

Major Research Project Report

STUDY ON STRESS LEVELS IN PUBLIC SECTOR ORGANIZATIONS

Submitted By

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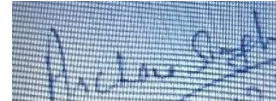
CERTIFICATE

This is to certify that **Ananya Gautam 2K21/DMBA/28** has submitted the project report titled “**Study on Stress Levels in Public Sector Organizations**” in partial fulfillment of the requirements for the award of the degree of Master of Business Administration (MBA) from Delhi School of Management, Delhi Technological University, New Delhi during the academic year 2022-23.



Dr. PK Suri

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DECLARATION

I, **Ananya Gautam**, student of Delhi School of Management, Delhi Technological University hereby declare that the Major Research Project report titled “**Study on Stress Levels in Public Sector Organizations**” submitted in partial fulfillment of the requirements for the award of the degree of Master of Business Administration (MBA) is the original work conducted by me. I also confirm that neither I nor any other person has submitted this project report to any other institution or university for any other degree or diploma. I further declare that the information collected from various sources has been duly acknowledged in this project.



Ananya Gautam

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ACKNOWLEDGMENTS

I would like to acknowledge Delhi School of Management, DTU, for giving me the opportunity to take up project-based courses as a part of our curriculum for an enhanced learning experience.

I would like to express my sincere gratitude towards **Prof. P.K. Suri** for guiding and supporting me throughout my project.



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EXECUTIVE SUMMARY

Examining the levels of stress that workers in public sector organizations feel is the goal of this study project. Employees from a variety of public sector organizations, including banks and government agencies, were surveyed for the study. The poll gathered data on the factors that lead to stress, how people deal with it, and how stress affects their daily lives and professional success.

According to the study's findings, the most common causes of stress among employees of public sector organizations are work-life balance, job instability, and busyness. It has been discovered that coping strategies including exercise and social support are successful at lowering stress levels. However, the study also discovered that stress has a considerable negative influence on general wellbeing and job performance, with frequent results including higher absenteeism and worse job satisfaction.

In order to address the root causes of workplace stress, the study project advises public sector organizations to improve workload management and foster work-life balance. The study also suggests offering support services to stressed-out employees and putting stress management plans into place. The study's overall findings emphasize the significance of treating workplace stress for the welfare of public sector personnel and the organizations they work for.

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CHAPTER 1

INTRODUCTION

1.1 Background

In the present era, stress has become a widespread problem that has an impact on everyone's life. According to studies, stress levels have quickly risen in the public sector. The economic downturn and fierce global market competition have put organizations in a difficult position. Banks are being restructured as a result, which increases employee duties. High employee turnover results from this, which has a bad effect on employees' conduct and output. While some levels of stress can be advantageous for businesses, excessive stress can negatively impact employee wellbeing and impair both personal and professional performance.

We all experience stress daily, and it's frequently brought on by obligations to our families, jobs, and other commitments. Although stressful conditions are sometimes beyond our control, effective stress management can ease the burden and improve the quality of our lives. Stress management is not a one-time fix to get rid of all the stress that has built up. Instead, it should be a regular habit for workers to avoid stress from building up and adversely affecting their well-being and productivity. Employees who practice often are more likely to learn stress management techniques.

Stress management is more and more important in today's environment as stress levels rise. A wide range of methods and psychotherapies are included in stress management, which helps people regulate and prevent their stress levels and eventually improves how they operate in daily life. Controlling, preventing, escaping, or developing coping mechanisms are a few of these strategies. As a rule, prevention is always preferable to treatment, so it makes sense to manage stress before it becomes a problem rather than having to invest a lot of money in treating the effects of it. At the individual and organizational levels, stress management is successfully implemented. Depending on the stress levels of their employees, organizations offer stress management resources including Employee Assistance Programmes (EAPs) and training connected to stress. With the help of these programs, employees feel less stressed and work with greater efficiency, ultimately increasing productivity. "A Healthy employee is a Productive employee."

1.2 Problem Statement

This study's goal is to look at how stressed-out public-sector organizations are. High levels of stress can have a severe impact on one's physical and emotional well-being, making it difficult to successfully manage one's life. Effective stress reduction techniques can promote a balanced approach to work, relationships, relaxation, and enjoyment, enabling people to live healthier and more fruitful lives. The public sector does not, however, benchmark stress management consistently. Therefore, this study aims to contrast two various public sector organizations and

create uniform stress management practices that may be used by all governmental and non-profit institutions.

1.3 Objectives of the study

- To identify what level of stress and sources of stress employees face in current situation.
- To compare stress levels in different types of organizations
- To study the effect of stress on the organization's productivity.
- To analyze the impact of stress on job performance.
- To recommend necessary steps that should be taken for the betterment of both employees as well as for the organizations

1.4 Scope of the study

In this study, the Employees' State Insurance Corporation (ESIC) and the State Bank of India (SBI) will be compared in terms of their levels of stress. The study will use both primary and secondary data sources, and a sample size of 100 employees will be chosen using a convenience sampling technique (non-probability sampling). Data on a variety of factors, including work pressure, job insecurity, work-life balance, organizational culture, and communication channels, that contribute to stress in the workplace will be gathered using a standardized questionnaire using a five-point Likert scale for the study.

The scope of the study includes an evaluation of the primary sources of stress in these organizations as well as a comparative investigation of the work environments in ESIC and SBI. The study's goal is to find the best practices that may be used to lower stress levels and enhance the working environment. The analysis will also consider the important data regarding ESIC and SBI, such as their respective workforces, earnings, and assets.

CHAPTER 2

LITERATURE REVIEW

Review on the studies on stress among the employees is needed to know the areas that are already covered. This will help in finding the new areas which are uncovered and to study them. After understanding the concept of the stress, we need to study the previous studies in order to have a larger and clearer view of various effects of stress on the employees. This will surely put down the scope of the topic for further research. The studies made earlier on the stress among the employees are reviewed briefly here.

