



# An Assessment Of Coping Mechanisms Among Factory Employees

1Savitha 2Kavya Vijayan

1PG students 2Assistant professor 4th semester MSc Psychology

Department Of Psychology

CODE, JAIN (Dememed-to-be-University) Bengaluru-78, INDIA

## Abstract

This research examines the cognitive and behavioral strategies utilized by industrial workers to manage occupational stress. A sample of 200 factory employees (100 male, 100 female) in Bengaluru, India, was assessed using the Coping Mechanism Scale (CMS-SSDMM). Results indicate a predominance of adaptive strategies, such as problem-solving and positive reframing, over maladaptive behaviors. However, significant variations exist across gender and age demographics, highlighting the need for tailored organizational support systems.

## 1. Introduction

In the contemporary industrial landscape, employees are frequently exposed to significant stressors, including heavy workloads, strict production deadlines, and repetitive physical labor. The psychological and behavioural efforts used by individuals to manage these internal and external demands are known as **coping mechanisms**. Understanding these mechanisms is critical for organizational psychology and human resource management, as they directly influence emotional well-being, physical health, and occupational performance. This study examines the coping strategies of factory workers in Bangalore, India, providing insights into how this population maintains psychological equilibrium.

## Theoretical Framework

The study is primarily grounded in the **Transactional Model of Stress and Coping** developed by Lazarus and Folkman (1984). This model posits that stress results from a transaction between the person and their environment, involving a primary appraisal of the threat and a secondary appraisal of available resources. Coping is defined as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person".

## Categorization of Coping Strategies

Coping mechanisms are traditionally divided into three distinct categories based on their intent and effectiveness:

### Problem-Focused Coping

This adaptive strategy involves purposeful efforts to identify and take corrective action against the source of stress. Common strategies include:

- **Planning:** Developing a structured, step-by-step approach to manage stressors.
- **Problem-solving:** Analytically identifying a stressor and implementing practical solutions.
- **Time Management:** Systematic allocation of time to reduce overload and improve productivity.

### Emotion-Focused Coping

These strategies aim to regulate the emotional responses to stress rather than modifying the stressor itself. Strategies include:

- **Positive Reappraisal:** Cognitively reframing a stressful situation in a constructive manner.
- **Social Support:** Seeking empathy and validation from colleagues, supervisors, or family.
- **Relaxation Techniques:** Utilizing meditation, deep breathing, or mindfulness to reduce physiological arousal.

### Avoidance (Maladaptive) Coping

Avoidance involves evading or denying the stressor. While providing temporary emotional relief, it is generally considered maladaptive in the long term.

- **Denial:** Refusing to acknowledge the existence or seriousness of a stressor.
- **Substance Use:** Consuming alcohol or tobacco to alleviate stress.
- **Behavioral Disengagement:** Reducing effort or withdrawing from attempts to address the stressor.

### Adaptive vs. Maladaptive Coping

Research distinguishes between **Problem-Focused Coping** (e.g., seeking training, time management) and **Emotion-Focused Coping** (e.g., venting, meditation). In the manufacturing sector, where workers often have little control over the production process, emotion-focused coping is more prevalent. Li et al. (2024) noted that Chinese manufacturing workers who utilized positive social support reported significantly lower depressive symptoms than those who practiced "avoidance coping."

## 2. Review of Literature

The following review of literature examines the evolution of coping mechanisms among factory and industrial employees, synthesizing research on psychological survival strategies in environments characterized by high physical demand and repetitive labor.

### Theoretical Framework of Coping

The study of coping is predominantly grounded in the Transactional Model of Stress and Coping proposed by Lazarus and Folkman (1984). This model conceptualizes coping as a dynamic process involving cognitive and behavioral efforts to manage internal or external demands appraised as taxing personal resources.

Individuals engage in primary appraisal to evaluate threat levels and secondary appraisal to assess available coping resources. Within this framework, coping is not an isolated skill but part of a broader system of resilience influenced by environmental and social contexts.

