An Empirical Evidence of Occupational Stress at the Workplace: A Study on Female Employees Working in Indian Manufacturing Firms

Norin Raj Lakra[1*] , Dr. Ashish Mohan Dubey[2]

[1*]Ph.D Scholar, BIT, Mesra (Patna), Research Scholar, Department of Management, BIT Mesra Ranchi (Patna Campus), Near Patna Airport, P.O. Bihar Veterinary College,, Patna – 800014, Bihar, India, E-mail: phd10052.21@bitmesra.ac.in, ORCHID ID: 0009-0002-1001-0408
[2]Assistant Professor, Department of Management, BIT Mesra Ranchi (Patna Campus)
Near Patna Airport, P.O. Bihar Veterinary College, Patna – 800014, Bihar, India, E-mail: amdubey@bitmesra.ac.in, ORCHID ID: 0000-0003-4894-1208

Abstract
Occupational stress has become a widely recognised term in today's business landscape and poses a growing psychological threat to both employees and organisations. The evolving nature of modern employment has heightened pressure on workers, significantly contributing to occupational stress. Long-term exposure to occupational stress poses physical and psychological risks and, in turn, affects the organisation, leading to poor performance, absenteeism, and employee turnover. A study on 477 female employees working in various manufacturing sectors across India was conducted. The study identified *Organisational Role Challenges, Personal Disposition, and Postural Problems* as the primary stress-inducing facets. This research can be used as a tool to develop targeted strategies to promote a more equitable and inclusive work environment within the manufacturing sector.

Key words: occupational stress, female employees, manufacturing, postural problems, role challenges

1. Introduction

In today's volatile and high-pressure work environment, employees often report experiencing occupational stress. It typically arises from a mismatch between job expectations and employees' inability to meet them, often due to limited resources and increasing environmental and organisational demands. Irregular work shifts, poor ergonomics, limited opportunities for professional growth, and excessive job demands are among the factors contributing to occupational stress, poor performance, and psychological distress (Lakra & Dubey, 2025). Prolonged exposure to such stressors can lead to serious mental and physical health consequences.

When it comes to women in manufacturing, the conversation becomes even more critical. Historically, manufacturing has been a male-dominated sector. However, over the years, there has been a slow yet noticeable shift, with more women entering these traditionally male-dominated spaces. Sectors such as heavy metals and chemical manufacturing pose significant challenges for female employees, yet many women have persisted and established their presence in these demanding environments, reflecting resilience and progress (Data for India, 2025).

Notably, industries such as textiles and food processing have seen a relatively higher participation of women compared to other manufacturing sectors (Data for India, 2025). Despite manufacturing industries having existed in India for decades, gender disparity in the workforce persists. Data continues to show a significantly higher representation of men than women (Hr-Economic Times, 2024).

This underrepresentation of women can be attributed to various socio-cultural and structural barriers, including social psychology, safety concerns, gender-based discrimination, restrictive cultural norms, and inadequate workplace infrastructure. These challenges not only hinder women's entry into the sector but also affect their long-term retention, especially in roles traditionally occupied by men (Lucro, 2025). Maintaining a congenial environment is crucial, as it has an overall impact on the organisation. There are numerous instances in our daily lives and in organisations that can elevate the stress response and, if not addressed, can become a threat to organisational disaster.

Previous studies have shown that stress, particularly when combined with poor work-life balance, often leads to high attrition rates among women. Thus, the current research focuses on occupational stress and investigates several other critical issues faced by women in Indian manufacturing firms and contributes valuable insight towards understanding women's psychological problems.

This study can be useful towards guiding managers and policymakers of manufacturing firms in developing strategies and policies for improving workplace conditions and industrial psychology.

2. Literature review

Occupational stress is increasingly recognized as a modern workplace hazard, resulting from poor working conditions and ineffective human resource management practices, which negatively impact individuals both psychologically and physically (Lakra & Dubey, 2025; WHO, 2012).

The origins of the concept of stress trace back to Hans Selye's work in 1936 on the general physiological reaction (Selye, 1956). Building on Selye's foundational work, the concept of stress has significantly expanded over the years, and now it is viewed through multidimensional lenses incorporating organisational, psychological, behavioural and socio-cultural dimensions (Cooper & Payne, 1991; Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) define stress as a situation in which individuals struggle to cope due to limited personal resources and an inability to meet external demands. When daily routines are disrupted and individuals find themselves unable to manage their workload, it leads to both psychological and physiological disturbances. Common symptoms include anxiety, tension, distress, and, in severe cases, depression (Davis, J.L. et al., 2024; Beehr & Newman, 1978).

Beehr and Newman (1978) further explain occupational stress as a condition that arises when there is a significant shift or disruption in an individual's usual work environment. Similarly, Weiman (1977) emphasizes that occupational stress results not only from the nature of work itself but also from the impact it has on a person's mental and physical well-being. Lazarus and Folkman (1984) also observed a direct correlation between a person's environment and occupational stress.

Workplace incidents and environmental pressures can trigger stress, which may manifest as either short-term (occasional) or long-term (chronic) responses (Cavanaugh et al., 2000). Importantly, stress is subjective and varies from person to person. Lyle E. Bourne and R. Ekstrand (1985) noted that an individual's perception and response to a situation largely determine the degree of stress experienced.

Nixon (1979), a British cardiologist, illustrated the concept of stress-performance balance through his 1979 model known as "The Human Function Curve". This model outlines five stages: boredom, inactivity, optimal tension (where performance peaks), exhaustion, and finally, burnout or illness. Fischer (2000) emphasised that peak performance is achieved during the stage of healthy tension, underscoring the need for organisations to effectively manage employee stress to enhance productivity and overall quality of work life.

Further, Cooper and Bright (2001) proposed a comprehensive and widely accepted definition of stress, categorizing it into three dimensions: a) Stimulus-based, focusing on environmental stressors, b) Response-based, addressing psychological reactions and c) Interaction-based, emphasizing physiological responses arising from the interaction between the individual and their environment.

Additionally, Robert Karasek (1979) and colleagues found that a lack of autonomy, particularly restrictions on decision-making, can significantly contribute to employee stress.

Over the years, numerous studies have explored occupational stress from social, psychological, and physical perspectives, but still, scarce knowledge could be seen across various industries, geographical regions and different job roles. This gap gives an opportunity to explore these dimensions and uncover the untouched areas through a comprehensive research study, and highlight the key factors of occupational stress prevailing among female employees of manufacturing firms in India.

3. Theoretical Concept and Framing of the Research Conceptual Model

Occupational stress stems from hostile or unsupportive work environments (Cooper & Marshall, 1976; Peterson & Brown, 2005). In today's era, it has become a complex, chronic condition that has emerged from poor organisational culture, resource shortages, excessive demands, and limited autonomy in the workplace.

