

Research on Occupational Stress and Coping Skills Assessment of Industrial Workers in Selected Areas of Bhopal (M.P.)

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Abstract: *The researcher felt a deep sense of satisfaction and fulfillment for having undertaken the study. The study provided the investigator with deeper insight about stress and coping skill among industrial worker. The direction from the guide, expert opinions and help from the staff of the college made the study interesting. This chapter deals with the major findings, discussion, conclusion, nursing implications, limitations, recommendations and summary drawn from the result of the study. The following chapter also deals with summary of the study. The present study attempts to find out the Occupational stress and coping skill by industrial workers. The sample consisted of total 60 industrial workers with stressful working condition. The tool used for assessing the stress was Perceived Stress Scale and Coping Scale. The majority of the industrial worker between two variables stress and coping skills. Stress mean is 22.216 and coping mean is 19.6 correlations (r) 0.667 positive correlations and table value is 0.250.*

Keywords: satisfaction, fulfillment, study, insight, stress, coping skill, industrial worker, guide, expert opinions

1. Need for the study

The changing nature of work, and indeed changes in society itself, means that is important to regularly update available information on the scale of occupational stress.

Stress at work is a relatively new phenomenon of modern life styles. The nature of work has gone through drastic change over the last century and it is still changes at whirlwind speed. They have touched almost all professions, starting from an artist to a surgeon, or a commercial pilot to a sales executive. With change comes stress inevitably. Occupational or job stress poses a threat to physical health. Job related stress in the life of organized workers, consequently, affects the health of organizations.

Statement of the problem

“A study to assess the occupational stress and coping skill of the industrial worker at selected area in Bhopal (M.P.)”.

2. Objectives

- To assess level of occupational stress and coping skill among industrial worker.
- To find out relationship between level of occupational stress and coping skill among industrial worker
- To find out association between level of occupational stress and coping skill among industrial worker with selected socio-demographical variables.

Assumptions

- Industrial employees may experience occupational stress and adopt coping mechanisms.
- Physical problems like increased blood pressure, diabetes mellitus, may increase stress among industrial worker.

Hypothesis

H₁: There is significant co-relationship between the level of stress and coping skills among individual worker at the level $p < 0.05$.

H₂: There is significant association between the level of stress in industrial worker coping skills with selected socio-demographic variables at the level $P < 0.05$.

Operational Definition

- **Assess:** In this study it refers to the way of finding the level of occupational stress as expressed by the industrial worker and coping skills adopted.
- **Industrial Worker:** In this study it refers to the persons who are working and appointed to work in industrial area.
- **Occupational Stress:** In this study it refers to the stress acquainted due to the occupation among industrial worker.
- **Coping Skills:** In this study it refers to the measures taken by the industrial worker to relieve the occupational stress.
- **Ethical And Legal Aspects:** Legal ethics is the minimum standards of appropriate conduct within the legal profession.

Delimitation

The study is limited to who will be,

- 1) The study is limited to industrial employees in selected area Bhopal.
- 2) The study was delimited to 60 samples.

3. Review of Literature

The reviewed literature that was undertaken for the purpose of conducting this study has been organized under the following headings.

3.1 Literature related to stress

3.2 Literature related to coping skills.

Research Methodology

Research Approach: Descriptive approach was used in the presents study.

Research Design: The research design is used in the present study is **Descriptive research design**.

Study Population

- **Target population:** In this study the target population was industrial worker in Bhopal those who are meeting the criteria of the study.
- **Accessible population:** In this research the accessible at the time of study was the industrial worker in Bhopal. In the present study, population includes industrial area who were working in EICHER limited.
- **Setting of the Study:** The study was conducted in a selected industrial area EICHER limited plot no 01 sector –D Mandideep Bhopal. The industrial areas were selected for the study on the basis of geographical proximity, feasibility of conducting the study.
- **Sample:** To fulfill the study objective the study, industrial worker in Bhopal were selected.
- **Sample Size:** The size of the sample was 60 only at industrial worker in Bhopal.
- **Sampling Technique:** The sampling technique used for this study was **purposive sampling technique**.

