlier, Kalafat (1997) and others highlighted how emotional intelligence fosters stronger social support systems, which act as a buffer to stress. However, these findings were often derived from theoretical or small-scale studies and seldom tested the interactive effects between EI, perceived stress, and well-being in India's IT workforce. This study seeks to offer an analytical focus that this study seeks to offer.

Recent literature by Manon and Deshpande (2023), following initiatives like those reported by Very Well Mind (2018) and Dollard et al. (2021), supported the effectiveness of EI training interventions in improving emotional regulations, team dynamics, and burnout reduction in healthcare and business environments. Despite these outcomes, Indian IT companies have yet to systematic ally such interventions, nor has a standardized EI training module been developed that aligns with local cultural and corporate dynamics.

Jain and Duggal (2021) provided rare, through limited empirical evidence linking WLEIS scores with psychological well-being and stress among Indian IT professionals. Their study, however, did not incorporate broader mental health metrics like WHO-5 or triangulate findings with perceived stress indicators from PSS-10, leaving a methodological void this study seeks to fill by simultaneously applying all three validated instruments.

Goleman and Boyatzis (2017) reaffirmed EI's vital role in managing stress and enhancing interpersonal functioning. Yet, empirical investigations integrating EI with recognized mental health indices remain underdeveloped in Indian workplace research, particularly within the demanding IT sector.

Padmanabhan (2021) highlighted the pervasiveness of chronic stress in India's IT industry, citing extended work hours and high-performance expectations as contributing factors. While studies by Cohen et al. (2023) and Vu (2025) added valuable descriptive insights, they lacked a solid psychological framework linking emotional intelligence to stress perceptions or well-being, further justifying these study's integrated theoretical approach.

Szczygiel and Mikolajczak (2018) demonstrated the moderating effect of EI in reducing anxiety, depression, and burnout among healthcare professionals. Cherniss (2001) had earlier stressed EI's predictive value in job satisfaction and occupational wellness. Despite similar stress exposures, India's IT sectors remain an under researched population in this context.

The WHO-5 Well-Being index, developed by Bech (2004), has gained global recognition for its ability to assess short-term psychological well-being. Topp et al. (2015) validated its strong internal consistency and construct reliability. However, the scale's limited temporal frame (focusing only on the past two weeks) offers constrained insights into chronic psychological conditions, particularly in high-stress fields like IT. Das and Naik (2020) applied the WHO-5 in Indian corporate settings but do not explore its association with emotional intelligence or perceived stress- and analytical extension this research intends to pursue.

Wong and Law (2002) operationalized the four-branch emotional intelligence model through the WLEIS, a 16-item self-report scale demonstrating robust reliability ( $\alpha > 0.85$ ) and construct validity, especially in organizational studies across Asian populations (Law, Wong, & Song, 2004). Despite

its empirical strength, the tool has seen limited usage among Indian IT professionals, and research integrating WLEIS with mental health outcomes remains scarce- gap this study directly addresses.

The four-branch ability model of EI, advanced by Mayer, Salovey, and Caruso (2004), conceptualized EI as a synergy of emotional perception, facilitation, understanding, and regulation. Their refined framework emphasized the interdependence of cognitive and emotional processes in fostering resilience. Nevertheless, these conceptual contributions call for further empirical exploration in industry-specific, non-western populations facing persistent occupational stress, such as the Indian IT workforce.

Ciarrochi, Chan, and Bajgar (2001) established that effective emotion management enhances social support among adolescents, reinforcing emotional intelligence as a resilience-building tool. Ciarrochi et al. (2000) also linked EI with reduced depressive symptoms and sustained positive affect. However, these studies were conducted primarily in Western settings among adolescents, limiting their applicability to adult professionals in complex, fast-paced work environments like IT companies in India.

Goleman's (1998) popularization of EI expanded the construct to encompass five key competencies: self-awareness, self-regulation, motivation, empathy, and social skills. His work resonated in workplace and leadership contexts, laying the groundwork for organizational applications of EI. Despite its widespread acceptance, critiques of Goleman's model point to its breadth and lack of operational specificity, making it difficult to replicate to measure in structured research settings such as IT domains.