Looking at the theoretical background of occupational stress, it is observed that most studies have used theories and models to understand the complex issues faced by individual employees. Our research found that the Job Demand-Control (JDC) Model, by Karasek (1979), which stated that job strain results from the combination of high psychological demands and low decision-making autonomy (Belwal, S. et al., 2023; Linnik, & Sepp, J.,2023). Conservation of Resources (COR) Theory by Stevan Hobfoll (1989) suggests that people have some resources for his /her disposal. Stress is predicted when there is a threat and loss of valued resources (Hobfoll, S., 1989). The Job Demand-Control-Support (JDC-S) model by Robert Karasek and Töres Theorell gave an extended version of the Job Demand-Control model in the late 1980s. This model added that health is compromised when there is high demand and low control. Then, in the year 2006, Arnold Bakker and Evangelia Demerouti gave the Job Demands-Resources (JD-R) Model, which combined the principles of job stress and work motivation. The JD-R model discusses two broad categories: job

demand and job resources. This theory fits in all work environments due to its flexibility. Job demands refer to all the physical and psychological efforts that are required to do a job, for example, a high workload and emotional demands. Job resources are the requirements of a job that help to complete the demanded job, such as social support (Demerouti et al., 2001) and learning and development (Bakker, 2011). Social Capital Theory (SCT), grounded in the works of Bourdieu (1986), Coleman (1988), and Putnam (1995), conceptualises the resources embedded within social networks, such as trust, reciprocity, and shared norms, that facilitate collaboration and collective well-being. In organisational contexts, SCT has been used to explain how strong interpersonal ties and workplace cohesion can foster innovation, knowledge sharing, and resilience. Resource Theory, introduced by Foa and Foa (1971, 1980), conceptualises interpersonal behaviour as an exchange of six fundamental resource types: love, status, information, goods, services, and money, each varying in tangibility and dependency on the provider. Within organisational contexts, the theory explains how resource exchanges influence employee satisfaction, fairness perceptions, and stress levels.

In light of the above discussion, recurring theories and the most cited variables from these studies have confirmed that occupational stress is multi-dimensional. Cause and effect vary from person to person, and hence, the Beehr and Newman Facet Model (1978) can be best suited to study occupational stress and used as a conceptual framework for the current research.

The model provides a broad view of understanding occupational stress by classifying stressors into different facets. The model presents five facets in which employees can encounter stress in their lives. These are the environment facet, the Personal Facet, process facets, the human consequences facet, the adaptive response facets and Time facets, which incorporate all the other facets that progress over time.

The present study focuses on identifying the various facets of stress in manufacturing firms in India. This facet model serves as a foundation for examining occupational stress from different angles. This model helps to clarify conceptual issues and foster more systematic empirical research. A relatively facet-based approach to occupational stress not only identifies the causes of stress but also how employees' psychology is affected. Thus, this research is important for HR managers and researchers to proactively design a constructive plan to help the employees and the organisation. Table 1 presents a consolidated list of stress-inducing factors derived from empirical studies focused on women in manufacturing and service sectors.

Table 1: Factors of Occupational Stress

Factors	Supporting Authors
1. Absence of additional benefits	Sathakathulla, A.A., 2025;
2. Absence of emotional support	Sharma & Nair, 2015;
3. Absence of healthcare facilities	Thi, H.V. et al., 2025;
4. Absence of recognition	Mosadeghrad, 2014; Ai & Lai, 2023;
5. Challenges in task delegation	Jacob, 2019;
6. Conflicting role expectations	Osipow & Spokane, 1987;
7. Continuous work without respite	Kanellakis et al. 2018;
8. Cultural transition	Jain & Batra, 2015;
9. Decreased workplace motivation	Denis et al., 2007;
10. Difficult workplace relationships	Akanji, 2018; Amro et al., 2019;
11. Dynamic work culture	Berard, 2006;
12. Excessive overtime	Park, S. et al., 2020;
13. Excessive role demands	Abdel-Halim, 1978;
14. Frequent tech updates	Carvalho et al., 2021;
15. Health and safety risks	Beheshtifar & Nazarian , 2013;
16. High-velocity work environment	Gabriel, K.P., 2021;
17. Individual traits	Dehdashti et al., 2017;
18. Ineffective salary increase system	Hamdan, 2012;
19. Insufficient professional development	Monica et.al., 2012;
20. Insufficient restroom facilities	Venugopal,V. et al., 2016;
21. Intoxication	Das, B., 2020;
22. Job insecurity	Sharma & Nair, 2015;
23. Lack of employee wellness initiatives	Hameed, A. & Khwaja, M.G, 2023;
24. Lack of movement	Corvo et al., 2020;
25. Lack of trust	Hamdan, 2012;

26. Limitations on resources	Yan et al, 2022;
27. Limited workplace facilities	Mao,Y. et al., 2023;
28. Low self-assurance	Genaidy et al.,1994;
29. Monotonous tasks	Hong et.al., 2022;
30. Operational difficulties	Ghani et.al., 2022;
31. Organisational restructuring	Akanji, 2013;
32. Personal family issues	Ayyagari et al., 2011; Rooprekha &
33. Poor sanitation standards	Shamindra, 2023;
34. Privacy violations	Rajaraman, D. et al., 2013;
35. Prolonged standing	Uma, 2018; Amiri, 2018;
36. Promotion postponement	Quick, J.C. & Henderson, 2016;
37. Resource scarcity	Das, 2018;
38. Rigid working hours	Narban et.al., 2016;
39. Role demands	Clarke & Cooper , 2004;
40. Role immobility	Mohajan, 2012;
41. Uncomfortable work posture	Makhija et al., 2016;
42. Uneven workload allocation	Sahoo, et.al., 2015;
43. Unfavourable physical work environment	Shaikh et al., 2018; Cohen et al., 1987;
44. Unfulfilled career aspirations	Girma, B. et al., 2021;
45. Urgency of deadlines	Vischer, 2007;
46. Workplace congestion	McGrath, 1970;
47. Workplace discontent	Basinska & Wiciak, 2012;
48. Workplace harassment	Rietze et al., 2022;
49. Workplace inequality	Mishra & Sharma, 2022;
50. Workplace politics	Ranjit & Muhammed, 2021;

Source : Author's compilation

4. Research Methodology

The objective of this study is to identify the most prominent factors contributing to occupational stress among female employees working in manufacturing firms across India. To achieve this, a quantitative research design was adopted, involving a survey of 477 female employees. The survey instrument includes a structured questionnaire based on 50 variables identified through a comprehensive review of existing literature.

Data collection was carried out using a stratified random sampling technique to ensure representation across various types of manufacturing firms. Responses were gathered via both online and offline methods from female employees working in diverse manufacturing sectors across India. Participants assessed their stress levels using a five-point Likert scale ranging from "strongly disagree" to "strongly agree."

Tables 2, 3, and 4 present the demographic profiles of the respondents. The collected data were analysed using IBM SPSS Statistics (Version 27.0) software, and Exploratory Factor Analysis (EFA) was conducted to identify the underlying dimensions of occupational stress. From the initial 50 variables, 34 variables were retained after factor analysis as key contributors to occupational stress among female employees. These variables were subsequently grouped into seven major factors based on their inter-item correlations.

Table 5, 6 & 7 presents the results of the factor analysis, including the factor loadings and Cronbach's alpha values to assess internal consistency. These identified factors were then used as input for a Multiple Regression Analysis (MRA) using the stepwise method, which was employed to test the study's hypotheses (Hair et al., 2018).

Finally, a validated model was developed to highlight the key predictors of occupational stress among female employees in India's manufacturing sector. Table 10. presents the outcomes of the MRA, including the regression coefficients and the final model.

