

# An Analysis of Stress Among the Women Mill Workers in Dindigul District of Tamil Nadu

\* *D. B. Poorna*

\*\* *P. Anandaraj*

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## Abstract

Women's employment is an index of a society's modernization. It helps them to initiate and motivate the process of change towards social justice and build up human resources. The traditional role of a man has been to earn money for the running of the home. This has changed to a great extent. Now, working women contribute to the expenses of running their homes as well. The working women have added responsibilities of looking after both - the family and the workplace. Hence, due to a lot of mental pressure, women develop both physical and psychological problems. Because of their busy schedule both at home and at the workplace, women are short of time to perform all their duties. In spinning mills, most of the workers are women employees. The Dindigul District is the one of the largest industrial districts in Tamil Nadu. It is home to a major textile spinning industry, which has the highest capacity within Tamil Nadu. The work environment of the mills causes a lot of stress to the women because of continuous long working hours, ill-health, physical and mental sickness, which leads to fatigue, stress, auditory damage, breathing problems, and so on. Hence, the present study aimed to understand the factors that caused stress to the mill workers and also provides some suggestions which can be used by the mill workers to overcome stress.

**Keywords:** stress, women mill workers, coping strategies, textile spinning industry

**JEL Classification:** M12, M54

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India is the largest producer of agricultural products. Most of the women are employed in agriculture. But nowadays, due to several climatic changes and insufficient rain, most of them are withdrawing from agriculture, and this condition will ultimately lead to unemployment. Due to these reasons, most of the women workers have gradually moved to textile mills. Now, next to the agricultural sector, the textile sector has developed to a great extent. Over the decades, women have been gradually replaced by men in most of the mills. The decline in women's employment has been gradual, but quite steep in the textile sector. The economic growth of a country depends on the rate of industrialization in the country. But industrialization may not be achieved in the absence of any one of the factors namely - land, labor, capital, and organizations. Though all the four factors of production seem to be equally important, still the progress of the industry mainly depends on the productive efficiency of the labor force. So labor should be considered as the most important factor for the growth of the industry (Eshwari, 2011).

Women's employment is an index of a society's modernization. It helps them to initiate and motivate the processes of change towards social justice and build up human resources. Employment is a major step in the guarantee of human rights to women. Women's attitude, interest in, and motivation for work is the product of a complex combination of factors like education, family background, role perceptions, and the like. Women work for the following reasons - to raise the standard of living of the household, to have an independent income, to utilize their educational and mental facilities, and to avoid stagnation while sitting at home (Anitha, 2009). As women play multiple roles in their day-to-day life, they get little time to take care of themselves. It leads to stress and finally causes several physical and mental-health problems like blood pressure, heart attack, stroke, breast cancer, and hormone problems (Elizabeth, 2010).

## Women and the Textile Industry

The textile industry occupies a unique place in India. One of the earliest to come into existence in India, it accounts for

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\* *Former M.Phil. Research Scholar*, Department of Applied Research, Gandhigram Rural University, Dindigul District, Tamil Nadu. E-mail : poorna\_db@yahoo.com

\*\* *Teaching Assistant*, Department of Business Administration, Madurai Kamaraj University College, Madurai District, Tamil Nadu. E-mail: ok\_anandaraj@yahoo.co.in

14% of the total industrial production, contributes to nearly 30% of the total exports, and is the second largest employment generator after agriculture. The Textile Industry is providing one of the most basic needs of people, which is employment, and it holds importance in maintaining sustained growth for improving the quality of life. Textile industry is the only industry to have employed women workers over 50 years ago. Women workers, unlike the majority in the informal sector, have been exposed to rigorous work, discipline, fixed working hours, specific production norms, and the like. The women are ready to work for very low wages and for longer hours under exceedingly inhospitable conditions of work. Their 'oriental docility' normally did not let them join unions and agitate against the management. In Tamil Nadu, the garment industry is female dominated. The predominance of small firms, low qualification of the workforce, and limited trade union presence contribute to the fact that exploitation and discrimination, particularly in terms of women, continues to exist in the textile and garment industry (Thomas, 2011).

## **Spinning Mills and Women**

Tamil Nadu hosts 43% of all bigger Indian mills and almost 80% of the smaller Indian mills. The mills supply garments throughout Tamil Nadu and the whole of India (GOI Monitor, 2012). Any European or US clothing brand sourcing from India is thus linked to the Tamil Nadu spinning mills. Instead of stopping sourcing from these mills, international buyers are urged to use their leverage for bringing about improvements in the current set up. To stay competitive, pressure on production costs is high. As a result, manufacturers are in search of cheap labor. This is why a male, permanent labor force has been replaced by a female, flexible labor force in the Tamil Nadu garment industry. Although according to Indian law, women should be paid equally, but it is a fact that they are paid less than their male counterparts. Female workers are also considered more docile and loyal than their male colleagues. According to trade union Hind Mazdoor Sabha, 60 to 80% of the workers in the textile and garment industry are temporary workers because this helps to cut costs in salaries and benefits, and also prevents unionization as temporary workers are less inclined to join trade unions. Unmarried girls are mostly employed in these mills through the Sumangali Scheme.

## **Statement of the Problem**

Stress initially acts in a subtle manner in our normal working life without threatening our survival. Employers today are critically analyzing stress-management issues that contribute to lower job performance of workers, originating from dissatisfaction and high labour turnover, ultimately affecting organizational goals and objectives. The impact of stress does not manifest itself dramatically. Its intensity is so low that we do not notice it. A stressed person cannot work precisely. Higher level of stress exist with no managerial concern for solutions, consequently lowering the workers' performance, staking organizational reputation, and resulting in loss of skilled employees. These situations lead to immediate effective stress management practices to increase satisfaction and overall performance of the workers. Hence, in the present study, the researchers have analyzed how stress affected the women mill workers' performance.

