"Job satisfaction analysis of female Employees of IT Sector working from home during the pandemic of COVID-19 using interaction effect"

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Abstract:
Since the pandemic of Covid-19, working from home has become a new normal. A relative psychological feeling and understanding of an individual is job satisfaction. It varies depending on various factors that influence or contribute, such as physical, financial, technological, social, and psychological factors. The main goal of the research is to understand the difference in job satisfaction of urban working women from the IT sector in India in a pandemic situation based on two factors namely marital status and nature of family. The study was confined to the urban working women in the IT sector in the city of Pune, India.

This paper aims to study the impact of marital status and nature of family as a combined effect on the job satisfaction of female employees in the IT sector working from home during the pandemic situation of covid-19.

A questionnaire gathered primary data and the respondents were female IT sector employees in Pune. In this background the present study was undertaken to analyse job satisfaction of working women in the IT sector during a pandemic situation. The sample consists of 238 career women working in the IT Sector of Pune, India. The questionnaire was Circulated online through Google Form to 300 respondents and received 238 responses from them. The received data tested for data fitment and further interaction effect was found. The interaction effect results show that marital status and nature of family are significantly associated with job satisfaction of female working employees of the IT sector. It opens for a thought to start rethinking women employee job satisfaction in terms of formulating employee support programs to maintain their level of job satisfaction to enhance productivity.
Keywords: Work from Home, COVID-19, Pandemic, job satisfaction

1. INTRODUCTION:
Work From Home (WFH) is currently considered to safeguard from the risk of infection due to COVID-19 as an alternative task. WFH, however, is not recent and it has brought to the notice of various thought schools. The WFH description was originally presented by Nilles (1988) looking into 1973, referred to as “telecommuting” or “telework”. The COVID 19 has given a deep impact worldwide. World economy suffered and due to which we humans also. For the safety of the employees and the society at large, the government had declared regulations to get home isolated. In the COVID 19 pandemic situation one concept has become an indispensable part of almost all the employees that is “Work from Home”. Work from home has changed the work philosophy of many organizations globally and job satisfaction for an individual. Employment satisfaction is the total optimistic sense of the employee about the job and the work ecosystem. Either rational or emotional or behavioural components may quantify the feeling. Job satisfaction often requires the context of the work experience of a worker, their work-life quality, and the value a job must bring to an employee. While WFH acceptance has risen worldwide, one must analyse its effect on job satisfaction considering various factors affecting it. WFH has positive consequences for both employers and workers. The merits comprised of reduced travel-time, the avoidance of office-politics, the use of optimum office-space, boosted optimism, stronger gender balance (e.g. females and careers), happier workers with lowest attrition and absenteeism rate, greater talent retention, employee-satisfaction and enhanced productivity (2007). WFH can help female employees for flexibility to perform the duty which ultimately saves money and travel-time to work. On the other hand, the drawbacks of WFH include the shadow contrast between work and family, disruptions, and social isolation. In this paper we are going to study the perception of female employees towards WFH. It has become necessary to study the perception of female employees because to maintain the work life balance is a big challenge for female employees in Indian society. Pandemic situation has created uncertainty for the security of jobs which may give psychological stress to any employee. With focus on two parameters marital status and nature of family the impact on job satisfaction of women employees in the IT sector working from home is studied.

2. LITERATURE REVIEW
Sundari, R., and P. a. Sathyanarayana (2012) in their research study show that family-work conflict and conflicts of work-family seems to have adverse effects concerning the family domain. The history of conflict between Work and Family as well as conflict between Family and Work are impacted by variables such as family size, age of children, working hours, and level of social support.
Oh. JI, R. B. (2014) put a light on many young women not only want to sit at home and do housework but want to have jobs. About 64 percent of mothers whose youngest child was under six years of age were working. While women in the workforce are increasingly represented, they still face challenges juggling work and home life.
Nair D.S, & Millath, M. A. (2019) emphasized that social distancing steps, such as working from home and school shutting down, have placed an extra strain on families to fight the spread of the virus. Much of the extra workload associated with COVID-19 falls on females, while the couple more equally shares childcare duties. With the exception of those who continue to work at their usual place of work, many of the women surveyed spend more time on housework than before.

Oggero, N., Rossi, M. C., Del Boca, D., & Profeta, P. (2020), gave an analysis of the family-work dispute between employees of Travancore Cements Ltd. in Kottayam, Kerala. The study's results were independent of Sex, qualification for college, number of working hours a week, experience at work, and marital status.

Greenhaus, J. H., & N. J. Beutell (1985) A literary analysis on the tension between work and family roles indicates that there is a conflict between work and family. A model of work-family-conflict is proposed, and a set of ideas for study are presented.

G.Shiva G.Shiva (2013) highlighted the work-life balance used to describe activities that strike an equilibrium between the workers’ family needs and their working lives. To assess which ones, contribute to efficiencies and employee stress work, companies should regularly review their work processes and practices.