5. Results and discussion

Demographic profile of respondents

Table 2: Age

Age Range	Frequency	Percentage
18-28	148	31.03
29-39	220	46.12
40-50	68	14.26
51-60	41	8.60

Table 3: Marital status

Marital Status	Frequency	Percentage
Single	131	27.46
Married	331	69.39
Divorced	4	0.84
Widow	10	2.10
Separated	1	0.21

Table 4: Education

Education	Frequency	Percentage
No formal education	26	5.45
Matriculation	59	12.37
12th	72	15.09
Certificate/Diploma	77	16.14
Graduation	131	27.46
Masters	68	14.26
Professional Qualification	44	9.22
Doctorate	0	0

Source: Author's compilation

5.1 Factor Analysis

Factor Analysis is a statistical technique used to reduce data complexity by identifying underlying structures or patterns among a large set of variables. In this study, a total of 50 variables related to occupational stress were initially included for analysis.

To assess the suitability of the dataset for factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was calculated. The KMO value was measured 0.947, indicating excellent sampling adequacy, as Hair et al. (2018) suggested that the KMO values above 0.50 are considered an acceptable measure to go for further factor analysis. Additionally, the Bartlett's Test of Sphericity was found to be significant (χ^2 = 17,920, df = 1225, p < 0.000), confirming that sufficient correlations exist among the variables to proceed with factor analysis (See Table.5).

A factor loading cut-off of 0.50 was applied to ensure that only variables with meaningful contributions to the factors were retained. Principal Component Analysis (PCA) was used as the extraction method, combined with Varimax rotation to enhance interpretability of the factor structure. The analysis extracted 34 variables, which together accounted for 68.344% of the total variance, indicating a strong explanatory power of the retained factors in representing the data related to occupational stress among female employees in manufacturing firms in India.

Table 6. presents the percentage of variance explained by each extracted component, along with their cumulative contribution. Further Table 7. presents the outcome of factor loading along with extracted component cumulative alpha value explained by each factors.

Items with factor loading value less than 0.5 were considered as a weak contributor and thus were excluded for further analysis. Items having value 0.5 but does not strongly fit with pre-identified factors were clubbed within seven major facets, each representing a distinct dimension of occupational stress. These factors were identified based on the observed inter-variable correlations and factor loadings. Table 7. presents the 34 variables grouped under new seven major factors.

Table 5: KMO & Bartlett's Test

Kaiser-Mayer-Olkin Measure of Sample Adequacy		.947
Barlett's Test of Sphericity	Approx. Chi-Square	1.792E4
	Df	1225
	Sig.	.000

Source: Author's compilation

Table 6: Total Variance Explained

Comp.	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	Var. %	Cum. %	Total	Var. %	Cum. %	Total	Var. %	Cum. %
1	21.247	42.495	42.495	21.247	42.495	42.495	5.028	10.057	10.057
2	2.556	5.113	47.607	2.556	5.113	47.607	4.996	9.993	20.049
3	2.200	4.400	52.007	2.200	4.400	52.007	4.672	9.343	29.393
4	1.841	3.682	55.688	1.841	3.682	55.688	4.317	8.633	38.026
5	1.665	3.331	59.019	1.665	3.331	59.019	4.279	8.557	46.583
6	1.320	2.640	61.659	1.320	2.640	61.659	4.016	8.031	54.615
7	1.269	2.539	64.198	1.269	2.539	64.198	3.181	6.361	60.976
8	1.049	2.098	66.296	1.049	2.098	66.296	1.909	3.817	64.793
9	1.024	2.048	68.344	1.024	2.048	68.344	1.775	3.551	68.344

Note: Comp. = Component; Cum. % = Cumulative percentage; Var. % = percentage of variance

Table 7: A summary of Factor coding with Variance explained and Alpha Value of new clubbed variables.

Sl. No.	Factors	Code	Variables	Factor loadings	Alpha value
1.	Career Stagnation	CS	Lack of reward Thwart ambition Delayed in promotion Lack of specialized training Poor increment policy	.711 .709 .693 .683 .667	.876
2.	Organisational Role Challenges	ORC	Role overload Role conflict Lack of resources Role expectation Unfair distribution of work	.728 .674 .610 .561 .550	.865
3.	Postural Problems	PP	Strained work posture Constant long standing and sitting Repetitive task Fast- Paced work Less mobility	.780 .767 .739 .735 .645	.884
4.	Professional Relationship	PR	Workplace bullying Mistrust Discrimination Cultural shift Poor interpersonal relations Adversity in delegating responsibilities	.661 .642 .572 .572 .561 .528	.886
5.	Workplace Hygiene	WHEW	Low standard sanitation	.791	

	& Employee well-being		Inadequate toilet and wash facilities Inadequate amenities No medical facilities	.772 .739 .735	.875
6.	Workplace Constraints	WC	Maintenance complication Lack of confidence Restriction on inputs No breaks	.654 .533 .583 .528	.781
7.	Personal Disposition	PD	Dynamic work culture Personality Intoxication Fear of layoffs Family problem	.765 .626 .604 .726 .693	.817

Source: Author's compilation

5.2 Multiple Regression Analysis

The study utilized stepwise estimation to perform Multiple Regression Analysis (MRA), aiming to identify the most significant factors influencing occupational stress among female employees (OSAFE) in manufacturing firms across India. A total of 34 independent variables were included in the MRA. The details of factors and variables are outlined in Table 7. To facilitate analysis, codes were assigned to all seven facets identified through factor analysis, which were then used to develop the regression equation based on the MRA results.

The following section provides a brief overview of the seven independent variables and hypotheses employed in the current study.

1. Career Stagnation

Career stagnation refers to a situation in which employees feel trapped in their current positions due to the organisation's failure to provide adequate growth opportunities, recognition, or career advancement over an extended period. Hurst (2017) suggests that obstacles to career progression can result in disengaged behavior and hinder performance development.

Earlier studies have shown that employees engaged in monotonous or routine work often lack clarity about their professional goals and challenges, which in turn leads to reduced workplace effectiveness. These employees may also experience feelings of low status and limited personal growth opportunities (Kornhauser, 1965). Several factors contribute to career stagnation, including under-promotion, delayed or denied promotions, poor increment and reward policies, and the absence of specialized training opportunities (Cooper & Marshall, 1976; Krishnamurthy & Prabakaran, 2015; Sutherland & Cooper, 2000; National Institute for Occupational Safety and Health [NIOSH], 2008).

Hypothesis 1 (H1): Career stagnation is the predictor of occupational stress among female employees in manufacturing firms in India.

2. Organisational Role Challenges

According to Pareek (1983, 1993), a role in an organisation refers to the position an employee holds to perform various functions. Employees assigned multiple roles carry obligations and face expectations from management. Role stress arises when employees feel overwhelmed by managing several roles simultaneously (Caplan & Jones, 1975). Research indicates that occupational stress often results from role overload (Akanji, 2013; Ganster & Rosen, 2013; Akanji, 2018). Employees in designated roles frequently feel pressured to perform well to satisfy both superiors and subordinates. Other role-related stressors include dual roles, role conflict, and role stagnation (Beehr & Newman, 1978).