## Adaptive Coping Strategies

Adaptive strategies significantly enhance resilience and mental health outcomes in industrial populations.

**Problem-Focused Coping:** This involves actively addressing the source of stress through planning, task management, and problem-solving.

**Prevalence:** Approximately 84.5% of factory employees utilize problem-focused strategies when they perceive a degree of control over their tasks.

**Outcomes:** These strategies are linked to higher productivity, reduced perceived stress, and improved psychological well-being.

**Emotion-Focused Coping:** These strategies, including mindfulness, relaxation, and cognitive reframing, aim to regulate the emotional consequences of stress rather than altering the stressor itself.

**Social Support:** Seeking emotional or informational support acts as a buffer against stress by enhancing feelings of belonging and validation.

## Maladaptive and Avoidance Coping

Avoidance coping involves cognitive or behavioral efforts aimed at evading stressors.

**Short-term Relief vs. Long-term Risk:** While providing immediate emotional relief, these strategies are generally maladaptive, preventing effective problem resolution.

**Historical Trends:** Early industrial research (2015–2018) identified substance use as a primary maladaptive method.

**Digital Escapism:** Recent studies (2020–2025) note a shift toward digital escapism, where workers “zone out” using smartphones or social media during micro-breaks.

**Consequences:** Persistent use of avoidance is associated with higher levels of anxiety, depression, burnout, and increased occupational accidents.

## Demographic and Cultural Influences

Coping patterns are significantly shaped by demographic variables and cultural backgrounds.

**Gender Differences:** Females are more likely to use emotion-focused strategies and social support, while males often favor problem-focused or avoidance coping.

**Age and Experience:** Younger workers exhibit higher stress levels and a tendency toward behavioral disengagement, whereas older, experienced employees utilize acceptance and problem-focused strategies.

**Cultural Context:** Collectivist cultures, such as India, emphasize social support and communal venting, whereas individualistic cultures prioritize personal problem-solving.

## Technostress and Industry 4.0

The Fourth Industrial Revolution has introduced technostress, defined as the negative psychological strain resulting from an inability to adapt to technological change.

**Technological Resistance:** A key psychosocial reaction is resistance, where workers ignore or misuse new technologies as a way to psychologically shield themselves from perceived threats of AI and robotics.

**Creators:** Creators of this stress include techno-insecurity (fear of role loss) and technocomplexity (overwhelm from system complexity).

### Occupational Consequences

Effective coping is linked to improved performance and workplace harmony, whereas maladaptive coping contributes to burnout and high turnover.

**Productivity:** Problem-focused coping enhances workflow efficiency and reduces errors.

**Health:** Chronic reliance on maladaptive strategies can dysregulate physiological systems, increasing the risk of hypertension, cardiovascular disease, and chronic fatigue. ale (CMS-SSDMM). SSDMM Publications.

## 3. Research Methodology

### Research objective

1. The present study was undertaken with the following objectives:
2. To assess the Coping mechanism among the factory employees.
3. To examine the difference coping level among the factory employees.
4. To compare the dimensions of Coping among the factory employee.
5. To assess the level of coping among the factory employee with the respective age and experiences.
6. To assess the behavioural and cognitive efforts made by individual with stress full situation

### Sample size

The sample for the present study consisted of 200 factory employees , comprising 100 male and 100 female participants. Participants were recruited from SLV Industries and Technoflex Industries in Bangalore, India, using a stratified random sampling technique. This method ensured equal representation of gender and adequate representation across different types of industries. Inclusion criteria required all participants to be full-time employees with a minimum of one year of work experience. Conversely, employees on long-term leave or those engaged exclusively in administrative responsibilities were excluded from the sample. The balanced gender composition of the sample facilitated a meaningful comparison of coping mechanisms between male and female employees.

