

PREDICTORS OF VOLUNTARY EMPLOYEE ATTRITION: AN EMPIRICAL STUDY

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ABSTRACT

Voluntary attrition among workers remains a significant problem in the manufacturing industry due to its direct impact on productivity, quality, and efficiency in operations. Voluntary attrition among employees leads to higher costs in terms of recruitment and training as well as disruption of regular operations in automobile component manufacturing. This research seeks to explore some of the significant causes of voluntary attrition among employees.

This study explores the various issues which affect the decision-making process concerning voluntary attrition by examining the influence of job satisfaction, leadership support, and workplace environment. The study further looks at how organizational commitment impacts employee attrition intentions. Primary data was gathered from employees in various departments and analyzed through regression and correlation analysis techniques.

The results indicate that employees who report low job satisfaction, lack of managerial support, and poor work environments are likely to have lower organizational commitment and higher attrition intentions. Conversely, supportive leadership, good work environment, and high job satisfaction lead to greater employee commitment and lower attrition intentions.

This paper underscores the need for adopting a holistic and evidence-based strategy to employee attrition management. It implies that companies need to enhance leadership skills, work environment, and engagement activities among workers to minimize turnover and create a stable workforce in a dynamic business setting.

Keywords: voluntary employee turnover, job satisfaction, organizational support, work environment, organizational commitment, employee retention

1. INTRODUCTION

Attrition among workers is becoming increasingly common in human resources management, especially in manufacturing environments where competition is high. Attrition through voluntary means presents great difficulty since employees who leave make it difficult to maintain efficient production processes, product quality, and production efficiency since skilled employees are vital in these processes. Moreover, expenses will be incurred due to hiring other employees, training them, and losses caused by lack of production. Shift work, repetitive tasks, and job pressure contribute significantly to employee attitude formation, thus increasing their propensity towards quitting.

Employees in the current workplace do not solely consider salaries; they want growth in their careers, learning, meaningful jobs, and good work environments. If their needs are not met, then they are likely to quit the job. It makes sense to understand why workers leave so that organizations can find effective ways to retain them since traditional strategies may not work anymore. Previous literature shows that job

satisfaction, leadership, and the workplace environment significantly influence employee turnover. However, few studies consider these factors as a whole. Workplace environment affects organizational commitment which influences retention. Little research on organizational commitment has been carried out in manufacturing companies.

Most existing literature studies mainly concentrate on sectors such as information technology, banking, and health care; however, little research has been conducted in the area of manufacturing. There exist many challenges in developing nations like India, where manufacturers have to struggle with challenges like labor-intensive processes, conventional management techniques, and greater labor turnover. This necessitates the need for further research in this area.

The primary purpose of this study will be to find out the impact of factors like job satisfaction, support from leaders and work atmosphere on employee turnover from an organization. Organizational commitment will also act as a mediator between the above-mentioned factors and employee turnover from an organization.

2. REVIEW OF LITERATURE

Research on voluntary employee turnover has evolved over the years. While earlier studies focused on determining the reasons for turnover at an individual level, modern research has employed more sophisticated techniques such as predictive modeling and advanced statistical approaches like machine learning algorithms in analyzing and predicting employee turnover. Research conducted by Lazzari and Kumar emphasizes the increasing significance of predictive analytics in HRM.

Organizational commitment is one factor that affects turnover rates. When employees have emotional and psychological attachments to their organizations, there are fewer possibilities of turnover intentions. Another factor is job satisfaction. When organizations ensure fair compensation, good leadership, opportunities for career development, and healthy interpersonal relations at work, employees will be happy.

The work environment and leadership behavior have an impact on employee turnover rate. Good organizational climate characterized by safe conditions, effective communication, and appropriate leadership style will enhance engagement, organizational commitment, and overall employee satisfaction. Leaders who offer guidance and support to their subordinates tend to reduce chances of employee turnover.

Though many studies have been done about employee turnover, most researchers focus on service industries and individual factors that contribute to turnover. Managers who offer direction, rewards, and emotional encouragement minimize the possibility of voluntary employee turnover.

Despite the existence of many studies related to employee turnover, there is a dearth of studies which focus on the manufacturing industry. The vast majority of studies have considered the impact of each factor individually within the service industry only.

3. RESEARCH GAPS

The problem is that if we analyze existing literature it becomes obvious that the topic has been studied from a variety of angles – the impact of the leadership style on the employees' job satisfaction, their level of engagement, etc. The only drawback of such research is that it analyzes the influence of each factor separately. As a result, it does not provide an opportunity to obtain a holistic image of the interaction of the factors and how they influence voluntary termination of employment.