Hypothesis 2 (H2): Organisational role challenges is the predictor of occupational stress among female employees of manufacturing firms in India.

3. Postural Problems

Awkward postures are a significant physical stress factor in industrialised work environments (American Institute of Stress, 2023). The National Institute for Occupational Safety and Health (NIOSH, 2008) has reported that prolonged standing, sitting, or working in awkward postures increases the risk of musculoskeletal pain among employees. Maintaining the same posture for extended periods can lead to chronic health issues. Poor ergonomics often result in complaints of back pain, neck pain, and other work-related musculoskeletal disorders (MSDs) (Nassiri et al, 2015; Hassan & Hanisah, 2015).

Hypothesis 3 (H3): Postural problems are the predictor of occupational stress among female employees of manufacturing firms in India.

4. Professional Relationship

Studies by Kang & Singh (2006), Keshavarz & Mohammadi (2011), and Yang et al. (2015) highlighted that poor relationships with superiors

and colleagues are significant factors of stress in the organisation. Interpersonal conflicts, cultural dissonance and bullying, and difficulty in delegating responsibility (Wang et al., 2017; International Labour Organisation [ILO], 2016) aggravate stress and anxiety among the employees (Leka & Jain, 2010).

A feeling of isolation in a culturally diverse work environment builds tension and anxiety, affecting the overall motivation, concentration and prompt decision-making (Leka & Jain, 2010). Employees who are being discriminated against or harassed develop a feeling of withdrawal, which makes an employee depressed, leading to increased absenteeism, reduced motivation, and counterproductive work behaviour, which negatively affect both individual performance and organisational productivity (Lakra & Dubey, 2025; World Health Organisation (WHO), 2012; Nappo, 2020).

Hypothesis 4 (H4): Professional relationship at work is the predictor of occupational stress among female employees of manufacturing firms in India.

5. Workplace Hygiene and Employee Wellbeing

Ensuring employee hygiene and well-being is a core responsibility of any organisation. A lack of support for employees' physical and mental health can lead to heightened levels of occupational stress in the workforce (Wadia, 2021). Research indicates that inadequate water and sanitation facilities at workplaces contribute significantly to psychological stress, particularly among women (Hulland et al., 2015). Workplace hygiene extends beyond clean toilets to include access to soap, running water, and changing rooms, essential for maintaining employee morale and reflecting an organisation's commitment to health and safety.

Employee wellbeing encompasses mental, physical, emotional, and economic health, all influenced by workplace relationships, available resources, and organisational decisions. To promote wellbeing, organisations often provide benefits such as transportation, housing, and health services (Ivancevich, Matteson, & Preston, 1982; Marikaki, 2023).

Hypothesis 5 (H5): Workplace hygiene and employee wellbeing is the predictor of occupational stress among female employees of manufacturing firms in India.

6. Workplace Constraints

Workplace constraints are another source of workplace-related stress that can occur in any organisation. Organizational constraints are generally classified as a form of hindrance that employees feel while performing their tasks towards goal attainment. Organisational constraints can be of varied nature and can be associated with poorly designed shifts, unclear roles, and insufficient breaks, which hamper employees' health and morale (Motowidlo et al., 1986). Furthermore, unfavourable policies related to sick leave, lack of authority, no hearing of grievances and non-involvement in the organisational decision-making process create a feeling of being undervalued among staff, thereby reducing their dedication towards the organisation (Lakra, N.R. & Dubey, A.M., 2025). Previous studies found that non-involvement of employees in management decisions lowers morale and dedication towards the organisation. Such feelings demotivate them, create a sense of alienation and show counterproductive work behaviour, and the chances of quitting the job become high (Pindek & Spector, 2016). Employees do not show their mental struggle instantly, but with time these constraints trigger a stress response in the individual.

Hypothesis 6 (H6): Workplace constraints is the predictor of occupational stress among female employees of manufacturing firms in India.

7. Personal Disposition

Personal disposition refers to an individual's characteristic way of responding to situations, recognizing that no two individuals react identically. Personality traits influence an employee's coping capacity, which determines their threshold for stress (Annette, 2021; Ganster & Schaubroeck, 1991). Individuals with higher coping limits can tolerate greater stressors before feeling overwhelmed, while those with lower limits experience stress, exhaustion, and mental strain more readily when their threshold is exceeded (Fernander & Schumacher, 2008; Kobasa, 1979; Pearlin & Schooler, 1978; Watson & Pennebaker, 1989). Studies have also linked stress to decreased concentration and impaired performance at work (Ward et al., 2021; Wiegel et al., 2015).

Common stressors related to personal disposition include fear of layoffs, job dissatisfaction, increasing responsibilities, educational insecurities, and low morale. These factors collectively contribute to occupational stress among employees (Lakra & Dubey, 2025).

Hypothesis 7 (H7): Personal disposition influences occupational stress among female employees of manufacturing firms in India.

Table 8. Variable Entered into the Regression Model for Occupational Stress among Female Employees.

Coefficients[a]

Model		Unstd.		Std.	T	Sig.	Correlations			Co-linearity Statistics	
		B	SE	B			*r*	Partial	Part	Tolerance	VIF
3	(Const)	.678	.113		5.978	.000					
	X2_ORC	.417	.033	.480	12.769	.000	.738	.506	.356	.550	1.818
	X7_PD	.311	.035	.321	8.948	.000	.667	.380	.249	.602	1.660
	X3_PP	.095	.028	.117	3.387	.001	.546	.154	.094	.646	1.549

Source : Author's compilation
Note: Const. = Constant; Unstd. = Unstandardized coefficient (*B*); SE = Standard Error; Std. = Standardized coefficient (β)Beta; *r* = Zero error

Table 9. Variable Not Entered into the Regression Model for Occupational Stress among Female Employees.

Excluded Variables[d]								
Model		Beta In	T	Sig.	Partial *r*	Co-linearity Statistics		
						Tolerance	VIF	Minimum Tolerance
3	X1_PS	.048[c]	1.257	.209	.058	.534	1.872	.439
	X4_RAW	.066[c]	1.439	.151	.066	.364	2.751	.364
	X5_WHEW	-.038[c]	-1.085	.278	-.050	.635	1.575	.518
	X6_WC	-.013[c]	-.298	.766	-.014	.387	2.585	.387

Source : Author's compilation
Notes: Predictors: (Constant) X2_ORC, X7_PD, X3_PP and Y_OSAFE ; Partial *r* = Partial Correlation

6. Results, Discussion, and Hypothesis Testing

Table 8. presents the variables entered into the regression model for occupational stress among female employees (OSAFE) in manufacturing firms in India. Out of the seven independent variables analyzed, three were found to be statistically significant predictors: X2 (Organisational Role Challenges), X7 (Personal Disposition), and X3 (Postural Problems). Consequently, hypotheses H2, H7, and H3 are supported by the study's findings.

Table 9. displays the four independent variables that were not supported by the data. These variables are X1 (Career Stagnation), X4 (Professional Relationships), X5 (Workplace Hygiene & Employee Well-being), and X6 (Workplace Constraints) were excluded from further consideration due to their p-values exceeding the significance threshold of 0.05. According to Hair et al. (2018), a significance level below 0.05 is required for statistical acceptance. The significance values observed were: Career Stagnation (p = .209), Professional Relationships (p = .151), Workplace Hygiene & Employee Well-being (p= .278), and Workplace Oppression (p = .766).

