

# Assessing the Impact of Workload on Job Satisfaction Among Pharmacy Technicians: Exploring the Relationship Between Workload, Stress Levels, and Job Satisfaction Across Various Pharmacy Settings

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## Abstract

This study examines the relationship between workload, stress levels, and job satisfaction among pharmacy technicians in a large tertiary hospital. A cross-sectional survey of 50 pharmacy technicians revealed a significant negative correlation between workload and job satisfaction, indicating that higher workload is associated with lower job satisfaction. Additionally, years of experience positively predicted job satisfaction, suggesting that more experienced technicians may better manage workload-related stress. These findings highlight the importance of effective workload management and support systems to enhance job satisfaction and reduce burnout among pharmacy technicians.

**Keywords:** Pharmacy technicians, workload, job satisfaction, stress, tertiary hospital, experience, burnout

## Introduction

Pharmacy technicians play a crucial role in the healthcare system, supporting pharmacists in dispensing medications, managing inventory, and providing patient care in various settings, including community pharmacies, hospitals, and retail chains. As the demand for pharmacy services continues to grow, so too does the workload placed on pharmacy technicians. Increased responsibilities and higher workloads have raised concerns about the potential impact on job satisfaction and overall well-being among this vital group of healthcare professionals (Koehler and Brown, 2017).

Job satisfaction is a critical factor in maintaining a motivated and effective workforce, particularly in healthcare, where the quality of care can directly impact patient outcomes. For pharmacy technicians, job satisfaction is influenced by various factors, including workload, stress levels, and the work environment (Desselle and Holmes, 2017). A high workload, often coupled with time pressures and resource constraints, can lead to increased stress, burnout, and ultimately, lower job satisfaction (Gaither et al., 2008).

The relationship between workload, stress, and job satisfaction is well-documented in healthcare literature. Studies have shown that excessive workload is a significant predictor of job dissatisfaction and burnout among

healthcare workers, including pharmacy technicians (García et al., 2019). Moreover, stress resulting from high workload can negatively affect job performance, leading to errors, reduced quality of care, and decreased job satisfaction (Shanafelt et al., 2015). Understanding how these factors interplay is essential for developing strategies to improve job satisfaction and retain skilled pharmacy technicians in the workforce.

Despite the growing recognition of these issues, there is limited research specifically focused on how workload affects job satisfaction among pharmacy technicians across different pharmacy settings. This study aims to fill this gap by investigating the relationship between workload, stress levels, and job satisfaction among pharmacy technicians working in various environments, including community pharmacies, hospitals, and retail settings. By examining these factors, this study seeks to provide insights that can inform policy and practice improvements aimed at enhancing job satisfaction and reducing stress among pharmacy technicians.

## Literature Review

### The Role of Pharmacy Technicians

Pharmacy technicians are integral members of the healthcare team, responsible for supporting pharmacists in a variety of tasks, including medication dispensing, inventory management, and providing customer service. Their role has expanded significantly in recent years, driven by changes in healthcare delivery models, increased patient demand, and the evolving scope of pharmacy practice (Desselle and Holmes, 2017). As pharmacy technicians take on more responsibilities, their workload has correspondingly increased, raising concerns about the potential impact on their job satisfaction and overall well-being.

### Workload and Job Satisfaction in Healthcare

The relationship between workload and job satisfaction is well-documented across various sectors, particularly in healthcare. High workload is often cited as a key factor contributing to job dissatisfaction, stress, and burnout among healthcare workers, including pharmacy staff. Studies have shown that excessive workload can lead to feelings of being overwhelmed, decreased job performance, and a higher likelihood of errors, all of which can negatively impact job satisfaction (Gaither et al., 2008). In the context of pharmacy practice, the increased responsibilities placed on pharmacy technicians, combined with the pressures of meeting patient needs in a timely manner, can exacerbate these issues.

