



# Impact of Sleep Deprivation and Perceived Stress on Job satisfaction of Corporate Employees

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This study examines how sleep deprivation and perceived stress affect corporate employees' job satisfaction. The study makes use of a quantitative research design and gathers information from 166 employees who are randomly chosen from diverse corporate organizations. Using Pearson's Correlation Method and Stepwise Regression, the study examines the connections between lack of sleep, perceived stress, and job satisfaction. Results suggest that higher levels of perceived stress and sleep deprivation are associated with lower levels of job satisfaction. Strategies to reduce stress and promote healthy sleep habits may be beneficial. 32.8% of Negative variance is caused by Sleep Deprivation and Perceived stress on Job satisfaction. This research proves that to increase job happiness and productivity, corporate organizations must prioritize employee well-being by tackling sleep deprivation and stress management.

***Index Terms:*** Sleep Deprivation, Perceived Stress, Job satisfaction

## I. INTRODUCTION

Sleep deprivation is a condition caused by lifestyle choices, work demands, medical conditions, and social factors. It can have significant consequences on overall well-being, cognitive function, mood, and physical health. This research paper will explore the causes, consequences, and mitigation strategies of sleep deprivation, with a focus on supplying unique insights and perspectives. Sleep deprivation is caused by external and internal factors, such as lifestyle choices, work-related demands, and social factors. External factors include lifestyle choices, work-related demands, and social factors, while internal factors include medical conditions and individual differences.

External factors include lifestyle choices, work-related demands, and social factors, while internal factors include medical conditions and individual differences. Sleep deprivation can have a variety of negative effects on a person's physical, mental, and emotional health.

Stress is an inescapable element of today's fast-paced lifestyle and can be caused by a variety of sources. It is defined as the physiological and psychological response of an individual to a perceived threat or demand. It involves both physiological and psychological changes, such as increased alertness, heightened arousal, decreased concentration, irritability, anxiety, and mood changes. Stress can be caused by a variety of sources, such as work, financial, relationship, major life changes, health-related, and environmental.

There are diverse types of stress that individuals may experience, such as acute, episodic, chronic, and physical. Physical effects of stress include physical fatigue, muscle tension, headaches, muscle spasms, and muscle spasms. Chronic stress is long-term stress that lasts for a while and often has no obvious cure and can have negative effects on physical and mental health. Stress has a negative influence on mental health, cognitive function, emotions, and behavior. It can lead to changes in sleep patterns, appetite, and physical activity levels, as well as changes in interpersonal relationships and unhealthy coping behaviors.

Job satisfaction is a multidimensional psychological response with three main arms: cognitive, affective, and behavioral. Positive affectivity is characterized by high energy, enthusiasm, and enjoyable participation, while negative affectivity is characterized by anguish, unpleasant involvement, and anxiety. Job satisfaction is affected by different variables, such as balance between serious and fun activities, reward, and the nature of associations with partners and managers. Job Satisfaction is an essential part of individual prosperity and hierarchical achievement. It is affected by elements such as the idea of the work, reward and advantages, vocational development and advancement open doors, a sound balance between serious and fun activities, connections inside the working environment, initiative, and authoritative strategies and practices.

It is also affected by individual qualities, inclinations, and individual conditions, such as work that clash with their interests and values, or solidness and monetary prizes. Associations can set up a climate that advances Job Satisfaction, prompting higher representative commitment, efficiency, and maintenance. Finally, cultivating position fulfillment helps the two people and associations in carrying out their objectives and making a positive work.

## **II. NEED OF THE STUDY**

This study aimed to determine if Sleep Deprivation and perceived stress affect job satisfaction. It was found that those who experienced less stress or knew how to manage or cope with it were more productive in their jobs and satisfied in other aspects of life. There have been many studies or research that have been conducted on perceived stress with job satisfaction, but a gap exists where all three variables are studied together. To bridge this gap and further conduct this study in a form of intervention study, this research was conducted.

### III. RESEARCH METHODOLOGY

Quantitative research of two-group design was done, and samples of participants was gathered using purposive sampling. Participants completed a questionnaire, informed consent was sought, and their responses were recorded truthfully and in confidence. Instructions for questionnaires were provided to those meeting inclusion/exclusion criteria. The study also included an organizational commitment and work locus of control scale for each participant.

#### 3.1 Population and Sample

3.2 The sample consisted of working employees ranging from 23 to 45 years of age, with an average age of 27.6 years. Data was collected from 166 employees through a purposive sampling method.

#### 3.3 Data and Sources of Data

For this study, data has been collected through an offline survey method. The sample for the current study included 166 participants, of whom 93 were female and 73 were male.