Table 10. summarizes the model development steps for the regression model of OSAFE. The coefficient of determination (R^2) derived from the multiple regression analysis (MRA) indicates the explanatory power of the model, ranging from 0 to 1. Model 3 demonstrates the highest R^2 value of 0.633, signifying that approximately 63.3% of the variance in occupational stress among female employees is explained by the three significant predictors in the final stepwise regression model.

Table 10: Model Summary for Occupational Stress Among Female Employees Model Summary

Model	R	R^2	Adj. R^2	SEE	Change Statistics					Durbin-Watson
					R^2 Change	F Change	df1	df2	*P*	
1	.738[a]	.545	.544	.53396	.545	568.560	1	475	.000	
2	.790[b]	.624	.622	.48596	.079	99.462	1	474	.000	
3	.795[c]	.633	.630	.48068	.009	11.470	1	473	.001	1.873

Note: Adj. R^2 = Adjusted $R^{2,}$ SEE= Standard error of the estimation; *p* = Significance of F Change

The regression equation (Hair et al., 2018) can be as follows:

OSAFE= $\alpha + \sum_{i=1}^{n} \beta 1 \chi i + ei$

Y_OSAFE= 1.390 + .480 *X1_ORC + .321 *X2_PD + .117 *X3_PP

This equation indicates that organisational role challenges, personal disposition, and postural problems significantly influence occupational stress among female employees (OSAFE) in Indian manufacturing firms. These factors are perceived by employees as critical stressors impacting their psychological and physical well-being at work.

The Durbin-Watson test was applied to assess autocorrelation among residuals, with a value of 1.873 indicating no significant autocorrelation, thus validating the regression assumptions (Hair et al., 2018). A summary of the hypothesis testing results is presented in Table 11.

Consequently a validated model has been generated from the results of MRA. The Figure 1. depicts the percentage and overall model fit.

Table 11: Summary of Hypothesis Acceptance

Code	Hypothesis	R2	Change R2	Result
H2	Organisational Role Challenges	.545	.545	Supported
H7	Personal Disposition	.624	.079	Supported
H3	Postural Problem	.633	.009	Supported
H1	Career stagnation		Value of significance .209	Rejected
H4	Professional Relationship		Value of significance .151	Rejected
H5	Workplace Hygiene & Employee well-being		Value of significance .278	Rejected
H6	Workplace Constraints		Value of significance .766	Rejected

Source: Author's compilation

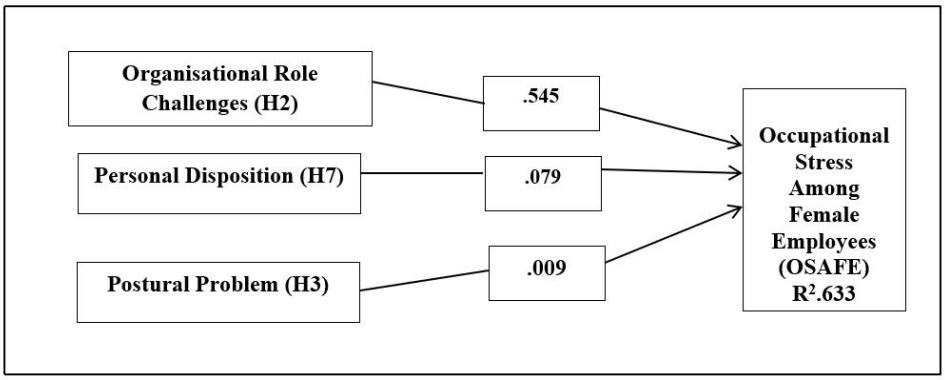

Figure 1: Validated Model for Occupational Stress Among Female Employees(OSAFE).

Source: Author's compilation

7. Conclusion

The work environment plays a crucial role in shaping employees' well-being, as a significant portion of their daily lives is spent at work. Occupational stress remains a key challenge for both employees and organisations. According to a report by HR-Economic Times, 2024 women represent less than 20% of the workforce in Indian manufacturing companies. Despite growth in the electronics sector, female participation remains low, with most women employed in industries such as textiles, apparel, food processing, and tobacco.

This study found that occupational stress stems from multiple interconnected factors within the organisation. Prolonged exposure to such stress can lead to serious health issues, including burnout, anxiety, depression, cardiovascular diseases, weakened immunity, and reduced productivity

(Ganster & Rosen, 2013). Given the evolving global workforce and changing socio-economic conditions, it is increasingly important to address occupational stress, particularly among female workers of manufacturing firms through human resource management for a diverse work environment.

Using factor analysis, the study identified key factors contributing to occupational stress, and subsequent multiple regression analysis (MRA) highlighted organisational role challenges, personal disposition, and postural problems as the primary stressors affecting female employees in Indian manufacturing firms. These findings underscore the need for targeted organisational interventions.

The research work has several implications, firstly, to provide actionable insights for organisation's human resource management and policymakers to improve female employees' psychological well-being and foster resilient, inclusive work environments. Moreover, the proposed model offers a valuable tool for researchers and industry practitioners to conduct further in-depth analyses and develop effective strategies to create stress-free workplaces.

Acknowledgement

The author is immensely grateful to the editors for his critical and valuable comments to improve the manuscript. We would also like to express sincere appreciation to the anonymous referees for their valuable comments, which enhanced the quality of the article.

Funding: The author received no financial support for the research authorship or publication of this article.

Conflict of Interests

The authors Norin Raj Lakra and Dr. Ashish Mohan Dubey declare that they have no conflict of interests related to the research, authorship and publication of this article.

References:

1. Abdel-Halim, Ahmed A. (1978). Employee Affective Responses to Organizational Stress: Moderating Effects of Job Characteristics. Personnel Psychology, 31(3), 561-79, https://doi.org/10.1111/j.1744-6570.1978.tb00463.x
2. Ai Joo Chan & Lai Wan Hooi (2023). Rewards and recognition on employee motivation and employee performance: a study of a manufacturing company in Malaysia. International Journal of Management Practice. Inderscience Enterprises Ltd., 16(3), 267-283.
3. Akanji, Babatunde (2013). Occupational stress: A review on conceptualisations, causes and cure. Economic Insights – Trends and Challenges, 2(3), 73–80.
4. Akanji, Babatunde (2018). Occupational stress: Issues and strategies. Journal of Management Research, 10 (2), 34–47.
5. American Institute of Stress (2023). Workplace Stress. DOA: 19, July,2025, https://www.stress.org/workplace-stress
6. Amiri, Mohammad (2018). Occupational Stress among Information Technology in Chandigarh City. In National Conference on New Approaches to Management, Economics.https://www.researchgate.net/publication/331132710_Occupational_Stress_among_Information_Technology_in_Chandigarh
7. Amro Al-Madadha; Ahmad Samed Al-Adwan; Mohammad Kasem Alrousan, Yaser A. Jalghoum (2019). Organisational climate and team performance: the mediating role of psychological empowerment at Jordanian pharmaceutical companies. International Journal of Management Practice. Inderscience Enterprises Ltd., 12(2), 228-245. https://doi.org/10.1504/IJMP.2019.098661
8. Annette, Brose (2021). Chapter 47 - Personality and stress, Editor(s): John F. Rauthmann,. The Handbook of Personality Dynamics and Processes, Academic Press, https://doi.org/10.1016/B978-0-12-813995-0.00047-9.
9. Ayyagari, Ramakrishna , Grover, Varun & Purvis, Russell (2011). Technostress: Technological Antecedents and Implications. MIS Quarterly, 35, 831-858. https://doi.org/10.2307/41409963.
10. Basinska, Beata & Wiciak, Izabela (2012). Fatigue and professional burnout in police officers and fire fighters. Internal Security, 4, 265-274.
11. Bakker, Arnold B., and Demerouti, Evangelia (2007). The Job Demands-Resources model: State of the art. Journal of Managerial Psychology, 22(3), 309–328. https://doi.org/10.1108/02683940710733115
12. Beehr, T. A. & Newman, J. E. (1978). Job stress, employee health, and organizational effectiveness: A facet analysis, model, and literature review. Personnel Psychology, 31(4), 665–699. https://doi.org/10.1111/j.1744-6570.1978.tb02118.x
13. Beheshtifar, Malikeh & Nazarian, Rahele (2013). Role of Occupational Stress in organizations. Interdisciplinary Journal of