Hashim, R, Bakar & Mahyudin, H. A. (2020) insisted that the lockdown of the pandemic provided the catalyst for homework or telework jobs. The survey proposed to assess the job satisfaction and efficiency of employees while working at home. The results showed that 87.1 percent were happy with working from home, but a dismaying 53.7 percent showed job efficiency. The results of the findings require that the policy be reassessed by university administrators.

Susilo, D.(2020) the aim of study was to assess the influence of home-work on job outcomes. The study has repercussions for business executives who want to test the effectiveness of their work-from-home policies. During the coronavirus epidemic, this is particularly appropriate. Although the validity of the study is limited to the degree to which these advantages are articulated in Indonesia, it is possible, among other countries affected by COVID-19, to identify external validity.

As per Vyas, L., and N. Butakhieo. (2020) a significant proportion of the population has been unable to commute to work due to the panda pandemic. This has resulted in new job arrangements being pursued by both employers and workers.

In their report, Prasanthi, P. (2020), two hundred and fifty employees were investigated for this research in the IT sector in the Chennai area. Results have shown that Perceived Organizational Support (POS) has a supportive and powerful relationship with the intent to remain.

In contrast to past pandemic circumstances, COVID 19 has shown a severe effect on the global economy. A tension between jobs and safety has been established. All companies were forced to stop their normal schedules, reflecting the worldwide economic crisis. Organizations prefer new strategies and ways to run their business. WFH can be described as work done from a remote location rather than a conventional way, i.e. from the workplace. Digital Transformation has allowed access to knowledge from anywhere from anywhere.
Any employee's performance is highly affected by his mental state, all were worried and scared about the safety of their own as well as family during COVID 19 situation. The key factors due to the stress of employees are the risk of viral infection, protection, financial loss and job insecurity, which adversely results in their performance. Health protection, jobs and financial security should be ensured to boost the efficiency of employee organizations (Sasaki et.al, 2020).

According to Hemapiya, E., and Ramchandran, S. (2019), Job satisfaction established is important for the retention of quality workers. Work life quality has a lot of meaning in the life of IT woman workers.

3. RESEARCH QUESTION

Whether the Marital Status and Nature of Family of Women Employees Working from Home during the COVID-19 pandemic impacts significantly on their job satisfaction?

Objectives

1. To study the impact of ‘Marital Status’ of Women Employees Working from Home during the COVID-19 pandemic on ‘Job Satisfaction’.
2. To study the impact of ‘Nature of Family’ of Women Employees Working from Home during the COVID-19 pandemic on ‘Job Satisfaction’.
3. To study the Combined impact of ‘Marital Status’ and ‘Nature of Family’ of Women Employees Working from Home during the COVID-19 pandemic on ‘Job Satisfaction’.

Hypothesis

H₀: There is no interaction between ‘Marital Status’ and ‘Nature of Family’ of Women Employees Working from Home during the COVID-19 pandemic on ‘Job Satisfaction’.

H₁: There is a significant interaction between ‘Marital Status’ and ‘Nature of Family’ of Women Employees Working from Home during the COVID-19 pandemic on ‘Job Satisfaction’.

4. RESEARCH DESIGN

A] Sample Design:

- Population: 600
- Sample Design: 238 (Ref. Krejcie & Morgan, 1070) with 95% Confidence Interval
- Sample Element: Women Employee working from home
- Sampling Technique: Simple Random Sampling

B] Research Methodology: Researcher has used the two-way ANOVA for studying the main effect of independent variables ‘Marital Status’ and ‘Nature of Family’ on response variable and interaction effect of both independent variables on the response variable ‘Job Satisfaction’.

Our ANOVA Model with the ‘Interaction Term’ is:

Job Satisfaction = Marital Status * Nature of Family

C] Data Collection:
A Survey Questionnaire is prepared to collect the data from respondents. Questionnaire comprised three sections 1. Demographic Profile, 2. Five Point Likert Scale is used to know the Job Satisfaction Level of working women employees during the Pandemic period, 3. This section is of subjective question to collect the challenges in work and life balance. Questionnaire was developed with the help of experts’ suggestions and content validity performed. Once ensured the reliability and face validity, a questionnaire was sent through email to various Women working employees of various industries. It was sent to 100 respondents out of which 80 responses received.

D] Data Analysis:
Received Responses were analysed for studying the Interaction effect between the independent Variables ‘Marital Status’ and ‘Nature of Family’ on response Variable ‘Job Satisfaction with their Main effects.
For each of the two phases, the first table in the output indicates the sample size of our two factors. As stated, the sample sizes are not identical, which is why we choose to generate the appropriate means through Quantitative Analysis selection. The information is shown below in table 1. This table presents the marginal averages of total Nature of Family for the two main effects, for the relationship, the std. dev. and sample sizes. For our purposes, the medium is the required significant knowledge.

Table 1:

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Dependent Variable: Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marital Status</td>
</tr>
<tr>
<td></td>
<td>Married</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unmarried</td>
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<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
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<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The total marginal means are highlighted for Married Employee vs. Unmarried Employee, and the marginal means are highlighted in italic for the two levels of the Essence of Family group. Finally, the four cell definitions are highlighted in yellow that are important to the interaction. However, we must first analyse the findings of the ANOVA shown in the table before we can interpret these methods.