Sampling Criteria

Inclusion Criteria

- 1) Industrial areas who were working in selected EICHER limited Bhopal.
- 2) Who are willing to participate in the study and available at the time of data collection.
- 3) Clients who are able to read and write English/Hindi.

Exclusion Criteria

- 1) Those who are having chronic mental and physical illness.
- 2) Those who are absent on the particular day.
- 3) Those who are not willing to participate.

Variables under study

- **Independent variables:** In this study, the occupational stress and coping skills.
- **Dependent variables:** Stress among industrial worker.
- **Demographic variables:** Age, sex, educational qualification, experiences, sources of information etc.
- **Development of rating scale:** The rating scale was prepared to assess the relevancy, accuracy and appropriateness of the items in the socio-demographic variables and questionnaire of stress scale and coping scale.
- **Reliability of the tool:** The reliability of the tool was tested by using Splint half method and applying Karl Pearson's correlation coefficient formula. The reliability of stress scale was 0.75. The reliability of coping strategies scale was 0.76.

Ethical Consideration

- Permission was obtained to conduct the study from the administrators of the EICHER limited Bhopal.
- A written informed consent (in English/Hindi language) was taken from the persons who were willing to participate in the study.
- Subject was assured of confidentiality of the data obtained and explained about the study.
- Ethical clearance was obtained from the institute ethics committee.

4. Data Analysis and Interpretation

Frequency and Percentage Distribution of Demographic Variables of Industrial Worker

Table 4.1: Distribution of Industrial Worker according to their Age Group, (n=60)

S. NO.	Demographic Data	Number	Percentage
	Age		
1.1	25 year less than	25	41.67%
1.2	25 year to 35 year	10	16.66%
1.3	36 year to 45 year	15	25%
1.4	46 year to above	10	16.66%

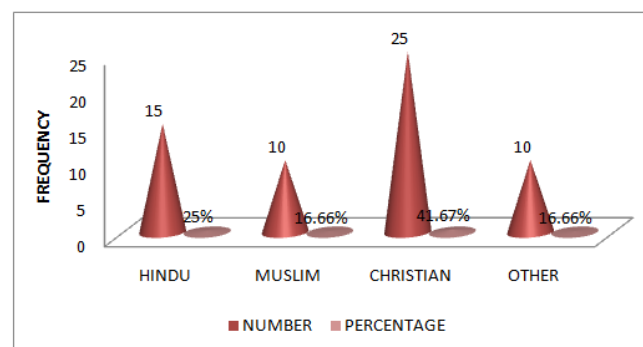


Figure 4.1: Bar graph representing age distribution of industrial worker

Description: -The bar diagram depicts that majority of the industrial worker age less than 25year 25 (41.67%) belonging to the age group 25 year to 35 year 10 (16.66%), belonging to the above 36 year to 45 year 15 (41.66%) belonging to the group of above 46 year 10 (16.66%).

Table 4.2: Distribution of Industrial Worker according to their Sex Group, (n=60)