#### 3.4 Theoretical framework

Variables of the study contain dependent and independent variables. The study used a pre-specified method for the selection of variables. The study used the Job satisfaction type as dependent variable and Sleep Deprivation and Perceived Stress as independent variable.

Zhang (2020) looked at the well-being of regular individuals who were residing and working following a month of restrictions to stop the COVID-19 flare-up in China. The necessity to concentrate on the health of individuals who were not exposed to the virus is supported by evidence, especially for those who left their jobs during the event. We examined 369 persons in 64 Chinese cities who underwent confirmed Covid cases to assess their pain, illness, and life satisfaction (LS). The results imply that people who engage in physical activity may be more susceptible to financial issues during the lockdown.

Long (2018) In organisational study, sleep deprivation is a significant problem since it may have a detrimental effect on employees' psychological well-being, actions, and performance. Existing research explains the definition, measurement, theoretical foundation, and processes of sleep deprivation to address this. Additionally, it provides an overview of the precise aspects that impact employees' ability to sleep, as well as the consequences for teamwork and leadership. The sorts of concepts, antecedents, mechanisms of processes, research methodologies, and research levels might all be explored in future studies.

Wilkinson (2015) This paper examines the consequences of sleep deprivation on humans, with an emphasis on biochemical, physiological, and psychological alterations. Only in rare cases has an attempt been made to link these measures, as they may vary depending on what the individual is doing at the time they are taken. However, for the time being, most of the information is organised into three categories: biochemical alterations, physiological changes, and changes in performance and conduct.

Dayal (2005) In a survey of 40 employees, it was found that in descending order of significance, success, recognition, the work itself, responsibility, interpersonal relationships, achievement, and advancement all contribute to job satisfaction. Employee dissatisfaction is influenced by a variety of factors, including management, the workplace environment, business policies, and the administration.

Peptone (2003) studied 80 executives and found that in the public sector, motivators—such as success, acclaim, and responsibility—significantly increased job satisfaction over hygiene (job) factors, whereas in the private sector, motivators significantly increased job dissatisfaction.

Bialowolski (1994) studied the correlation between life satisfaction LS0 and job satisfaction (JS), Utilizing information from 216,573 people and applying aboard. we look to lay out whether, and how much, JS impacts resulting life satisfaction and how LS simultaneously affects job satisfaction. Our discoveries validate that LS and JS are decidedly strongly related, as in the overflow hypothesis, and that life satisfaction impacts JS more firmly than the other way around. The size of the effect is viewed as populace explicit and time-delicate, with the highest impact in the resulting year and with genuinely tremendous impacts enduring even as long as 5 years.

### 3.5 Descriptive Tools

Bergen Insomnia Scale (BIS) by Pallesen (2008), This scale consists of six questions that each measure a distinct insomnia symptom. On an 8-point scale, participants show how many days in the previous month they had various sleep issues, ranging from 0 to 7. The scale's lowest score is 0, and its maximum possible value is 42. The reliability of this scale is 0.79.

The Minnesota Satisfaction Questionnaire (MSQ) by Weiss, Dawis, England, and Lofquist (1967). This questionnaire assesses an employee's job happiness. There are three forms available: two long versions (1977 and 1967) and a condensed version. This study uses the condensed version which has 20 items in it. There are several translations of the forms that are available. The reliability of this (coefficient) ranges from 0.87-0.92 for general satisfaction level. The scoring is based on the Likert scale and uses a range of 5, 4,3,2,1.

Perceived stress scale (PSS) by Cohen, (1983) The instrument measures a person's feeling of their level of stress. First, reverse your answers to questions 4, 5, 7, and 8. These 4 questions' scores should be changed as follows: 0 = 4, 1 = 3, 2 = 2, 3 = 1, 4 = 0. Add your answers to each question's score to obtain the overall. With individual values on the scale ranging from 0 to 40, increasing PSS scores imply increased felt stress, according to my final evaluation. Low stress is defined as a score of 0 to 13. High perceived stress would be defined as scores between 27 and 40, while scores between 14 and 26 would be considered moderate stress. This scale has a reliability of 0.78.

## IV. RESULTS AND DISCUSSION

### 4.1 Pearson's Correlation

Table 2: Pearson's correlation across the study variables.