**Table 2:**

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>17560.081a</td>
<td>3</td>
<td>5920.027</td>
<td>2791.405</td>
<td>0.000</td>
<td>0.963</td>
</tr>
<tr>
<td>Intercept</td>
<td>75611.824</td>
<td>1</td>
<td>76511.824</td>
<td>33919.58</td>
<td>0.000</td>
<td>0.984</td>
</tr>
<tr>
<td>Marital Status</td>
<td>403.875</td>
<td>1</td>
<td>408.875</td>
<td>176.305</td>
<td>0.000</td>
<td>0.534</td>
</tr>
<tr>
<td>Nature of Family</td>
<td>14517.369</td>
<td>1</td>
<td>1517.369</td>
<td>6767.148</td>
<td>0.000</td>
<td>0.977</td>
</tr>
<tr>
<td>Marital Status * Nature of Family</td>
<td>69.572</td>
<td>1</td>
<td>69.572</td>
<td>32.710</td>
<td>0.000</td>
<td>0.134</td>
</tr>
<tr>
<td>Error</td>
<td>483.389</td>
<td>223</td>
<td>2.182</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>123811</td>
<td>227</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>17944.469</td>
<td>228</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The last three columns, describing the F-value, the levels of significance and ‘effect size (Partial Eta Squared)’. These present the two key influences and the combined effect. Both the key impacts and the interaction impact are statistically meaningful (p<0.05). Major results warn that between married and unmarried female employees there is significant variations in the overall nature of the family score and between employees in the group of the joint family vs. the nuclear family. The major interaction effect suggests that the category of the essence of the family depends on the discrepancies between married and unmarried workers. The partial values of the eta square reflect the scale of the variations. We can assume that in the general nature of the family, the size of the difference between married and unmarried employees is moderate, and that the size of the difference between employees in the joint vs. nuclear categories is enormous in the full nature of the family! This should not be surprising, since the categorical element, Joint-Nuclear family, was generated using the overall Nature of Family score. In fact, the primary reason we used the category variable of Nature of Family was to explore its potential association with Employee Marital Status.

Recall that the researcher needs to clearly state what the discrepancies between the means are in order to have a full explanation of the findings (see Table 1). Notice that because there are only two levels of our two independent variables, comparisons between the marginal means do not need to be carried out, i.e. the F-value already shows us that they vary significantly. In order to interpret the differences between the four cell means relevant to the interaction effect, however, multiple comparisons will be needed. For now, however, below is an example of how these outcomes will be written in APA format about the key effects:
For Marital Status, an important main impact, $F (1,224) = 176.305, p < .001$, was obtained. Being married Employees had a slightly higher mean than Unmarried ($M = 25.2445 > (M = 18.0832)$ staff. This was a moderate (Partial Eta Squared = .45) disparity. For Nature of Family $F (1,224) = 6667.148$, a substantial main effect was also obtained, suggesting the nuclear category had significantly higher scores ($M = 28.4613$) than the joint category ($M = 10.6045$). The disparity reflected was incredibly high (Partial Eta Squared = .97). Considering the previous analyses in this text concerning variations in marital status in the nature of the family, none of these results should be unexpected. And, of course, considering that the total Nature of Family scores is used to construct this independent variable, the main effect on the Nature of Family group was guaranteed to occur. However, given that the interaction impact was important, $F (1,224) = 32.710, p < .001$, there is more to the story. This is the most interesting and insightful aspect of this ANOVA, although the effect size is relatively weak (Partial Eta Square = .12), since it shows that the Marital Status difference in the overall composition of the family depends on the category of family nature (Joint or Nuclear).

5. CONCLUSION:

1. As Interaction Effect between both independent variables ‘Marital Status’ and ‘Nature of Family’ impacts significantly on the response variable ‘Job Satisfaction’, null hypothesis ‘$H_0$: There is no interaction between ‘Marital Status’ and ‘Nature of Family’ of Women Employees Working from home during the pandemic of COVID-19 on ‘Job Satisfaction’’ is rejected.

2. For Marital Status, an important main impact was obtained. Married Female Employees had a slightly higher ‘Job Satisfaction’ than Unmarried Female Employees as per their Mean ($M = 25.2445 > (M = 18.0832)$).

3. For Nature of Family, a substantial main effect was also obtained, suggesting that employees in the ‘Nuclear’ category were having more ‘Job Satisfaction’ in working from home compared to the ‘Joint’ Category as per the Mean Scores ($M = 28.4613 > (M = 10.6045)$).

6. DISCUSSION:

the empirical research reveals that the current work from home situation have the ability, arising from both job and household duties to further increase women's workload. The current crisis has further adding the work pressure of women because of both their jobs and their housework. In addition to other obstacles, marital status and the dynamics of the nature of family have an effect on female workers' job satisfaction.

7. REFERENCES:


