



“AN ANALYTICAL STUDY ON STRESS INFLUENCING WORK-LIFE BALANCE IN TYRE MANUFACTURING INDUSTRY AT VADODARA”

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Abstract

Work is a major source of life satisfaction, but it can also be a major source of stress. Due to economic rationalization and globalization, many organizations are undergoing continuous change in their working environments, which results in job insecurity, increased workloads, and job restructuring. The stress has both positive and negative effects on people. Stress management requires the ability to reduce and control it as one of its key components. Maintaining work-life balance enables employees to strike a healthy balance between their professional and personal responsibilities, as well as their family life. The study is done to know the significant impact of Stress & Work-life balance on employee performance in tyre manufacturing industry. The methodology adopted and information collected is based on primary and secondary type of data. The results of the regression model using the independent variable in the study was carried out. Based on the findings of this study, it was recommended that there is need for organizations to design programmes that will help employees to overcome the stress related to work.

Keywords : Stress, Work related stress, Work Life balance, Stress Management, Employee performance

Introduction

The purpose of this project is to evaluate the degree of work-life balance, work stress, and work satisfaction among employees in a manufacturing company. Work is a major source of life satisfaction, but it can also be a major source of stress. Due to economic rationalization and globalization, many organizations are undergoing continuous change in their working environments, which results in job insecurity, increased workloads, and job restructuring.

The employer is facing a number of issues as a result of turnover, particularly in global manufacturing companies. Because of the significant financial, time, and energy costs involved, it becomes one of the most important issues. While their coworkers tended to resign from their positions, the other employees also encountered a variety of issues. It is discovered that the most important factor influencing the intention to leave is work-life balance.

The findings might provide employers some useful information for improving performance and planning when it comes to staff management. Workplace stress has an impact on employee satisfaction, organizational productivity, mental and physical health, absenteeism and its financial costs, increased impact on family, and ultimately, the employee's potential. Work-life balance is a topic of discussion today because, in affluent societies, the excessive demands of work are seen as a unique problem that requires attention. For many people, striking a balance between their personal and professional lives is becoming more and more important. This suggests that balancing and integrating their personal needs, their family's needs, and their career requirements is their main career goal. There's no doubt that the long hours that many people have to work contribute to a growing desire to balance work with other facets of life. Young people want to grow and manage their careers on their own terms, and striking a balance between their work and personal lives is a crucial component of this career individualism.

Satisfaction and good functioning at work and at home with a minimum of conflict is the definition of work-life balance. Because of this, "the absence of unacceptable levels of conflict between work and non-work demands" is sometimes used to describe it. Hence, a conflict results when demands from both work and leisure are not met reciprocally. Because of this, work/family conflict or work/non-work conflict is the term used to describe situations in which there is an imbalance between work and non-work.

The pace of change and the ensuing upheavals and adjustments, the need for quick responses, the significance of providing excellent customer service and its implications for continuous availability, and the advancements in information technology and information load are just a few examples of the factors that demand our time and can put us under pressure at work.

Stress is being produced and is being exacerbated by the demands of the modern lifestyle and organizational structures. Stress at work has an impact on the organization as well as the individual. Stress at work arises when one is unable to handle the lengthy workdays and deadlines of today. Every reaction to stress has an impact on both the specific person and the surroundings. Although we frequently view the high levels of stress we encounter in modern life as bad things, stress can also occasionally be perceived as beneficial. Stress is generally correlated with both internal and external factors. The physical surroundings, one's employment, interpersonal relationships, daily obstacles, and expectations are examples of external factors.

Over the past century, there have been significant changes to the nature of work, and these changes are happening at a breakneck pace. They have impacted people in practically every industry, from surgeons to artists, and from sales executives to commercial pilots. As things change, stress will inevitably arise. Stress at work can be harmful to one's physical health.

Consequently, the health of organizations is impacted by the stress that organized workers experience at work. Chronic job stress is brought on by circumstances at work that impair a person's ability to perform and general physical and mental health. Performance is negatively correlated with job stress.