Contemplorary Research in India, 4(9), 648-657.
14. Belwal, S., Al Maqbali, A. A. H., and Belwal, R. (2023).Understanding the Impact of Occupational Stress on the Home Environment: Evidence from Oman. FIIB Business Review, 12(3), 263-278. https://doi.org/10.1177/23197145221132064 (Original work published 2023)
15. Berard, Denis (2006). Postural and articular stress at work. Eurofound, France
16. Caplan, R. D. & Jones, K. W. (1975). Effects of work load, role ambiguity, and type A personality on anxiety, depression, and heart rate. Journal of Applied Psychology, 60(6), 713–719. https://doi.org/10.1037/0021-9010.60.6.713
17. Carvalho, Ozaias & d'Angelo, Marcia (2021). Technological stress and the intention to stay in organizations: Do the quality of life and work-home conflict mediate this relationship?.Contextus – Revista Contemporânea de Economia e Gestão, 19, 176-196. https://doi.org/10.19094/contextus.2021.62600.
18. Cavanaugh, M. A., Boswell, W. R., Roehling, M. V. & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among U.S. managers. Journal of Applied Psychology, 85(1), 65–74. https://doi.org/10.1037/0021-9010.85.1.65
19. Clarke, S. & Cooper, C. (2004). Managing the Risk of Workplace Stress: Health and Safety Hazards (1st ed.). Routledge. https://doi.org/10.4324/9780203644362
20. Cohen, Sheldon, Evans, Gary, Stokols, Daniel and Krantz, David (1987). Behavior, Health and Environmental Stress (chapters 1 and 2). https://doi.org/10.1007/978-1-4757-9380-2.
21. Cooper, C. L. & Marshall, J. (1976). Occupational sources of stress: A review of the literature relating to coronary heart disease and mental ill health. Journal of Occupational Psychology, 49(1), 11–28. https://doi.org/10.1111/j.2044-8325.1976.tb00325.x
22. Corvo, P., Fontefrancesco, M.F. & Matacena, R. (2020). Eating at Work: The Role of the Lunch-Break and Canteens for Wellbeing at Work in Europe. Soc Indic Res , 150, 1043–1076. https://doi.org/10.1007/s11205-020-02353-4
23. Das, B. (2020). Work-related injuries, postural stress, and musculoskeletal disorders among the railway track maintainers in India. ToxicolInd Health. 36(5), 371-385. https://doi.org/10.1177/0748233720932815
24. Das, P K. (2018).Work Related Stress among Coal Mine workers: A study on select coal mines of Dhanbad & Jharia regions. International Journal on Arts, Management and Humanities, 7 (1), 56-70.
25. Data for India, 2025, By Nileena Suresh, Published Jul 3, 2025 / Updated Jul 30, 2025. https://www.dataforindia.com/women-in-manufacturing/
26. Davis, Justin L., Fodor, A., Batchelor, John H., McDowell, William C. & Perkims, Robert D. (2024). Status anxiety and executive decision making: financial implications of reactions to unethical behavior. European Journal of International Management, 24 (2) , 284-309. https://doi.org/10.1504/EJIM.2024.140936
27. Dehdashti, Alireza, Mehralizadeh, Semira & Mahjoubi, Zahra (2017). Workplace Stresses and Musculoskeletal Disorders Among Nurses: A Cross-Sectional Study. Middle East Journal of Rehabilitation and Health. In Press. 10.5812/mejrh.57480. https://doi.org/10.5812/mejrh.57480
28. Denis, D. M. St-Vincent, D. Imbeau, C. Jetté, I. Nastasia (2007). Intervention practices in musculoskeletal disorder prevention: A critical literature review. Applied Ergonomics, 39(1), 1-14. https://doi.org/10.1016/j.apergo.
29. Fernander, A. & Schumacher, M. (2008). An examination of socio-culturally specific stress and coping factors on smoking status among African American women. Stress and Health, 24, 365–374.
30. Foa, Uriel (1971). Interpersonal and Economic Resources. Science (New York, N.Y.), 171, 345-51. https://doi.org/10.1126/science.171.3969.345.
31. Gabriel, K. P. & Aguinis, Herman (2022). How to prevent and combat employee burnout and create healthie workplaces during crises and beyond. Business Horizons. 65 (2), 183-192. https://doi.org/10.1016/j.bushor.2021.02.037
32. Ganster, D. C., & Rosen, C. C. (2013). Work stress and employee health: A multidisciplinary review. Journal of Management, 39(5), 1085–1122.

