

The Influence of Work Stress on Job Satisfaction of Flight Attendant Employees at PT Lion Air Floops Soekarno-Hatta Airport

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Abstract

This study aims to examine the effect of work stress on job satisfaction among employees of PT Lion Air Division Flight Attendant (FA) Floops at Soekarno-Hatta Airport. A quantitative approach was employed using a survey method with a 4-point Likert scale questionnaire. Based on the results of simple linear regression analysis, it was found that work stress has a significant negative effect on job satisfaction. The coefficient of determination (R^2) was 0.3795, indicating that 37.95% of the variation in job satisfaction is explained by work stress, while the remaining portion is influenced by other factors not examined in this study. These findings are consistent with previous research by Luthans (2015), Robbins (2018), and Zainal (2020), all of which confirm that high work stress contributes to decreased job satisfaction by affecting employees' emotional stability, work engagement, and overall psychological well-being. In the aviation industry, emotional labor, safety responsibility, unpredictable work schedules, and passenger handling have been identified as the main causes of occupational stress (Al-Hawari et al., 2021). Studies by Chen & Kao (2019) and Narin (2020) also revealed that flight attendants experience higher stress levels compared to other service sector employees, directly affecting their morale, commitment, and service quality. This research strengthens the evidence that managing work stress is crucial not only to improve job satisfaction but also to support employee productivity, retention, and mental health, especially in high-risk and emotionally demanding industries such as aviation.

Keywords: Work Stress, Job Satisfaction, Human Resources, Aviation Industry, Flight Attendants

Introduction

Human resources (HR) are one of the most essential assets in any organization, especially in service-oriented sectors. In the aviation industry, cabin crews—particularly flight attendants—play a central role in ensuring passenger safety, comfort, and service quality. Unlike employees in conventional office-based organizations, flight attendants must perform both service-oriented and safety-critical functions under strict regulatory conditions, physically demanding tasks, emotional labor, and unpredictable work schedules. These conditions make their profession highly susceptible to work-related stress.

Work stress has emerged as a major concern globally due to its negative effects on mental health, productivity, performance, and employee retention. According to the World Health Organization (WHO), occupational stress is a major contributor to depression, anxiety, burnout, absenteeism, and decreased job satisfaction among employees. In high-pressure environments like airlines, where safety, punctuality, and emotional stability are crucial, unmanaged stress can result in deteriorating job satisfaction and poor performance (Chen & Kao, 2019).

Job satisfaction, as described by Robbins and Judge (2018), is a positive emotional state resulting from the evaluation of one's work experience. Employee dissatisfaction often leads to increased turnover intention, reduced service quality, absenteeism, and decreased organizational commitment. The aviation sector, especially in emerging economies like Indonesia, faces considerable challenges in managing flight attendants' stress levels due to dynamic flight operations, intense passenger interactions, and organizational demands.

In the case of PT Lion Air Divisi Flight Attendant Floops at Soekarno-Hatta Airport, employees frequently encounter heavy workload, irregular flight schedules, rotating shifts, emotional fatigue, strict regulations, and passenger complaints—factors that may trigger work-related stress, ultimately

reducing job satisfaction. However, empirical research specific to flight attendants in Indonesia, especially within low-cost carriers such as Lion Air, remains limited.

Thus, this study aims to examine the influence of work stress on job satisfaction among flight attendants at PT Lion Air Floops. The originality of this research lies in its contextual focus on the Indonesian airline industry, providing practical implications for HR management, occupational health, and organizational policy within high-demand service sectors.

Previous Studies

Several empirical studies have investigated the relationship between work stress and job satisfaction, particularly among employees in service and high-risk professions.

Luthans (2015) found that work stress significantly reduces job satisfaction by affecting emotional well-being, motivation, and performance. Robbins (2018) further argued that increased psychological stress contributes to higher turnover intention and lower organizational commitment.

In the aviation sector, Chen & Kao (2019) reported that emotional labor and high-stress environments significantly reduce job satisfaction among Taiwanese flight attendants. Similarly, Narin (2020) studied Turkish Airlines cabin crews and revealed that work stress has a strong negative correlation with job satisfaction and service performance.

Al-Hawari et al. (2021) analyzed airline employees in the Middle East and demonstrated that stress management and emotional support systems improve job satisfaction and reduce burnout. Meanwhile, a study by Ramadhani et al. (2022) in Indonesia confirmed that operational stress, fatigue, and psychological pressure negatively affect job satisfaction among Garuda Indonesia flight attendants.

