

ANALYSIS OF WORKPLACE STRESS AND JOB SATISFACTION USING SPSS

1. Background and Problem Statement

A multinational IT firm wanted to investigate whether workplace stress significantly impacted employee job satisfaction across different departments and experience levels. Despite implementing several well-being initiatives, the HR team observed consistent turnover and varying satisfaction levels across teams. They needed a structured data-driven approach to identify patterns in stress levels, understand job satisfaction trends, and recommend areas for intervention.

2. Objectives

- To measure the relationship between perceived workplace stress and job satisfaction
- To assess whether age, gender, and department moderate this relationship
- To provide evidence-based suggestions for HR policy enhancement
- To segment job satisfaction by tenure and stress perception level

3. Methodology

3.1 Survey Design and Data Collection

- Instrument: Structured online questionnaire
- Key Variables:
 - Perceived Stress Score (scale: 1–5)
 - Job Satisfaction Score (scale: 1–5)
 - Department (categorical: HR, IT, Finance, Marketing)
 - Age (continuous), Gender (categorical), Experience (years)
- Sample Size: 320 employees across 4 departments

3.2 Data Preparation in SPSS

- Missing value imputation using mean replacement for Likert-type responses
- Variable labeling and proper scaling

- Computed composite scores for multi-item constructs of stress and satisfaction

3.3 Analytical Techniques Used

- Descriptive Statistics for all variables
- Pearson's Correlation to examine stress-satisfaction relationship
- Multiple Linear Regression to model predictors of job satisfaction
- One-way ANOVA to compare satisfaction levels across departments
- Interaction term creation for experience $\times$ stress to test moderation

4. Key Results

- **Descriptive Stats:** Mean stress score = 3.2; Mean satisfaction = 3.7
- **Correlation:** Significant negative correlation ($r = -0.49$, $p < .001$) between stress and satisfaction
- **Regression Output:**
 - Stress negatively predicted satisfaction ($\beta = -0.41$, $p < .001$)
 - Age and gender not significant; department dummies for IT and Finance showed significant variance
- **Moderation:** Experience $\times$ Stress interaction term was significant ($p = .03$), indicating that stress affects less experienced employees more severely
- **ANOVA:** Satisfaction varied significantly across departments ($F = 4.83$, $p < .01$), with Marketing showing lowest scores

5. Interpretation and Insights

- Higher workplace stress significantly lowers job satisfaction.
- Less experienced staff are more vulnerable to stress-induced dissatisfaction.
- Departmental differences suggest role-based or managerial culture influences satisfaction levels.
- General well-being initiatives may be less effective if not tailored by experience and function.

6. Recommendations

- Introduce mentorship programs to support less experienced employees
- Department-specific action plans to address unique stressors
- Deploy periodic pulse surveys focusing on high-stress departments
- Stress management training integrated with manager KPIs

7. Deliverables

- .sav file with labeled, cleaned dataset and computed fields
- SPSS output file with all analysis commands and syntax
- Written report in APA format with tables, graphs, and interpretations
- Slide deck summary for HR presentation (optional)

8. Stakeholder Relevance

Academic:

- Suitable for research on occupational psychology, HR analytics, or organizational behavior
- Demonstrates application of SPSS for moderation and regression analysis

Corporate:

- Directly applicable to HR teams in identifying employee experience patterns
- Actionable insights for retention strategy, employee segmentation, and stress management planning