In other words, increased stress results in decreased performance. It was once thought that workers would perform better and be more energized by moderate levels of stress. However, this belief is no longer accepted. From the point of view of the employee, WLB is upholding obligations both at work and at home. Benefits and working conditions are perceived by employees as work-life benefits that assist in balancing the demands of work and family. Work-life conflict, on the other hand, is a demand in the form of inner role conflict, wherein role pressures from the workplace and other life domains, like family, are somewhat incompatible with one another, making it harder to participate in one role because of the necessity of participating in another. The impact of family demands on work was the primary focus of the concept of work-life conflict at first. The analyses' findings show that work-life balance has a positive impact on job satisfaction and that job stress has a statistically significant negative effect. Furthermore, it is discovered that work-life balance does not mitigate the impact of job stress on job satisfaction.

The study was carried out with the responses taken by the help of questionnaire survey among the employees working in the industry in which question were asked related to the factors contributing to the work-related stress, working hours, challenges for the employees and about work-life balance various questions were prepared. The objective of the study on stress influencing work-life balance in the tyre manufacturing sector is to study the significant impact of stress and work-life balance on employee performance in tyre manufacturing industry.

Objectives of the Study

The Objective of the study on stress influencing work-life balance in the tyre manufacturing sector is to study the significant impact of Stress & Work-life balance on Employee Performance in tyre manufacturing industry.

Hypothesis

Null Hypothesis (H₀): There is no significant impact of Stress & Work-life balance on Employee Performance in tyre manufacturing industry.

Alternative Hypothesis (H₁): There is significant impact of Stress & Work-life balance on Employee Performance in tyre manufacturing industry.

Research Design

The main objective of the research is to analyse the various factors causing stress at workplace. It aims at suggesting certain stress management techniques to minimize the stress level of employees. This research paper is descriptive and analytical in nature. In this project an attempt has been taken to analyse the impact of stress influencing Work-life balance in tyre manufacturing industry.

Sampling Method

The sampling method for the analysis selected is the non-probability sampling method. The method involves non-random selection which is based on convenience and the other criteria, which allows the data that are required to be collected.

Sampling Frame

The sampling frame for the analysis is done by considering all the criteria and to get the required result:

- Sample Size: 100 to 150 employees
- Sample Unit: Employees of tyre manufacturing industry
- Sample Area: Vadodara based tyre manufacturing industry

Literature Review

(1) Attar, M., Çağlıyan, V., & Abdul-kareem, A. (2021) conducted the research on evaluating the moderating role of work life balance on the effect of job stress on job satisfaction. The aim of this study is to establish the moderating role of WLB on the effect of job stress on job satisfaction of employees. In order to achieve the research objective, quantitative analyses are employed. In the descriptive analyses and evaluations, it is generally observed that the participants level of job stress is moderate while their WLB and job satisfaction levels are a little above average. Based on the results of inferential statistical analyses it is concluded that job stress has a statistically significant negative effect on employees' job satisfaction and weak negative relationship exists between them.

(2) Roopavathi, S., & Kishore, K. (2021) conducted research on the impact of work life balance on employee performance. The work life balance is considered to be important factor in terms of the success of employees. The objectives of the study are to study the present scenario of work life balance, to examine the factors influencing work life balance of employees, to interpret the basic concept of employee performance and to analyse the impact of work life balance on employee performance. This research paper is descriptive and analytical in nature.

This study is providing conceptual clarity between work-life balance and employee performance. There is a powerful relationship between both.

(3) Nurafiqah, W., & Aziz, A. (2022) conducted research on the influence of work satisfaction, work stress and work life balance towards turnover intention among staffs in a manufacturing company. This paper is quantitative research using a set of questionnaires as the instrument to collect the data. In conclusion, this study has examined the relationship between work satisfaction, work stress and work life balance factors which are related to the turnover intention among employees in the manufacturing company. Based on the results of the study, it shows that work stress and work life balance for the workers at the company is at a high level, while work satisfaction and turnover intention are at a moderate level.