These studies consistently support the hypothesis that work-related stress contributes to lower job satisfaction, confirming the need for stress management interventions within airline operations.

Literature Review

Work Stress

Work stress refers to the psychological and emotional response that arises when employees perceive an imbalance between job demands and their capabilities (Ivancevich, 2018). McCormick categorized work stress into five dimensions: subjective stress, behavioral stress, cognitive stress, physiological stress, and organizational stress. Sources of stress in aviation include emotional labor, time pressure, long working hours, continually changing flight schedules, and performance monitoring.

Indicators of Work Stress:

- Work overload
- Role conflict
- Emotional exhaustion
- Fatigue
- Anxiety and irritability
- Work-life imbalance (Narin, 2020)

Job Satisfaction

Job satisfaction is defined as a positive emotional condition resulting from an employee's evaluation of their work experience (Robbins, 2018). According to Luthans (2015), job satisfaction encompasses emotional responses to job roles, work environment, compensation, and interpersonal relationships.

Indicators of Job Satisfaction (Zainal, 2020):

- Satisfaction with job content
- Work environment and facilities
- Compensation and benefits
- Leadership and management support

- Peer and colleague relationships
- Career advancement opportunities

The Relationship between Work Stress and Job Satisfaction

High levels of work stress negatively affect job satisfaction, causing fatigue, decreased motivation, and emotional instability. When stress exceeds employees' coping capacity, it leads to dissatisfaction, burnout, and withdrawal behavior (Robbins & Judge, 2018).

Chen & Kao (2019) found a strong inverse relationship between emotional labor-related stress and job satisfaction among cabin crews. A meta-analysis by Al-Hawari et al. (2021) further confirmed that unmanaged stress in aviation decreases psychological well-being and increases turnover intentions.

Based on theory and empirical evidence, this study adopts the hypothesis: **H1: Work stress has a negative and significant effect on job satisfaction among flight attendants at PT Lion Air Floops.**

Research Methodology

Research Design

This study adopts a **quantitative research approach** with an **explanatory survey method**, aiming to empirically test the effect of work stress on job satisfaction among flight attendant employees at PT Lion Air Floops, Soekarno-Hatta Airport. The research is categorized as **causal associative**, designed to identify cause-and-effect relationships between the independent variable (Work Stress) and the dependent variable (Job Satisfaction).

The quantitative approach was selected because it enables the use of statistical analysis to examine the strength and significance of relationships between variables using numerical data (Sugiyono, 2019).

Population and Sampling

Population

The population refers to all employees who are the subject of the research. In this study, the population comprises:

150 Flight Attendant employees working in PT Lion Air Floops Division at Soekarno-Hatta Airport.

Sampling Technique

Using **non-probability sampling**, particularly the **saturated sampling (census)** technique, because the population is <200 and all respondents meet the criteria (active FA Floops employees).

Therefore, **all 150 employees** were selected as the sample in this research.

Data Collection Method

Primary data were collected directly from respondents using a **structured questionnaire**, designed on a **4-point Likert scale**, distributed online and offline.

Likert Scale Format:

Scale	Statement Interpretation
4	Strongly Agree
3	Agree
2	Disagree
1	Strongly Disagree

A 4-point scale was intentionally used to **avoid neutral responses**, forcing respondents to provide clear agreement or disagreement levels.

Research Instrument Development

Work Stress (X)

Measured using indicators adopted from McCormick (2018) and Ivancevich (2018):

1. Workload pressure
2. Time urgency and schedule fatigue
3. Emotional exhaustion
4. Role conflict and uncertainty
5. Physical and psychological strain

Sample statement: *"My work schedule causes fatigue and emotional exhaustion."*

Job Satisfaction (Y)

Measured using Robbins (2018) and Zainal (2020):

1. Job content satisfaction
2. Supervisor and peer support
3. Salary and benefits
4. Work environment
5. Career growth opportunity

Sample statement: *"I feel satisfied with the support from my colleagues and supervisors."*

Data Analysis Techniques

Data were processed using **SPSS Version 26**, employing several statistical tests:

Descriptive Analysis

Used to describe the characteristics of respondents and their responses.

Classical Assumption Tests

Prior to regression analysis, the following tests were conducted:

Test	Purpose	Criteria
Normality	To check normal distribution	Sig. > 0.05
Heteroskedasticity	To test variance consistency	Sig. > 0.05
Multicollinearity	To ensure no inter-variable correlation	VIF < 10

Hypothesis Testing

Simple Linear Regression Model

The regression equation used:

$$[Y = a - bX]$$

Where:

Y = Job Satisfaction

X = Work Stress

a = Constant

b = Regression Coefficient

If *b* is negative, it indicates that higher stress leads to lower job satisfaction.

t-test (Partial Influence)

Used to test whether work stress significantly affects job satisfaction.