The traditional role of a man is to earn money for running the home. This has changed to a great extent. Working women contribute to the expenses of running their homes as well. Working women are now becoming increasingly responsible to look after both the family and the work place. In this case, women are plagued with both physical and psychological problems. Because of their busy schedule both at home and at the workplace, women lack the time to perform all their duties. In spinning mills, most of the workers are women employees. The work environment of the mills causes more stress because of continuous long working hours, ill-health, physical and mental sickness which leads to fatigue, nervous tension, auditory damage, and breathing problems. Hence, this study sheds light on the factors causing stress to women workers employed in spinning mills, and suggests strategies to overcome stress.

## **Need and Relevance of the Study**

Dindigul District is one of the largest industrial districts in the state of Tamil Nadu (The Hindu, 2011). It is home to a major textile spinning industry, which ranks highest in capacity within Tamil Nadu. During the MGR period, the chief minister of Tamil Nadu gave away grants to start and run spinning industries in Dindigul to promote the industrial development of the district. It has pioneered the growth of the textile and engineering industry in the country, and has led to the development of a majority of the population in Dindigul (The Hindu, 2011). The District depends on the textile mills and its ancillary and auxiliary industries for their livelihood. It was found that there are 196 registered

spinning mills in the district (Eshwari, 2011). Hence, the present study is a fact-findings exercise to identify the stress level of the women workers in spinning mills.

## Objectives of the Study

The following are the main objectives of the study :

- 1) To analyze the socioeconomic background of the women employees, and to find out the factors that caused stress among the women mill workers in Dindigul district.
- 2) To measure the level of stress among the employees of different age groups.
- 3) To identify the coping strategies to manage stress.
- 4) To offer suitable suggestions for women mill workers to overcome stress.

## Research Methodology

The research problem in this study is to identify the factors that cause stress and to measure the stress level of the women mill workers in Dindigul district. Descriptive type of research used in this study aims at highlighting the existing problems. The description is used for frequencies, averages, and other statistical calculations. In this study, the frequency of women affected by stress could be identified by using descriptive research design.

↳ **Sampling :** In this study, women mill workers in Dindigul district were considered as the sample unit. The sampling frame in this study is women mill workers belonging to different age groups. The sampling type is probability sampling. 116 women mill workers were considered as a sample. The sample size was selected which was 20% proportionate to the total population of women workers working in three different spinning mills in Dindigul district in two taluks - namely Athoor and Nilakottai.

↳ **Data Collection :** In a structured interview, the schedule was prepared, and the same questions were posed to all the respondents in the same order. Each question was asked in the same way in each interview, promoting measurement reliability. In the present study, Likert's summated scale was used. In the procedure of its analysis, each item was evaluated on the basis of how well it discriminated between those persons whose total score was high, and those whose score was low. In this study, secondary data were collected from company records, journals, newspapers, and electronic sources.

↳ **Period of the study :** This study was done for a period for eleven months from January to November 2012 and the interviews were conducted in spinning mills in Dindigul district.

## Results and Analysis

The data analysis was done by using SPSS. Chi square test was applied to the variables to identify the relationship between them. A pilot study was done in the initial stages with 20 respondents in order to find out the reliability of the questionnaire and to restructure the questionnaire as per the respondents' suggestions.

↳ **Respondents' Profile :** The profile of the respondents revealed their age, experience, educational qualifications, house type, and nature of family. Table 1 provides the details of the respondents' demographic profile. The Table 1 shows that 77.6% of the respondents fell in the age group 19-32 years. Among this age group, most of the female workers were unmarried with a job experience of less than 47 months. The mills particularly picked up the young girls since they worked very fast and could be hired for low wages. Most of the unmarried girls joined under the Sumangali scheme. Under this scheme, after completion of three years of work, the young girls receive a lump sum amount which varies from ₹ 30,000 - ₹ 50,000. So, their parents use this amount as dowry during their daughter's marriage. 5.6% of the respondents were educated up to the middle school level, and 96.6% of the women had completed their studies till the higher secondary school level. Majority of respondents (60.3%) lived in their own houses, and 87.1% of the respondents were from nuclear families.

↳ **Economic Conditions of the Women Mill Workers :** The economic condition of the respondents includes the land