### Stress and Burnout Among Healthcare Workers

Stress and burnout are closely linked to workload and job satisfaction. Burnout, characterized by emotional exhaustion, depersonalization, and a reduced sense of personal accomplishment, is a common outcome of prolonged exposure to high levels of work-related stress (Maslach & Jackson, 1981). Healthcare professionals, including pharmacy technicians, are particularly vulnerable to burnout due to the high-stakes nature of their work and the constant demands placed on them. Studies have shown that burnout not only affects job satisfaction but also has serious implications for patient safety and the overall quality of care provided (Shanafelt et al., 2015).

In pharmacy settings, stress can arise from various sources, including time pressures, the complexity of tasks, and the need to maintain accuracy in medication dispensing. Research indicates that pharmacy technicians who experience high levels of stress are more likely to report lower job satisfaction, higher turnover intentions,

and greater incidences of job-related errors (Hossain, 2020). Addressing the factors that contribute to stress and burnout is therefore critical in promoting job satisfaction and retention among pharmacy technicians.

### Factors Influencing Job Satisfaction Among Pharmacy Technicians

Job satisfaction among pharmacy technicians is influenced by a range of factors, including work environment, professional relationships, recognition, and opportunities for advancement (Desselle and Holmes, 2017). However, workload and stress are consistently identified as key determinants of job satisfaction. A study by Koehler and Brown (2017) found that pharmacy technicians who reported higher levels of workload also reported lower levels of job satisfaction, suggesting a direct correlation between these variables.

Moreover, the organizational support provided to pharmacy technicians can significantly impact their job satisfaction. Supportive work environments, characterized by clear communication, adequate resources, and opportunities for professional development, can mitigate the negative effects of high workload and stress. Conversely, a lack of support can exacerbate feelings of dissatisfaction and contribute to higher turnover rates (Gaither et al., 2008).

### Gaps in the Literature

While the existing literature provides valuable insights into the relationship between workload, stress, and job satisfaction among healthcare workers, there is relatively little research focused specifically on pharmacy technicians. Most studies tend to group pharmacy technicians with pharmacists or other healthcare professionals, potentially overlooking the unique challenges and experiences of this specific group. Additionally, much of the research has been conducted in specific settings, such as community pharmacies or hospitals, with limited exploration of how these dynamics play out across different types of pharmacy environments.

Given the critical role that pharmacy technicians play in the healthcare system, there is a clear need for more targeted research that examines how workload impacts their job satisfaction, particularly in the context of different pharmacy settings. Understanding these dynamics is essential for developing strategies to improve job satisfaction and reduce stress among pharmacy technicians, ultimately leading to better outcomes for both staff and patients.

The literature underscores the importance of workload and stress as key factors influencing job satisfaction among healthcare workers, including pharmacy technicians. While the role of pharmacy technicians has expanded, so too have the challenges associated with managing their workload. Addressing these challenges through supportive work environments, professional development opportunities, and workload management strategies is crucial in promoting job satisfaction and reducing burnout. However, further research is needed to explore these relationships specifically among pharmacy technicians in various pharmacy settings, to better understand their unique experiences and needs.

## Methodology

### Study Design

This study employed a cross-sectional quantitative research design to assess the impact of workload on job satisfaction among pharmacy technicians working in a large tertiary hospital. The study aimed to quantify the

relationship between workload, stress levels, and job satisfaction, providing insights into how these factors interact in a high-pressure healthcare environment.

### Setting

The research was conducted in a large tertiary hospital located in an urban area, known for its comprehensive healthcare services and extensive pharmacy department. The hospital's pharmacy department includes various units such as inpatient, outpatient, and specialized services, making it an ideal setting to examine the diverse experiences of pharmacy technicians in different roles.

### Population and Sample

The study population consisted of pharmacy technicians employed at the tertiary hospital during the study period. A purposive sampling method was used to ensure that the sample included pharmacy technicians from different units within the hospital (e.g., inpatient, outpatient, specialized services). This approach allowed for a more comprehensive understanding of how workload and job satisfaction may vary across different pharmacy settings within the hospital.

A total of 50 pharmacy technicians were selected to participate in the study. This sample size was determined to be adequate for conducting meaningful statistical analyses while being manageable within the study's scope and resources.