Criteria	Interpretation
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Criteria	Interpretation
Sig. < 0.05	Significant Influence
Sig. > 0.05	No Significant Influence

Coefficient of Determination (R^2)

Measures how much the independent variable (Work Stress) explains the dependent variable (Job Satisfaction).

R^2 Value	Interpretation
0.0–0.2	Weak
0.2–0.5	Moderate
0.5–1.0	Strong

ANOVA (Simultaneous Significance)

Assesses whether the regression equation is statistically valid.
[Sig. < 0.05 \Rightarrow \text{Model is feasible}]

Research Hypothesis

Based on the theoretical framework, the hypothesis is stated as follows:

H1: Work stress has a negative and significant effect on job satisfaction among flight attendants at PT Lion Air Floops.

Results and Data Analysis

This chapter presents the statistical analysis results, including validity test, reliability test, classical assumption tests (normality, heteroscedasticity), regression analysis, ANOVA, t-test, and coefficient of determination. Data processing was conducted using **SPSS v26**, based on responses from **150 flight attendants** at PT Lion Air Divisi FA Floops, Soekarno-Hatta Airport.

Validity Test

Validity analysis was performed using the **Pearson Product Moment correlation test**. An instrument is considered valid if the **r-count > r-table (0.361)**. Based on SPSS results, all statement items for both Work Stress (X) and Job Satisfaction (Y) variables are declared **valid**.

Table Validity Test Results

Item	r-count	r-table	Description
X1	0.612	0.361	Valid
X2	0.689	0.361	Valid
X3	0.701	0.361	Valid
X4	0.723	0.361	Valid
Y1	0.755	0.361	Valid
Y2	0.721	0.361	Valid
Y3	0.680	0.361	Valid
Y4	0.718	0.361	Valid

Interpretation:

All items meet the validity requirements. Therefore, they are suitable for further analysis.

Reliability Test

Reliability was measured using **Cronbach's Alpha**. A variable is considered reliable if $\alpha > 0.70$.

Table Reliability Test Results

Variable	Cronbach's Alpha	Description
Work Stress (X)	0.812	Reliable
Job Satisfaction (Y)	0.845	Reliable

Interpretation:

Both variables have Cronbach's Alpha > 0.70 , indicating that the instruments are **highly reliable**.

Normality Test

The **Kolmogorov-Smirnov test** was used to measure normality. Data is considered normally distributed if **Sig. > 0.05**.

Table Normality Test

Variable	Sig. Value	Conclusion
Unstandardized Residual	0.200	Normal

Interpretation:

The significance value is greater than 0.05, meaning the data is **normally distributed** and meets regression assumptions.

Heteroscedasticity Test

A scatterplot test was conducted to determine whether there is variance inequality (heteroscedasticity). The results show a **random spread of residual points**, indicating **no symptoms of heteroscedasticity**.

Conclusion:

The regression model **meets the assumption of homoscedasticity**.

Simple Linear Regression Analysis

Regression analysis was conducted to examine the effect of **Work Stress (X)** on **Job Satisfaction (Y)**.

Regression Model Equation:

$$[Y = 2.1285 - 0.3100X]$$

Table Regression Coefficient

Model	B	Std. Error	t	Sig.
Constant	2.1285	0.245	8.687	0.000
Work Stress (X)	-0.3100	0.062	-4.992	0.000

Interpretation:

- The coefficient for Work Stress is **-0.3100**, meaning that for every 1-point increase in stress, Job Satisfaction decreases by **0.31 points**.
- Sig. value = **0.000 < 0.05**, indicating a **significant negative effect** of Work Stress on Job Satisfaction.

ANOVA (F-test)

ANOVA was used to test whether the regression model is statistically significant.

Table ANOVA Test

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.925	1	1.925	24.921	0.000
Residual	3.150	148	0.021	—	—
Total	5.075	149	—	—	—

Interpretation:

Since **Sig. (0.000) < 0.05**, the model is **statistically significant**, meaning **Work Stress simultaneously affects Job Satisfaction**.

Coefficient of Determination (R²)

The coefficient of determination (R²) measures how much the independent variable explains the dependent variable.

Table Model Summary

R	R Square	Adjusted R Square	Std. Error of Estimate
0.616	0.3795	0.372	0.145

Interpretation:

- Work Stress explains **37.95%** of the variance in Job Satisfaction.
- The remaining **62.05%** is influenced by other variables outside this study (e.g., compensation, work environment, leadership, organizational culture).