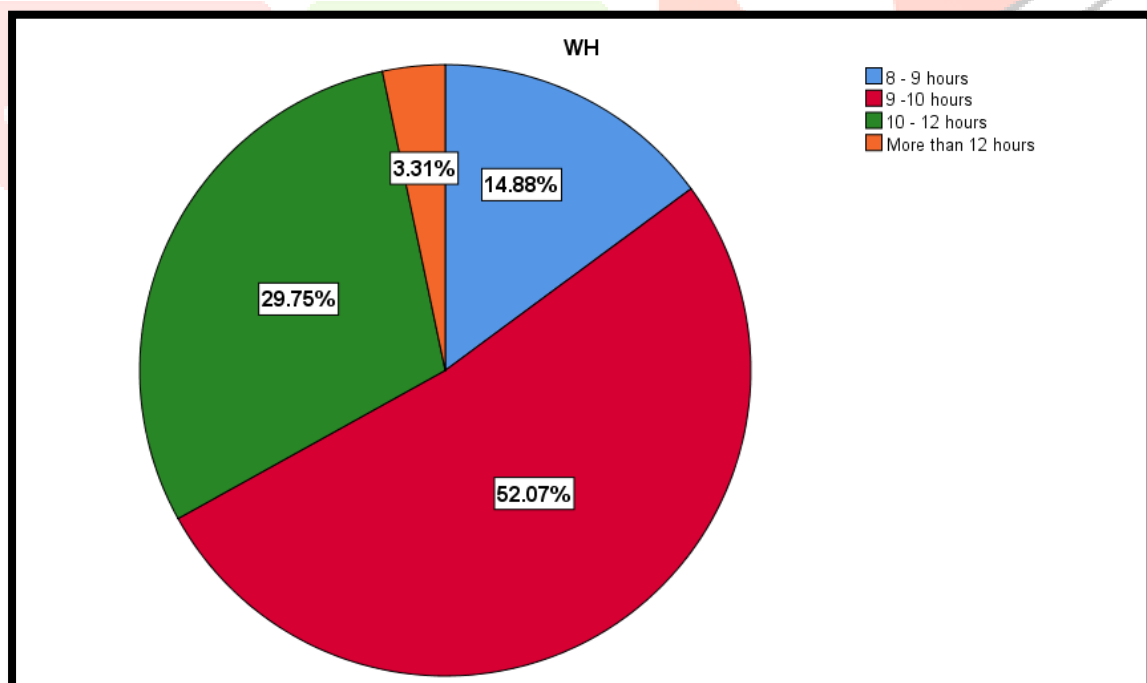
(4) Preethi, M., & Anandan, C. R. C. (2022) conducted the research on comparison of work life balance between IT employees and manufacturing industry employees. The study aimed with the objectives to know about employees' organizational commitment, to analyze employees' awareness of work life balance in their personal lives and to investigate the elements that contributes to a better working life. Descriptive design was carried out to gather information with the intention to attain the particulars which is essentially required for describing work-life balance and its impact on personal life.

Methodology

The main objective of the research is to analyse the various factors causing stress at workplace. This research paper is descriptive and analytical in nature. In this project an attempt has been taken to analyse the impact of stress influencing Work-life balance in tyre manufacturing industry. The data were collected for analytical study done to know about the objectives from various sources. It included the observation and Survey done from Questionnaires, reports, relevant websites, published journals, so that the information is accurate and reliable. The sampling method for the analysis selected is the non-probability sampling method. The method involves non-random selection which is based on convenience and the other criteria, which allows the data that are required to be collected.