Job satisfaction			Perceivedstress	Sleep deprivation
Job satisfaction	Pearson Correlation	1	-.461**	-.539**
	Sig. (2-tailed)		.000	.000
	N	165	165	165
Perceived stress	Pearson Correlation	-.461**	1	.555**
	Sig. (2-tailed)	.000		.000
	N	165	165	165
Sleep deprivation	Pearson Correlation	-.539**	.555**	1
	Sig. (2-tailed)	.000	.000	
	N	165	165	165

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### 4.2 Regression

Table 2 Linear regression with insomnia and perceived stress as a predictor of job satisfaction.

ANOVA<sup>a</sup>

Sum of		Squares	df	Mean Square	F	Sig.
Model 1	Regression	20707.146	1	20707.146	66.659	.000 <sup>b</sup>
	Residual	50634.648	163	310.642		
	Total	71341.794	164			
Model 2	Regression	23431.131	2	11715.566	39.614	.000 <sup>c</sup>
	Residual	47910.663	162	295.745		
	Total	71341.794	164			

a. *Dependent Variable: Job satisfaction*

b. *Predictors: (Constant), Sleep deprivation*

c. *Predictors: (Constant), Sleep deprivation, Perceived stress*

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	91.716	3.920		23.400	.000
	Sleep deprivation	-1.227	.150	-.539	-8.165	.000
2	(Constant)	106.221	6.121		17.353	.000
	Sleep deprivation	-.930	.176	-.408	-5.277	.000
	Perceived stress	-1.111	.366	-.235	-3.035	.003

a. *Dependent Variable: Job satisfaction*

Table 2 shows the stepwise linear regression for predicting job satisfaction using insomnia and perceived stress. The model presented the best fit. Findings suggest that insomnia and perceived stress explains 32.8% of negative variance in job satisfaction.

Sleep deprivation has a significant effect on job satisfaction, with a coefficient of determination of 0.290 and an adjusted R-squared value of 0.286. Coefficients for sleep deprivation and perceived stress are also statistically significant.

This research aimed to study the impact of sleep deprivation and perceived stress on the job satisfaction of corporate employees. The sample size was 165 working individuals within the age range of 23-45 years. The tools used to measure sleep deprivation, perceived stress and job satisfaction were the Bergen insomnia scale (BIS), perceived stress scale (PSS) and Minnesota satisfaction questionnaire (MSQ). The correlation analysis results showed that there were significant correlations between the variables in the dataset. These correlation coefficients suggest that there are relationships among the variables in the dataset.

The negative correlations between Job Satisfaction and both Perceived Stress and Sleep Deprivation show that higher levels of perceived stress and sleep deprivation are associated with lower levels of job satisfaction. Additionally, the positive correlation between Perceived Stress and Sleep Deprivation suggests that higher levels of perceived stress may experience difficulties in getting sufficient sleep. Research has also shown that sleep deprivation has an indirect negative association with employee creativity, suggesting that sleep deprivation does have a negative association with job satisfaction. Further research or added analyses may be



necessary to explore causal relationships and potential underlying factors. These findings can inform organizations and individuals about the potential impact of perceived stress and sleep deprivation on job satisfaction.

Strategies to reduce stress and promote healthy sleep habits may be beneficial in improving job satisfaction and overall well-being in the workplace. Table 2 shows the results of two regression analyses conducted on the variable "Job satisfaction". The model's coefficient of determination (R-squared) is 0.290, showing that approximately 29% of the variance in job satisfaction can be explained by sleep deprivation. The adjusted R-squared value (0.286) adjusts for the number of predictors and supplies a more conservative estimate of the model's explanatory power. The ANOVA table shows that the regression model is statistically significant ( $p < 0.001$ ) and the regression sum of squares (20707.146) shows the variation in job satisfaction explained by sleep deprivation, while the residual sum of squares (50634.648) is the unexplained variation.

The coefficients table provides information about the regression coefficients and their significance. In Model 1, the constant term is 91.716 and the coefficient for sleep deprivation is -1.227, showing that for each unit increase in sleep deprivation, job satisfaction decreases by 1.227 units. The coefficient for sleep deprivation and perceived stress is statistically significant ( $p < 0.001$ ). (Shields, 2017) and (Nakata, 2011) conducted cross sectional studies where they interviewed 2643 full time corporate employees ranging from 25 years to 50 years of age in small and medium sized firms. Findings revealed that individuals who works for more than 10 hours per day slept less and complained about frequent levels of stress compared to individuals working 6-8 hours per day.

Overall, the regression analyses suggest that sleep deprivation and perceived stress have a significant negative impact on job satisfaction. Perceived stress has been identified and assessed as a bigger contributor towards lower levels of job satisfaction than sleep deprivation, contributing to lower levels of job satisfaction by 57% if compared to sleep deprivation.

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