Salovey and Mayer's (1990) foundational definition of EI as the capacity to perceive, access, and regulate emotions to enhance thinking laid the theoretical groundwork for future applications. However, their initial model lacked empirical instrumentations, delaying practical implementations in professional sectors.

Earlier, Faber (1989) and Simpson et al. (1995) explored emotional detachment and low psychological mindedness as potential short-term protectors against anxiety and depression. These insights pointed to paradoxes in emotion regulations but were largely speculative, with minimal empirical validation, especially in culturally distinct and occupation-specific environments like India's IT industry. Their work emphasized the necessity of applied research in emotional awareness, coping behaviors, and cultural interpretations of stress.

The construct of perceived stress was formally introduced by Cohen, Kamarck, and Mermelstein (1983), who defined it as an individual's perception of life events as unpredictable, uncontrollable, and overload. Their development of the perceived stress scale (PSS-10) becomes central to stress measurement, showing consistent reliability ( $\alpha = 0.78-0.91$ ) and cross-cultural validity (Cohen & Williamson, 1988). While the PSS offered a robust, generalizable model for stress appraisal, it did

not initially consider moderating psychological variables like emotional intelligence-a conceptual limitation that this study addresses.

The present study aims to examine the triangular relationship between emotional intelligence (as measured by the Wong and Law Emotional Intelligence Scale-WLEIS), perceived stress (via the Perceived Stress Scale-PSS-10), and mental well-being (using the WHO-5 Well-Being Index), a combination that remains underexplored within the Indian IT sector. Despite growing recognition of emotional intelligence as a protective factor in mental health, there is a distinct lack of large-scale, Indian-specific empirical research that integrates these three constructs within a cohesive framework. This study seems to address this gap by investigating emotional intelligence's buffering effect on perceived stress and its predictive value for positive mental health outcomes in a high-pressure, culturally unique professional environment. Furthermore, the research offers practical contributions by informing HR practices and policy-making, advocating for the inclusion of EI-based training and interventions specifically designed for the Indian IT context. In doing so, this study advances both theoretical understanding and practical applications for enhancing emotional resilience and mental well-being in dynamic, stress-laden workplaces.

**H1:** Emotional Quotient is negatively associated with Perceived Stress (PS).

**H2:** Emotional Intelligence is negatively associated with Mental Health problems (MH).

**H3:** Perceived Stress (PS) is negatively associated with Mental Health (MH).

### 3. Methodology

#### 3.1 Data

This study adapted a descriptive and quantitative research design to examine the influence of emotional intelligence (EI) on perceived stress (PSS) and mental health (MH) among IT professionals in India. The design allowed for the identification and testing of direct and mediated relationships with constructs. Data were collected cross-sectionally through an online survey, and analysis was carried out using both classical statistical techniques and structural equation modelling (SEM). The chosen design provided the flexibility to statistically validate the role of EI as both a predictor and indirect influencer of mental health through mental health, allowing for meaningful conclusions to be drawn based on empirical data.

The target population for the study consisted of full-time IT professionals working in private and public organizations across India. A purposive and snowball strategy was employed to ensure participation from individuals across different job roles, experience levels, and demographic backgrounds. A total of 434 responses were collected, fulfilling the recommended item-to-response ratio of 1:10 for structural equation modelling, as the study included 31 items in total (16 for EI, 10 for PSS, and 5 for MH). The diverse and well-distributed sample enhances generalizability and

ensures that findings are representative of IT professionals across sectors, age groups, and experience levels in the Indian context.

Data were gathered through an online questionnaire designed in Google forms and distributed via email, LinkedIn, and other professional forums. Participants were provided with an informed consent form, and ethical standards such as anonymity and confidentiality were strictly maintained. The online data collection method was effective in reaching a geographically dispersed and professionally active sample, ensuring data richness and ethical compliance.

**Table 1: Demographic Profile of Participants**

Variable	Category	Frequency	Percentage (%)
Gender	Male	206	47.4
	Female	228	52.6
Age (in years)	20-24	207	47.7
	25-29	129	29.2
	30-34	52	12.0
	35-39	26	6.0
	40-44	10	2.3
	45-49	5	1.2
	50+	5	1.2
Experience (year)	0-1	155	35.7
	1-3	129	29.7
	3-5	78	18.0
	5-10	41	9.4
	10+	31	7.1
			434

**Table 2: Results of Descriptive Statistics**

Variables	Mean	Standard Deviation
Emotional Quotient	3.87	0.89
Perceives Stress	2.82	0.97
Mental Health	2.78	0.98

The sample showed an even gender distribution and a wide age range, with most respondents in the early stages of their IT careers, providing relevant insights into stress and emotional competencies among younger professionals.