S. No.	Gender	Number	Percentage
2.1	Male	30	50%
2.2	Female	30	50%

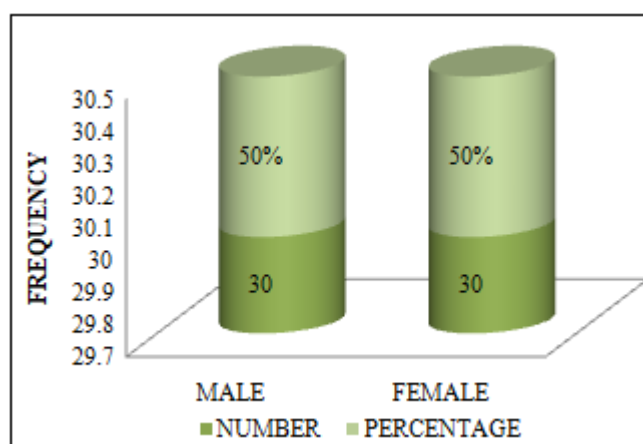
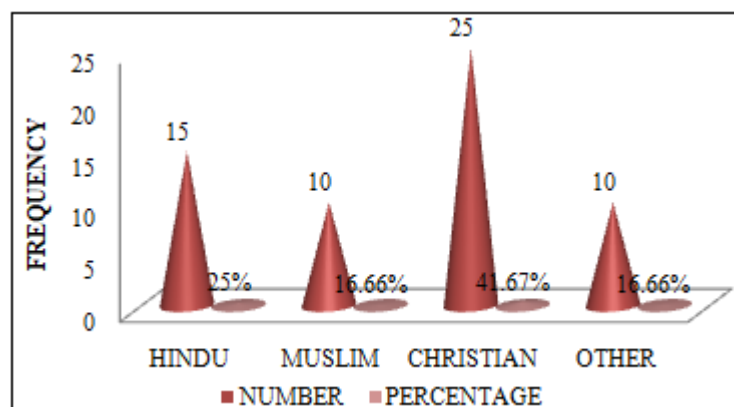


Figure 4.2: Bar graph representing Sex distribution of industrial worker

Description: The diagram showing majority male 30 (50%) or female 30 (50%).

Table 4.3: Distribution of Industrial Worker according to their Religion Group, (n=60)

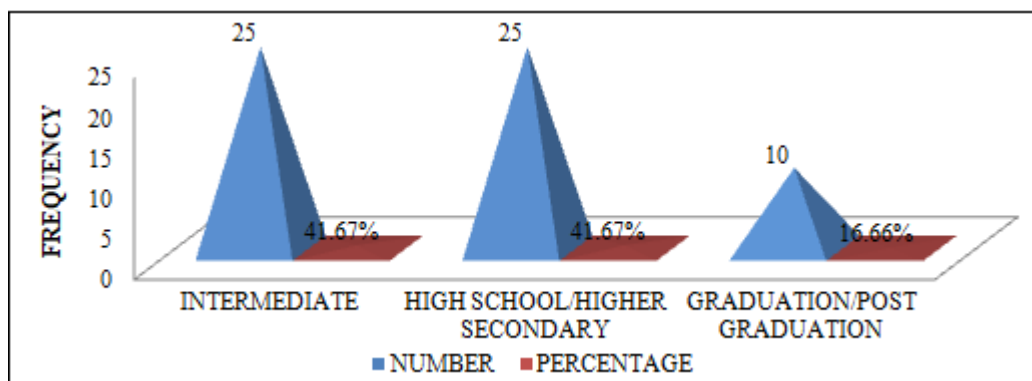
S. No.	Religion	Number	Percentage
3.1	Hindu	15	25%
3.2	Muslim	10	16.66%
3.3	Christian	25	41.67%
3.4	Other	10	16.66%

**Figure 4.3:** Bar graph representing religion distribution of industrial worker.

Description: The diagram showing majority of religion Hindu 15(25%), Muslim 10 (16.66%), Christian 25 (41.67%), other 10 (16.66%).

Table 4.4 (D): Distribution of industrial worker according to their Educational Status is Group, (n=60)

S.NO.	Educational Status	Number	Percentage
4.1	Intermediate	25	41.67%
4.2	High School/Higher Secondary	25	41.67%
4.3	Graduation/Post Graduation	10	16.66%

**Figure 4.4** Bar graph representing educational status is group distribution of industrial worker

Description: -The diagram showing educational status intermediate 25 (41.67%), high school/higher secondary school 25 (41.67%), graduation/post graduation 10 (16.66%).