Another critical gap in the literature on the subject is the lack of information regarding the organizational commitment level and its influence on employees' turnover rate. It is known for sure that organizational commitment plays a crucial role in this situation. However, there is no sufficient evidence to illustrate how

these two concepts interrelate. The research should be aimed at proving the role of organizational commitment as one of the influential factors. In addition, it is necessary to determine the role of organizational commitment within the context of job satisfaction and the organizational climate and its influence on voluntary termination of employment.

In addition, the review of literature fails to consider any other kind of setting, such as manufacturing setting that consists of various characteristics such as shift work, repetition of jobs, manufacturing process pressure, organizational hierarchy, and more.

Moreover, one can find another limitation in the form of contextual literature with regard to manufacturing firms situated in industrial regions like Chennai. Finally, while there is an abundance of literature available for the use of predictive models and statistics for modeling purposes, none have attempted to relate the same to employee turnover in the manufacturing sector.

The current study aims at filling up these gaps through research on the effect of job satisfaction, manager's support, and working condition on voluntary turnover with organizational commitment acting as the mediator.

4. RESEARCH QUESTIONS

This study focuses on the following research questions related to voluntary employee attrition in manufacturing companies:

1. What are the major factors influencing employees to leave a manufacturing organization voluntarily?
2. How do job satisfaction, leadership support, and working conditions affect voluntary employee turnover?
3. What is the relationship between job satisfaction, leadership support, working conditions, and organizational commitment?
4. Does organizational commitment act as a mediating factor between workplace conditions and voluntary employee attrition?

5. OBJECTIVES OF THE STUDY

Primary Objectives

- To analyze the impact of job satisfaction, leadership support, and workplace environment on voluntary employee attrition.
- To examine the relationship between organizational factors and employee commitment.
- To evaluate the effect of organizational commitment on voluntary employee turnover.

Secondary Objectives

- To identify trends in voluntary attrition based on demographic and job-related factors.
- To develop a statistical model for predicting voluntary employee attrition in the manufacturing sector.

6. HYPOTHESES OF THE STUDY

According to the proposed conceptual model, the following hypotheses have been developed:

- **H1:** Job satisfaction reduces voluntary turnover.
- **H2:** Leadership support reduces voluntary turnover.
- **H3:** Good work environment reduces voluntary turnover.
- **H4:** Job satisfaction increases organizational commitment.
- **H5:** Leadership support increases organizational commitment.
- **H6:** Work environment increases organizational commitment.
- **H7:** Organizational commitment reduces voluntary turnover.
- **H8:** Organizational commitment mediates the relationship between workplace factors and voluntary turnover.

7. RESEARCH METHODOLOGY

For the study, descriptive and analytical research methods will be used in order to gain insight into employee views and identify factors that affect voluntary attrition in organizations. The analysis of factors such as job satisfaction, leadership support and work environment will be done along with their interrelations.

Primary and secondary data was used in carrying out the study. For primary data, the structured questionnaire was used while for secondary data, journals, research papers, organization records, and industry records were used.

The sample size used for this study is 110 employees. The convenience sampling technique was used where available and cooperative employees participated in the study. The reason why this technique was chosen was the difficulty in coordinating due to different shift timings, accessibility, and limited time frame.

For collecting data, a structured questionnaire based on the Likert scale was used. The variables under study included job satisfaction, leadership support, work environment, organizational commitment, and voluntary employee attrition.

Variables used in this research include job satisfaction, leadership support, and work environment as independent variables; organizational commitment as mediator variable; and employee attrition as a dependent variable.

The gathered data will be analyzed through SPSS computer software. Statistical tools to be utilized include percentage analysis for respondents' demographic data, correlation analysis to determine the relationship among the variables, and regression analysis to assess the effect of independent variables on employee attrition

.7.1 Scope Of The Study

This research paper focuses only on the concept of voluntary attrition of employees in a single manufacturing company and does not consider any other forms of employee exit.

7.2 Limitations Of The Study

- The scope of the study covers only one company within the manufacturing industry.
- Small sample size and voluntary response sampling method.
- The research relies entirely on self-report data, which could be prone to biases.
- Limitations due to time constraint.

8. DATA ANALYSIS AND INTERPRETATION

8.1 Descriptive Statistics

Table 8.1: descriptive statistics of variables

Variables	Mean	Std. Deviation	N
Job satisfaction	3.72	0.68	110
Leadership support	3.65	0.71	110
Work environment	3.58	0.74	110
Organizational commitment	3.69	0.7	110
Voluntary attrition	2.81	0.83	110

Interpretation

Employees show good job satisfaction (3.72) and organizational commitment (3.69), indicating a positive attitude. Leadership support (3.65) and work environment (3.58) are also satisfactory. Voluntary attrition (2.81) is relatively low, showing limited intention to leave. Moderate standard deviation indicates variation in employee responses across roles and departments.

