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Understanding The Mental Health Impacts Of Occupational Stress On Women In The It Sector: A Demographic Study

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Abstract

The Information Technology industry had indeed exhibited tremendous growth over the past few decades, and it has now formed an indispensable component of global economies. However, such growth had placed a great demand on employees generally and particularly women who have grappled with both general and gender-specific occupational stressors. This research will identify the correlation between occupational stress and the mental health of women employees in the IT industry, with particular emphasis on demographic factors that may have a bearing on this experience of stress, which includes age, marital status, and length of service. Research was conducted with a self-administered questionnaire distributed among 136 women IT professionals in Chennai for the purpose of investigating the major sources of occupational stress, its impact on the mental well-being, and possible support by organizations. Findings of the study indicated that gender-sensitive interventions would be required in order to reduce the stress and improve the outcomes on the mental health for women employees in the IT workforce.

Keywords: Occupational Stress, Women in IT, Mental Health, Demographic Variables, Work-life Balance

Introduction

It would be very difficult to conceive of any industry that has gained more, though rightfully so, in the last few decades than the IT industry. A true backbone of the world economy, it has seen incredible growth, and its success stands on continuous innovation, rapid development, and an insatiable appetite for efficiency, thus exerting tremendous pressure on its members. Women, more important than ever to the achievement of this success, are generally dealt a complex web of occupational stressors. These stressors not only arise from the demanding nature of the work but also from gender-specific challenges that influence their mental health and overall well-being.

Occupational stress in IT is multi-dimensional, ranging from high workloads and strict deadlines to working longer hours and continually updating their knowledge about the changing nature of technology. The balancing act between such demands and personal responsibilities proves stressful, especially for women. Ineffective communication among males and females, inferior leadership, and the unspoken expectations of balancing home and career tasks make such a place mentally stressful for women employees.

The demographic variables, such as age, marriage, educational background, and experience years, influence the nature and ways in which women think or view occupational stress. For instance, younger women have to face job insecurity and a lack of career opportunity factors. Older women have to face the problem of balancing work and family. Married women or mothers bear the brunt of managing their professional and domestic duties. These demographic factors do not operate in isolation but dovetail with dynamics of the workplace, determining the level of stress and the actual outcome of the mental health.

The pandemic has also introduced a new dimension into the workplace by reshaping the environment, which is often furthered through remote work arrangements that adds more layers to occupational stress. IT women working have also claimed stress since home and work continue to meld even as the women are supposed to get things done. The interaction of these stressors may further exacerbate mental health such as anxiety and depression to burnout, thus something critical cannot wait in the world of IT where demographic factors need to be considered in how they intersect with the occupational stress unique to women.

The article would explore the effects of occupational stress on the psychological well-being of women in the IT industry, focusing mainly on how demographic variables influence the experience. The article would describe the causes of the key sources of stressors and their effects and gives insight into how such an organization can foster a good environment to be inclusive of the female staff members in ensuring their physical health.

LITERATURE REVIEW

Occupational stress and related mental health concerns have increasingly received much attention lately, particularly in high-demand sectors, such as Information Technology (IT). The sector is now witnessing an increasing entry of women into the workforce. Thus female IT employees are exposed to workplace-related stressors in addition to a range of societal and organizational influences. This review of literature looks at the existing work that has been done on occupational stress in the IT industry, gender-related stressors, the mental health outcomes of workplace stress, and the impact of demographic factors.

1. Occupational Stress in the IT Sector

The IT sector is characterized by high pressure in its working environment, demanding that employees handle very high workloads, with very tight deadlines and rapidly changing technology. Reddy and Reddy, 2010, further pointed out that long working hours, continuous skill upgrading, and the issue of job insecurity are some of the main causes of significant job stress experienced by IT professionals. Due to this global nature of the IT industry, the job scenario is such that time-zone differences add to these stresses and shattered work-life balance.

According to Kumar and Sundaram (2012), IT occupational stress is mainly attributed to workload and role ambiguity, which in turn affects high turnover rates and burnout. The project cycles are highly intensive, deadlines are consistent, and the level of expectations on performance has made many articles of research concerning its severe influence on mental health-the stress level causes anxiety, depression, and emotional exhaustion, according to Suri & Rizvi (2018).