Table 4.5 (E): Distribution of industrial worker according to their Marital Status Group (n=60)

S.NO.	Marital Status	Number	Percentage
5.1	Married	30	50%
5.2	Unmarried	20	33.33%
5.3	Divorced	10	16.66%

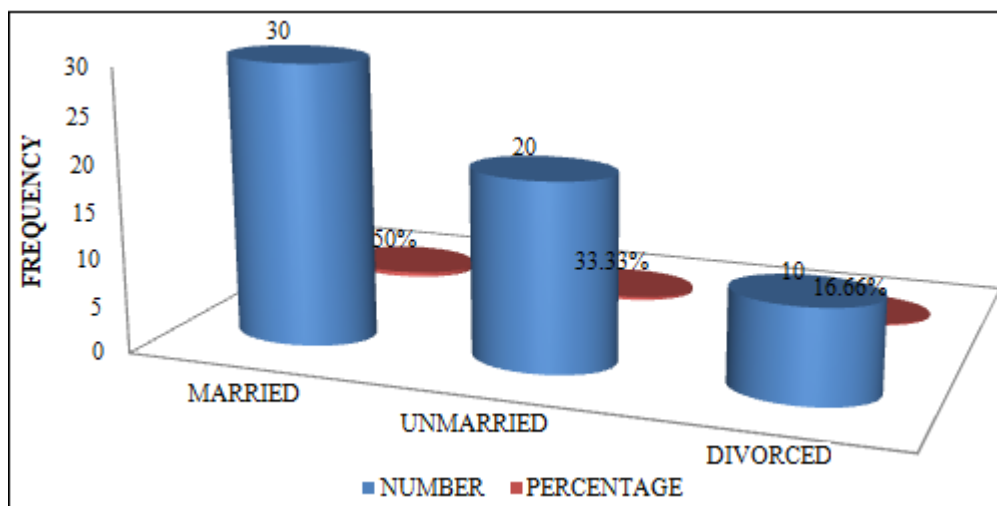


Figure 4.5: Bar graph representing marital status distribution of industrial worker

Description: The diagram showing majority marital status married 30 (50%), unmarried 20(33.33%), divorced 10 (16.66%).

Table 4.6 (F): Distribution of industrial worker according to their type of family group, (n=60)

S. No.	Type of Family	Number	Percentage
6.1	Nuclear	30	50%
6.2	Joint Family	10	16.66%
6.3	Extended Family	20	33.33%

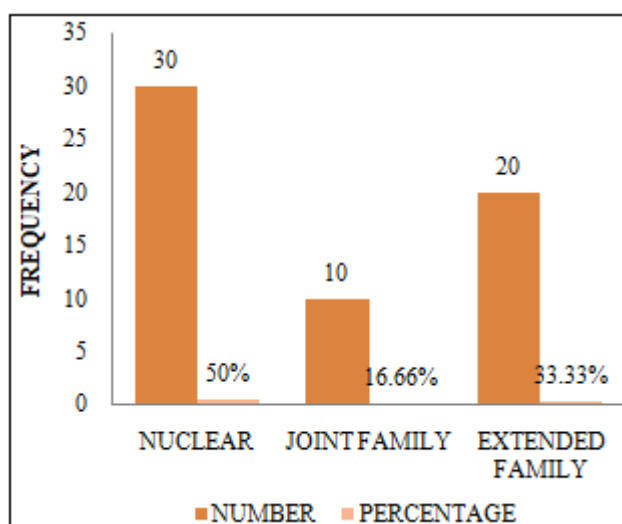


Figure 4.6: Bar graph representing type of family distribution of industrial worker

Description: The diagram showing majority of type of family nuclear 30(50%), joint family 10 (16.66%), extended family 20 (33.33%).

Table 4.7 (G): Distribution of industrial worker according to their Number of Children Group, (n=60)

S.NO.	Number Of Children	Number	Percentage
7.1	Nil	18	30%
7.2	One	16	26.66%
7.3	Two	16	26.66%
7.4	More Than Two	10	16.66%