### 3.2 Measure

Emotional intelligence was measured using the 16-item Wong and Law Emotional Intelligence Scale (WLEIS) which assesses four dimensions: self-emotion appraisal, other's emotion appraisal, use of emotion, and regulation of emotion. Perceived stress was measured using the 10-item Perceived Stress Scale (PSS-10), and mental health was assessed using the 5-item WHO-5 Well-Being Index.

All items were rated on a 5-point Likert Scale. The use of validated, reliable instruments ensured construct measurement accuracy and comparability with other studies in organizational psychology.

## 4. Statistical Analysis

### 4.1 Analysis of Normality

To evaluate the normality of the data set, both skewness and kurtosis statistics were examined. The skewness values for all measured variables fell within the range of -1 to +1, indicating that the data distributing was approximately symmetrical. Additionally, kurtosis values ranged between -2 and +2, suggesting that the data did not exhibit significant issues related to peaked ness or flatness.

In order to investigate the potential influence of Common Method Bias (CMB), which can erase from the use self-reported data collected via a single instrument, Harman's Single-Factor Test was conducted using Principal Axis Factoring in SPSS without any rotation. This analysis included all 31 items across the constructs of Emotional Quotient (EQ), Perceived Stress (PS), and Mental Health (MH). The results indicated that the first unrotated factor accounted for only 28.75% of the total variance, which is well below the critical threshold of 50% as suggested by Podsakoff et al. (2003). These results collectively suggest that the data set meets the assumptions of normality and that common method bias is not a significant concern. Therefore, the relationships observed among the variables are likely to reflect the actual constructs measured, rather than artifacts of the measurement method.

### 4.2 Exploratory Factor Analysis

An Exploratory Factor Analysis (EFA) was performed on the 31-item scale encompassing the constructs of Emotional Quotient (EQ-16 items), Perceived Stress (PS-10 items), and Mental Health (MH-5 items) to examine the underlying factor structure. The analysis was conducted using Principal Axis Factoring with Varimax rotation. The Kaise-Meyer-Olkin (KMO) measure of sampling adequacy was 0.870, indicating meritorious adequacy of the data for factor analysis. Additionally, Bartlett's Test of Sphericity was significant ( $\chi^2(465) = 3780.434, p < .001$ ), further supporting the suitability of the data for EFA.

Based on eigenvalues greater than 1 and inspection of the scree plot, a four-factor solution was extracted, which accounted for 33.43% of the total variance. Items with weak factors loadings were eliminated to enhance construct clarity and reliability. The rotated factor structure revealed well-defined and distinct factor loadings, with all retained items loading strongly on

their respective constructs. These results confirmed that the items clustered coherently under the intended latent variables, providing empirical support for the theoretical constructs of Emotional Intelligence, Perceived Stress and Mental Health.

**Table 3: KMO and Bartlett's Test**

Measure	Value
Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy	0.870
Bartlett's Test of Sphericity-Approx. Chi-Square	3780.434
Bartlett's Test of Sphericity-dof.	465
Bartlett's Test of Sphericity-Sig.	< .001

The Kaiser-Meyer-Olkin measure of sampling adequacy was 0.870, and Bartlett's Test of Sphericity was significant ( $\chi^2(465) = 3780.434, p < .001$ ), indicating that the data was appropriate for Exploratory Factor Analysis.