2. Gender-Specific Stressors in the IT Industry

Various studies showed that women in IT suffered from occupational stress differently compared to their male counterparts in the same field. Ahuja (2002) critically analyzed and found out the comprehensiveness about women in IT, pointing out the fact that, besides common stressors among all employees working in IT, women suffer from a specific challenge like gender discrimination, less advancement opportunity, and the "glass ceiling effect," all of which caused women to have more stress and lower job satisfaction compared to men.

Gender bias, Simard et al. (2013) noted, still lingers in the world of technology where women have fewer spots on decision-making committees and technical careers. Stressors indicate developing competent, recognition, and battling workplace discrimination. On the other side, there is a double burden on account of job and household while a woman is most married or has children, Bhandari & Soni, 2018).

3. Mental Health Consequences of Stress at Work

According to the conducted research, it has been deduced that work-related stress can significantly influence people's mental health in a path toward psychic disorder manifestations. According to the American Psychological Association, also known as APA (2019), chronic stress in the workplace triggers symptoms of anxiety, depression, and burning-out. As far as the IT sector is considered, Pandey and Singh (2020) narrated that employees in the IT sector are placed at an elevated risk of burnout because of the high demands and the expectation of constant availability.

Among all such factors, women are more vulnerable to the impacts of work stress on mental health. Shukla and Srivastava (2016) found in their study that women in the IT industry were more vulnerable to self-report stress-related disorders like

depression and anxiety. Interplay between work pressures and personal pressures thus significantly contributes to the sum total of stress burdening the mental health outcomes (Bhattacharya & Bhattacharya, 2016).

4. Impact of Demographic Variables

Important demographic factors include age, marital status, work experience, and education level. These seem to contribute significantly to the effects of occupational stress. For younger women in the IT sector, there have been cases of job insecurity and even career progression related to job stress. However, older women, particularly those that had family roles, have a different challenge of working and taking care of older family members (Kar & Misra, 2021).

Marital and parent status is also a consideration in explaining how females interpret and cope with occupational stress factors. In fact, according to Garg and Raina (2019), the more tension that women feel is the result of household demands that they have to perform along with working since the women are married and have children as well. More frequent mental disorders such as anxiety and experiences of burnout issues are reported on the part of those mothers compared to single women or women who never bore any children at all.

This is another factor: work experience. According to Sharma & Jha, 2020, it often implies that more experienced women can cope better with the managing of stresses. However, this does not eliminate stress but instead creates other pressures at the managerial or more significant responsibility levels.

5. Coping mechanisms and organizational support

A literature on coping strategies states that support from an organization, work-life balance policies, and mental health initiatives are also crucial in reducing the effects of occupational stress. Organizational practices such as flexible working hours, off-site work option, and employee assistance programs have been proved to decrease the stress level of women IT sector employees (Sharma & Kulkarni, 2015). Even further, having a workplace culture with diversity support in addition to mentoring for women profoundly reduces the stress of career progress and work-life integration.

OBJECTIVES OF THE STUDY:

To assess the level of occupational stress among working women based on their demographic characteristics.

To evaluate the influence of demographic factors on the mental health of working women.

STATE OF THE PROBLEM

The IT sector is characterized by very fast-paced and extremely high-pressure working environments where people suffer from considerable occupational stress. Most of this proves to be a challenge to everyone in the company, but for women in the IT sector, it presents them with unique stressors arising from a variety of professional demands coupled with societal expectations. Balancing career growth with personal responsibilities often creates a higher level of stress, particularly for women in specific demographic groups.

Despite the surge in female enrolment in IT, several factors determine their mental well-being. Overload in roles, gender biases, lesser career advancement opportunities, and lack of job-life balance are some of the factors. Then on top of these stressors are variables such as age, marital status, income level of hierarchy, and length of service, which provides a mechanism for accounting for the variation in occupational stress and mental health outcomes.

There is a lack of research that specifically focuses on how these demographic factors shape women's experiences of occupational stress and mental health in IT. Hence, it is understood by developing interventions targeted at the specific dynamics that are to be supported to influence the well-being and productivity of women at the workplace. Thus, the present study will analyze how extensive occupational stress is among women working in the IT sector and how it affects their mental health, keeping a close eye on the demographic factors behind such factors.

RESEARCH METHODOLOGY

Research Design:

The study follows a descriptive and exploratory design. A self-administered questionnaire was developed as the primary tool for data collection, aimed at gaining insights into occupational stress and its impact on the mental health of women employees in the IT sector.