| <b>Table 1: Profile of the Respondents</b> |                         |                           |                        |                          |                        |
|--------------------------------------------|-------------------------|---------------------------|------------------------|--------------------------|------------------------|
| <b>Background characteristics</b>          | <b>Married<br/>n=36</b> | <b>Unmarried<br/>n=74</b> | <b>Widowed<br/>n=2</b> | <b>Separated<br/>n=4</b> | <b>Total<br/>N=116</b> |
| <b>Age (years)</b>                         |                         |                           |                        |                          |                        |
| 19-32                                      | 16(44.4%)               | 74(100.0%)                | 0(.0%)                 | 0(.0%)                   | 90(77.6%)              |
| 33-45                                      | 20(55.6%)               | 0(.0%)                    | 2(100.0%)              | 4(100.0%)                | 26(22.4%)              |
| <b>Experience</b>                          |                         |                           |                        |                          |                        |
| 0-47 months                                | 14(38.9%)               | 74(100.0%)                | 0(.0%)                 | 0(.0%)                   | 88(75.9%)              |
| 48-96 months                               | 22(61.1%)               | 0(.0%)                    | 2(100.0%)              | 4(100.0%)                | 28(24.1%)              |
| <b>Educational qualifications</b>          |                         |                           |                        |                          |                        |
| Middle school                              | 2(5.6%)                 | 0(.0%)                    | 0(.0%)                 | 2(50.0%)                 | 4(3.4%)                |
| Higher sec school                          | 34(94.4%)               | 74(100.0%)                | 2(100.0%)              | 2(50.0%)                 | 112(96.6%)             |
| <b>House type</b>                          |                         |                           |                        |                          |                        |
| Own house                                  | 26(72.2%)               | 42(56.8%)                 | 0(.0%)                 | 2(50.0%)                 | 70(60.3%)              |
| Rent house                                 | 10(27.8%)               | 32(43.2%)                 | 2(100.0%)              | 2(50.0%)                 | 46(39.7%)              |
| <b>Family type</b>                         |                         |                           |                        |                          |                        |
| Joint family                               | 9(25.0%)                | 6(8.1%)                   | 0(.0%)                 | 0(.0%)                   | 15(12.9%)              |
| Nuclear family                             | 27(75.0%)               | 68(91.9%)                 | 2(100.0%)              | 4(100.0%)                | 101(87.1%)             |
| Source: Field study                        |                         |                           |                        |                          |                        |

| <b>Table 2: Economic Condition of the Women Mill Workers</b> |                         |                           |                        |                          |                        |
|--------------------------------------------------------------|-------------------------|---------------------------|------------------------|--------------------------|------------------------|
| <b>Economic Background</b>                                   | <b>Married<br/>n=36</b> | <b>Unmarried<br/>n=74</b> | <b>Widowed<br/>n=2</b> | <b>Separated<br/>n=4</b> | <b>Total<br/>N=116</b> |
| <b>Land Holdings</b>                                         |                         |                           |                        |                          |                        |
| None                                                         | 31(86.1%)               | 65(87.8%)                 | 2(100.0%)              | 2(50.0%)                 | 100(86.2%)             |
| Dry land                                                     | 5(13.9%)                | 9(12.2%)                  | 0(100.0%)              | 2(50.0%)                 | 16(13.8%)              |
| <b>Daily wages (₹)</b>                                       |                         |                           |                        |                          |                        |
| 140-370                                                      | 0(.0%)                  | 10(13.5%)                 | 0(.0%)                 | 1(25.0%)                 | 11(9.5%)               |
| 370-880                                                      | 36(100.0%)              | 64(86.5%)                 | 2(100.0%)              | 3(75.0%)                 | 105(90.5%)             |
| <b>Family Savings (₹)</b>                                    |                         |                           |                        |                          |                        |
| 150-975                                                      | 32(88.9%)               | 71(95.9%)                 | 2(100.0%)              | 3(75.0%)                 | 108(93.1%)             |
| 976-2100                                                     | 4(11.1%)                | 3(4.1%)                   | 0(.0%)                 | 1(25.0%)                 | 8(6.9%)                |
| <b>Family Debts (₹)</b>                                      |                         |                           |                        |                          |                        |
| 3000-21000                                                   | 36(100.0%)              | 69(93.2%)                 | 2(100.0%)              | 4(100.0%)                | 111(95.7%)             |
| 21001-45000                                                  | 0(.0%)                  | 5(6.8%)                   | 0(.0%)                 | 0(.0%)                   | 5(4.3%)                |
| Source: Field study                                          |                         |                           |                        |                          |                        |

holdings, daily wages, family savings, and debts. The Table 2 clearly depicts the economic condition of the women mill workers. The Table 2 shows that majority of the respondents were from a very poor background. 86.2% of the respondents did not hold any assets and their daily family income ranged from ₹ 140 - ₹ 880. Though some of them possessed dry land, they were not cultivating any crops, cereals, vegetables and so on. Their family members were daily wagers like load man, construction workers, farmers, drivers and so on. It showed that these women workers were forced to work in mills because of their poverty and poor economic background. As compared to the families' savings, the family debt amount was very high. The respondents' families got loans from SHGs, and they had some self-savings, and they deposited their savings in post offices and other financial schemes.

The Table 3 shows the relationship between the marital status of the respondents and the distance commuted by the respondents to reach the mills where they were employed. Majority of respondents (92.2%) traveled a distance of 0.5-

| Table 3: Commuting Distance to the Mills and Mode of Traveling |                 |                   |                |                  |                |
|----------------------------------------------------------------|-----------------|-------------------|----------------|------------------|----------------|
| Distance and Traveling mode                                    | Married<br>n=36 | Unmarried<br>n=74 | Widowed<br>n=2 | Separated<br>n=4 | Total<br>N=116 |
| <b>Distance (Km)</b>                                           |                 |                   |                |                  |                |
| 0.5-11                                                         | 36(100.0%)      | 65(87.8%)         | 2(100.0%)      | 4(100.0%)        | 107(92.2%)     |
| 12 -23                                                         | 0(.0%)          | 9(12.2%)          | 0(.0%)         | 0(.0%)           | 9(7.8%)        |
| <b>Travelling mode</b>                                         |                 |                   |                |                  |                |
| By walking                                                     | 7(19.4%)        | 27(36.5%)         | 1(50.0%)       | 1(25.0%)         | 36(31.0%)      |
| By mill bus                                                    | 24(66.7%)       | 46(62.2%)         | 0(.0%)         | 1(25.0%)         | 71(61.2%)      |
| By private bus                                                 | 5(13.9%)        | 1(1.4%)           | 1(50.0%)       | 2(50.0%)         | 9(7.8%)        |
| Source: Field study                                            |                 |                   |                |                  |                |