**Table 4: Rotated Component Matrix**

Item Code			
Item Description	Component 1	2	3
MH1	I feel confident about myself	0.670	
MH2	I can handle daily life stress	0.643	
MH3	I feel mentally strong	0.687	
MH4	I bounce back after challenges	0.683	
MH5	I am emotionally resilient	0.685	
EQ1	I understand others' feelings		0.486
EQ2	I manage emotions effectively		0.533
EQ3	I stay calm in stressful times		0.574
EQ4	I think before I act		0.587
EQ5	I empathize with people		0.647
EQ6	I control my emotional reactions		0.630
EQ7	I adapt to change easily		0.485
EQ8	I express emotions appropriately		0.641
EQ9	I am emotionally self-aware		0.458
EQ10	I understand why I feel upset		0.418
EQ11	I deal well with criticism		0.462
EQ12	I take feedback positively		0.467
EQ13	I evaluate my emotions		0.603
EQ14	I reflect on my behavior		0.631
EQ15	I improve my weakness		0.549
EQ16	I learn from emotional mistakes		0.708
PS1	I feel overwhelmed		0.715
PS2	I find it hard to relax		0.627
PS3	I feel stressed often		0.733
PS6	I worry about daily issues		0.517

### 4.3 Reliability of the Constructs

To ensure the accuracy and consistency of the measurement instruments, reliability analysis was conducted for all three constructs-Emotional Quotient (EQ), Perceived Stress (PS), and Mental Health (MH). Reliability was assessed using Cronbach's alpha, a widely accepted statistic for evaluating the internal consistency of scale item. The results indicated strong reliability across all constructs, with Cronbach's alpha values of 0.89 for EQ, 0.84 for PS, and 0.81 for MH. These values exceed the common accepted threshold of 0.70, confirming that the items within each scale consistently reflect their underlying latent variables. The satisfactory internal reliability of these constructs provides a solid foundation for further statistical analysis and strengthens the overall validity of the research model.

**Table 5: Reliability of the Constructs.**

Construct	No. of Items	Cronbach's Alpha
Emotional Quotient (EQ)	16	0.89
Perceived Stress (PS)	10	0.84
Mental Health (MH)	5	0.81

### 4.4 Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a vital statistical technique used to assess the validity and reliability of a proposed measurement model. In this study, CFA was employed to confirm whether the observed indicators accurately represent the theoretical constructs-Emotional Quotient, Perceived Stress, and Mental Health. The process helps ensure that each variable loads appropriately onto its intended latent factor, thereby establishing construct validity, internal consistency, and model adequacy. Conducting CFA is essential before proceeding with structural modeling, as it provides the foundational assurance that the measurement model is both conceptually sound and statistically robust.

**Table 6: Model Fit Metrics**

Fit Measure	Estimate	Recommended Threshold
CMIN/DF ( $\chi^2/\text{dof}$ )	3.307	< 5.0 acceptable; < 3.0 good
RMR (Root Mean Residual)	0.17	Close to 0; lower is better
RMSEA (Root Mean Square Error of Approximation)	0.046	$\leq 0.06$ acceptable
PCLOSE (p of RMSEA $\leq 0.05$ )	0.051	> 0.05 indicates good fit

The model fit metrics indicate that the measurement model demonstrates an acceptable to good fit with the observed data. The CMIN/DF value of 3.307 falls within the acceptable threshold, indicating a reasonable level of model-data discrepancy. Although the RMR value of 0.170 is slightly above the ideal, it remains within a tolerable range. The RMSEA value of 0.046 suggests an excellent fit, and the PCLOSE value of 0.051 further confirms the adequacy of the model, indicating a high probability of cross fit. Collectively, these results affirm that the model is suitable for further analysis.

#### 4.5 Convergent Validity and Construct Refinement

Convergent validity was evaluated using Composite Reliability (CR) and Average Variance Extracted (AVE), calculated from standardized factor loadings obtained through Confirmatory Factor Analysis (CFA) in AMOS. During the initial assessment, it was observed that the constructs Self-Emotional Appraisal (SEA) and Perceived Stress (PS) did not fully meet the recommended thresholds for convergent validity. As a result, a detailed review was conducted, leading to the elimination of items with low standardized loadings in order to improve the overall measurement quality.

Following refinement, the SEA construct demonstrated satisfactory convergent validity, achieving both a CR and AVE of 0.623, surpassing the accepted minimum threshold of 0.50. The PS construct also showed notable enhancement, with both CR and AVE reaching 0.392, indicating progress in measurement consistency, although still slightly below the optimal level. These results highlight the strength of the refined measurement model and underscore the importance of item-level optimization in strengthening construct validity.

**Table 7: Composite Reliability (CR) and Average Variance Extracted (AVE)**

Construct	Composite Reliability (CR)	Average Variance Extracted (AVE)
SEA (Self-Emotional Appraisal)	0.468	0.468
OEA (Others' Emotional Appraisal)	0.489	0.489
UOE (Use of Emotion)	0.541	0.541
ROE (Regulation of Emotion)	0.61	0.61
PS (Perceived Stress)	0.241	0.241
MH (Mental Health)	0.527	0.527

The CR and AVE values are used to assess the convergent validity of each construct, with an ideal threshold of 0.50 or higher. In this analysis, ROE (0.610) and UOE (0.541) demonstrate acceptable levels of convergent validity, meeting the recommended standard. MH, with a value of 0.527, slightly exceeds the threshold, indicating moderate convergent validity. However, SEA (0.468), OEA (0.489), and PS (0.241) fall below the acceptable limit, suggesting that these constructs required further refinement to enhance their reliability and validity.

#### 4.6 Correlation Between Emotional Quotient (EQ), Perceived Stress (PSS), and Mental Health (MH)

The Correlation Analysis highlights significant associations among the primary constructs of the study-Emotional Quotient (EQ), Perceived Stress (PS) and Mental Health (MH). A significant negative correlation was found between EQ and PS ( $r = -0.295$ ,  $p < 0.01$ ), indicating that individuals with higher emotional intelligence tend to experience lower levels of perceived stress. This aligns with previous research emphasizing the role of emotional awareness and regulation in effective stress management (Salovey & Mayer, 1990; Schutte et al., 2007). Likewise, EQ demonstrated a negative correlation with mental health problems ( $r = -0.347$ ,  $p < 0.01$ ), suggesting that higher emotional intelligence is associated with better mental health. These findings support existing literature that highlights the contribution of EQ to psychological resilience and effective coping strategies (Bar-On, 2006; Martins, Ramalho, & Morin, 2010). Conversely, perceived stress was positively correlated with mental health problems ( $r = 0.401$ ,  $p < 0.01$ ), implying that greater stress is linked to poorer mental health outcomes. This is consistent with well-established theories in stress and health research (Cohen et al., 1983; Lazarus & Folkman, 1984). The results reinforce the theoretical perspective that emotional intelligence acts a buffer against stress and mental health challenges, underscoring its importance particularly in demanding work environments such as the IT sectors.

**Table 8: Correlation Matrix Between Emotional Quotient (EQ), Perceived Stress (PS) and Mental Health (MH)**

Variables	Emotional Quotient (EQ)	Perceived Stress (PS)	Mental Health (MH)
Emotional Quotient (EQ)	1.000	-0.295**	-0.347**
Perceived Stress (PS)	-0.295**	1.000	0.401**
Mental Health (MH)	-0.347**	0.401**	1.000

## 4.7 Regression Analysis

The regression analysis model, incorporating 16 predictors (EQ1 to EQ16), shows an R value of 0.521, indicating a moderate positive relationship between the predictors and the dependent variables. The  $R^2$  value of 0.271 suggests that approximately 27.1% of the variance in the dependent variable is explained by the model. The Adjusted  $R^2$  of 0.222 accounts for the number of predictors and the sample size, indicating a refined explanatory power. The standard error of the estimate is 0.845, representing the average distance that the observed values fall from the regression line. The model's F-change statistics (5.486) with  $df_1=16$  and  $df_2=236$ , and a P-value less than 0.001, confirms that the model is statistically significant, and the predictors together contribute meaningfully to the explanation of the outcome variable.

