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Problems of Women Teachers in Engineering Colleges of Nagpur, India – A Sociological Study

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Abstract:

Today many women are into employment and contributing significantly to the family income. But still working women are expected to look after the family and children as a primary responsibility. Working at home and outside creates work-family conflict. There are more than 20 engineering colleges in and around Nagpur and many of the faculties are female. The study aims to explore the problems of women teachers in engineering colleges. In present scenario there are many issues pertaining to teachers who are striving hard to maintain equilibrium at domestic level and also at work place. The present study would help the women teachers to increase awareness about these psycho-social problems and also provide for solutions to wipe them off and help them live dual life happily and satisfactorily.

Keywords: Problems at work place, women teachers, job satisfaction, work-family conflict

1. Introduction

Men and women are pillars of society. Since ages society is progressing because of equal contribution of men and women. Still capabilities of women are treated less in the society as compared to men. Also, since the Stone Age women's contribution in socio-economic life is prominent, but this has not been given its due consideration. Even today, looking after the family and children is supposed to be the primary responsibility of women. And performing all the duties and responsibilities of home, single handedly, overburdens and creates strains on a working woman. The perception that women are solely responsible for the domestic work, gives rise to a feeling of guilt in women when they are not able to look after the children or the family due to their official work. This in turn results in emotional disorders.

Recently, more women are entering the previously male-dominated occupational areas in India and engineering teaching is one of them. Engineering is an age old typical male dominant profession. Nagpur city, second capital of Maharashtra state, has become the education hub of central India. There are more than 20 engineering colleges in and around Nagpur providing engineering education. As said earlier the population of female faculty in these engineering colleges is increasing day by day. Hence the study was carried out to explore the problems of women teachers in these engineering colleges. The study was aimed at understanding the work-family conflict faced by women teacher. The study's findings may provide insights into the formulation of appropriate policies in favor of female teachers.

2. Objectives of the Study

Following objectives are set for the study:

1. To find out the problems faced by working women in home because of demand of family life.
2. To assess the problems of working women at the workplace with respect to career development.
3. To measure the extent of work satisfaction from their present jobs.
4. To assess the extent to which employed women contribute to family income.
5. To assess the work-family conflict among the women teachers of the engineering colleges.

Along with the objectives following Hypotheses were set prior to the study.

- H1: Women teachers in engineering colleges of Nagpur city are satisfied with their job.
- H2: Women teachers in engineering colleges of Nagpur city are grappled with feelings of guilt as a result of not giving sufficient time to their children.
- H3: Women teachers in engineering colleges of Nagpur city do not have stress and anxiety.

3. The Review of Literature

Many women work twice as many hours as men because they carry out most of the household work and responsibilities as well as the work in the workplace. Women have to play many roles. At work place she is expected to be an efficient employee, at home, she is expected to be a loving and caring mother, wife, daughter-in-law or a daughter. Hence, she faces many problems at work place and also at domestic front. What are the issues and problems of working women? The issues and problems highlighted in the literature review are discussed below.

Paterson (1978) confirmed that because of the dual role played by woman it creates more conflicting situations for them and this in turn becomes burdensome for women to tolerate. Holahan and Gilbert (1979) also reported that women who performed home roles (e.g. wife, mother and a homemaker) and non-home roles (e.g. employee) frequently experience difficulty to justify the demands of that role. Tensions and conflict between work and family arise because of multiple factors; the impact of this conflict and tensions is seen more on family life than on work place (Eby et al., 2005). Research on work-family conflict has also found that such conflict is higher on those who work for longer hours, who has greater work demands, and on those who have a higher job involvement (Eby et al., 2005). Frone et al. (1992) opined that conflict, overload and stress are associated with the combination of career and family roles.

4. Research Methodology

4.1. Nature of the Study

The basic aim of this study was to gain familiarity and to achieve new insights along with describing the existing facts. Hence this study can be called as descriptive research study.

4.2. Data Collection

The primary data was collected by administering a structured questionnaire to the women teachers of engineering colleges.

4.3. Questionnaire Construction

The final version of the questionnaire consists of 32 questions on different aspects. In the questionnaire a note was mentioned, which describes the purpose of the research project. Though the questionnaire is not divided into sections, but first nine questions dealt with the respondents' demographic profile. Rest of the questions include the variables pertaining to various dimensions of problems faced by women teachers in engineering colleges. The respondents are instructed to choose one specific answer they feel is true for them.