| Table 4: Family Members of the Respondents and their Occupation |           |          |          |          |           |
|-----------------------------------------------------------------|-----------|----------|----------|----------|-----------|
| Relationship and their Occupation                               | Father    | Husband  | Mother   | Others   | Total     |
| None                                                            | 5(7.6%)   | 0(.0%)   | 6(66.7%) | 9(25.7)  | 20(17.2%) |
| Construction worker                                             | 8(12.1%)  | 6(22.2%) | 0(0.0%)  | 0(0.0%)  | 14(12.1%) |
| Driver                                                          | 5(7.6%)   | 2(7.4%)  | 0(0.0%)  | 1(1.1%)  | 8(6.9%)   |
| Farmer                                                          | 8(12.1%)  | 0(.0%)   | 1(11.1%) | 0(0.0%)  | 9(7.8%)   |
| Home servant                                                    | 0(.0%)    | 0(.0%)   | 1(11.1%) | 0(0.0%)  | 1(0.9%)   |
| Load man                                                        | 15(22.7%) | 5(18.5%) | 0(0.0%)  | 0(0.0%)  | 20(17.2%) |
| Medical labor                                                   | 0(.0%)    | 0(.0%)   | 1(11.1%) | 0(0.0%)  | 1(0.9%)   |
| Milkman                                                         | 2(3.0%)   | 1(3.7%)  | 0(0.0%)  | 0(0.0%)  | 3(2.6%)   |
| Mill worker                                                     | 0(.0%)    | 0(.0%)   | 0(0.0%)  | 2(1.7%)  | 2(1.7%)   |
| Hotel Server                                                    | 7(10.6%)  | 5(18.5%) | 0(0.0%)  | 0(0.0%)  | 12(10.3%) |
| Shepherd                                                        | 8(12.1%)  | 0(.0%)   | 0(0.0%)  | 2(60.8%) | 10(8.6%)  |
| Stores' labor                                                   | 1(1.5%)   | 2(7.4%)  | 0(0.0%)  | 0(0.0%)  | 3(2.6%)   |
| Textile labor                                                   | 0(.0%)    | 4(14.8%) | 0(0.0%)  | 0(0.0%)  | 4(3.4%)   |
| Watchman                                                        | 7(10.6%)  | 1(3.7%)  | 0(0.0%)  | 1(10.7%) | 9(7.8%)   |
| Source: Field study                                             |           |          |          |          |           |

11.25 km. Most of the mills are situated in rural areas, so these workers are easily able to get in touch with the mill members, and get employed at low wages. 61.2% of the respondents commuted to the mill by using the mill's bus, 31% of the respondents covered the distance by foot, and 7.8% of respondents used a private bus as their mode of commuting to work.

✎ **Family Background of the Respondents :** The relations of women mill workers in Dindugul district included father, husband, mother, and others like grandfather, grandmother, father in law, and mother in law. The Table 4 shows the relationship the particular family member had with the respondents as well as their occupation. The Table 4 depicts that almost all the relatives of the respondents were working as daily wagers. Hence, it can be ascertained that the women came from a very poor economic background. Also, it clear that most of the families were patriarchal. Poverty was the major reason for the young girls to choose to work in mills for low wages.

✎ **Factors Causing Stress :** Factors that cause stress can be - long distance of the work place from home, traveling mode, noise in the workplace, economic problems, inadequate availability of leave, and lack of child care facilities. The Table 5 lists the factors that caused stress to the women mill workers. The Table 5 shows that 47.4% of the respondents agreed that long distance from their place of work caused them stress, and the majority of the respondents agreed that the mode of travel was not a stress causing factor. All the respondents (100%) agreed that noise in the

| Table 5: Factors Causing Stress                                      |                 |              |                |             |               |             |
|----------------------------------------------------------------------|-----------------|--------------|----------------|-------------|---------------|-------------|
| Factors causing stress                                               | Level of stress | Married n=36 | Unmarried n=74 | Widowed n=2 | Separated n=4 | Total N=116 |
| Un comfortable Distance                                              | High            | 20(55.6%)    | 34(45.9%)      | 0(0.0%)     | 1(25.0%)      | 55(47.4%)   |
| Inconvenient traveling mode                                          | Low             | 16(44.4%)    | 40(54.1%)      | 2(100.0%)   | 3(75.0%)      | 61(52.6%)   |
| Child care                                                           | High            | 5(13.9%)     | 14(18.9%)      | 1(50.0%)    | 1(25.0%)      | 21(18.1%)   |
|                                                                      | Low             | 31(86.1%)    | 60(81.1%)      | 1(50.0%)    | 3(75.0%)      | 95(81.9%)   |
| Noise in the workplace, Non-Availability of leave, Economic problems | High            | 30(83.3%)    | 0(0.0%)        | 2(100.0%)   | 2(50.0%)      | 34(29.3%)   |
|                                                                      | Low             | 6(16.7%)     | 74(100.0%)     | 0(0.0%)     | 2(50.0%)      | 82(70.7%)   |
| Source: Field study                                                  |                 | 36           | 74             | 2           | 4             | 116         |
|                                                                      |                 | (100.00%)    | (100.00%)      | (100.00%)   | (100.00%)     | (100.00%)   |

