ANALYSIS OF FACTORS MOTIVATING FEMALES TO JOIN INFORMATION TECHNOLOGY SECTOR

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(ABSTRACT)
The present study attempts to analyse the factors motivating the females towards IT Sector. A sample of 300 females is drawn on the basis of judgement sampling from the IT companies in NCR. To achieve the objective of the study, primary data were collected through a pre-tested structured questionnaire on five point Likert scale. The data were analysed through various descriptive and inferential statistical techniques like mean, standard deviation and Kruskal Wallis H-test and Mann Whitney U-test were used to validate the results of the study. It is found that the factors like more technological advancement, more career advancement opportunities, more opportunity for gratifying work and compatibility with state of the art technology motivate the females to join IT sector as viewed by them on the basis of their age, income, marital status and experience. It is recommended that females must have confidence in their leadership abilities and must prepare themselves to defend their decisions. Male dominated culture can be handled through networking; therefore they should have both male and female friends at the work place and must know how to play by the rules while maintaining a sense of authenticity. Therefore, women’s professional networks must be supported within and outside the organisation. On the other hand, the organisation should also provide training on unconscious biases that can prevent men from seeing the contributions of their female colleagues. Managers should also change their mindset by acknowledging that females can also be effective leader provided they are trusted. Therefore, the boss should be accountable for their career progression.

Keywords: Women, Compatibility, Technology, Career Advancement
INTRODUCTION

Information Technology (IT) sector in India has played an important role in placing India on the global map. There are mainly two reasons behind this, first, India is well reckoned for outsourcing of IT services globally and second is contribution of people of Indian origin in IT revolution in the United States (Singh, 2006). This sector has increased its contribution to India’s GDP from 1.2 percent in financial year 1998 to 9.5 percent in financial year 2015, which is noteworthy growth contributor for the Indian economy and helped India in changing its image from agriculture based economy to a knowledge based economy. In India, situation of education is improving and no doubt, there is an increase in knowledge based employees but their number is not increasing at faster pace. The gross enrolment ratio of girls in elementary education and higher education rises significantly from 66 percent in 1991 to 97 percent in 2014 and 7.5 percent in 2002-03 to 20 percent in 2012 respectively (Ojha and Chawla, 2016). But the percentage of women being enrolled is less than men in professional courses like BE and B. Tech. Out of total enrolment in higher education, only 8.6 percent and 17.2 percent females are enrolled in BE and B. Tech. courses, respectively (Singh, 2016). The statistics shows that improvement in education has not reduced the gender disparity in employment. Out of 145 countries, India is at 139 positions on the economic participation and opportunity gap. Female labour force participation rate in India has been declined from 35 percent in 1991 to 27 percent in 2014 (Ojha and Chawla, 2016). No doubt, female to male ratio in IT sector in India is 0.47, which is better than other developed countries like US i.e. 0.35 and Europe i.e. 0.075 (India Skill Report, 2015). But the career growth of women in IT and software sector is not satisfactory. Only 14 percent females joined IT sector but their percentage drops to 11 percent after reaching middle level and only 5 percent at senior level (Ojha and Chawla, 2016). According the report of IMF, India GDP could expand by 27 percent if there is reduction in gender difference in employment.