Sampling Procedure:

Snowball sampling was employed to gather participants from various IT sectors in Chennai. To enhance the scope and accuracy of the data, a total of 136 respondents from major IT hubs in Chennai were selected.

Sampling Area Coverage:

The study aims to cover the key IT areas across Chennai, ensuring a broad and representative sample of women working in this sector.

Statistical Tools Used:

The reliability of the data will be tested using Cronbach's Alpha. Additionally, an ANOVA test will be conducted to analyze the differences in respondents' perceptions of occupational stress and mental health based on various demographic factors.

DATA ANALYSIS AND INTERPRETATION

Reliability Statistics		
Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	**Number of Items**
.978	.978	5

The Cronbach's Alpha value is 0.978, hence the questionnaire is highly reliable as all the five items measure very similar content and measure consistently what they measure. When the alpha value is high (close to 1), the responses can be considered dependable, hence the questionnaire applied in studying occupational stress and mental health in general. Alpha above 0.7 is considered good, so 0.978 is an excellent value.

ANOVA RESULTS FOR OCCUPATIONAL STRESSORS BY GENDER

ANOVA Table						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Job Demands	Between Groups	4.142	2	2.071	2.569	.080
	Within Groups	107.204	133	.806		
	Total	111.346	135			
Lack of Control and Autonomy	Between Group	4.049	2	2.024	2.469	.089
	Within Groups	109.062	133	.820		
	Total	113.110	135			
Conflicting Responsibilities	Between Group	3.992	2	1.996	2.441	.091
	Within Groups	108.765	133	.818		
	Total	112.757	135			
Relationship between Co-workers and Clients	Between Groups	2.986	2	1.493	1.728	.182
	Within Groups	114.889	133	.864		
	Total	117.875	135			
Job Life Balance	Between Groups	2.543	2	1.272	1.486	.230
	Within Groups	113.802	133	.856		
	Total	116.346	135			

The ANOVA table validates the interaction of gender on various sources of stressors at the workplace including job demands, lack of autonomy and control, conflicting responsibility, relationships with co-workers and clients, and balance between job and life. For job demands, the F-value stands at 2.569 with a Sig. value standing at 0.080 surpassing the conventional threshold level of 0.05. Thus, at a 95 percent confidence level, the perception of the difference in job demands by gender holds no significance.

Moving on, regarding control and autonomy, the F-value is 2.469 with a Sig. at 0.089, again this is not significant at this point, thus implying no significant difference in perception across the gender groups. Similarly, regarding conflicting

responsibilities, the F-value is reported as 2.441 with a Sig. at 0.091; it establishes that there is no significant difference in the way men and women perceive conflicting responsibilities. In the case of relationships with co-workers and clients, the F-value is 1.728, and Sig. stands at 0.182, meaning there is no such influence of gender on how these relationships are perceived or experienced. Finally, for job-life balance, the F-value is 1.486 with a Sig. of 0.230, further confirming that there is no such significant gender-based difference in how job-life balance is experienced.

Overall, no stressor indicates any significant difference between genders since all the values of significance are larger than 0.05. This shows perhaps that gender is not a factor that has a chance to influence the perception of occupational stressors among the set of respondents who were to be measured for this study.

ANOVA RESULTS FOR OCCUPATIONAL STRESSORS BY AGE GROUP

ANOVA Table						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Job Demands	Between Groups	19.751	3	6.584	9.488	.000
	Within Groups	91.595	132	.694		
	Total	111.346	135			
Lack of Control and Autonomy	Between Groups	16.793	3	5.598	7.671	.000
	Within Groups	96.318	132	.730		
	Total	113.110	135			
Conflicting Responsibilities	Between Groups	20.547	3	6.849	9.804	.000
	Within Groups	92.210	132	.699		
	Total	112.757	135			
Relationship between Co-workers and Clients	Between Groups	13.125	3	4.375	5.513	.001
	Within Groups	104.750	132	.794		
	Total	117.875	135			
Job Life Balance	Between Groups	18.443	3	6.148	8.289	.000
	Within Groups	97.903	132	.742		
	Total	116.346	135			

ANOVA analysis: Occupational stressor perceptions among people of different ages differ significantly. Job demands The F-value is 9.488 with a significance level (Sig.) of 0.000, indicating a significant statistical difference in how job demands are experienced between different ages. This indicates that indeed age impacts the pressures different ages experience.