| Table 6: Age and Factors Causing Stress |                 |             |            |             |
|-----------------------------------------|-----------------|-------------|------------|-------------|
| Factors Causing Stress                  | Level of Stress | Age (Years) |            | Total N=116 |
|                                         |                 | 19-32 n=90  | 33-45 n=26 |             |
| Repetitive work                         | High            | 88(97.8%)   | 26(100.0%) | 114(98.3%)  |
|                                         | Low             | 2(2.2%)     | 0(0.0%)    | 2(1.7%)     |
| Job insecurity                          | High            | 77(85.6%)   | 24(92.3%)  | 101(87.1%)  |
|                                         | Low             | 13(14.4%)   | 2(7.7%)    | 15(12.9%)   |
| Low rate of pay                         | High            | 87(98.9%)   | 26(100.0%) | 113(99.1%)  |
|                                         | Low             | 1(1.1%)     | 0(0.0%)    | 1(0.9%)     |
| Harassment by male workers              | High            | 15(16.7%)   | 5(19.2%)   | 20(17.2%)   |
|                                         | Low             | 75(83.3%)   | 21(80.8%)  | 96(82.8%)   |
| Source: Field study                     |                 |             |            |             |

workplace caused them a lot of stress. The permissible noise exposure for 8 hours per day is 90 dBA, but in mills, the produced noise levels are 92-105 dBA (Aswathappa, 2009). 100% of the respondents agreed that unavailability of adequate leaves was a stress causing factor because the workers were not allowed to take more than 2 days leave per month. In addition, they were required to work even on Sundays. No weekly leave or government holidays were provided to them. Majority of them suffered from economic problems, which was a major cause of stress.

➤ **Age and Stress Causing Factors** : Some factors like repetitive work, job insecurity, low wages, bad behavior of male workers were some of the factors which caused a lot of stress to the women respondents. The Table 6 shows the relationship between age and the stress causing factors. A majority of the respondents (98.3%) agreed that monotonous and repetitive chores at home and in the mill fatigued them. If the workers took leaves, then the mill management would chuck them out. 87.1% of the respondents agreed that job insecurity was the major factor causing stress. 99.1% of the respondents agreed that low wages were another stress causing factor as the appraisal only amounted to ₹10 for every six months (₹ 20 every year)! Most of the mill workers came from the same villages, so the respondents were either related to or were the neighbors of their co-workers. Majority of women workers (82.8%) felt comfortable while working with male workers, but in some cases, male workers harassed the women workers.

➤ **Physical Symptoms** : Physical symptoms of stress included headache, chest pain, respiratory problems, muscular problems, leg pain, and hair fall. The Table 7 shows the relationship between physical symptoms of stress and age. It shows that 100% of the respondents suffered from back pain, 90.5% of the respondents suffered from hair fall, 76.7% of the respondents suffered from leg pain, 55.2% of the women workers suffered from head ache, 95.7% of the respondents suffered from respiratory problems, and 97.4% of the respondents suffered from chest pain.

| Table 7: Physical Symptoms of Stress by Age |                 |               |               |                |
|---------------------------------------------|-----------------|---------------|---------------|----------------|
| Factors Causing Stress                      | Level of Stress | Age (Years)   |               | Total<br>N=116 |
|                                             |                 | 19-32<br>n=90 | 33-45<br>n=26 |                |
| Headache                                    | Low             | 50(55.6%)     | 2(7.7%)       | 52(44.8%)      |
|                                             | High            | 40(44.4%)     | 24(92.3%)     | 64(55.2%)      |
| Chest pain                                  | Low             | 89(98.9%)     | 24(92.3%)     | 113(97.4%)     |
|                                             | High            | 1(1.1%)       | 2(7.7%)       | 3(2.6%)        |
| Respiratory problems                        | Low             | 89(98.9%)     | 22(84.6%)     | 111(95.7%)     |
|                                             | High            | 1(1.1%)       | 4(15.4%)      | 5(4.3%)        |
| Muscular problems                           | Low             | 74(82.2%)     | 12(46.2%)     | 86(74.1%)      |
|                                             | High            | 16(17.8%)     | 14(53.8%)     | 30(25.9%)      |
| Leg pain                                    | Low             | 27(30.0%)     | 0(0.0%)       | 27(23.3%)      |
|                                             | High            | 63(70.0%)     | 26(100.0%)    | 89(76.7%)      |
| Hair fall                                   | Low             | 11(12.2%)     | 0(0.0%)       | 11(9.5%)       |
|                                             | High            | 79(87.8%)     | 26(100.0%)    | 105(90.5%)     |
| Back pain                                   | High            | 90(100.0%)    | 26(100.0%)    | 116(100.0%)    |
| Source: Field study                         |                 |               |               |                |

| Table 8: Mental Symptoms of Stress by Age |                 |               |               |                |
|-------------------------------------------|-----------------|---------------|---------------|----------------|
| Factors Causing Stress                    | Level of Stress | Age (Years)   |               | Total<br>N=116 |
|                                           |                 | 19-32<br>n=90 | 33-45<br>n=26 |                |
| Lack of Concentration                     | Low             | 69(76.5%)     | 16(61.5%)     | 85(73.3%)      |
|                                           | High            | 21(23.3%)     | 10(38.5%)     | 31(26.7%)      |
| Impatient and Irritable                   | Low             | 16(17.8%)     | 4(15.4%)      | 20(17.2%)      |
|                                           | High            | 74(82.2%)     | 22(84.6%)     | 96(82.8%)      |
| Blaming others (Negative Attitude)        | Low             | 60(66.7%)     | 15(57.7%)     | 75(64.7%)      |
|                                           | High            | 30(33.3%)     | 11(42.3%)     | 41(35.3%)      |
| Anxiety                                   | Low             | 18(20.0%)     | 5(19.2%)      | 23(19.8%)      |
|                                           | High            | 72(80.0%)     | 21(80.8%)     | 93(80.2%)      |
| Feeling guilty/Upset                      | Low             | 72(80.0%)     | 19(73.1%)     | 91(78.4%)      |
|                                           | High            | 18(20.0%)     | 7(26.9%)      | 25(21.6%)      |
| Source: Field study                       |                 |               |               |                |