- a) **Dileep Kumar M. (2008)** ^[1] - The productivity of the work force is the most important factor as far as the success of an organization is concerned. The productivity in turn is depends on the psychosocial well-being of the employees. In the age of highly competitive and dynamic world, man is exposed to all kinds of stressors that can affect him on all area of life. The growing need of interventional strategies is felt more at organizational level. This research was made for studying the impact of stress on the Nationalized and Non-Nationalized Bank's employees.
- b) **Shruti M. (2009)** ^[2] - concludes that bank employees are too much stressed with their job with great workload, so the employee's expert some light events to add up in their work place like entertainment, trips, coffee breaks, rest intervals once in a while during lumps of work. Accordingly, the employees are expected to get a hike in their salary from their performance. But even then, the employees are very cooperative and have a very good high regard and respect towards the bank's image and its future.
- c) **Rajendran Jayashree (2010)** ^[3] - This research was to study the impact of occupational stress on National Bank employees. The problem of stress is unavoidable in the banking sector. A majority of the employees face many stress-related ailments and a lot of psychological problems. Hence, the management must take several initiatives in helping their employees to overcome its adverse effect. Since stress in the banks are because of extreme work pressure and work life imbalance, the organization should always support and encourage the employees by playing roles by which they can be helped in balancing work and family. The productivity of the work force is the most adverse factor as far as the success of an organization is concerned. The productivity in turn is depends on the psychosocial well-being of the employees. In an age of highly competitive and dynamic world, man is exposed to all kinds of stress that can affect him on all parts of life. The growing importance of interventional strategies is felt excessive at organizational level.
- d) **Aliah Binti Roslan (2011)** ^[4] - Agenda of this study is to acquire factors of the work stress among the Banks employees. The survey was carried out at 12 branches of Bank Rakyat at Northern Zones. A total of 154 bank employees took part in this study. Correlation analyses were conducted to get the relationship between levels of work stress with personal factors, organizational factors and environmental factors; whereas descriptive analysis was conducted to analyze demographic characteristics of respondents. Besides that, T-test, ANOVA and regression were also in use in this study. The information discovered from

this study showed that there was no statistically important change in the level of stress at work through demographic factors. However, the findings showed that only organizational factors have good relationship with work stress level. Findings of this study also resulted in the overall level of work stress among respondent is moderate.

- e) **Sharmila A. and Poornima J. (2011)** ^[5] - The banking sector is becoming more competitive around the country and the level of product and service quality being offered to customer is same. Hence, the bank management adds great responsibilities on the shoulders of employees, resulting into a pressure on them, with increasing psychological problems i.e. stress, strain, anxiety, depression, sleep disorders, etc. This situation, in which the employees have no sense of identification with their job, can cause an individual looking for other job or don't perform efficiently their own. Therefore, it is more difficult for management that how to maintains bank employees' ability to develop successful performance with their organization under given conditions. The study addresses the specific problems of private bank employees related to occupational stress. This throw light in to the pathogenesis of various problems related to occupational stress among bank employees.
- f) **Nadeem Malik (2011)** ^[6] -Stress is a universal element and persons from nearly all walk of life have to face stress. Stress can have great negative impacts on both the employee and the organization. This research checked that what the impact occupational stress produced upon employees. The study describes the occupational stress in private and public banks. A randomly selected sample of 200 employees from private and public banks shows that occupational stress is found more among private bank employees when compared with public bank employees. Among different occupational stress variables, role over load, role authority, role conflict and lack of senior level support contribute more to the occupational stress. Bank employees cannot get the time to relax and wind down when they are faced with work load, discrimination, favoritism, delegation and conflicting tasks.
- g) **R.S Deshmukh (2011)** ^[7] - The study is confined to the male population of 200 bank employees of the Nationalized and Non-Nationalized Banks of Chandigarh City. Hence; stress management approaches might be beneficial to the organizations to change the attitude of Nationalized and Non-Nationalized Bank employees. The researchers study the stress level while considering few stress variables of bank employees of the Nationalized Banks and Non-Nationalized Banks in Chandigarh, Union Territory.
- h) **Mohd. Mohsin, Md. Aktar Kamal (2012)** ^[8] - Stress testing is one of the effective and popular ways to alert bank management with regard to adverse unexpected outcomes related to variety of risks and provides an indication how much capital might be needed to absorb losses should large shocks occur. The authors have studied stress test first from theoretical standpoint and then conducted stress testing of credit, equity and liquidity shocks of ten commercial banks of Bangladesh. The study finds that the large numbers of banks are capable of withstanding liquidity shocks while a half of the banks under study are resilient to defend the equity shocks. The credit shocks were varied under different categories. The study has also pointed out some additional CAR that the banks to collect to absorb the shocks.
- i) **Yasir Arafat Elahi and Mishra Apoorva (2012)** ^[9] - The study is disclosed the significant differences in stress experience among short, medium and long tenure groups. So, it has

been observed that the total and for six types of role stress, experienced the minimum stress, medium tenure group experienced a medium level stress and the short tenure group experienced the maximum stress, pointing out the significant existence of a negative relationship between length of service and role stress.

- j) **Showkat Hussain Gani (2012)** ^[10] - This study looks into the new century stress prevails in the banking organizations. It brings out the factors causing stress at the place of work, what individuals do to decrease it and suggestions that may improve the levels of performance at the same time. It is imperative that the issue of stress in the organisation is addressed. The paper includes sample survey outcome done on people from Banking sector and their views on the concerned topic.
- k) **Rajesh Jampala, P. Adi Lakshmi (2012)** ^[11] - The study measures occupational stress with HSE indicator tool. The differences among the various employees based on different demography's including sector, gender, qualification, industry and experience has been analyzed. The correlations among various factors causing stress including demand, control, manager support, peer support, relation, role and change factors are explored.
- l) **R. Gomathi and R. Deepika (2013)** ^[12] - Stress has become a major issue of the modern times as it can cause harm to employee's performance and health. Work related stress costs organization billions of dollars each year because of sickness, turnover and absenteeism. So, it becomes necessary for every organization to know the factor causing stress among the employees as well as how they cope up with stress to make the employee more participative and productive. This research study showed the factor causing stress among employees and to know how they cope up with stress.
- m) **Arti Devi (2013)** ^[13] - This study aims at an identification of the sources of role stress at commercial banks, identifying the coping strategies used by the employees, assessing whether the employees can be segmented on the basis of their role experiences, examining the determinants of role stress-based employee segments, proposing a comprehensive model for role stress phenomenon at commercial banks.
- n) **Vijay Joshi & K.A. Goyal (2013)** ^[14] - In this study the authors found that cultural fit and HR policies are two prominent factors for high level of stress and dissatisfaction with bank employees. This study is a small contribution for the betterment of the bank employees and provides guidelines for bank policy makers, scholars and researchers.
- o) **Showkat Khalil Wani (2013)** ^[15] -The study shows that clerical grade employees experience more stress than officers and there is strong relationship between job stress and employee motivation. On the basis of findings of the study the current payer puts forth some related suggestions and recommendations to improve overall job scenario in banking sector.
- p) **N.R.V. Prabhu (2014)** ^[16] - Banks and bank employees are playing a very crucial role for developing the Indian Economy. It is generally believed by the common man that employees of banks may not experience stress in their jobs when compared to other occupations. To test the proof of this belief the researcher had undertaken a study of bank employees in Chennai. It is the comparative study with reference to the employees of National Banks, State Bank of India, Private sector Banks and the Co-operative sector Banks in Chennai.