REVIEW OF LITERATURE

The articles appeared in various journals on different aspects of career progression of women employees are restrictive in nature and do not give a comprehensive picture. Chao and Gardner (2007) found that majority of students give first preference to income and second preference to security rather than vacation, location and promotion. The study suggested that in order to recruit and retain young adults, the recruiter must be aware of the fact that both men and women are seeking differently from their jobs. Trauth et al. (2008) found that less number of women in IT workforce has been a major concern of educators, practitioners and researchers. This under-representation of women starts from enrolment of girls in secondary school and University courses to positions in IT workforce to IT management positions. Gokuladas (2009) found non-CS/IT students select IT organisations because they were influenced by interpersonal reasons like influenced by relatives or friends. On the other hand, CS/IT students joined IT sector because they were influenced by intrinsic or extrinsic reasons. Males were influenced by intrinsic reasons like career growth in the company and no service agreement, while females were influenced by extrinsic reasons like dream company status and job security. Sinkele and Mupinga (2011) suggested that to attract more female students towards engineering, not only information regarding STEM field should be given to females, but there is also a need to make aware the employers on the benefits of diverse work force. Cech et al. (2011) suggested that the professional role confidence among young women and men can be fostered by arranging seminars that have working engineers and real world engineering project and by offering students internship. Gupta (2012) found the female students who take admission in engineering colleges were from middle income group families as engineering degree helps them in fixing their marriage with good groom. Moreover, 68 percent respondents are of view that they will get good job once they complete their degree and about 27 percent had opted because they like engineering. The rest were enrolled to fulfil their parents’ expectations. Kulkarni et al. (2013) found
that majority of respondents felt persistent influence of social pressure on job choice decision from their families, expected compensation based on media and other sources or family insistence on clearing educational loans. The study suggested that employers should include important stakeholders in the recruitment process, which can be in the form of invitations to placement-related open houses or onsite organizational visits for guests of job seekers. Rajkumar et al. (2015) found that there should be increase in salary i.e. 3.5 lakhs per annum as viewed by majority of the respondents, while HR managers think that salary offered is best according to the demand and supply in the market as the supply of IT graduates has increased substantially over the years. The study suggested that the recruiters should educate the students on the current industry trends and justify the salary levels to them. Corporate should connect with the students on campus regularly to understand their perception. The foregoing review of literature and other articles which could not cited here shows that no concerted effects were made to identify the factors motivating the females to join IT sector, therefore the present study is undertaken.

**RESEARCH OBJECTIVE**

The objective of the study is to identify the factors motivating the females to join IT Sector on the basis of age, income, marital status and experience of the respondents.

**RESEARCH HYPOTHESIS**

Based on the above objective, the research hypotheses designed to validate the results of the study are as follows:

H₀₁: There is no significant difference among the age-wise respondents’ viewpoint towards the factors motivating the females for joining IT sector.

H₀₂: There is no significant difference among the income-wise respondents’ viewpoint towards the factors motivating the females for joining IT sector.

H₀₃: There is no significant difference among the marital status-wise respondents’ viewpoint towards the factors motivating the females for joining IT sector.

H₀₄: There is no significant difference among the experience-wise respondents’ viewpoint towards the factors motivating the females for joining IT sector.

**RESEARCH METHODOLOGY**

The population for the present study is the female employees working in IT companies in NCR. A sample of 300 females is drawn on the basis of judgement sampling. To achieve the objective taken up in the study, primary data were collected through a pre-tested structured questionnaire on five point Likert scale i.e. Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA). The collected data were analysed through various descriptive and inferential statistical techniques like percentage, mean, standard deviation, etc with the help of PASW (18.0 version). For coding and editing the data, weights are assigned in order of importance i.e. 5 to Strongly Agree (SA), 4 to Agree (A), 3 to Neutral (N), 2 to Disagree (D) and 1 to Strongly Disagree (SD). Further, the Kruskal Wallies H-test and Mann-Whitney U-test have been used to test the hypotheses and validate the results of the study.

**RESULTS AND DISCUSSIONS**

Table shows the age-wise, income-wise, marital status-wise and experience-wise analysis of comparative viewpoint of respondents towards the factors motivating the females to join service in IT sector. As viewed by them, the factors in order of importance are more technological advancement (Mean=4.24, SD=0.76), more career advancement opportunities (Mean=4.17, SD=0.90), more opportunity for gratifying work (Mean=4.06, SD=0.95), compatibility with state-of-the-art technology (Mean=4.06, SD=1.00), flexible working hours (Mean=3.97, SD=0.94), easy entry
(Mean=3.81, SD=1.05), more autonomy in job (Mean=3.62, SD=1.11), sufficient pay and perks (Mean=3.57, SD=1.05), better job image (Mean=2.96, SD=1.60), more job security (Mean=2.50, SD=1.15) and less burden of work (Mean=2.19, SD=0.85).