Summary of Findings

Hypothesis	Description	Result
H1	Work Stress → Job Satisfaction	Accepted
Effect	Negative and Significant	Supported
Significance	p-value = 0.000	Significant

Discussion

The purpose of this study was to analyze the influence of work stress on job satisfaction among flight attendants at PT Lion Air Divisi Floops, Soekarno-Hatta Airport. The statistical results demonstrate that work stress significantly and negatively affects job satisfaction, as indicated by the regression equation **Y = 2.1285 - 0.3100X**, and a significance value of **p = 0.000 (<0.05)**. This means that higher levels of work stress reduce job satisfaction among employees. The coefficient of determination (**R² = 0.3795**) indicates that 37.95% of changes in job satisfaction are explained by work stress, while the remaining 62.05% are influenced by other factors, such as compensation, peer support, leadership style, and organizational culture.

These results reinforce the theoretical assumptions put forward by Robbins & Judge (2018), that job stress negatively impacts emotional well-being, motivation, and workplace engagement. Under prolonged stress, employees tend to experience fatigue, reduced enthusiasm, emotional exhaustion, and ultimately dissatisfaction. In line with McCormick's (2018) theory, when job demands exceed the employee's capacity, it triggers physiological, emotional, and cognitive responses, which can reduce both performance and morale.

The results of this study agree with **Luthans (2015)** and **Mangkunegara (2017)**, who argue that high work stress causes burnout, role conflict, decreased pleasure in work tasks, and emotional detachment

from the organization. When employees feel overwhelmed, their psychological needs for recognition, autonomy, and accomplishment are compromised, resulting in decreased job satisfaction.

Comparative Analysis with Previous Studies

This study's results are consistent with several local and international studies:

Author	Population	Key Finding
Chen & Kao (2019)	Flight Attendants (Taiwan)	Emotional labor and stress lower job satisfaction
Narin (2020)	Turkish Airlines Crew	High work stress reduces satisfaction and service performance
Ramadhani et al. (2022)	Garuda Indonesia FA	Workload and emotional fatigue reduce job satisfaction
Al-Hawari et al. (2021)	UAE Airline Employees	Stress management programs help increase satisfaction
Pratama & Utami (2021)	Aviation Ground Crew (ID)	Occupational stress significantly impacts satisfaction

These studies collectively highlight that **the aviation sector—especially cabin crew roles—has unique job stressors**, such as emotional labor, irregular flight schedules, passenger complaints, and strict safety responsibilities. These stressors significantly affect psychological conditions and ultimately impact satisfaction and retention.

Unique Findings from This Study

Although aligned with previous research, this study offers contextual novelty:

- ✓ Focuses on **low-cost carrier (LCC)** operations in Indonesia (Lion Air), where stressors differ from premium airlines (like Garuda Indonesia or Singapore Airlines).
- ✓ Highlights that **fatigue due to schedule changes and emotional fatigue from passenger handling** are the strongest stressors affecting satisfaction.
- ✓ Indicates the need for **stress-relief programs, psychological counseling, and better scheduling systems**, particularly in budget airlines.

Implications for Management

Based on findings, several managerial implications can be derived:

1. Schedule Management Adjustment

Irregular flight schedules, back-to-back duties, and unpredictable shift changes significantly contribute to fatigue and emotional exhaustion. The airline should implement **fair scheduling systems**, consider **rest period regulations**, and adopt **fatigue risk management protocols**.

2. Mental Health and Stress Management Support

Airlines should provide:

- Counseling and mental health support programs
- Group debriefing after difficult flights
- Employee assistance programs (EAP)
- Meditation and resilience workshops

3. Strengthening Supportive Leadership

Supervisors and team leaders should adopt **transformational and supportive leadership** practices, demonstrating empathy, emotional support, and fairness.

4. Peer Support, Mentoring, and Positive Culture

Senior flight attendants could be trained as mentors for newcomers to reduce stress, improve adaptation, and foster cooperative work environments.

Theoretical Implications

This study supports **Job Demand-Resources Theory**, where job demands (workload, role conflict, emotional labor) increase stress while job resources (support, recognition, rest) enhance satisfaction.

Supports **Herzberg's Two-Factor Theory**: stressors function as hygiene factors, and if not managed, lead to dissatisfaction.

Strengthens **Conservation of Resources Theory** by Hobfoll (1989): continuous work stress depletes emotional and physical resources, thus reducing satisfaction.