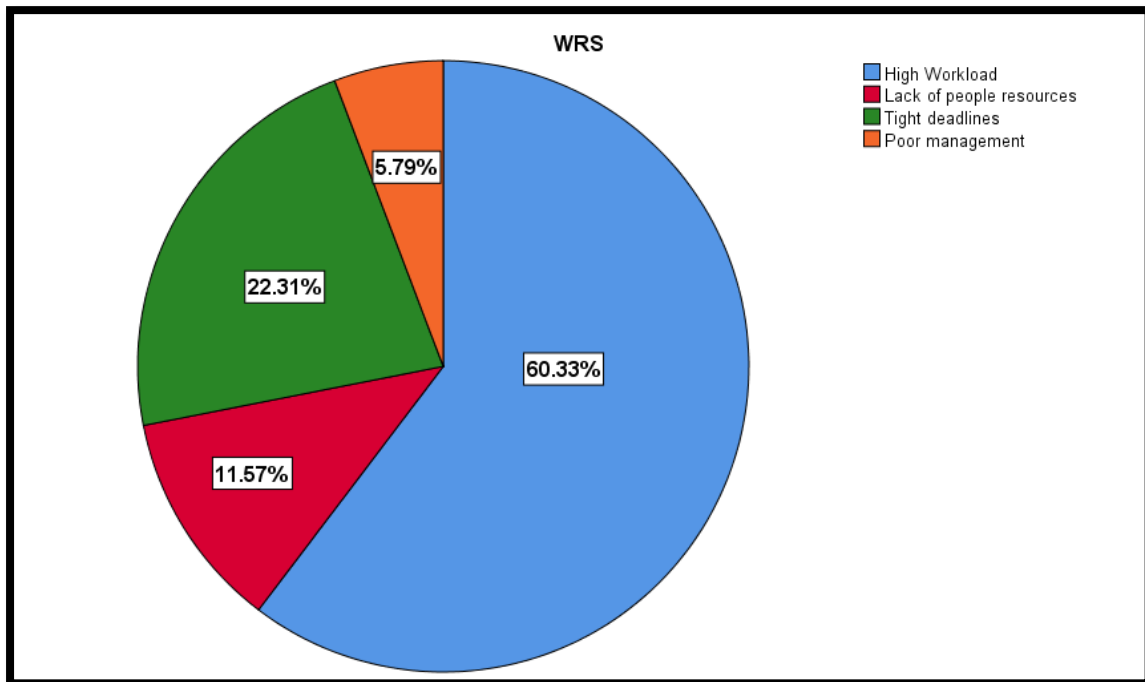
Results

Pie Chart Based on Working Hours



The pie chart represents the Working hours of the employees who responded within the tyre manufacturing industry. It shows that 52.07% of employees spent their 9 to 10 hours for work, 29.75% of employees spent their 10 to 12 hours for work, 14.88% of employees spent their 8 to 9 hours for work and 3.31% of employees spent more than 12 hours for the work who responded within the tyre manufacturing industry.

Pie Chart Based on Work Related Stress



The pie chart represents the Work-related stress of the employees who responded within the tyre manufacturing industry. It shows that 60.33% of employees are stressed due to High Workload, 22.31% of employees are stressed due to tight deadlines, 11.57% of employees are stressed due to lack of people resources and 5.79% of employees are stressed due to poor management who responded within the tyre manufacturing industry.

Gender & Age Crosstabulation

		Age				Total
		18 - 30 years	31 - 40 years	41 - 50 years	51 and above	
Gender	Male	27	48	17	18	110
	Female	10	1	0	0	11
Total		37	49	17	18	121

The table represents the crosstabulation for Gender and Age. It shows that among total 121 employees who responded 110 are male employee and 11 are female employee. Among them 27 male employees and 10 female employees belong to the category of 18 to 30 years, 48 male employees and 1 female employee belong to the category of 31 to 40 years, 17 male employees and no female employee belong to the category of 41 to 50 years, 18 male employees and no female employee belong to the category of 51 & above years. In the responses taken it shows that majority of employee belong to the category of 31 to 40 years age group having experience in the relevant field.

Coping Mechanism & Managing Stress Crosstabulation

		MS				Total
		Slightly effective	Moderately effective	Very effective	Extremely effective	
CM	Exercise	0	1	18	30	49
	Meditation	1	1	18	0	20
	Hobbies/Leisure activities	3	3	6	28	40
	Socializing with friends/family	0	10	2	0	12
Total		4	15	44	58	121

The table represents the crosstabulation for Coping Mechanism and Managing Stress. It shows that among total 121 employees who responded, 49 employees expressed that Exercise helps them as a coping mechanism to reduce stress, 20 employees expressed that Meditation helps them as a coping mechanism to reduce stress, 40 employees expressed that Hobbies & leisure activities helps them as a coping mechanism to reduce stress, 12 employees expressed that Socializing with friends & family helps them as a coping mechanism to reduce stress. Also, majority of employees expressed that these coping mechanism helps them in reducing the stress in their daily life.

Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.749 ^a	0.561	0.554	0.286

The regression analysis was used to determine independent variables (Stress and Work-life balance) simultaneously impact the dependent variable (Employees performance). The relationships between the dependent variable and independent variables, as well as the findings of the significance test for the model have been respectively interpreted. The coefficient of multiple determinations, the standard error of estimate, and the regression coefficients were the three main factors taken into account when interpreting the results of regression analysis.