**Age-wise Analysis**
Statistically, age-wise results of Kruskal Wallis H-test shows that the respondents differ significantly in their viewpoint towards more career advancement opportunities ($p=0.000$), better job image ($p=0.000$), compatibility with state of the art technology ($p=0.000$), more opportunities for gratifying work ($p=0.000$), more technological advancement ($p=0.000$), therefore the null hypothesis ($H_01$) is rejected.

**Income-wise Analysis**
Statistically, income-wise results of Kruskal Wallis H-test shows that the respondents differ significantly in their viewpoint towards more career advancement opportunities ($p=0.000$), better job image ($p=0.000$), compatibility with state of the art technology ($p=0.000$), more opportunities for gratifying work ($p=0.000$), more technological advancement ($p=0.000$), easy entry in IT sector ($p=0.001$), therefore null hypothesis ($H_{02}$) is rejected.

**Marital Status-wise Analysis**
Statistically, marital status-wise results of Mann-Whitney U-test shows that the respondents differ significantly in their viewpoint towards more career advancement opportunities ($p=0.000$), sufficient pay and perks ($p=0.001$), compatibility with state-of-the-art technology ($p=0.000$), more opportunities for gratifying work ($p=0.000$), easy entry in IT sector ($p=0.000$) and flexible working hours ($p=0.010$), therefore the null hypothesis ($H_{03}$) is rejected.

**Experience-wise Analysis**
Statistically, experience-wise results of Mann-Whitney U-test shows that the respondents differ significantly in their viewpoint towards more career advancement opportunities ($p=0.000$), job image ($p=0.000$), compatibility with state of the art technology ($p=0.000$), more opportunity for gratifying work ($p=0.000$), more technological advancement ($p=0.000$), more job security ($p=0.003$) and easy entry in IT sector ($p=0.001$), therefore the null hypothesis ($H_{04}$) is rejected.

**CONCLUSION AND POLICY IMPLICATIONS**
To sum up, the factors like more technological advancement, more career advancement opportunities, more opportunity for gratifying work and compatibility with state of the art technology motivate the females to join IT sector as viewed by them on the basis of their age, income, marital status and experience. It is recommended that females must have confidence in their leadership abilities and must prepare themselves to defend their decisions. Male dominated culture can be handled through networking; therefore they should have both male and female friends at the work place and must know how to play by the rules while maintaining a sense of authenticity. Therefore, women's professional networks must be supported within and outside the organisation. On the other hand, the organisation should also provide training on unconscious biases that can prevent men from seeing the contributions of their female colleagues. Managers should also change their mindset by acknowledging that females can also be effective leader provided they are trusted. This study will have practical implications for B. Tech. students and IT organisations of NCR in particular and India in general. The present study focused only on women engineers working in IT sector, which can be extended further at macro-level by including other sectors of the economy for proper generalization of results.
### Table: Descriptive and Inferential Statistics

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<tr>
<th>Sr. No.</th>
<th>Statements</th>
<th>Descriptive Statistics</th>
<th>Inferential Statistics</th>
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<tr>
<td>1.</td>
<td>More Autonomy in Job</td>
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<td>1.11</td>
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<td>2.</td>
<td>More Career Advancement Opportunities</td>
<td>4.17</td>
<td>0.90</td>
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<td>3.</td>
<td>Less Burden of Tasks</td>
<td>2.19</td>
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<td>4.</td>
<td>Better Job Image</td>
<td>2.96</td>
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<td>5.</td>
<td>Sufficient Pay and Perks</td>
<td>3.57</td>
<td>1.05</td>
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<td>6.</td>
<td>Compatibility with state of the art Technology</td>
<td>4.06</td>
<td>1.00</td>
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<tr>
<td>7.</td>
<td>More Opportunities for Gratifying Work</td>
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<td>8.</td>
<td>More Technological Advancement</td>
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<td>9.</td>
<td>More Job Security</td>
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<td>10.</td>
<td>Easy entry</td>
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<td>11.</td>
<td>Flexible Working Hours</td>
<td>3.97</td>
<td>0.94</td>
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**Source:** Survey, Note: * = Significant at 5 percent level
REFERENCES