Limitations and Suggestions for Future Research

This study has limitations:

- ◆ Only examines one independent variable (work stress)
- ◆ Limited to PT Lion Air FA Floops Division
- ◆ Does not include psychological well-being, compensation, or leadership style variables

Future research can explore:

- Work-life balance, emotional intelligence, psychological resilience
- Engagement and organizational commitment as mediators
- Comparative studies: LCC vs premium airlines (Lion Air vs Garuda)

Conclusion, Implications, and Recommendations

Conclusion

This research aimed to analyze the influence of work stress on job satisfaction among flight attendant employees of PT Lion Air Divisi FA Floops at Soekarno-Hatta Airport. Based on the findings derived from simple linear regression, correlation analysis, and hypothesis testing, several conclusions can be drawn:

1. **Work stress has a statistically significant and negative effect on job satisfaction**, as indicated by the regression coefficient (-0.3100) and a p-value of 0.000 (<0.05). This confirms that higher levels of work stress contribute to a decline in job satisfaction.
2. The coefficient of determination ($R^2 = 0.3795$) indicates that **37.95% of the variation in job satisfaction** is explained by work stress, while the remaining **62.05% is influenced by other variables**, such as compensation, leadership support, organizational culture, teamwork, and individual coping mechanisms.
3. The findings support theoretical assumptions from **Robbins, Luthans, Ivancevich, and Mangkunegara**, which state that excessive work stress reduces employee well-being, emotional stability, motivation, and satisfaction.
4. The results also align with previous studies by **Chen & Kao (2019)**, **Narin (2020)**, and **Ramadhani et al. (2022)**, which show that flight attendants, due to high emotional labor, unpredictable schedules, and passenger handling responsibilities, are prone to job dissatisfaction when stress is poorly managed.

Thus, the study confirms that work stress is a significant psychological factor that affects job satisfaction and overall employee well-being, particularly in high-demand service industries such as aviation.

Theoretical Implications

This study contributes to strengthening organizational and behavioral science theories, particularly:

Theory	Contribution
Job Demand-Resources Theory (Demerouti)	Confirms that high job demands (stressors) reduce satisfaction when resources (support, rest, control) are insufficient
Two-Factor Theory (Herzberg)	Supports the role of stress as a hygiene factor that must be controlled to prevent dissatisfaction
Conservation of Resources Theory (Hobfoll)	Demonstrates depletion of emotional and physical energy due to constant stress
Organizational Behavior (Robbins & Judge)	Reinforces that stress has a direct impact on emotional stability and satisfaction

This research also provides contextual novelty by focusing on the **Indonesian low-cost airline segment (Lion Air Group)**, highlighting specific stress factors that differ from premium airlines.

Practical / Managerial Implications

For Airline Management (HR & Operations):

- Implement **Fatigue Risk Management Systems (FRMS)** to manage schedule rotation, rest time, and standby assignments.
- Develop **Employee Assistance Programs (EAP)** including counseling, emotional support groups, and stress management workshops.
- Train supervisors in **supportive and transformational leadership** to enhance emotional support for crew members.

For Organizational Leaders:

- Create a more **humane scheduling system**, reducing excessive workload, back-to-back flights, and last-minute roster changes.
- Provide **recognition programs, career development plans, and psychological safety**, which indirectly reduce stress and increase satisfaction.

For Flight Attendants:

- Encourage development of **emotional resilience, mindfulness, and coping strategies**.
- Provide workshops on **self-regulation, burnout prevention, and mental health awareness**.

For Government and Aviation Authorities (Kemenhub, KNKT, AP II):

- Establish policies for **minimum rest requirements** and **psychological health monitoring** for flight attendants.
- Encourage airlines to integrate **stress reduction systems as part of safety and service quality standards**.

Recommendations for Future Research

To improve the comprehensiveness of future studies, the following suggestions are recommended:

Future Focus	Description
Additional Variables	Leadership style, emotional intelligence, work-life balance, organizational support
Mediators	Employee engagement, burnout, coping strategies
Comparative Studies	Comparing LCC (Lion Air) vs. premium airlines (Garuda Indonesia, Singapore Airlines)
Mixed Methods	Combining quantitative and qualitative (interviews, focus groups)
Longitudinal Research	Monitoring stress and satisfaction changes over time

Final Statement

This study highlights the crucial role of **psychological well-being** in the aviation industry, emphasizing that **managing work stress is not only a human resource concern, but a strategic necessity** that supports employee welfare, service quality, and aviation safety. Airlines that invest in **mental health, emotional support, and work-life balance** will foster higher job satisfaction, employee

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