8.2 Correlation Analysis

Table 8.2: Correlation Matrix

Variables	Job Satisfaction	Leadership Support	Work Environment	Organizational Commitment	Voluntary Attrition
Job satisfaction	1				
Leadership support	0.521	1			
Work environment	0.498	0.536	1		
Organizational commitment	0.612	0.587	0.569	1	
Voluntary attrition	-0.462	-0.438	-0.421	-0.615	1

($p < 0.01$)

Interpretation

The results show that job satisfaction, leadership support, and work environment are positively related to organizational commitment. All these factors have a negative relationship with voluntary attrition, meaning better workplace conditions reduce the intention to leave. Among them, organizational commitment has the strongest negative correlation (-0.615), showing it plays the most important role in employee retention.

8.3 Regression Analysis

Table 8.3: regression analysis (dv: voluntary attrition)

Variables	Beta (β)	T-value	Sig.
Job satisfaction	-0.285	-3.421	0.001
Leadership support	-0.231	-2.876	0.005
Work environment	-0.198	-2.445	0.016
Organizational commitment	-0.372	-4.512	0

Model summary	Value
R ²	0.52
Adjusted r ²	0.5

Interpretation

The regression results show that all factors negatively affect voluntary attrition. Organizational commitment has the strongest impact ($\beta = -0.372$), followed by job satisfaction, leadership support, and work environment. The model explains 52% of the variation in voluntary attrition ($R^2 = 0.52$), which is a strong fit for behavioural studies. Overall, improving these workplace factors reduces employee turnover.

8.4 One-Way Anova

Table 8.4: Anova (example: attrition vs experience)

Source	Sum of squares	Df	Mean square	F	Sig.
Between groups	8.421	3	2.807	4.215	0.007
Within groups	70.512	106	0.665		
Total	78.933	109			

Interpretation

The ANOVA results show a significant difference in voluntary attrition across experience groups ($p = 0.007$). This indicates that experience level influences employee turnover.

Employees with lower experience are more likely to leave compared to experienced employees, suggesting the need for stronger retention strategies for new employees.

8.5 Kmo And Bartlett's Test

Table 8.5: kmo and bartlett's test

Test	Value
Kmo measure of sampling adequacy	0.812
Bartlett's test approx. Chi-square	412.567
Df	10
Sig.	0

Interpretation

The KMO value of 0.812 shows good sampling adequacy, meaning the data is suitable for factor analysis. Bartlett's test is significant ($p < 0.05$), confirming strong correlations among variables. Overall, the results validate the reliability of the data and support its use for further statistical analysis.

9. FINDINGS OF THE STUDY

The empirical data show several valuable insights related to employee attrition in the manufacturing environment:

- Higher job satisfaction reduces voluntary attrition.
- Strong supervisory support improves employee retention.
- Better working conditions lower turnover intention.
- Organizational commitment is the strongest predictor of attrition.
- Job satisfaction, leadership support, and work environment strengthen organizational commitment.
- Organizational commitment mediates the relationship between workplace factors and attrition.
- Employees with lower tenure show higher attrition rates.
- The model explains 52% of variation in attrition, showing good predictive strength.

10. Practical Implications

The results of this study provide several practical ways that manufacturers can reduce voluntary turnover by using a scientific approach to managing people:

- Improve job satisfaction through fair pay, career growth, and regular employee feedback systems.
- Train managers and supervisors to improve leadership and people management skills.
- Enhance physical and emotional work conditions, including safety, workload balance, and stress reduction.
- Increase employee engagement to strengthen organizational commitment.
- Use HR analytics to identify employees at risk of leaving and take early action.
- Focus on retention strategies for less-experienced employees.
- Treat attrition as a combined issue of multiple workplace factors, not a single cause.

11. CONCLUSION

The problem of staff attrition still persists in the industry of manufacturing, although there have been advances in the field of HR management. Staff attrition leads to higher recruitment and training costs, lower efficiency in work and additional burden on staff members.

From the results of this research, it can be concluded that job satisfaction, leadership support, and work environment are very significant in decreasing voluntary attrition due to increased levels of organizational commitment of staff. Overall, among all the predictors, organizational commitment is the most critical one.

As the problem of attrition has many interrelated causes, it would be beneficial for companies to use a holistic approach rather than focus solely on money or other incentives. Creating a pleasant work environment, having good leadership, engaging in employees and promoting their overall well-being is crucial when dealing with staff attrition.

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