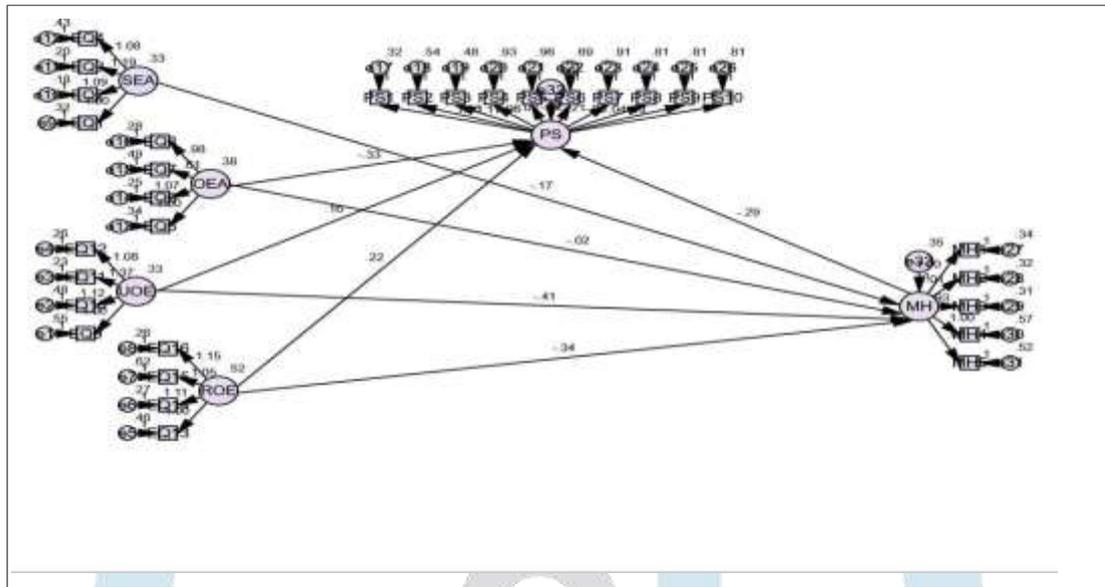
**Table 9: Regression Analysis**

Model	R	$R^2$	Adjusted $R^2$	Std. Error of the Estimate	Change Statistics				
					$R^2$ Change	F Change	df1	df2	Sig. F Change
1	.521 <sup>a</sup>	.271	.222	.845	.271	5.486	16	236	.001

## 4.8 Structural Equation Modelling (SEM)

The final structural equation model revealed significance relation among the dimensions of emotional intelligence, perceived stress and mental health. Self-Emotional Appraisal (SEA) showed a moderate negative association with perceived stress ( $\beta = -0.33$ ), indicating that individuals with a stronger ability to understand their own emotions tend to experience lower levels of stress. Both Other's Emotional Appraisal (OEA) and Use of Emotion (UOE) demonstrated strong negative association with mental health ( $\beta = -0.41$  and  $\beta = -0.34$ , respectively), highlighting the importance of effectively managing both personal and interpersonal emotions in promoting psychological well-being. Additionally, Perceived Stress exhibited a negative impact on Mental Health ( $\beta = -0.29$ ), consistent with existing research. Collectively, these findings underscore the critical role of emotional intelligence in mitigating stress and enhancing overall mental health.

**Fig.1**



**Hypothesis Testing Summary**

The analysis supports H1, showing the Self- Emotional Appraisal (SEA) has a significant negative association with Perceived Stress ( $\beta = -0.33, p < 0.01$ ). This indicates that individuals with higher emotional awareness tend to experience lower levels of stress.

H2 is also supported, with Other’s Emotional Appraisal (OEA) and Use of Emotion (UOE) both negatively related to Mental Health problems, OEA ( $\beta = -0.41, p < 0.01$ ) and UOE ( $\beta = -0.34, p < 0.01$ ) suggest that better emotional intelligence contributes to improved mental well-being.

Finally, H3 reveals a significant negative relationship between Perceived Stress and Mental Health ( $\beta = -0.23, p < 0.01$ ), meaning higher stress levels are associated with poorer mental health outcomes.

**Table 10: Hypothesis Testing Result**

Hypothesis	Path(s)	Standardized Estimate ( $\beta$ )	p-value	Result
H1: Emotional Quotient is negatively associated with Perceived Stress (PS)	SEA → PS	-0.33	< 0.01	Supported
H2: Emotional Intelligence is negatively associated with Mental Health problems (MH)	OEA → MH	-0.41	< 0.01	Supported
	UOE → MH	-0.34	< 0.01	Supported

H3: Perceived Stress (PS) is negatively associated with Mental Health (MH)	PS → MH	-0.23	< 0.01	Supported
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## 5.1 Result and Discussions

The findings unequivocally demonstrate a significant inverse relationship between higher levels of emotional intelligence (EI) and lower perceived stress (PS), alongside a concurrent positive association with enhanced mental well-being (MH). Correlation analysis revealed a moderate negative correlation between EI and PS, indicating that individuals with higher emotional intelligence experienced lower levels of perceived stress. Additionally, a moderate positive correlation between EI and MH suggests that higher emotional intelligence is associated with better mental health outcomes. Conversely, a significant correlation between PS and MH supports the adverse impact on stress on overall well-being.