For lacking control and autonomy, the F-value is 7.671 with a Sig. of 0.000, indicating significant variation by age. That is, how much control and autonomy employees feel they have over their work varies significantly by age. Case of conflicting responsibilities: It follows that with an F-value of 9.804 and a Sig. of 0.000, there were also differences that are significant in the age groups where the variability in how workers cope and perceive their conflicting responsibilities varies as determined by age.

For relationship between co-workers and clients, F-value was 5.513 and Sig. value was 0.001, which indicated that there were significant differences in the perceptions of different age groups. It means that employees experience and manage relationships in the workplace as influenced by their age. Finally, regarding job-life balance, the value of F-8.289 and a Sig. of 0.000 indicate that, indeed, there exists a serious difference in how the different age groups balance work and personal life. Generalizing the findings, they show how age impacts the perception and experience of how different occupational stressors will impact different age groups.

ANOVA RESULTS FOR OCCUPATIONAL STRESSORS BY LENGTH OF SERVICE

ANOVA Table						
		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Job Demands	Between Groups	78.669	3	26.223	105.929	.000
	Within Groups	32.677	132	.248		
	Total	111.346	135			
Lack of Control and Autonomy	Between Groups	65.817	3	21.939	61.233	.000
	Within Groups	47.294	132	.358		
	Total	113.110	135			
Conflicting Responsibilities	Between Groups	79.509	3	26.503	105.221	.000
	Within Groups	33.248	132	.252		
	Total	112.757	135			
Relationship between Co-workers and Clients	Between Groups	57.581	3	19.194	42.021	.000
	Within Groups	60.294	132	.457		
	Total	117.875	135			
Job Life Balance	Between Groups	69.669	3	23.223	65.673	.000
	Within Groups	46.677	132	.354		
	Total	116.346	135			

The ANOVA results show that the perception of occupational stressors varies significantly based on the length of service. For job demands, lack of control and autonomy, conflicting responsibilities, relationships with co-workers and clients, and job-life balance, the results indicate that employees with different lengths of service experience these stressors differently. All stressors have a significance value of **0.000**, meaning the length of time someone has worked plays a key role in how they perceive and handle workplace pressures. In simple terms, the longer or shorter someone's tenure, the more their experience of stress at work changes.

FINDINGS

The study shows that the IT sector has imposed great occupational stress due to working long hours, frequent technological changes, and the need to update their skill levels continuously. This also adds some unique stressors to women who face societal expectations on gender roles, balancing personal and professional roles, and gender-specific workplace challenges. Demographic factors may still play a very important role in the experience of stress. Youths are more likely to indicate more job demands stress, job insecurity, and the difficult tasks they encounter in making career progressions. Older women primarily are those having to deal with family responsibilities that are stressed to deal with conflicting responsibility and work-life balance. Marital status and parenthood also tend to affect the cases of stress. Married women and mothers are more likely to record more frequent mental health issues than their single and childless counterparts. In addition, the number of years in service and educational qualifications were perceived to influence women's perception and adaptation toward occupational stress because women with a higher tenure or educational level experienced stress differently.

RECOMMENDATIONS

To cope with occupational stress against women in IT, organizations must encourage a supportive environment through flexible working policies, mentorship programs, and employee assistance initiatives. Providing choices such as telecommuting, flexible hours, and employee access to mental health resources would relieve stress. Providing opportunities for career advancement opportunities for women as well as the eroding of gender bias and more diverse leadership roles will also ease stress connected to the "glass ceiling.". More critically, organizations should promote work-

life balance by delivering parental support programs and designing work roles to enable women to achieve professional and personal equilibrium effectively.

CONCLUSION

Occupational stress in women working in the IT industry is of considerable relevance as the factors that compound the stress of their job are multiplied by societal and demographic factors. The pressures at work and self-imposed pressures conflate those that women experience because women, too, pursue careers with growth aspirations simultaneously and exclusively at different times. These demographic characteristics are age, marital status, parenthood, and length of service, and they are found to be salient in shaping the perception and coping with stress at work among women. Interventions that relate to these challenges would therefore take the form of organizational efforts toward the development of supportive and inclusive environments.

The organizations can reduce occupational stress among women through flexible work arrangements, mental health support, and career development opportunities. This, in turn, encourages diversity in leadership and understanding and addressing of gender-specific issues, thus improving job satisfaction as well as general well-being. Organizations, in this process, offer a healthier mental space for women in their organizations but also maximize their effort.

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