➤ **Mental Symptoms :** Mental symptoms of stress such as lack of concentration, irritation, blaming others, anxiety, feeling guilty /upset are discussed here. The Table 8 shows that the majority of the respondents (73.3%) were affected by lack of concentration. The noise produced from the machines, workload, and restlessness caused irritability and impatience, and 82.8% of the respondents suffered from impatience, 64.7% of the respondents blamed others for their problems (negative attitude), and 80.2% of the respondents suffered from anxiety. Most of the workers belonged to the poor economic background, and they bore the heavy burden of debts. They led an unpleasant life, and so, 21.6% of the respondents were plagued with guilt or felt upset most of the times.

➤ **Stress Levels :** Psychological problems included forgetfulness, lack of concentration, self talk, impatience and irritability, blaming others (negative attitude), anxiety, feeling guilt/ upset ; while health problems included head ache, respiratory problems, muscular problems, back pain, leg pain, and hair fall. The above problems are discussed and the levels of severity - feeling burned out, strained, balanced, and effective - are shown in the Table 9.

| Table 9: Level of Stress           |                    |                 |                 |                 |
|------------------------------------|--------------------|-----------------|-----------------|-----------------|
| Stress symptoms                    | Burned out<br>≥110 | Strained<br>≥66 | Balanced<br>≥44 | Effective<br>≥1 |
| <b>Psychological Problem</b>       |                    |                 |                 |                 |
| Forgetfulness                      | 2                  | 2               | 4               | 108             |
| Lacking concentration              | 38                 | 27              | 24              | 27              |
| Self talk                          | 5                  | 5               | 6               | 100             |
| Impatient and Irritable            | 1                  | 24              | 71              | 20              |
| Blaming others (Negative Attitude) | 1                  | 5               | 35              | 75              |
| Anxiety                            | 1                  | 24              | 68              | 23              |
| Feeling upset                      | 0                  | 8               | 17              | 91              |
| <b>Health Problems</b>             |                    |                 |                 |                 |
| Head ache                          | 8                  | 14              | 42              | 52              |
| Respiratory problem                | 1                  | 2               | 2               | 111             |
| Muscular problem                   | 8                  | 15              | 7               | 86              |
| Back pain                          | 93                 | 23              | 0               | 0               |
| Leg pain                           | 38                 | 27              | 24              | 27              |
| Hair fall                          | 22                 | 45              | 38              | 11              |
| Source: Field study                |                    |                 |                 |                 |

Table 9 depicts the levels of stress experienced by the employees. It clearly explains the respondents' psychological and health problems. 38 respondents felt burned out from lack of concentration, 5 of them felt burned out from self talk, 2 respondents were burned out from forgetfulness, and 1 respondent suffered from impatience and irritability, blaming others (negative attitude), and anxiety. None of the respondents felt burned out due to feeling guilty/ being upset. In case of health problems, it is clear from the Table that the majority of respondents (93) felt burned out from back pain, 38 respondents felt burned out from leg pain, 22 respondents felt burned out due to hair fall, and 8 of them felt burned out from headache and muscular problems, and 1 respondent felt burned out from respiratory problems.

↳ **Factors that Triggered Stress :** Factors that triggered stress explained the causes of stress. Some factors included relative's death, relations' separation, health problems, family problems and so on. The factors that triggered stress were compared with the marital status of the respondents. Marital status was classified into married, unmarried, and others category. The others category included widowed and separated. The Table 10 explained the factors that triggered stress.

The Table 10 explains the factors that triggered stress as compared with the marital status of the respondents. In case of majority of the respondents, 36.1% of the married women suffered from economic problems, 24.3% of the unmarried women also suffered from economic problems, and the other respondents like widowed and separated women suffered due to death of the spouse and separation from the spouse respectively.

↳ **Coping Strategies for Stress Management :** The coping strategies of stress were compared with the marital status of the respondents, as shown in the Table 11. The Table 11 depicts that the following measures acted as stress busters for the respondents : saving money, regular health check up, leave availability, good communication, completion of work in time, and social and family support helped the respondents to cope with stress. 91.7 % of the respondents said that listening to music acted as a stress buster ; for 88.9% of the respondents, regular counseling ; and for 25% of the respondents, regular feedback acted as coping strategies for stress management.

## Summary of Findings

The following are some of the major findings drawn from the data analysis and interpretation :

1) Majority of the respondents (77.6%) fell in the age group of 19-32 years. Among this age group, most of the female

| Table 10: Stress Triggering Factors by Marital Status |                |           |           |              |
|-------------------------------------------------------|----------------|-----------|-----------|--------------|
| Triggering Factors                                    | Marital Status |           |           | Total<br>116 |
|                                                       | Married        | Unmarried | Others    |              |
| None                                                  | 4(11.1%)       | 19(25.7%) | 0(.0%)    | 23(19.8%)    |
| Father's death                                        | 0(.0%)         | 3(4.1%)   | 0(.0%)    | 3(2.6%)      |
| Mother's death                                        | 0(.0%)         | 2(2.7%)   | 0(.0%)    | 2(1.7%)      |
| Son's death                                           | 1(2.8%)        | 0(.0%)    | 0(.0%)    | 1(.9%)       |
| Spouse's death                                        | 0(.0%)         | 0(.0%)    | 2(100.0%) | 2(1.7%)      |
| Drunkard father                                       | 0(.0%)         | 13(17.6%) | 0(.0%)    | 13(11.2%)    |
| Drunkard husband                                      | 1(2.8%)        | 0(.0%)    | 0(.0%)    | 1(.9%)       |
| Father separation                                     | 0(.0%)         | 3(4.1%)   | 0(.0%)    | 3(2.6%)      |
| Spouse separation                                     | 0(.0%)         | 0(.0%)    | 2(50.0%)  | 2(1.7%)      |
| Economic problems                                     | 13(36.1%)      | 18(24.3%) | 0(.0%)    | 31(26.7%)    |
| Family problems                                       | 1(2.8%)        | 3(4.1%)   | 0(.0%)    | 4(3.4%)      |
| Health problems                                       | 0(.0%)         | 1(1.4%)   | 0(.0%)    | 1(.9%)       |
| Mother's health problems                              | 0(.0%)         | 1(1.4%)   | 0(.0%)    | 1(.9%)       |
| Marriage problem                                      | 0(.0%)         | 3(4.1%)   | 0(.0%)    | 3(2.6%)      |
| Child care                                            | 9(90.0%)       | 0(0.0%)   | 1(10.0%)  | 10(100.0%)   |
| Fear of children's future                             | 6(16.7%)       | 0(.0%)    | 1(25.0%)  | 7(6.0%)      |
| Feeling lonely                                        | 0(.0%)         | 1(1.4%)   | 0(.0%)    | 1(.9%)       |
| Studies discontinued                                  | 0(.0%)         | 5(6.8%)   | 0(.0%)    | 5(4.3%)      |
| Workload                                              | 1(2.8%)        | 1(1.4%)   | 0(.0%)    | 2(1.7%)      |
| Source: Field study                                   |                |           |           |              |

workers were unmarried with less experience. The mills particularly pick up young girls since they work fast, are efficient, and can be recruited for low wages. 63.7% of the unmarried girls joined under the Sumangali scheme. Under this scheme, after the completion of 3 years of work, the young girls got a lump sum amount which varied from ₹ 30,000 - ₹ 50,000. 5.6% of the respondents were educated up to the middle school level, and 94.4% of the respondents had completed their education up to the high school level. Due to financial constraints, they did not get a

| Table 11: Coping Strategies for Stress Management |                 |                 |                   |                |                  |                |
|---------------------------------------------------|-----------------|-----------------|-------------------|----------------|------------------|----------------|
| Coping strategies                                 | Level of Stress | Married<br>n=36 | Unmarried<br>n=74 | Widowed<br>n=2 | Separated<br>n=4 | Total<br>N=116 |
| Regular feedback                                  | Low             | 27(75.0%)       | 43(58.1%)         | 1(50.0%)       | 2(50.0%)         | 73(62.9%)      |
|                                                   | High            | 9(25.0%)        | 31(41.9%)         | 1(50.0%)       | 2(50.0%)         | 43(37.1%)      |
| Counseling                                        | Low             | 4(11.1%)        | 10(13.5%)         | 0(0.0%)        | 1(25.0%)         | 15(12.9%)      |
|                                                   | High            | 32(88.9%)       | 64(86.5%)         | 2(100.0%)      | 3(75.0%)         | 101(87.1%)     |
| Listening to music                                | Low             | 3(8.3%)         | 5(6.8%)           | 1(50.0%)       | 1(25.0%)         | 10(8.6%)       |
|                                                   | High            | 33(91.7%)       | 69(93.2%)         | 1(50.0%)       | 3(75.0%)         | 106(91.4%)     |
| i. Saving money                                   | High            | 36              | 74                | 2              | 4                | 116            |
| ii. Health checkup                                |                 | (100.00%)       | (100.00%)         | (100.00%)      | (100.00%)        | (100.00%)      |
| iii. Leave availability                           |                 |                 |                   |                |                  |                |
| iv. Good communication                            |                 |                 |                   |                |                  |                |
| v. Completion of work in time                     |                 |                 |                   |                |                  |                |
| vi. Social and family support                     |                 |                 |                   |                |                  |                |
| Source: Field study                               |                 |                 |                   |                |                  |                |

chance to pursue higher education. 72.2% of the respondents had their own house, and 75% of the respondents belonged to nuclear families. The respondents were from a very poor background. 86.2% of the respondents did not have any assets and their family income (daily) ranged from ₹ 140 - ₹ 880. Though some of them had dry land, they were not cultivating any crops, cereals, vegetables, and so on. Their family members were daily wagers like load man, construction workers, farmers, drivers and so on. The family members of 17.2% of the respondents were unemployed. Women workers were forced to work because of their abject poverty. This shows clearly that their poverty forced these young girls to work in mills instead of going in for higher education or acquiring some other skills.

93.1% of the respondents had only a little amount of family savings ranging from ₹ 150 - ₹ 975. 95.7% of the respondents were burdened with family debts. The family debts ranged from ₹ 3000 - ₹ 45000. 92.2% of the respondents traveled a distance of 0.5-11 km to reach their workplace (mill). Most of the mills are situated in rural areas, and so these workers were easily able to get in touch with other mill workers, and started working in the mills for a low wage. 61.2% of the respondents used the mill bus as mode of traveling, 31% of the respondents commuted by walking, and 7.8% of the respondents used private buses as their mode of travel. 47.4% of the respondents agreed that traveling a long distance was a cause of stress to them, and majority of them agreed that the mode of travel was not the stress causing factor.

**2)** 100% of the respondents agreed that noise in the workplace and unavailability of leaves were the major causes of stress because the workers were permitted to take only two days' leave per month, and they also worked on Sundays. No weekly leave or government holidays were provided to them. 98.3% of the women agreed that repetitive and monotonous chores at home and at the mill fatigued them. If the workers took more than two leaves a month, the mill management would fire them from their job. A majority of respondents (87.1%) agreed that job insecurity was the major factor causing stress. 99.1% of the workers agreed that low rate of pay was another stress causing factor because the pay got increased only by ₹ 10 for every six months. Most of the mill workers belonged to the same villages, so the workers were either relatives or neighbors with one another. Majority of women workers (82.8%) felt comfortable to work with male workers, but in some cases, the women were harassed by the male co-workers.

**3)** All the respondents suffered from back pain because for the whole day, the respondents were standing at the machines and they did not get adequate rest after returning home as they had to look after the household chores as well. 90.5% of the respondents suffered from hair fall, 76.7% of the respondents suffered from leg pain, 55.2% of the women workers suffered from head ache, 95.7% of the respondents were affected by respiratory problems, and they did not have the awareness regarding the respiratory problems. Mill workers inhale cotton dust, which forms cotton bags in their stomachs, which over time causes stomach ache or other respiratory problems. 97.4% of the respondents suffered from chest pain. The majority of the respondents (73.3%) suffered from lack of concentration. The noise produced from the machines, workload, and restlessness made them impatient and irritable, and 82.8% of the respondents became impatient, and 80.2% of the respondents suffered from anxiety.

**4)** It is clear that in case of psychological problems 32.7% of the respondents were burned out from lack of concentration. In case of health problems, it is clear that a majority of the respondents (80.1%) felt burned out from back pain, 32% of the respondents felt burned out from leg pain. All the respondents (100%) agreed that saving money, regular health check ups, leave availability, good communication, completion of work in time, social and family support acted as coping strategies. 91.7% of the respondents said that listening to music, 88.9% of the respondents said that regular counseling, and only 25% of the respondents said that regular feedback were the coping strategies for stress management.

## **Suggestions**

Based on the major findings of the study, the suggestions are appended below :

**1)** It is suggested that the mills have to chalk - out various social welfare schemes for their workers - like assisting in educating the children of the workers and undertaking various voluntary welfare facilities like arranging the health check ups for the workers and their family members, establishing tie - ups with the medical and educational

institutions for the benefit of the workers and their family members. These measures will help to enrich the social - life of the workers even outside the working hours and beyond the working place. It will help the workers to improve their standard of living, which will result in higher levels of satisfaction towards the working conditions in the mills.

**2)** Efficient workers have to be identified and they need to be rewarded suitably. It will motivate other workers also to improve their efficiency. This will lead to an increase in the efficiency as well as the profits earned by the mills. If the extraordinary efficiency of the workers is properly rewarded and recognized by the mills, it will help the workers to get adequate recognition in the workplace itself. The economic rewards and recognitions offered by the mills for the workers who have extraordinary efficiency will help them to realize higher status in the society and in the workplace as well.

**3)** In addition, the mills have to strictly implement the provisions of various Acts and Laws, which have been implemented for the purpose of protecting the interests of the workers at the workplace. The benefits derived by the workers because of such voluntary welfare facilities and statutory facilities offered by the mills will increase the satisfaction of the workers with the working conditions in the mills.

**4)** It is suggested to increase the workers' break time and to provide some additional leaves for them and also to provide regular health check ups that would help the women workers to get relief from various health problems like muscle ache, back pain, contraction of muscles, vitamin and mineral deficiencies, and also result in early diagnosis of various serious health problems like respiratory problems, damage to reproductive organs, and liver and kidney damage. Also, regular audiometry tests are necessary for the sound auditory health of the workers.

**5)** It is suggested to organize training programmes for the workers. Requisite training will improve the efficiency of the workers, which will, in turn, result in more work getting done in a short period of time, which would ultimately increase the profitability of the mill. Adequate counseling should be provided to the employees when they face problems, because counseling is the discussion of a problem that usually has an emotional angle to it so that the employee can better cope with her emotions, as bottled up emotions can result in psychological problems. Social and family support is very important so that the employee gets the required self confidence, motivation, and awareness about the society, which improves their quality of work.

**6)** Mills have to take these steps for the improvement of basic facilities at the workplace. Better facilities need to be provided in other places in the mills, like providing lunch rooms, cafeteria, and rest rooms, as these will be helpful in improving the work efficiency of the workers. By providing better lighting, ventilation, cleanliness, and proper toilet facilities in the mills, the extent of satisfaction of the workers with their working conditions can be improved drastically.

**7)** The trade unions themselves have to get various schemes implemented to improve the health and hygiene of the workers, as well to improve the interpersonal relationships between the workers, and they have to insist with the management for the strict implementation of the various welfare measures given in various Acts and Laws.

## **Conclusion**

The present study has highlighted the various problems faced by the women mill workers, and their stress levels were also analyzed. Based on the major findings and suggestions, the following conclusion has been drawn. The study on the stress levels of the employees revealed the factors causing stress, as well as also shed light the health problems faced by the women mill workers due to inadequate facilities at the mills. The analysis sheds light on the economic problems, health problems, and working conditions faced by the women in spinning mills. Though the workers of this industry are engaged in satisfying one of the basic needs of humans, that is cloth, there is a general feeling among the workers that they have not been properly and adequately recognized, rewarded, and provided with better working conditions, and it is hoped that this type of a study and the offered suggestions will be useful for the workers, thereby improving their socioeconomic condition as well as raising their standards of living. Proper increments need to be provided to the employees so that they can get rid of debts, have some savings, and improve their financial condition as a whole. Regular health checkups and counseling would help the workers to get freedom from mental stress.

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