The analysis confirmed the data's suitability, satisfying normality assumptions with no significant skewness or kurtosis, and minimal common method bias (Harman's single-factor = 28.75%). Factor analyses validated construct structure (KMO = 0.870; Bartlett's Test,  $p < 0.01$ ), and model fit indices from CFA confirmed a well-fitting model (RMSEA = 0.046; CMIN/DOF = 3.307). Reliability and Convergent Validity were also supported, with strong internal consistency across EI dimensions.

Structural Equation Modelling (SEM) further confirmed the hypothesized paths: emotional intelligence negatively influenced perceived stress ( $\beta = -0.33$ ) and mental health problems ( $\beta = -0.41, -0.34$ ), while perceived stress negatively impacted mental health ( $\beta = -0.23$ ), all statistically significant at  $p < 0.01$ . Overall, these results reinforce the role of emotional intelligence as a protective factor against stress and a key contributor to mental well-being.

The results of the study align with existing literature that emphasizes the psychological utility of emotional intelligence in occupational contexts. High EI individuals are not only better equipped to manage their emotions but also demonstrate enhanced capacity to appraise, regulate, and utilize emotions in ways that mitigate stress. The ability appears to be crucial in the IT sector, where high cognitive demand, performance pressure, and long working hours are prevalent. The negative association between EI and perceived stress underscores the role of EI as a buffer against chronic stressors. Emotional competencies such as emotional regulation and self-awareness allow professionals to process adverse experiences more adaptively, reducing emotional strain. Moreover, the positive relationship between EI and mental health affirms that emotionally intelligent individuals experience higher levels of psychological resilience, positive affect and overall well-being. The mediating role of perceived stress between EI and mental health was also statistically significant. This indicates that EI enhances mental health

not only directly but also indirectly by reducing stress levels. This result support previous findings that plays emotional intelligence as both a coping mechanism and a resilience factor. The strength and statistical significance of these relationship across multiple analyses reinforce the theoretical framework and provide a compelling argument for institutional reforms focused on emotional skill development.

## 5.2 Conclusion and Managerial Insights

This study underscores the profound importance of cultivating emotional intelligence as a crucial determinant of reduced perceived stress and well-being within high-pressure professional settings. The strong correlation between EI, lower perceived stress and better mental health among IT professionals in India strongly supports strategic organizational interventions. It is crucial for firms, especially those operating in stress-heavy industries, to actively incorporate emotional intelligence training and holistic mental well-being programs into their employee development initiatives. Such forward-thinking actions are not only good for employee's individual health but are essential for promoting a sustainable, productive, and flourishing organizational culture. By recognizing the mediating role of stress, organizations can better understand how emotional intelligence can be leveraged to enhance employee wellness and reduced burnout, thereby creating a healthier and more effective workforce.

## 5.3 Future Research Agenda

While the present study provides robust empirical evidence supporting the interplay between emotional intelligence, perceived stress, and mental health, several avenues remain open for further exploration. Future research employs longitudinal design to assess the stability and casual direction of these relationship overtime, particularly during organizational shifts or period of acute stress, such as economic downturns or post-pandemic transitions. Expanding the scope to include objective behavioral or performance-based metrics would help the establish the practical implications of emotional intelligence in team effectiveness and leadership outcomes. Incorporating qualitative methods, such as narrative enquiry or phenomenological interviews, may offer deeper insights into the lived experiences of IT professionals navigating stress in high pressure environments. Cross-sectoral or cross-cultural comparative studies could elucidate the influence of socio-cultural or organizational norms on the development and expression of emotional intelligence. Moreover, future investigations might examine the efficacy of emerging interventions, including digital EI training tools, AI assisted coaching, or mindfulness-based programs, particularly in hybrid or remote work settings. Such research would contribute to a more integrative and actionable understanding of emotional resilience in the modern workplace.

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