### Data Collection Methods

Data were collected using a structured survey questionnaire designed specifically for this study. The questionnaire was developed based on existing literature and validated scales, such as the Job Satisfaction Survey (JSS) and the Workload and Stress Scale (WSS). The survey included sections on demographic information, workload (measured by the number of tasks performed, hours worked, and perceived workload), stress levels, and job satisfaction.

The survey was distributed electronically to the pharmacy technicians via the hospital's internal email system, with reminders sent to encourage participation. The survey was anonymous to ensure confidentiality and to encourage honest responses.

### Data Analysis

The quantitative data collected from the survey were analyzed using statistical software (SPSS, Version 27). Descriptive statistics, including means, standard deviations, frequencies, and percentages, were calculated to summarize the demographic characteristics of the participants and their responses to key survey questions.

Inferential statistical tests were conducted to examine the relationships between workload, stress levels, and job satisfaction. Pearson's correlation coefficient was used to assess the strength and direction of the relationship between these variables. Additionally, multiple regression analysis was performed to identify the predictors of job satisfaction among the pharmacy technicians, controlling for demographic variables such as age, gender, and years of experience.

## Ethical Considerations

The study received ethical approval from the ethics committee. Participation in the study was voluntary, and informed consent was obtained from all participants before they completed the survey. Participants were assured that their responses would be kept confidential, and all data were anonymized to protect their identities. The researchers adhered to ethical guidelines throughout the study, ensuring that the rights and well-being of the participants were prioritized.

## Findings

### Demographic Characteristics of Participants

The study sample consisted of 50 pharmacy technicians working in various units of the tertiary hospital, including inpatient, outpatient, and specialized services. The majority of participants were female (60%), with an average age of 35.2 years (SD = 8.6). The average years of experience as a pharmacy technician was 7.8 years (SD = 4.5).

Table 1. Demographic Characteristics of Participants

Characteristic	Frequency (n = 50)	Percentage (%)
Gender		
- Male	20	40%
- Female	30	60%
Age (years)		
- Mean (SD)	35.2 (8.6)	
Years of Experience		
- Mean (SD)	7.8 (4.5)	

### Workload and Job Satisfaction

The survey results indicated that pharmacy technicians experienced varying levels of workload, with some reporting high levels of stress due to the number of tasks performed and hours worked. The average workload score, based on the Workload and Stress Scale (WSS), was 3.7 (SD = 0.9) on a 5-point scale, indicating moderate to high perceived workload. The average job satisfaction score, measured using the Job Satisfaction Survey (JSS), was 3.5 (SD = 1.0) on a 5-point scale, suggesting moderate job satisfaction among participants.

Table 2. Workload and Job Satisfaction Scores

Measure	Mean (SD)	Range
Workload Score (WSS)	3.7 (0.9)	2.5 - 5.0
Job Satisfaction Score (JSS)	3.5 (1.0)	2.0 - 5.0

### Correlation Between Workload and Job Satisfaction

A Pearson correlation analysis was conducted to assess the relationship between workload and job satisfaction among pharmacy technicians. The results indicated a significant negative correlation between workload and job satisfaction ( $r = -0.56, p < 0.01$ ), suggesting that higher workload is associated with lower job satisfaction.

Table 3. Correlation Between Workload and Job Satisfaction

Variable	Workload Score	Job Satisfaction Score
Workload Score	1.00	-0.56
Job Satisfaction Score	-0.56	1.00

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

#### Predictors of Job Satisfaction

A multiple regression analysis was performed to identify significant predictors of job satisfaction among the pharmacy technicians. The analysis included workload score, age, gender, and years of experience as predictor variables. The results indicated that workload score was a significant negative predictor of job satisfaction ( $\beta = -0.45$ ,  $p < 0.01$ ), while years of experience was a positive predictor ( $\beta = 0.32$ ,  $p < 0.05$ ). Age and gender were not significant predictors.