4.4. Sampling Design

For this study purposive sampling is used. It is a non-probability sampling in which an experienced individual selects the sample based on his/her judgment about some appropriate characteristics required of the sample members. In this study, the sampling unit was teachers of engineering colleges in and around Nagpur city.

4.5. Sampling Size

The questionnaire and the cover letter were given to the 126 female faculty members of different engineering college of Nagpur city. Out of these 108 questionnaires were received back. 12 of these questionnaires were incomplete (or data missing). The respondents were telephoned and the missing data was collected. At last, 100 questionnaires were considered for further analysis.

4.6. Data Analysis and Statistical Techniques Used

The data analysis of the questionnaire was done in spreadsheet software. Descriptive statistics such as frequency, graphs, tables and cross tabulations were created. Phi correlation coefficient was also calculated to check the relationship among two different variables. This was used as a means to confirm expected (based on the literature) correlations between variables. Thus, the method was used with a pure descriptive purpose and no further studies were performed. For further analysis the respondents were grouped on some criteria. For example, the respondents were divided into groups depending on their age, work experience, marital status, children, etc. For variables measured on nominal scales cross tabulations and chi square test, which is a non-parametrical test, were used to investigate differences between groups. All significance levels were set to 5%.

4.7. The pilot Study

An obvious prerequisite for properly carried out survey research is that the respondents must understand and interpret the questionnaire in the same way as the researcher. Even if the researcher has a perfect understanding of the content and knows exactly how it should be analyzed, the answers can be useless if the respondents interpret the questions in a different manner. To avoid this, senior colleagues at the department were engaged as test persons. These colleagues looked for important questions that were not on the questionnaire and for readability, i.e. how difficult/easy it was to understand the questions. Thereafter the questionnaire was further developed using their opinions.

5. Data Analysis and Interpretation

5.1. Hypothesis Testing

Hypothesis testing begins with an assumption, called hypothesis that we make about a population parameter. Then we collect sample data, produce sample statistics, and use this information to decide how likely it is that our hypothesized population parameter is correct. One tailed test of proportion is used in this study to test the hypothesis.

5.1.1. Hypothesis #1:

H_0 : Women teachers in engineering colleges of Nagpur city are satisfied with their job.

Here, in the beginning researcher assumed that in general the women teachers are satisfied. It is assumed that more than 50% of population is satisfied. To test this assumption we set null hypothesis as the proportion of satisfied women teachers is 60% and the alternative hypothesis is that the percentage of this population is below 60%. Further the level of significance for testing the hypothesis is 0.05 is selected.

$$H_0: p = 0.6$$

$$H_1: p < 0.6$$

$$\alpha = 0.05$$

Further calculations are summarized below

$pH_0 = 0.6$ - Hypothesized proportion of satisfied women teachers

$qH_0 = 0.4$ - Hypothesized proportion of not satisfied women teachers

$n = 100$ - Sample size

$p = 0.85$ - Sample proportion of satisfied women teachers

$q = 0.15$ - Sample proportion of not satisfied women teachers

Next, the standard error of the proportion is calculated

$$\sigma = \sqrt{\frac{pH_0 * qH_0}{n}}$$

$$\sigma = \sqrt{\frac{0.6 * 0.4}{100}} = 0.0489$$

Next, the z value is calculated

$$z = \frac{p - pH_0}{\frac{\sigma}{\sqrt{n}}}$$

$$z = \frac{0.85 - 0.6}{0.0489} = 5.103$$

This is a left tailed test. In order to reject the null hypothesis that the proportion of women teachers who are satisfied is 60% we must accept the alternative hypothesis that fewer than 60% are satisfied. The critical value of z from the table is -1.96. As it is left tailed test acceptance region is from -1.96 to higher value. Our calculated z is 5.103 which is higher than -1.96. Hence we accept the hypothesis that Women teachers in engineering colleges of Nagpur city are satisfied with their job.

5.1.2. Hypothesis #2:

Women teachers in engineering colleges of Nagpur city are grappled with feelings of guilt as a result of not giving sufficient time to their children.

Here, in the beginning researcher assumed that in general the working mothers are having guilt of not giving sufficient time to their children. It is assumed that more than 70% of population is having this guilt. To test this assumption we set null hypothesis as the proportion of women teachers having guilt as 70% and the alternative hypothesis is that the percentage of this population is below 70%. Further the level of significance for testing the hypothesis is selected as 0.05.

$$H_0: p = 0.7$$

$$H_1: p < 0.7$$

$$\alpha = 0.05$$

Further calculations are summarized below

$pH_0 = 0.7$ - Hypothesized proportion of women teachers having guilt

$qH_0 = 0.3$ - Hypothesized proportion of women teachers not having guilt

$n = 49$ - Sample size (Number of respondents having child/children)

$p = 0.8$ - Sample proportion of women teachers having guilt

$q = 0.2$ - Sample proportion of women teachers not having guilt

Next, the standard error of the proportion is calculated

$$\sigma = \sqrt{\frac{pH_0 * qH_0}{n}}$$

$$\sigma = \sqrt{\frac{0.7 * 0.3}{49}} = 0.0654$$

Next, the z value is calculated

$$z = \frac{p - p_{H0}}{\frac{\sigma}{\sqrt{n}}}$$

$$z = \frac{0.8 - 0.7}{0.0654} = 1.52$$

This is a left tailed test. In order to reject the null hypothesis that the proportion of women teachers who are having guilt is 70% we must accept the alternative hypothesis that fewer than 70% are having this guilt. The critical value of z from the table is -1.96. As it is left tailed test acceptance region is from -1.96 to higher value. Our calculated z is 1.52 which is higher than -1.96. Hence, we accept the hypothesis that Women working in engineering colleges in Nagpur city, are grappled with feelings of guilt as a result of not giving sufficient time to their children.

5.1.3. Hypothesis #3:

Women teachers in engineering colleges of Nagpur city do not have stress and anxiety.

In general, it is assumed that the teaching profession is less stressful as compared to other corporate jobs. Hence it is assumed that more than 70% of women teachers' population feels that they do not have stress and anxiety. To test this assumption we set null hypothesis as the proportion of women teachers not having stress and anxiety as 70% and the alternative hypothesis is that the percentage of this population is below 70%. Further, the level of significance for testing the hypothesis is selected as 0.05.

$$H_0: p = 0.7$$

$$H_1: p < 0.7$$

$$\alpha = 0.05$$

Further calculations are summarized below

$p_{H0} = 0.7$ - Hypothesized proportion of women teachers not having stress and anxiety

$q_{H0} = 0.3$ - Hypothesized proportion of women teachers having stress and anxiety

$n = 100$ - Sample size

$p = 0.8$ - Sample proportion of women teachers not having stress and anxiety

$q = 0.2$ - Sample proportion of women teachers having stress and anxiety

Next, the standard error of the proportion is calculated

$$\sigma = \sqrt{\frac{p_{H0} * q_{H0}}{n}}$$

$$\sigma = \sqrt{\frac{0.7 * 0.3}{100}} = 0.0458$$

Next, the z value is calculated

$$z = \frac{p - p_{H0}}{\frac{\sigma}{\sqrt{n}}}$$

$$z = \frac{0.8 - 0.7}{0.0458} = 2.182$$

This is a left tailed test. In order to reject the null hypothesis that the proportion of women teachers not having stress and anxiety is 70% we must accept the alternative hypothesis that fewer than 70% are not having stress and anxiety. The critical value of z from the table is -1.96. As it is left tailed test acceptance region is from -1.96 to higher value. Our calculated z is 2.182 which is higher than -1.96. Hence we accept the hypothesis that women working in engineering colleges of Nagpur city are not having stress and anxiety.

6. Findings and Discussions

It is found that the female teachers tend to have a 'double shift' where they look after the home and children as well as the professional work. Also married women teachers have more domestic responsibilities as compared to unmarried working women and hence they get less time for the domestic chores. It is observed that most of the married women with children feel that they are not able to give sufficient time to their family members. Working mothers are always prone to guilt because of not able to give sufficient time to their children. It is found that working women are not able to pursue their hobbies and things of personal interest. It is observed that majority of women faculty feels that their teaching profession does not add to their stress or anxiety. Also, the majority of the faculty feels that their teaching job is neither physically tiring nor mentally tiring. Majority of working women feel that their socioeconomic status is enhanced due to their present job. It was found that married women are settled in their family life and hence are not interested in career shift.

7. Conclusion

The study reveals that teachers are working very hard to satisfy their family members as well as their workplace expectations. It can also be concluded that teachers are satisfied with their jobs. Their job is neither physically tiring nor mentally tiring; also it is helping them to enhance their status in the society. The further conclusion can be drawn that the women teachers who are married are settled in their family life so they don't want to switch over their job. They are happy and satisfied with their current job.

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