The model summary with the coefficient of determination $R^2 = 0.561$ at 0.05 a significant level. The coefficient of determination indicated that 56.1% of the variation in the affective commitment for the sample of 121.

Summary Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.378	2	6.189	75.517	0.000 ^b
	Residual	9.671	118	0.082		
	Total	22.050	120			

The summary ANOVA and F statistic which reveals the value of F being significant at 0.05 confidence level. The value of F is large enough to conclude that the set of independent variables: Stress and Work-life balance as a whole were contributing to the variance. The results of the regression model using the independent variables were presented and interpreted.

Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.596	0.245		14.671	0.000
	WLB	-0.361	0.092	-0.243	-3.907	0.000
	SW	-0.588	.0048	-0.759	-12.197	0.000

The table evaluates and interprets the standardized coefficients of correlation (beta). In estimating the contribution of each independent variable in the study, it was established that all independent variables significantly contributed in variance at significance level of 0.05. However, the relative importance of every independent variable was different. Also, since the significance values are less than 0.05, the coefficients are significant.

Discussion

In this chapter, the data gathered from the questionnaire that was given to the respondents will be explained and interpreted. The data are analysed by using Statistical Package Social Science (SPSS) computer programmed version 25. The major advantage of utilizing this software is its capacity to carry out a variety of sophisticated statistical analysis, modify variables, and create tables and charts. Each variable determines how the data analysis and interpretation are organized.

The regression analysis was used to determine independent variables (Stress and Work-life balance) simultaneously impact the dependent variable (Employees performance). As a result, the subsection examines whether the regression analysis can be used to explain the theory for impact of stress & work-life balance on the performance of the employees.

The relationships between the dependent variable and independent variables, as well as the findings of the significance test for the model have been respectively interpreted. The coefficient of multiple determinations, the standard error of estimate, and the regression coefficients were the three main factors taken into account when interpreting the results of regression analysis. These components were presented and interpreted in light of the regression analysis results.

The model summary with the coefficient of determination $R^2 = 0.561$ at 0.05 a significant level. The coefficient of determination indicated that 56.0% of the variation in the affective commitment for the sample of 121 can be explained while 44.0% remains unexplained.

The summary ANOVA and F statistic which reveals the value of F being significant at 0.05 confidence level. The value of F is large enough to conclude that the set of independent variables: Stress and Work-life balance as a whole were contributing to the variance. The results of the regression model using the independent variables were presented and interpreted. In estimating the contribution of each independent variable in the study, it was established that all independent variables significantly contributed in variance at significance level of 0.05. However, the relative importance of every independent variable was different. Furthermore, the coefficients are significant because the significance values are less than 0.05.

Conclusion

Stress is a common occurrence in daily life. It is now a typical occurrence in our daily lives. Stress is something we cannot avoid, but we can overcome it. Not all stress is negative. However, since it happens during work hours, it will have an impact on their job performance. The study's conclusion shows that the employees find themselves under stress at work. Regardless of age, the majority of employees concur that stress at work is having an impact on how well they perform.

Job stress has increased in all organizations over the last few decades and has a significant impact on performance of employees. Appropriate stress management programs are lacking, despite their importance. It is crucial to monitor and manage job stress because it has an impact on productivity. It is essentially the individual's duty to strike a balance between work and life and take action to lessen stress and burnout. It is true that the organization can help the process along. To understand what he wants from work and life, a person must examine his values, aspirations, and goals. Only then can he or she create appropriate strategies for striking a balance between the two. He must therefore reflect on the nature of his work, his coping mechanisms and relationship management.

In this research, we can conclude that whether the employees like it or otherwise, they have to take on the workload regardless. Improper work life balance proved that there is no significant influence in employee performance.

Perhaps, it is essential to note that these days, motivational talks or pep-talks do not work much on employees and it has become quite evident to many organisations. What would probably work is proper management of work and life by utilizing various coping mechanisms to reduce the work-related stress in daily life.

This study has examined the impact of stress & work-life balance on employee performance. The regression result revealed that all the coefficients of the model significantly influence employee performance. Based on the findings of this study, it was recommended that there is need for organizations to design programmes that will help employees to overcome the stress related to work. Organizational management should provide work-life balance training programs so that employees can manage their time more effectively, manage their workload more effectively, and take courses on life management, personal and professional development, and time management.

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