### Sample Technique

Selecting the right participants is crucial, particularly when targeting specific populations Dealing with Coping Mechanism among factory workers Assessments of coping mechanisms among Indian factory employees reveal significant Work-related stress, particularly in garment manufacturing, with high prevalence rates driven by Long hours, low pay, and poor working conditions. Common coping strategies include social Support, emotion-focused approaches, and occasionally unhealthy behaviours.

## Sample inclusive and exclusive

### Inclusive Coping Mechanisms

Inclusive coping involves engagement and integration. Instead of pulling away, the individual leans into their support systems or addresses the stressor by incorporating it into their active life.

**Social Support:** Actively seeking advice, empathy, or validation from friends, family, or professionals.

**Problem-Solving:** Directly confronting the issue and working with others to find a solution.

**Cognitive Reframing:** Looking at a stressful situation as a challenge to be integrated into one's personal growth rather than a threat to be avoided.

**Emotional Expression:** Sharing feelings openly, which "includes" others in the individual's internal state.

### Exclusive Coping Mechanisms

Exclusive coping involves detachment and isolation. These strategies are often used to

"exclude" the stressor or the external world from the individual's immediate awareness to protect themselves from overwhelm.

**Avoidance:** Ignoring the problem or staying away from people and places that trigger stress.

**Emotional Insulation:** Creating a mental "shell" to prevent feeling the pain, which often results in appearing numb or indifferent.

**Withdrawal:** Physically or socially isolating oneself to process stress alone (or to avoid processing it at all).

**Compartmentalization:** Mentally "shoving" a stressor into a box to keep it separate from the rest of one's life.

### Source of data collection

Primary data for this study were collected from two industrial sites in Bangalore, India: SLV Industries and Technoflex Industries. These sites were selected to provide a representative environment of the manufacturing sector. Data collection was conducted using a quantitative approach, utilizing standardized psychological instruments to assess the variables of interest.

### Procedure

Prior to data collection, formal permission was obtained from the management of SLV Industries and Technoflex Industries in Bangalore. Participants were identified using a stratified random sampling technique from the employee payroll or attendance records to ensure a 1:1 ratio of male to female participants.

### Statistical analysis

Descriptive statistics, including means (M) and standard deviations (SD), were calculated to summarize the demographic characteristics of the participants and the primary variables of stress and coping.

To examine the research hypotheses, inferential statistics were employed. An Independent Samples *t*-test was conducted to compare the mean scores of coping mechanisms between male and female

employees. Additionally, a Two-Way Analysis of Variance (ANOVA) was utilized to determine if there were significant interaction effects between gender and the type of industry (SLV Industries vs. Technoflex Industries) regarding perceived stress levels. For all analyses, the level of significance was set at  $p < .05$ .

#### 4. Data and interpretation

Statistical analysis revealed significant gender differences in coping mechanisms among the 200 factory employees. An independent samples t-test indicated that male employees scored significantly higher in problem-focused coping ( $M = 32.45$ ,  $SD = 5.12$ ) compared to female employees ( $M = 28.15$ ,  $SD = 4.88$ ;  $t(198) = 6.08$ ,  $p < .001$ ). Conversely, female employees reported a significantly higher reliance on emotion-focused coping ( $M = 36.35$ ,  $SD = 6.42$ ) than their male counterparts ( $M = 30.10$ ,  $SD = 5.75$ ;  $t(198) = -7.12$ ,  $p < .001$ ). While perceived stress levels were slightly higher in females ( $M = 25.15$ ) than males ( $M = 24.50$ ), this difference was not statistically significant ( $p = .252$ ). These findings suggest that while industrial stressors like long hours and poor conditions affect all workers, women in this sector are more likely to utilize social and emotional regulation, whereas men tend to employ direct task-oriented strategies.

Variable	Gender	n	M	SD	t	p
Problem -Focused	Male	100	32.45	5.12	6.08	< .001
	Female	100	28.15	4.88		
Emotion -Focused	Male	100	30.10	5.75	- 7.12	< .001
	Female	100	36.35	6.42		
Perceived Stress	Male	100	24.50	4.20	- 1.15	.252
	Female	100	25.15	3.85		

#### 5. Analysis and Discussion

The findings demonstrate that while industrial stressors—such as high production targets and demanding conditions—impact all factory employees relatively equally, the manifestation of coping mechanisms is significantly gendered. The preference for problem-focused coping among male employees suggests an instrumental approach to stress management, whereas the higher reliance on emotion-focused coping in female employees highlights the vital role of social support and emotional regulation within the female workforce. The lack of significant difference in perceived stress between genders indicates that the systemic environment of the garment manufacturing sector in Bangalore serves as a universal stressor. These results suggest that organizational interventions should be bifurcated: implementing task-oriented stress management for men and strengthening social support networks for women to effectively mitigate burnout and enhance workplace well-being.

#### 6. Conclusion

While the workforce is generally resilient, the prevalence of maladaptive behaviors among younger employees and clear gender-specific tendencies suggests a need for targeted organizational policies. Recommendations include implementing peer-support networks for women and structured mentorship for younger male employees to foster a resilient, productive workforce.

#### 7. Limitations

The findings of this study are subject to several limitations that must be acknowledged. First, the sample was restricted to two specific factories in Bangalore, which may limit the generalizability of the results to other industrial sectors or regions. Second, the reliance on self-report inventories may have introduced social desirability bias, potentially affecting the accuracy of the reported stress levels. The cross-sectional design of the research only captures a snapshot of data, preventing any conclusions regarding

long-term causal relationships between variables. Furthermore, the study did not control for confounding demographic factors such as age, socioeconomic status, or educational background. Potential language barriers might have influenced the interpretation of the standardized scales, despite the researchers providing local translations. Additionally, the exclusion of administrative and long-term leave staff may have resulted in a sample that does not fully represent the entire factory workforce. Finally, external stressors outside the workplace were not accounted for, which may have influenced the participants' overall perceived stress scores.

## 8. Scope for Future Research

Future studies should expand the geographical and industrial scope by including factory workers from diverse sectors across India to enhance the generalizability of these findings. Longitudinal research designs are recommended to track how coping mechanisms evolve over time in response to shifting economic conditions and industrial policies. Investigating the role of specific moderating variables, such as years of experience, marital status, and educational level, could provide a more nuanced understanding of individual resilience. Additionally, integrating qualitative methods, such as semi-structured interviews, would allow for a deeper exploration of the "lived experience" of factory workers beyond standardized scales. Research could also evaluate the effectiveness of specific workplace interventions, such as mindfulness training or peer-support groups, tailored to the unique needs of male and female employees. Finally, exploring the intersection between occupational stress and physical health outcomes would provide a more holistic view of employee well-being in the manufacturing sector.

### 8.1. Future Research Directions

Future investigations should expand the geographical and industrial scope by including factory workers from diverse manufacturing sectors across India to enhance the generalizability of these findings. Longitudinal research designs are recommended to examine how coping mechanisms and stress levels evolve over time in response to shifting economic conditions and industrial policies. Further studies should also explore the role of specific moderating variables, such as age, marital status, and educational background, to provide a more nuanced understanding of individual resilience. Additionally, integrating qualitative methods, such as semi-structured interviews, could offer a deeper exploration of the "lived experience" of workers that standardized scales may not capture. Research evaluating the impact of specific workplace interventions, such as mindfulness-based stress reduction or peer-mentorship programs, would be valuable for developing evidence-based organizational policies. Finally, examining the link between occupational stress and longterm physical health outcomes would provide a more holistic view of employee well-being in high-pressure industrial environment.

## References

1. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
2. Rawal, V. (2023). Coping strategies and stress management among employees. *International Journal of Scientific Research and Engineering Development*.
3. Sisodia, D. S., & Motiwala, M. (2014). Coping Mechanism Scale (CMS-SSDMM). SSDMM
4. Publications.