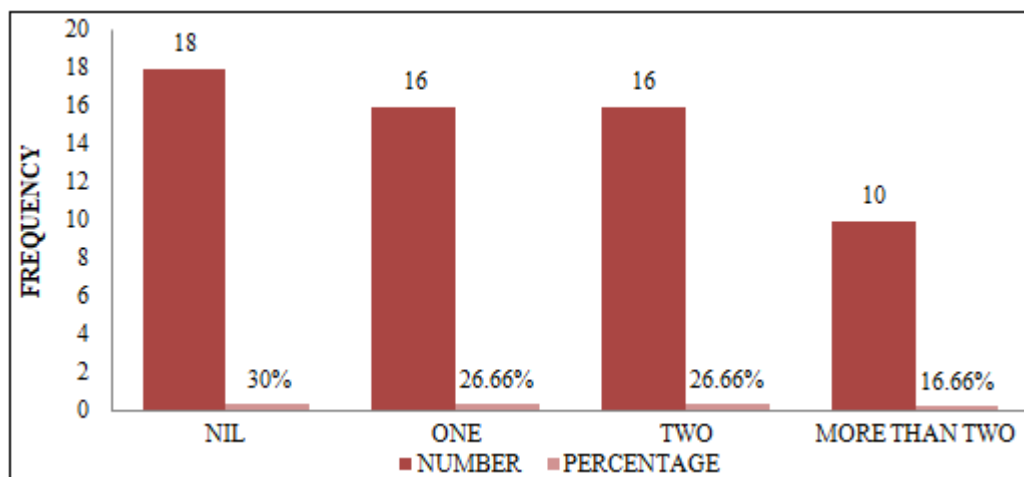


Figure 4.7 Bar graph representing number of children distribution of industrial worker.

Description: The diagram showing majority of number of children nil 18(30%), one child 16 (26.66%), two child 16 (26.66%), more than two child 10 (16.66%).

Table 4.8 (H) Distribution of Industrial Worker according to place of residence, (n=60)

	Place of Residence	Number	Percentage
8.1	Rural	30	50%
8.2	Urban	30	50%

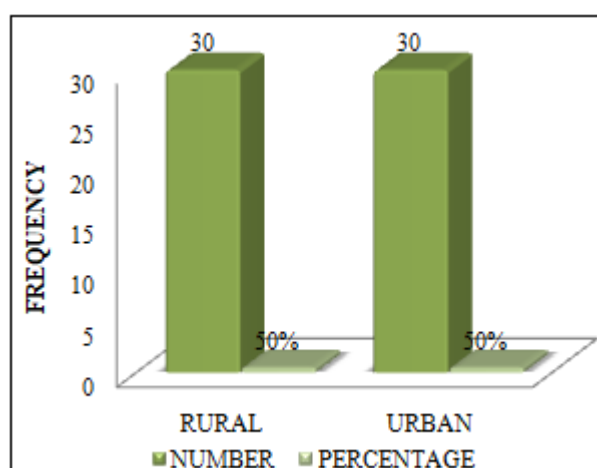


Figure 4.8: Bar graph representing place of residence in distribution of industrial worker.

Description: The diagram showing majority place of residence in rural 50 (50%), and urban 50(50%).

Table 4.9 (I) Distribution of Industrial Worker according to their Monthly Income Group, (n=60)

S.NO.	Monthly Income	Number	Percentage
9.1	Less than 10,000	15	25%
9.2	10,001-15,000	15	25%
9.3	15,001-20,000	15	25%
9.4	20,000 and above	15	25%

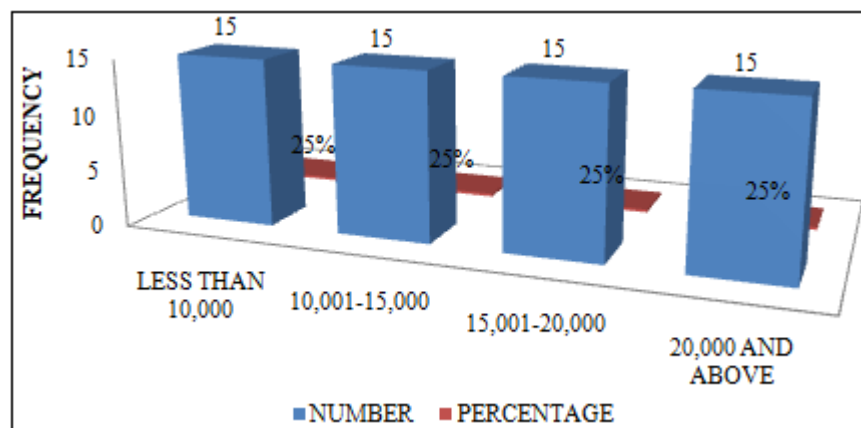


Figure 4.9 Bar graph representing monthly income distribution of industrial worker

Description: -The diagram showing majority monthly income less than 10,000 15(25%), 10,001-15,000 15 (25%), 15,001-20,000 15 (25%), 20,000 and above 15 (25%).