https://doi.org/10.1177/0149206313475815
33. Ganster, D. C., Schaubroeck, J., Sime, W. E., & Mayes, B. T. (1991). The nomological validity of the Type A personality among employed adults. Journal of Applied Psychology, 76(1), 143–168. https://doi.org/10.1037/0021-9010.76.1.143
34. Genaidy, A.M., A.A. Al-Shedi, W. Karwowski (1994). Postural stress analysis in industry. Applied Ergonomics, 25(2), 77-87. https://doi.org/10.1016/0003-6870(94)90068-X.
35. Ghani, B., Memon, K.R., Han, H., Ariza-Montes, A. & Arjona-Fuentes, J.M .(2022). Work stress, technological changes, and job insecurity in the retail organization context. Frontiers in Psychology, 13: 918065, 1-14. https://doi.org/10.3389/fpsyg.2022.918065
36. Girma B., Nigussie J., Molla A., Mareg M. (2021). Occupational stress and associated factors among health care professionals in Ethiopia: a systematic review and meta-analysis. BMC Public Health. 19;21(1):539. https://doi.org/10.1186/s12889-021-10579-1.
37. Hair Jr., J., & Page, M. (2018). The Essentials of Business Research Methods (4th ed.). Routledge. https://doi.org/10.4324/9781315716862
38. Hamdan,Y. (2012). Work Stress and its Management: A Practical Case Study. European Journal of Business and Management , 4(18), 33-36.
39. Hameed, Athar & Khwaja, Muddasar Ghani (2023). The role of benevolent human resource attributions in reducing occupational stress: empirical findings from the emerging markets. International Journal of Work Organisation and emotion, 14(3), 209-224. https://doi.org/10.1504/IJWOE.2023.132862
40. Hassan, Zuraida & Hanisah, Mohd. (2015). Ergonomic Problems and Stress Among Workers in a Manufacturing Company. International Journal of Knowledge Management Studies, 22, 17-31.
41. Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513
42. Hong Y., Zhang Y., Xue P., Fang X., Zhou L., Wei F., Lou X. & Zou H. (2022). The Influence of Long Working Hours, Occupational Stress, and Well-Being on Depression Among Couriers in Zhejiang, China. Frontiers in Psychology , 13:928928. https://doi.org/10.3389/fpsyg.2022.928928 .
43. HR- Economic Times. Yumna Mobin, (May 23, 2024), Growth of women in manufacturing sector: Highlights & Trends. https://hr.economictimes.indiatimes.com, https://bfwindia.com)
44. Hulland, K.R.S., Chase, R.P., Caruso, B.A., Swain, R., Biswal, B., Sahoo, K.C., et al. (2015) Sanitation, Stress, and Life Stage: A Systematic Data Collection Study among Women in Odisha, India. PLoS ONE, 10(11): e0141883. https://doi.org/10.1371/journal.pone.0141883
45. Ingram (2000). International Labour Organization (ILO). (2022). Women in manufacturing: Gender equality for inclusive growth. https://www.ilo.org/global/research/publications
46. International Labour Organization (2016). Workplace stress: A collective challenge. https://www.ilo.org/global/topics/safety-and-health-at-work
47. Ivancevich, J. M., Matteson, M. T., & Preston, C. (1982). Occupational stress, Type A behavior, and physical well being. Academy of Management Journal, 25(2), 373–391. https://doi.org/10.2307/255998
48. Jacobs, C. M. (2019). Ineffective-Leader-Induced Occupational Stress.Sage Open, 9(2). https://doi.org/10.1177/2158244019855858
49. Jain, Priyesha and Batra, Akhil (2015). Occupational Stress at Workplace: Study of the Corporate Sector in India. IOSR Journal of Business and Management (IOSR-JBM).e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 17, Issue 1.Ver. III, PP 13-21.
50. Kanellakis, K., Karakasidou, E., & Koutsoukis, N.S. (2018). The Role of Occupational Stress and Emotional Intelligence in Working Health-Care and Medical Environments. Psychology, 9, 1516-1529. https://doi.org/10.4236/psych.2018.96091
51. Kang, L. S., & Singh, R. (2006). Stress at Work: An Assessment of the Magnitude of Various Organisational Stressors. Indian Journal of Industrial Relations, 42(2), 190–202.

http://www.jstor.org/stable/27768065
52. Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. Administrative Science Quarterly, 24(2), 285–308. https://doi.org/10.2307/2392498
53. Keshavarz, M. & Mohammadi, R. (2011). Occupational stress and organizational performance, case study: Iran. ProcSocBehavSci , 30, 390–394.
54. Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. Journal of Personality and Social Psychology, 37(1), 1–11. https://doi.org/10.1037/0022-3514.37.1.1
55. Kornhauser, A. (1965). Mental health of the industrial worker: A Detroit study. New York: Wiley.
56. Kumari, Pavithra & Aithal, Sreeramana (2020). Stress Inducing Factors and Relevant Strategies Deployed to Overcome Stress in the Aviation Industry Sector -A Systematic Literature Review and Further Research Agendas. International Journal of Management, Technology and Social Sciences, 5, 347-371. https://doi.org/10.5281/zenodo.4331691 .
57. Lakra, N. R. & Dubey, A. M. (2025). Occupational Stress Among Female Employees: Ethical Challenges in Indian Workplaces. In: Pandikattu SJ, F.K. (eds) Applied Ethics and Rationality. Studies in Applied Philosophy, Epistemology and Rational Ethics, 74, 47-62, Springer, Cham. https://doi.org/10.1007/978-3-031-92139-1_3
58. Lazarus, R. S. & Folkman, S. (1984). Stress, appraisal, and coping. Springer.
59. Leka, Stavroula, Jain, A. & World Health Organization. (2010). Health impact of psychosocial hazards at work: an overview. World Health Organization. https://iris.who.int/handle/10665/44428
60. Linnik, L.I., and Sepp, J. (2023). Problems Causing Work-Related Stress and Strategies for Coping with Stress Suggested by Nurses During Covid-19 Pandemic. WSE As Transactions On Business and Economics.
61. Lucro (2025). DOA - August, 2025, https://www.lucro.in/post/empowering-women-empowering-change-lucros-commitment-to-inclusive-manufacturing
62. Lyle E. Bourne, Robert A. Baron, & Bruce R. Ekstrand (1985). Psychology: Its Principles and Meanings. New York : Holt, Rinehart, and Winston.
63. Makhija, Priya & Jatty, Gajendra. (2016). Occupational Stress Amongst Women Employees - A Review Of Literature. Asia Pacific Journal of Research, I(XLII), 259-257.
64. Mao, Y., Raju, G., Zabidi, M.A. (2023). Association between occupational stress and sleep quality: sysytematic review. Nat Sci Sleep., 14(15), 931-947. https://doi.org/10.2147/NSS.S431442.
65. Marikaki, A. (2023). Employee well-being in modern workplaces: The role of organizational support. Human Resource Development Review, 22(2), 145–160.
66. McGrath, J. E. (1970). A conceptual formulation for research on stress. (Ed.) Social and psychological factors in stress. New York: Holt, Rinehart and Winston, 10-21.
67. Mishra, Rajnish Kumar & Sharma, Divya (2022). Understanding workplace bullying: a conceptual review. International Journal of Management Science, 15(3), 346-363. https://doi.org/10.1504/IJMP.2022.122614
68. Mohajan, Haradhan,K. (2012). The Occupational Stress and Risk of it among the Employees, International Journal of Mainstream Social Science, 2(2), 17–34.
69. Monica Stănescu, Ana Maria Vasiliu, Marius Stoicescu (2012). Occupational stress in physical education and sport area, Procedia - Social and- Social and Behavioral Sciences, 33, 218-222. https://doi.org/10.1016/j.sbspro.2012.01.115.
70. Mosadeghrad, Ali Mohammad (2014). Occupational stress and its consequences. Leadership in Health Services, 27, 224-239. https://doi.org/10.1108/LHS-07-2013-0032 .
71. Motowidlo, S. J., Packard, J. S., & Manning, M. R. (1986). Occupational stress: Its causes and consequences for job performance. Journal of Applied Psychology, 71(4), 618–629.
72. Narban, Jitendra Singh, Narban, BhanuPratap Singh, Singh,Jitendra (2016). A Conceptual Study on Occupational Stress (Job Stress/Work Stress) and its Impacts. International Journal of Research and Innovative Ideas in Education, 2, 47-56.
73. Nassiri, P., Monazzam, M. R., & Kazemi, K. M. (2015). Ergonomic assessment in industrial workspaces. Iranian Journal of Public Health, 44(5), 644–650.
74. National Institute for Occupational Safety