- q) **Moon-dol Kim and Sung-Je Cho (2014)** ^[17] - The study identifies the effects of stress by general behaviour of bank employees. The study covered employees of banks located in the central part of the Republic of Korea who were invited to a questionnaire survey. Based on the results, stress by general characteristics differed more by duty and responsibility assigned. The implications of this study will be a basic data for framing policies to improve job satisfaction among bank employees.
- r) **Pooja Chatterjee (2016)** ^[18] -Employees are increasingly recognizing that work is affecting on their personal lives and they are not happy about it. Evidence indicates that balancing work and life demands now overcome job security as an employee priority. They want a good life as well as a job. The study assesses the stress, job satisfaction and mental health of employees belonging to two professions namely bank and IT firms comprising of both private as well as public sector. The need was felt so as to aid the personnel to combat with different dimensions of occupation stress and job dissatisfaction and to inculcate feelings of organizational citizenship behaviour and commitment and reduce employee turnover costs which are on the hike these days.
- s) **Risham Preet Kaur & Poonam Gautam Sharma (2016)** ^[19] - Despite of feeling relax with the advent of modern technology and innovations in the banking sector, employees are feeling over-burdened with work and stressed out. With the modernization in technology, banks have to make rapid changes. It has become hard for employees to adjust with these changes. This attempt has been made to study the causes and effects of stress with bank employees. The ways to handle stress has also been suggested. Measures to overcome stress that affects the physical as well as mental wellbeing of employees are also suggested.
- t) **Katherine M. Richardson (2017)** ^[20] - The editorial team of the Journal of Occupational Health Psychology is republishing the meta-analysis as part of a special series, providing a retrospective look at stress management and mental health wellness, and assessing current challenges to the field. Stress continues to be a concern for individuals and organizations, with many workers reporting high levels of job-related stress. Both stress management interventions and wellness programs address employee health and well-being, but wellness programs are generally more preventive, while stress management interventions focus on restoring depleted resources. Recent research has shown a trend toward incorporating stress management as a component of workplace wellness programs.
- u) **Dedi Iskamto (2021)** ^[21] - Human resources are a crucial element in driving a company or organization forward, and employee performance is an essential aspect of this. Companies often have set standards that employees must achieve, and their performance is determined by their ability to carry out tasks based on their experience, skills, and time management. The achievement of these set goals by employees is crucial to a company's success, and various measures are taken to improve employee performance. However, excessive workload and high demands can lead to employee work stress, which can have a detrimental effect on the company's productivity and profitability.

CHAPTER 3

RESEARCH METHODOLOGY

The study uses primary and secondary data gathered for this aim and is both descriptive and empirical. In-depth analysis of stress levels among workers in the public sector is the goal of the current study. Staff members' responses to questionnaires were used to gather the study's data. State Bank of India and Employees State Insurance Corporation served as the study's sources of sample participants.

The study's main goal is to gauge the level of stress experienced by all employee ranks.

Data Sources:

Both Primary data and secondary data are used here.

- **Primary Data:** The primary data was collected through the means of questionnaires filled by the bank employees.
- **Secondary Data:** Apart from the primary data, the secondary data was collected from websites, journals, and research books.

Sampling:

- **Sample size:** 100
- **Sampling area:** Pan India
- **Sample method:** Non-probability sampling method (Convenience sampling). The researcher had acquaintances in both the organizations, through which the questionnaire was floated.

Tools of data collection:

A structured questionnaire was prepared and sent to the employees for the collection of data. The five-point Likert scale was used for measuring the attitude and level of stress in the employees.

CHAPTER 4

ANALYSIS, DISCUSSION AND RECOMMENDATIONS

4.1 Introduction to the case

Stress has turned into a prevalent issue in the job due to today's fast-paced and competitive society. Employees' total productivity and level of job satisfaction are also impacted, in addition to their physical and mental health. Numerous businesses have been employing various strategies to lower stress levels at work in order to solve this problem.

However, the structure of the organization and the workplace have a significant impact on how effective these measures are. Consequently, a comparison study of two different organizational styles was conducted in order to comprehend the effects of various work environments on stress levels.

The Employees' State Insurance Corporation (ESIC), a central government statutory body under the Ministry of Labour & Employment, is the first entity under consideration. ESIC offers social security payments to employees and their dependents in the event of illness, pregnancy, disability, or death as a result of an occupational injury.

The State Bank of India (SBI), a bank in the public sector, is the second company being considered. The largest bank in India is SBI, which has a vast network of locations all over the nation. It offers its clients a range of banking and financial services.

The study tries to gauge the levels of stress in the various work settings present in both organizations. The study tries to pinpoint the fundamental causes of stress in these organizations and offer solutions to lower stress levels by quantifying the qualitative nature of the problem.

Workplace stressors such as deadline pressure, job uncertainty, work-life balance, organizational culture, and communication channels will all be considered in this study. The study attempts to uncover best practices that may be used to lower stress levels and enhance the overall work environment by analyzing these characteristics in both organizations.

Let us also see some basic information about both the organizations' operations

Some key facts and figures about ESIC: ^[iv]

- ESIC has a network of over 150 hospitals and 1500 dispensaries across the country, providing medical services to over 13.5 million insured persons and their dependents.

- In the financial year 2020-21, ESIC collected a total contribution of Rs. 25,931 crores and spent Rs. 29,154 crores on benefits and administrative expenses.
- As of March 2021, ESIC had a total workforce of 45,471 employees, including 6,951 medical staff.

Some key facts and figures about SBI: ^[v]

- Number of locations: 22,219 Branches, 62,617 ATMs in India
- Revenue: ₹406,973 crore (2022)
- Operating income: ₹78,898 crore (2022)
- Net income: ₹43,774 crore (2022)
- Total assets: ₹5,177,545 crore (2022)
- SBI has a total workforce of over 2.4 lakh employees

4.2 Data Collection

The data was collected through a questionnaire of 20 questions. The questionnaire was on Likert scale and was coded as follows for two different scales:

Scale 1: Never = 1; Rarely = 2; Sometimes = 3; Often = 4; Always = 5

Scale 2: Strongly Disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; Strongly Agree = 5

In surveys, Likert scale questions are frequently used to collect data for social science research. It enables researchers to gauge participants' attitudes, beliefs, and perceptions towards a specific subject. It is simpler to analyze the data and make reasonable inferences because to the number codes supplied to each response.

An Excel file including a Google Form was made to make it easier to collect the data. I gathered factual information from genuine workers at the organizations featured in the study using my personal network. The potential to reach a huge number of responders, convenience of use, and minimal cost are just a few benefits of using a Google Form to gather data. Additionally, as Excel contains several built-in functions for data modification and analysis, putting the data in an Excel file makes it simpler to maintain and analyze the data.

Also, the following table highlights the authors from whose literature we formulated the questions (refer the Annexure):

Table 4.1: Questions Corresponding to Authors' Literature (Source – Self Created)

Questions	Author
None	Dileep Kumar M. (2008)
None	Shruti M. (2009)
None	Rajendran Jayashree (2010)
None	Aliah Binti Roslan (2011)
Q1, Q2	Sharmila A. and Poornima J. (2011)
None	Nadeem Malik (2011)
None	R.S Deshmukh (2011)
Q4, Q6, Q13, Q18	Mohd. Mohsin, Md. Aktar Kamal (2012)
Q5	Yasir Arafat Elahi and Mishra Apoorva (2012)
Q3	Showkat Hussain Gani (2012)
None	Rajesh Jampala, P. Adi Lakshmi and O.A.R. Kishore (2012)
Q11, Q15, Q17	R. Gomathi and R. Deepika (2013)
None	Arti Devi (2013)
Q8, Q14, Q16, Q20	Vijay Joshi & K.A. Goyal (2013)
None	Showkat Khalil Wani (2013)
Q9	N.R.V. Prabhu (2014)
None	Moon-dol Kim and Sung-Je Cho (2014)
None	Pooja Chatterjee (2016)
Q10, Q12, Q19	Risham Preet Kaur & Poonam Gautam Sharma (2016)
Q7	K. M. Richardson (2017)
None	D. Iskanto (2021)

4.3 Data Analysis

We first carried out a principal component analysis (PCA) to determine the degree to which the questionnaire's questions were similar and how dimensional they were. A common statistical method called principal component analysis (PCA) breaks down a larger set of correlated variables into a smaller set of uncorrelated variables known as principal components. These elements can be used to find underlying patterns or structure and capture the majority of the variation in the data. We utilized PCA in our study to identify whether the questionnaire's items were measuring the same variables or whether they had many dimensions.

The initial division of the data was made according to the various scales to which the questions belonged. We then divided the questions within each dataset related to a given scale into five separate categories that were linked to stress levels, such as "workload management," "resources and tools," "work-life balance," etc. We computed the mean of all replies given by a respondent for the questions included in a particular principal component (PC), which is made up of numerous questions, in order to produce aggregated scores for that principal component. We were able to calculate average scores for all PCs using this method.

Then, we plotted the correlation through “ggcorrplot” function in R for both the scales;

Fig 4.1: Correlation Plot Scale 1 (Source – Self Created)

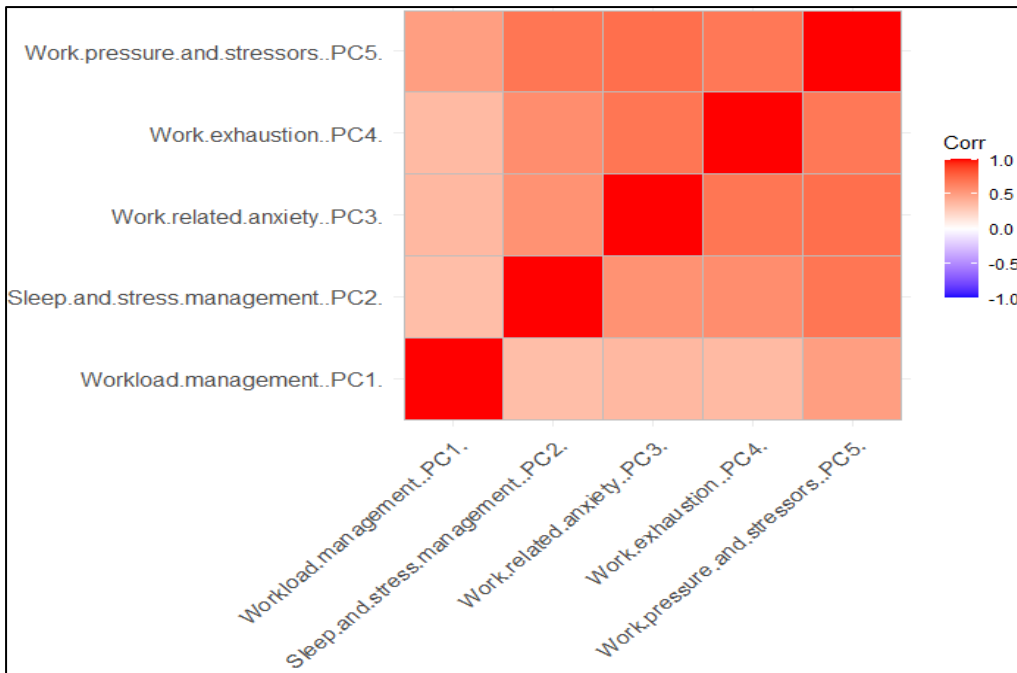
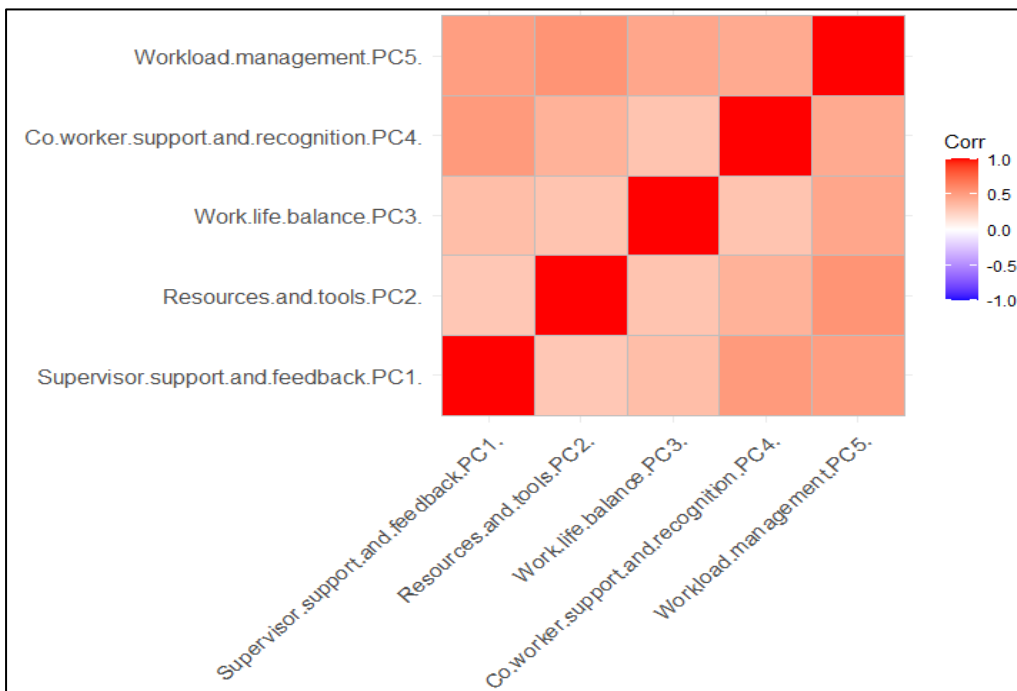