Table 4.10 (J): Distribution of Industrial Worker according to their Industrial Worker Group, (n=60)

S. No.	Length of Service	Number	Percentage
10.1	Less than 2 Years	20	33.33%
10.2	2-4 Years	20	33.33%
10.3	4-6 Years	10	16.66%
10.4	6 Years and above	10	16.66%

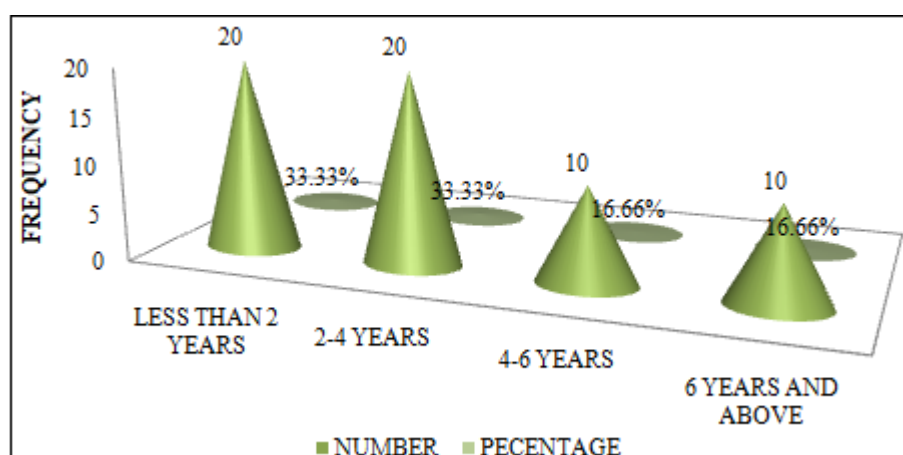


Figure 4.10: Bar graph representing distribution of length of services industrial worker.

Description: -The diagram showing majority length of services less than 2 years 20 (33.33%), 2-4 years 20(33.33%), 4-6 year 10 (16.66%), 6 years and above 10 (16.66%).

Frequency and Percentage Distribution of Stress in Industrial Worker

S.NO.	Stress	Range	Pre Test	
			Frequency	Percentage
1	Almost Never	0-7	0	0%
2	Sometimes	8-15	2	3.333%
3	Fairly Often	16-23	38	63.333%
4	Very Often	24-30	20	3.333%

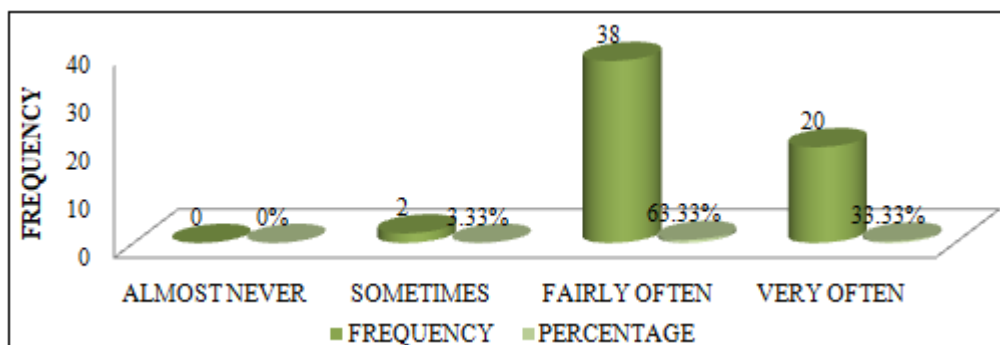


Figure 16 (a): Bar graph representing stress scale frequency and percentage distribution in industrial worker

Description: The bar graph diagram depicts that majority of the industrial worker stress scale almost never 0 (0%), sometimes 2 (3.33%), fairly often 38 (63.33%), very often 20 (33.33%).

Frequency and Percentage Distribution of Coping Skills in Industrial Worker

S. No.	Coping Scale	Range	Pre Test	
			Frequency	Percentage
1	Poor	0-10	0	0%
2	Average	11-20	34	56.666%
3	Good	21-30	26	43.333%

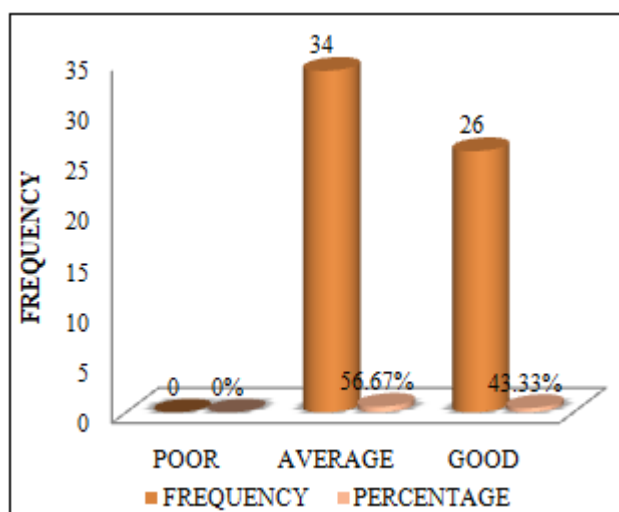


Figure 16 (b): Bar graph representing coping skill frequency and percentage distribution in industrial worker

Description: The bar graph diagram depicts that majority of the industrial worker coping skill poor 0 (0%), average 34(56.666%), good 26 (43.333%).

Mean, Median and Standard Deviation of Stress and Coping Skills

Stress			Coping Skills		
Mean	Median	S.D.	Mean	Median	S.D.
22.216	22.5	3.086	19.6	20	2.605

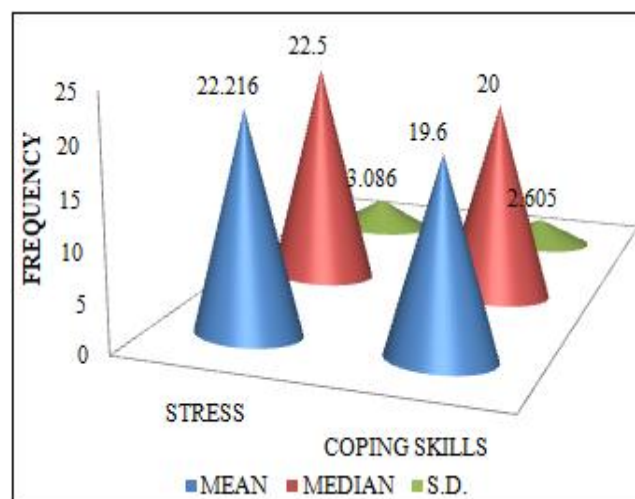


Figure 17: Bar graph representing stress and coping skills.

Description: The bar graph diagram depicts that majority of the industrial worker stress pre test mean 22.216, median 22.5, standard deviation 3.086. Coping skills pre test mean 19.6, median 20, standard deviation 2.605.

Karl Pearson's Correlation Coefficient

Description: The majority of the industrial worker between two variables stress and coping skills. Stress mean is 22.216 and coping mean is 19.6 correlations (r) 0.667 positive correlations and table value is 0.250.

Association of Pre Test Knowledge Score with Selected Demographic Variables By Using Chi-Square Test (Stress)

Association between pre-test score in coping skills in industrial worker with socio –demographic variables such as age, gender, religion, education, marital status, type of family, number of children, place residence, monthly income, length of service. The association between them was analyzed by chi- square test. The chi- square value of age in industrial worker was **14.015 at 6** degree of freedom, sex in industrial worker was **8.931 at 2** degree of freedom, number of children **9.101 at 6** degree of freedom. In this information was non-significant where probability is ≤ 0.05 . 2 is highly significant and 1 is significant.