and Health (NIOSH) (2008). Exposure to stress: Occupational hazards in hospitals. https://www.cdc.gov/niosh/docs/2008-136/
75. Nixon P.G. (1979). The human function curve - a paradigm for our times. Act Nerv Super (Praha). 1982; Suppl 3(Pt 1):130-3. PMID: 7183056.
76. Occupational Medicine (2000). Work-life conflict and extra-organisational activities. Occupational Medicine, 50(4), 261–268.
77. Osipow, S.H. & Spokane, A.R. (1987). Occupational Stress Inventory Manual (research vision), Odessa, FL: Psychological Assessment Resources.
78. Pareek, U. (1983). Organizational role stress.In L.D. Goldstein, & J.W. Pfeiffer (Eds.). The 1983 annual (115-123), San Diego, CA: University Associates.
79. Pareek, U. (1993). Making organizational roles effective.New Delhi: Tata McGraw-Hill Publishing Company Limited.
80. Park S., Kook H., Seok H., Lee J.H., Lim D., Cho D.-H., Oh S.-K. (2020).The negative impact of long working hours on mental health in young Korean workers. PLoS ONE, 15:e0236931. https://doi.org/10.1371/journal.pone.0236931
81. Pearlin, L. I., & Schooler, C. (1978). The Structure of Coping. Journal of Health and Social Behavior, 19(1), 2–21. https://doi.org/10.2307/2136319
82. Pindek, S., & Spector, P. E. (2016). Organizational constraints: A meta-analysis of a major stressor. Work & Stress, 30(1), 7–25. ttps://doi.org/10.1080/02678373.2015.1137376
83. Quick, J.C. & Henderson, D.F. (2016). Occupational Stress: Preventing Suffering, Enhancing Wellbeing. Int J Environ Res Public Health, 29;13(5), 459. https://doi.org/10.3390/ijerph13050459
84. Rajaraman, Divya, Travasso, Sandra M. & Heymann, S. Jody (2013). A qualitative study of access to sanitation amongst low-income working women in Bangalore, India. Journal of Water, Sanitation and Hygiene for Development, 3(3), 432-440
85. Ranjit, Gayatri & Akhil Muhammed (2021). A Study on Work Stress Management among Employees in a Spinning Mill in Kerala. Asian Journal of Sociological Research, 5(3), 32-38.
86. Rietze, Sarah & Zacher, Hannes (2022). Relationships between Agile Work Practices and Occupational Well-Being: The Role of Job Demands and Resources. International Journal of Environmental Research and Public Health, 19, 1258. https://doi.org/10.3390/ijerph19031258
87. Rooprekha Bakshi Maitli & Shamindra Nath Sanyal (2023). Organisational Commitment of Working Women: the role optimization. International Journal of Management Practice. Inderscience Enterprises Ltd., 16(2), 212-232.
88. Sahoo, K.C., Hulland, K.R., Caruso, B.A., Swain, R., Freeman, M.C., Panigrahi, P. & Dreibelbis, R. (2015). Sanitation-related psychosocial stress: A grounded theory study of women across the life-course in Odisha. India. SocSci Med., 139, 80-9, https://doi.org/10.1016/j.socscimed.
89. Salas, E., Linhardt, R., & Fernández Castillo, G. (2024). The Science (and Practice) of Teamwork: A Commentary on Forty Years of Progress…. Small Group Research, 56(3), 392-425. https://doi.org/10.1177/10464964241274119 (Original work published 2025)
90. Sathakathulla, A. A. (2025). Fringe benefits and employee performance in private sector organizations in the UAE- An insight. ComFin Research. 13(1), 1-30. https://doi.org/10.34293/commerce.v13i1.8454
91. Selye, H.(1956). The stress of life. New York: McGraw-Hill
92. Shaikh, M., Weiguo, Shahid, Ayaz, Ali, M, Weiguo, S. Shahid, M., Ayaz, H. & Ali, M. (2018). An Assessment of Hazards and Occupational Health & Safety Practices for Workers in the Textile Industry: A Case Study. International Journal of Academic Research in Business and Social Sciences, 8, 333-347. https://doi.org/10.6007/IJARBSS/v8-i12/5016 .
93. Sharma, B. & Nair, M. (2015). A qualitative study on causes and effects of stress among working women in management colleges in Jaipur. International Journal of Current Advanced Research , 4(6), 152-157.
94. Sharma, K. A. (2021). Work stress: A systematic review of evidence from India. In K. A. Sharma, C. L. Cooper, & D. M. Pestonjee (Eds.), Organizational stress around the world: Research and practice (pp. 80–127). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9780429292538-6
95. Sutherland, V.J., Cooper, C.L. (2000). Understanding the Nature of Stress:

Organizational Hot Spots. In: Strategic Stress Management. Palgrave Macmillan, London. https://doi.org/10.1057/9780230509146_4

96. Thi, H.V, Thi, Thu, H.P., Thi, L.A.N. & Thu, T.L. (2025). Analysis of factors affecting job satisfaction of manual workers: a case study from a garment factory in North Vietnam. Int. J. Business and Globalisation, 39 (5), 1-16.
97. Uma Devi T. (2018). A Study on Stress Management and Coping Strategies with Reference to IT Companies (2011). Journal of Information Technology and Economic Development, 2(2), 30-48.
98. Vischer, J. C. (2007). The effects of the physical environment on job performance: Towards a theoretical model of workspace stress. Stress and Health, 23(3), 175–184. https://doi.org/10.1002/smi.1134
99. Wadia, M. (2021).Workplace hygiene and the impact on employee stress and productivity. Workplace Insight Report, Wrike
100. Ward, Rachel & Brady, Abbie & Jazdzewski, Rebekah & Yalch, Matthew (2021). In book: Emotion, Well-Being, and Resilience: Theoretical Perspectives and Practical Applications (pp.3-14)
101. Watson, D. & Pennebaker, J. W. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. Psychological Review, 96(2), 234–254. https://doi.org/10.1037/0033-295X.96.2.234
102. Weiman CG. (1977). A study of occupational stressor and the incidence of disease/risk. J Occup Med., (2),119-22. https://doi.org/10.1097/00043764-197702000-00004.
103. Wiegel, Constantin & Sattler, Sebastian & Göritz, Anja & Diewald, Martin (2015). Work-related stress and cognitive enhancement among university teachers. Anxiety, stress, and coping. 29. 1-19. 10.1080/10615806.2015.1025764.
104. World Health Organization (2012). Mental health and work: Impact, issues and good practices. https://www.who.int/mental_health
105. Yan T, Ji F, Bi M, Wang H, Cui X, Liu B, Niu D, Li L, Lan T, Xie T, Wu J, Li J and Ding X (2022). Occupational stress and associated risk factors among, industrial workers in China. Front. Public Health, 10.945902 https://doi.org/10.3389/fpubh.2022.945902
106. Yang W.-N., Niven K., Johnson S. (2019) Career Plateau: A Review of 40 Years of Research. J. Vocat. Behav, 110:286–302. https:/doi.org/10.1016/j.jvb.2018.11.005.