Fig 4.2: Correlation Plot Scale 2 (Source – Self Created)



Then after we run the PCA on the data, we summarize the results for both the scales;

Fig 4.3: PCA Summary Scale 1 (Source – Self Created)

```
> summary(data.pca)
Importance of components:
              Comp.1   Comp.2   Comp.3   Comp.4   Comp.5
Standard deviation  0.3724155 0.2132973 0.1489270 0.12152995 0
Proportion of Variance 0.6271803 0.2057348 0.1002961 0.06678879 0
Cumulative Proportion 0.6271803 0.8329151 0.9332112 1.00000000 1
```

Fig 4.4: PCA Summary Scale 2 (Source – Self Created)

```
> summary(data.pca)
Importance of components:
              Comp.1   Comp.2   Comp.3   Comp.4   Comp.5
Standard deviation  0.3435708 0.3192051 0.2328273 0.17103603 1.442799e-08
Proportion of Variance 0.3890671 0.3358395 0.1786734 0.09642002 6.861255e-16
Cumulative Proportion 0.3890671 0.7249065 0.9035800 1.00000000 1.000000e+00
```

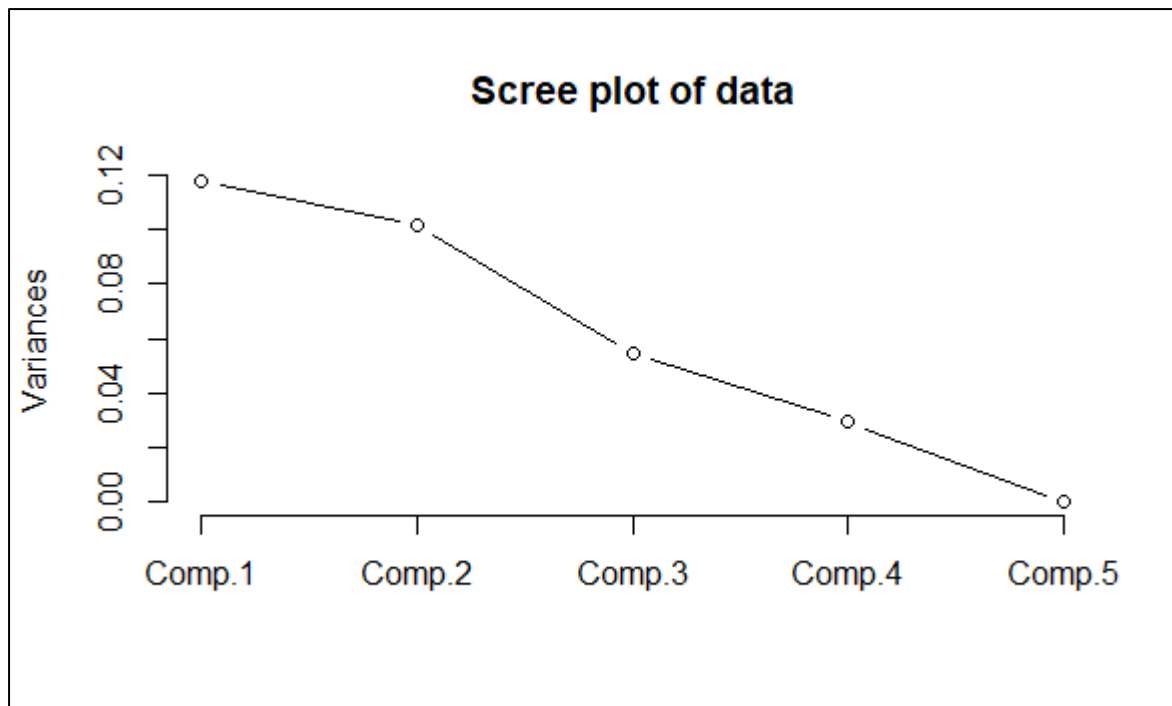
As seen highlighted in the figure, the cumulative proportion of Comp.1, Comp.2 and Comp.3 explains nearly 93.33% of the total variance in scale 1 and 90.35 % of the total variance in scale 2. This means that the first three principal components can accurately represent the data.

We can also see the visualization of this through a scree plot using “screeplot” function in R for both the scales;

Fig 4.5: Scree Plot Scale 1 (Source – Self Created)



Fig 4.6: Scree Plot Scale 2 (Source – Self Created)



We can now show the relative positions of the organizations, namely ESIC and SBI, in a 3D scatter plot since we have proven that three main components for each scale are adequate to appropriately display the corresponding data. The three primary components in this graphic can be represented by the X, Y, and Z axes, respectively. The coordinates for each organization are calculated by averaging the results for each principal component's scores. For instance, if the X-axis (corresponding to Scale 1) represents "Workload Management," the ESIC X-coordinate would be determined as the average of all the scores submitted by its employees for this primary component (i.e., the aggregated scores).

Fig 4.7: Representative Excel Worksheet Image for Scale 1 (Source – Self Created)

Name of yc	Type of Organization	Workload management (PC1)	Sleep and stress management (PC2)	Work-related anxiety (PC3)
SBI	PSB	5	4	4
SBI	PSB	3	4	3
SBI	PSB	2	2	1
SBI	PSB	3	2	3
SBI	PSB	3	3	3
SBI	PSB	1	1	1
SBI	PSB	3	3	3
SBI	PSB	5	3	3
SBI	PSB	3	2	2
SBI	PSB	3	2	2
	AVG (ESIC)	2.98	2.42	3.02
	AVG (SBI)	3.52	3.16	3.48

Fig 4.8: Representative Excel Worksheet Image for Scale 2 (Source – Self Created)

Name of your Organization	Type of Organization	Supervisor support and feedback(PC1)	Resources and tools(PC2)	Work-life balance(PC3)
SBI	PSB	3	1	2
SBI	PSB	3.5	4	3
SBI	PSB	3.5	4	5
SBI	PSB	3	3	3
SBI	PSB	4	4	4
SBI	PSB	5	5	5
SBI	PSB	4	4	4
SBI	PSB	4	5	3
SBI	PSB	5	5	3
SBI	PSB	4	5	4
	AVG (ESIC)	3.55	3.2	3.66
	AVG (SBI)	3.58	3.46	2.84

We then create the scatter plots for both the scales using “scatterplot3d” function in R;

Fig 4.9: Scatter Plot Scale 1 (Source – Self Created)

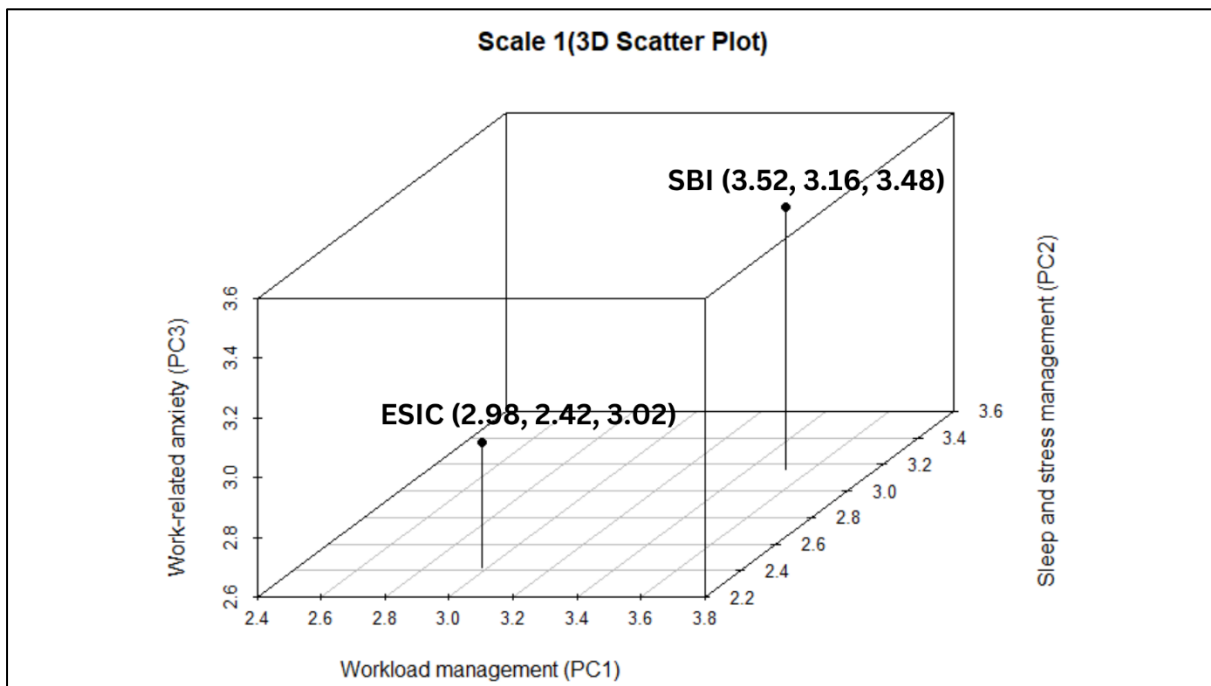
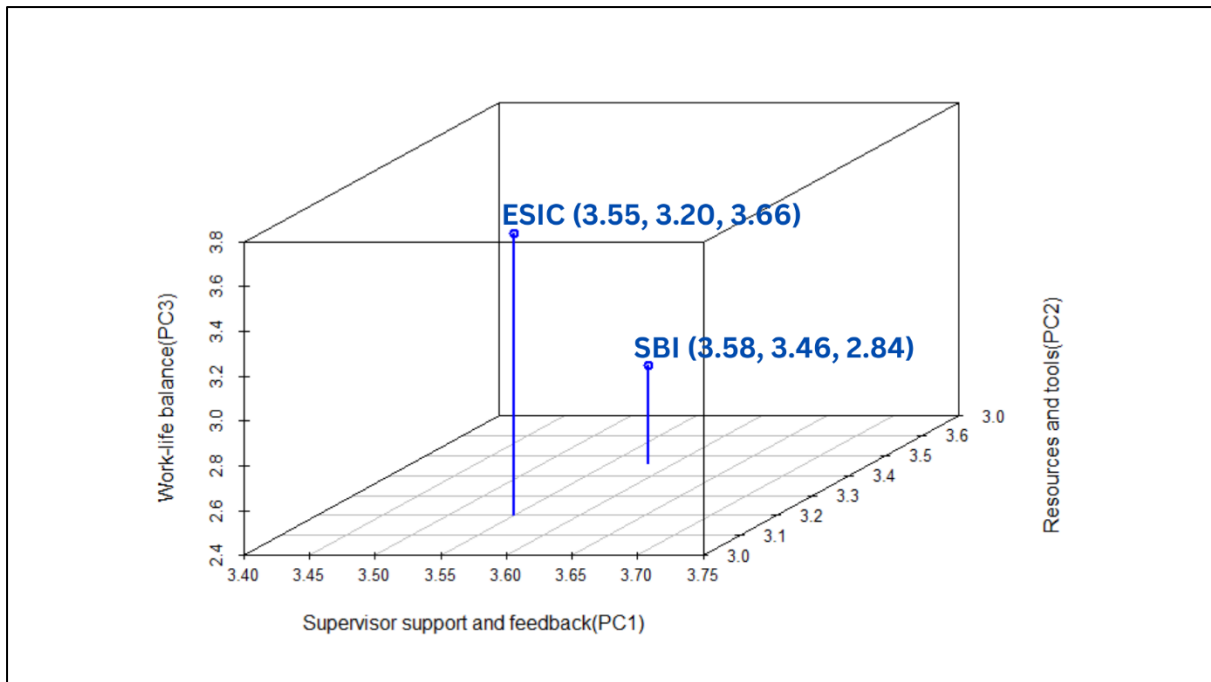


Fig 4.10: Scatter Plot Scale 2 (Source – Self Created)



Participants were then asked for additional remarks in order to record any extra feedback they chose to offer. We used the "wordcloud" function in R to produce a visual representation of the most frequently occurring terms within the dataset in order to gain relevant insights from the subjective replies.

Fig 4.11: Wordcloud (Source – Self Created)



4.4 Findings and Recommendations

Findings:

- The study analyzed stress levels of employees in two organizations, ESIC (a Central Government organization) and SBI (a Public Sector Bank), using principal component analysis (PCA) based on a set of questions.
- The scatter plot in Figure 4.9 shows that the principal components that contribute to stress are directly proportional to the average scores of the questions. Higher scores indicate higher levels of stress.
- The results of our analysis indicate that SBI has higher levels of stress than ESIC, which may be due to the profit-oriented nature of SBI and high amounts of fieldwork involved in the bank's operations.
- The scatter plot in Figure 4.10 shows that the principal components that contribute to a conducive work environment are inversely proportional to the average scores of the questions. Higher scores indicate a more conducive work environment.
- This suggests that SBI performs well in terms of supervisor support and resourcefulness, but still lags behind ESIC in overall work-life balance. This indicates that even though SBI employees have the necessary skills and support, they are still stressed, possibly due to the customer dependency nature of their work targets, which are mostly out of their control.
- Figure 4.11 highlights keywords such as "Pressure," "Balance," "Life," "Deadlines," and "Staff," indicating that PSB employees are burdened with high levels of pressure, tight deadlines, staff shortages or incompetence, and are yearning for a more balanced work profile and life.

Recommendations:

- Based on the findings of the study, it is recommended that Public Sector Banks (PSBs) take proactive measures to reduce stress levels and improve employee well-being. One approach could be to develop training programs that emphasize stress management and coping strategies to help PSB employees manage their workload and develop healthy work habits. These training programs could include mindfulness practices, time management skills, and communication techniques to promote a more productive and supportive work environment.
- In addition to training programs, PSBs could implement employee assistance programs (EAPs) to support employees dealing with personal or work-related issues. EAPs could provide counseling services, financial planning resources, and referral services to other health care providers to help employees manage their stress and well-being.
- To further reduce stress levels, PSBs could offer flexible work arrangements, such as telecommuting and flexible work hours, to help employees balance their work and

personal responsibilities. This could help mitigate the negative impact of long working hours and tight deadlines on employee well-being.

- Moreover, PSBs could provide adequate resources and support for employees, including technology, training, and adequate staffing levels, to ensure that employees have the necessary tools to perform their jobs effectively. Investing in employees and their skills can also improve the overall quality of the work, contributing to better employee satisfaction and reduced stress levels.
- To create a supportive work environment, PSBs could foster positive supervisor-employee relationships, promote teamwork, and recognize and reward employee achievements. This could help build a sense of camaraderie and mutual support among employees, which can reduce the negative impact of stress on employee well-being.
- Lastly, policies and procedures could be implemented to reduce the profit-oriented nature of PSBs, which could lead to a better work-life balance and improved employee well-being. This could include revising performance targets, reducing workload, and promoting a more employee-friendly work culture. By taking these steps, PSBs can reduce employee stress levels and promote a more supportive and productive work environment.

4.5 Limitations of the study

- Limited sample size: The study has a small sample size of 100 employees, which may not be representative of the entire public sector. This could lead to biased results, and the findings may not be generalized to other public sector organizations.
- Non-probability sampling: The researcher used a non-probability sampling method (convenience sampling) to select the sample, which could lead to a biased sample selection. The sample may not be representative of the entire population.
- Self-reporting bias: The study relies on self-reported data collected through questionnaires. Self-reported data is subjective and prone to biases such as social desirability bias, where respondents may not report their true feelings, leading to inaccurate results.
- Cross-sectional design: The study uses a cross-sectional design, which only captures data at one point in time. This design does not allow for the examination of changes in stress levels over time, and causal relationships between stress and job performance cannot be established.
- Limited scope: The study only focuses on two public sector organizations, namely the Employees' State Insurance Corporation (ESIC) and the State Bank of India (SBI). The findings may not be generalizable to other public sector organizations with different work environments and organizational cultures.

Overall, while the study provides valuable insights into the stress levels in public sector organizations, its limitations should be considered when interpreting the results. Future studies should consider larger sample sizes, randomized sampling methods, longitudinal designs, and objective measures to overcome the limitations of this study.

CHAPTER 5

CONCLUSION

Using principal component analysis, this study illustrates how stress affects employee wellbeing and the workplace in two organizations, ESIC and SBI. The findings indicate that SBI experiences more stress than ESIC, which can be ascribed to the nature of their business practices, including their reliance on customers and emphasis on profitability. Although SBI offers sufficient resourcefulness and supervisor assistance, it falls short of ESIC in terms of overall work-life balance.

The report makes a few suggestions to lessen stress and enhance employee wellbeing in PSBs. To start with, training courses that focus on stress management, coping mechanisms, and productive work practices can be created to assist staff in properly managing their workload. These courses could cover time-management tactics, communication strategies, and mindfulness exercises to encourage a more supportive and productive work environment. Employee assistance programmes (EAPs) can also be put into place to assist employees who are dealing with personal or professional issues. These programmes offer counselling services, resources for financial planning, and referral services to other healthcare professionals to assist employees in managing their stress and wellbeing.

Offering flexible work options, such as telecommuting and flexible work hours, can also assist employees in juggling their job and personal obligations, lessening the detrimental effects of lengthy workdays, and pressing deadlines on their wellbeing. Technology, training, and proper staffing numbers can all be offered to employees as resources and assistance, ensuring that they have everything they need to do their tasks well and improving employee satisfaction and lowering stress levels.

PSBs can promote teamwork, establish positive supervisor-employee relationships, and recognize and reward employee accomplishments to create a supportive work environment. PSBs can lessen the detrimental effects of stress on employee well-being by fostering a sense of camaraderie and mutual support among staff members.

Finally, policies and procedures can be put in place to lessen PSBs' focus on profit, including changing performance goals, lightening the workload, and encouraging a more employee-friendly workplace atmosphere. Such actions may result in an enhanced work-life balance and worker wellbeing.

We have achieved the objectives of the study as follows:

- Identified stress levels and sources of stress by floating a questionnaire among the employees.
- Compared stress levels in target organizations using principal component analysis.
- Studied the effects of stress on productivity by asking relevant questions to employees and reviewing previous literature.
- Analyzed the impact of stress on job performance by making visual representations.
- Recommended steps to make a conducive work environment for PSB employees.

In conclusion, this study emphasizes the significance of stress management and worker wellbeing promotion in the workplace. By putting into practice the study's recommendations, PSBs may foster a more encouraging and effective work environment, improving employee satisfaction and lowering stress levels.

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- v. <https://www.sbi.co.in/web/about-us>

ANNEXURE

A.1. Questionnaire:

1. How often do you feel overwhelmed by your workload?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
2. How frequently do you have difficulty sleeping due to work-related stress?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
3. Do you feel that your workload is manageable?
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
4. How often do you feel anxious about work-related issues?
 - a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always

5. Do you feel that your supervisor supports you in managing your workload?
- a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
6. How often do you feel exhausted at the end of the workday?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
7. Do you feel that you have the resources and tools to complete your job effectively?
- a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
8. How frequently do you feel pressure to meet work-related deadlines?
- a. Never
 - b. Rarely
 - c. Sometimes
 - d. Often
 - e. Always
9. Do you feel that your workload is fairly distributed among team members?
- a. Strongly agree

- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

10. How often do you feel irritable or easily annoyed at work?

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Always

11. Do you feel that your supervisor provides clear expectations and feedback on your work?

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

12. How frequently do you feel pressure to work outside of regular business hours?

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Always

13. Do you feel that you have control over your workload?

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree

e. Strongly disagree

14. How often do you feel physically tense or stressed at work?

a. Never

b. Rarely

c. Sometimes

d. Often

e. Always

15. Do you feel that you receive adequate support from coworkers?

a. Strongly agree

b. Agree

c. Neutral

d. Disagree

e. Strongly disagree

16. How frequently do you feel pressure to multitask or switch between tasks frequently?

a. Never

b. Rarely

c. Sometimes

d. Often

e. Always

17. Do you feel that you receive recognition for your work?

a. Strongly agree

b. Agree

c. Neutral

d. Disagree

e. Strongly disagree

18. How often do you feel overwhelmed by email or other forms of communication?

a. Never

- b. Rarely
- c. Sometimes
- d. Often
- e. Always

19. Do you feel that you have a good work-life balance?

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree

20. How frequently do you feel pressure to meet high performance standards?

- a. Never
- b. Rarely
- c. Sometimes
- d. Often
- e. Always

21. Any other comments you would like to share?

A.2. R Code for performing PCA

```
# Install and load the corrr package to calculate correlations
install.packages("corrr")

library('corrr')

# Install and load the ggcorrplot package to visualize
correlations
install.packages("ggcorrplot")

library(ggcorrplot)

# Install and load the FactoMineR package for principal
component analysis (PCA)
```

```

install.packages("FactoMineR")

library("FactoMineR")

# Install and load the factoextra package for additional PCA
visualization

install.packages("factoextra")

library(factoextra)

# Read in the data from a CSV file

data <- read.csv("data.csv")

# Check the structure of the data

str(data)

# Check for missing data in each column

colSums(is.na(data))

# Select the columns containing numerical data

numerical_data <- data[,3:22]

# Check the first few rows of the numerical data

head(numerical_data)

# Normalize the numerical data

data_normalized <- scale(numerical_data)

# Check the first few rows of the normalized data

head(data_normalized)

# Calculate the correlation matrix

corr_matrix <- cor(data_normalized)

# Visualize the correlation matrix using ggcorrplot

ggcorrplot(corr_matrix)

# Perform principal component analysis (PCA) on the
correlation matrix

data.pca <- princomp(corr_matrix)

# Check the summary of the PCA results

```

```

summary(data.pca)

# Check the loadings (correlation between the original
variables and the principal components) for the first two
principal components

data.pca$loadings[, 1:2]

# Visualize the scree plot of the PCA results

screeplot(data.pca, type="line", main="Scree plot of data")

```

A.3. R Code for making a Scatter plot

```

# Load the required packages

library(scatterplot3d)

library(rgl)

# Create a data frame with the coordinates and labels of the
points

points <- data.frame(

  x = c(3.55, 3.58),
  y = c(3.2, 3.46),
  z = c(3.66, 2.84),
  label = c("ESIC", "SBI")
)

# Set up the plot with appropriate labels and axis limits

s3d <- scatterplot3d(points$x, points$y, points$z, color =
"blue",

                                xlab = "Supervisor support and
feedback(PC1)",

                                ylab = "Resources and tools(PC2)",

                                zlab = "Work-life balance(PC3)",

                                xlim = c(3.4, 3.7), ylim = c(3.0, 3.6),
zlim = c(2.5, 3.8))

# Add droplines in the Y plane

```

```

for (i in 1:nrow(points)) {
  s3d$points3d(points$x[i], points$y[i], points$z[i], col =
"blue",
              type = "h", lwd = 2)
}

```

A.4. R Code for making a wordcloud

```

# Load necessary libraries
require(qdap)
require(qdapDictionaries)
require(tm)
require(wordcloud)

# Read the text file "data.txt" and store it in the variable
"x"
x = readLines("data.txt")

# Print the contents of "x"
x

# Collapse the text in "x" into a single string using a space
as a separator, and store the result in "x"
x = paste(x, collapse = " ")

# Convert all the text in "x" to lowercase, and store the
result in "x"
x = tolower(x)

# Load the "Top200Words" dictionary from the
"qdapDictionaries" library, and store it in the variable "t"
t = Top200Words

# Remove all words in "t" from "x", and store the result in
"x"
x = removeWords(x, t)

# Remove all English stopwords from "x", and store the result
in "x"

```

```

x = removeWords(x, stopwords("en"))

# Replace all non-word characters with a space in "x", and
store the result in "x"

x = gsub(pattern = "\\W", replacement = " ", x)

# Replace all digits with a space in "x", and store the result
in "x"

x = gsub(pattern = "\\d", replacement = " ", x)

# Replace all single-letter words in "x" with a space, and
store the result in "x"

x = gsub(pattern = "\\b[a-z]\\b{1}", replacement = " ", x)

# Remove any extra whitespace characters from "x", and store
the result in "x"

x = stripWhitespace(x)

# Create a word cloud of the words in "x", using a rainbow
color scheme with 7 colors, only showing words that occur at
least 10 times, and keeping the order of words in "x" fixed

wordcloud(x, colors = rainbow(7), min.freq = "10",
random.order = FALSE)

```

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