Chi Square Value Showing association between Pre-Test Coping Skills and Demographic Variables Industrial Worker.

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S.NO.	Demographic Variables		Number	Percentage (%)	DF (n-1)	Chi Square	Significance
1	Age (in years)	< 25 year	25	41.67%	3	0.294	(N.S.)
		25-35 years	10	16.66%			
		36-45 year	15	25%			
		46- above	10	16.66%			
2	Sex	Male	30	50%	1	0.665	(N.S.)
		Female	30	50%			
3	Religion	Hindu	15	25%	6	3.792	(N.S.)
		Muslim	10	16.66%			
		Christian	25	41.67%			
		Other	10	16.66%			
4	Educational Status	Intermediate	25	41.67%	2	0.945	(N.S.)
		High school/ Higher secondary	25	41.67%			
		Graduation/ post gradation	10	16.66%			
5	Marital Status	Married	30	50%	2	2.712	(N.S.)
		Unmarried	20	33.33%			
		Divorced	10	16.66%			
6	Type of Family	Nuclear	30	50%	2	2.032	(N.S.)
		Joint family	10	16.66%			
		Extended family	20	33.33%			
7	Number of Children	Nil	18	30%	3	3.481	(N.S.)
		Family one	16	26.66%			
		Two	16	26.66%			
		More than two	10	16.66%			
8	Place of Residence	Rural	30	50%	1	1.084	(N.S.)
		Urban	30	50%			
9	Monthly Income	Less than 10,000	15	25%	3	4.612	(N.S.)
		10,001-15,000	15	25%			
		15,001-20,000	15	25%			
		20,000/- and above	15	25%			
10	Length of service	Less than 2 year	20	33.33%	3	2.982	(N.S.)
		2-4 year	20	33.33%			
		4-6 year	10	16.66%			
		6 year and above	10	16.66%			

Significant (S.)**Highly Significant (H.S.)****Not Significant (N.S.)****Association of Pre Test Knowledge Score with Selected Demographic Variables by Using Chi-Square Test (Coping Skills)**

Association between pre test score in coping skills in industrial worker with socio – demographic variables such as age, gender, religion, education, marital status, type of family, number of children, place residence, monthly income, length of service. The association between them was analyzed by chi- square test. No significant on coping skills in industrial worker.

5. Summary, Conclusion, Major Finding, Implication and Recommendation

The present study attempts to find out the Occupational stress and coping skill by industrial workers. The sample consisted of total 60 industrial workers with stressful working condition. The tool used for assessing the stress was Perceived Stress Scale and Coping Scale.

5.1 Major Findings

- The majority of the industrial worker stress scale almost never 0 (0%), sometimes 2 (3.333%), fairly often 38 (63.333%), very often 20 (3.333%).
- The majority of the industrial worker coping skill poor 0 (0%), average 34(56.666%), good 26 (43.333%).
- The majority of the industrial worker between two variables stress and coping skills. Stress mean is 22.216 and coping mean is 19.6 correlations (r) 0.667 positive correlations and table value is 0.250.

5.2 Discussion

The section presents the major findings of the study and discussion them in relation to similar studies conducted by the researchers. The study was conducted to assess the stress and coping skill in industrial worker. The findings of the study have been discussed with reference to the objectives and hypotheses stated with findings of other studies.

5.3 Recommendation

- A similar study can be replicated on a large scale and for longer period for more reliability and effectiveness.

- Randomization of the group needs to be done.
- A qualitative method approach is used to explore comprehensive findings.
- A Descriptive research design.

5.4 Conclusion

The researcher felt a deep sense of satisfaction and fulfillment for having undertaken the study. The study provided the investigator with deeper insight about stress and coping skill among industrial worker. The direction from the guide, expert opinions and help from the staff of the college made the study interesting. This chapter deals with the major findings, discussion, conclusion, nursing implications, limitations, recommendations and summary drawn from the result of the study. The following chapter also deals with summary of the study.

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