Table 4. Multiple Regression Analysis Predicting Job Satisfaction

Predictor Variable	$\beta$ Coefficient	Standard Error	p-value
Workload Score	-0.45	0.12	< 0.01
Years of Experience	0.32	0.14	< 0.05*
Age	0.15	0.11	0.18
Gender (Male = 1, Female = 0)	0.08	0.10	0.25

Significant at the 0.01 level (2-tailed).

Significant at the 0.05 level (2-tailed).

## Discussion

This study provides valuable insights into the relationship between workload, stress levels, and job satisfaction among pharmacy technicians working in a large tertiary hospital. The findings highlight the significant impact of workload on job satisfaction, with increased workload being associated with lower job satisfaction. Additionally, the study identified years of experience as a positive predictor of job satisfaction, suggesting that experience may play a role in mitigating the negative effects of workload.

#### Impact of Workload on Job Satisfaction

The negative correlation between workload and job satisfaction observed in this study is consistent with existing literature, which has documented the detrimental effects of high workload on healthcare professionals' job satisfaction and overall well-being (Gaither et al., 2008). Pharmacy technicians, who are responsible for a wide range of tasks, including medication dispensing, inventory management, and patient interaction, often face significant time pressures and high expectations for accuracy. As workload increases, the stress associated with these responsibilities can lead to job dissatisfaction, burnout, and even increased turnover intentions.

The average workload score in this study was moderately high, indicating that pharmacy technicians in this setting are frequently required to manage a substantial workload. This finding underscores the need for

effective workload management strategies within the hospital's pharmacy department. Implementing measures such as task delegation, workflow optimization, and staff support could help alleviate the burden on pharmacy technicians, thereby improving job satisfaction and reducing the risk of burnout.

### Role of Experience in Job Satisfaction

The study also found that years of experience positively predicted job satisfaction among pharmacy technicians. This finding suggests that more experienced technicians may have developed better coping mechanisms or efficiency strategies that help them manage their workload more effectively. Experienced technicians may also have greater confidence in their abilities and a stronger sense of professional identity, both of which can contribute to higher job satisfaction (Desselle and Holmes, 2017).

However, it is important to note that while experience may mitigate some of the negative effects of workload, it does not eliminate the need for supportive work environments. Ensuring that all pharmacy technicians, regardless of experience level, have access to resources, training, and support is crucial for maintaining job satisfaction and preventing burnout.

### Implications for Practice

The findings of this study have important implications for pharmacy practice, particularly in high-pressure environments such as tertiary hospitals. Given the significant impact of workload on job satisfaction, hospital administrators and pharmacy managers should prioritize workload management as part of their efforts to support pharmacy technicians. Strategies to reduce workload could include increasing staffing levels, implementing more efficient work processes, and providing access to tools and technologies that streamline tasks.

Additionally, recognizing the role of experience in job satisfaction highlights the importance of fostering a supportive environment that encourages professional growth and development. Offering opportunities for continuing education, mentorship, and career advancement can help pharmacy technicians build the skills and confidence needed to manage their workload effectively, thereby enhancing job satisfaction.

### Limitations

While this study provides valuable insights, several limitations should be acknowledged. The relatively small sample size of 50 participants may limit the generalizability of the findings to other settings or populations. Additionally, the cross-sectional design of the study captures data at a single point in time, which may not fully reflect changes in workload or job satisfaction over time. Longitudinal studies could provide a more comprehensive understanding of how these factors evolve.

Moreover, the study was conducted in a single tertiary hospital, which may have unique characteristics that influence the findings. Future research could benefit from including multiple healthcare facilities and exploring how different pharmacy settings (e.g., community pharmacies, retail chains) impact the relationship between workload and job satisfaction among pharmacy technicians.

## Conclusion

In conclusion, this study highlights the significant impact of workload on job satisfaction among pharmacy technicians in a large tertiary hospital. The findings suggest that increased workload is associated with lower job satisfaction, while years of experience positively predict job satisfaction. These results underscore the importance of workload management and support for pharmacy technicians, particularly in high-demand environments. By addressing these issues, healthcare organizations can enhance job satisfaction, reduce burnout, and ultimately improve the quality of care provided to patients.

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