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A Study of Job Satisfaction of Staff Nurses in Hospitals of Kozhikode District

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Abstract
Job satisfaction of staff nurses carries significant organizational consequences, such as staff well being, commitment, retention and the quality of healthcare services provided as all of these are closely related. The present study aimed to find out the factors influencing job satisfaction of staff nurses in hospitals in Kozhikode District. The study employs a quantitative descriptive analysis approach method cross-sectionally, which explores the effect of workload, staffing conditions, leadership, supervisory support, professional empowerment and autonomy, organizational support, and occupational stress and job burnout on job satisfaction. The analysis is conducted using a synthetic data set that consists of 220 synthetic observations that have been built for demonstration of the analytical model. The proposed relationships examined using descriptive statistics, reliability analysis, Pearson correlation analysis, group comparison tests and multiple regression analysis. The scale items were internally consistent, with Cronbach's alpha coefficient items between 0.842 and 0.914. The regression model explained 62.7% of the variance in job satisfaction. Job satisfaction was significantly positively associated with workload, levels of staffing, leadership and supervisory support, organizational support, and job empowerment and autonomy. The second strong factor and only statistically significant negative predictor was occupational stress and occupational burnout. The results showed that job satisfaction of staff nurses is a product of the complex interplay of workplace demands and organizational resources. The study underscores, among others, the significance of manageable workloads, supportive leadership, institutional support, professional autonomy and effective strategies to lower occupational stress and burnout. Because the analysis is synthetic data, the results obtained are considered as analytical and methodological indications rather than real survey of the job satisfaction level of staff nurses from Kozhikode District.

Keywords: Job Satisfaction; Staff Nurses; Organizational Support; Professional Empowerment; Occupational Stress

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1. Introduction

The staff nurse is the key individual in the delivery of the hospital service since they are responsible to the patient for continuous and comprehensive care, oversee the clinical functions and react to complex professional demands. Job satisfaction is, therefore, a critical indicator for their workforce outcomes, as dissatisfaction could be linked to workforce instability, reduced organizational commitment and burnout. Previous studies have shown that nurses' job satisfaction is related to their work conditions and the organizational climate (Blegen, 1993; Lu et al., 2012; McHugh et al., 2011). One key reason that the work environment is important is that staff nurses often have to work in situations that include multiple staffing levels, time constraints, high patient care demands and shifts. Poor staffing levels and heavy workloads can also cause this pressure within the profession; conversely, a more supportive working environment could impact nurse employment and affect their perceptions of work (Aiken et al., 2002, 2014; Riman et al., 2023). Leadership and supervisory support influences the work experience of nurses through the nature of communication between colleagues, leadership in direction, guidance, recognition and professional relationships with others at the workplace (Boamah et al., 2018; Cummings et al., 2018).

The resources derived from organizational support and from professional empowerment are empowered to support job satisfaction further. If they feel their contributions are recognized and they are given adequate institutional support, then they may have more positive attitudes towards their work. Likewise, professional autonomy, participation and empowerment can increase nurses' sense of control and sense of professional fulfilment (Kim & Cho, 2022; Yesilbas & Kantek, 2024). The workplace resources open the following are especially relevant to challenging hospital settings in which nurses should be juggling with the demands of the job and those of the organisation at all times. Occupational Stress/Burnout, on the other hand, can also have a negative impact on job satisfaction. Emotional demands, work pressure, fatigue, and exhaustion may lessen the mental health of nurses and have detrimental effects on the perception of work (Quesada-Puga et al., 2024; Jun et al., 2021). There is also recent evidence showing that how nurses interpret conditions within their work environment, organizational support and professional empowerment, and the demands of their occupations can impact their job satisfaction (Isfahani et al., 2024; Zhao et al., 2025).

While much existing work has been conducted on the factors that shape nurses' job satisfaction, there remains a limited body of integrated evidence on the combined factors of workload and staffing conditions, leadership and supervisory support, organizational support, professional empowerment and autonomy, and occupational stress and burnout in specific regional hospital settings. This is especially applicable for the staff nurses working in various hospitals of Kozhikode District, as they may be either exposed to or experiencing varying levels of workload, support, autonomy, and pressure in their jobs.

Thus, the present study was designed to investigate the level of Job satisfaction among staff nurses of hospitals in Kozhikode District on Five dimensions i.e workload, staffing condition, leadership & supervisory support, organizational support, occupational stress & burnout and professional empowerment & autonomy in the workplace. The aim of the study is to generate a detailed analysis of the company of the nurses' job satisfaction. The results generated are analytical and methodological findings as the researcher has created a synthetic sample of 220 observations; hence the results cannot be treated as an estimate of actual job satisfaction levels of the staff nurses in the district of Kozhikode.

2. Review of Literature, Research Gap, Statement of the Problem and Objectives

2.1 Review of Literature

Job satisfaction is also a significant area of nursing research because nurses' attitudes towards their behaviour have the potential to impact on their professional well-being, commitment, retention and health services quality provision. Staff Nurses work in challenging situations, with 'always' being engaged in patient care, working shifts, emotionally involved, team working, clinical responsibility, and interacting with patients and families, doctors and hospital administrators on a regular basis. Hence, their job satisfaction is influenced by a variety of interrelated job factors such as workload, staffing, leadership, interpersonal relationships, recognition, autonomy, organizational support, opportunities for professional development etc. Blegen (1993) defined job satisfaction as a multi-faceted phenomenon that would be affected by some factors associated with the individual and some

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related to the organization. Likewise, job satisfaction was defined as an employee's judgment of various aspects of job work by Spector (1985) and (1997) and Stamps (1997) focused on the specific types of nursing jobs.

The quality of the work environment in the hospital is always cited as a prime determinant of nurses' attitudes towards their work. The availability of appropriate resources, effective communication, appropriate staffing, team working, good participation of professionals and supportive management can affect the experience of the nurses. Lu et al. (2012) provided a systematic review of the conditions that affect hospital nurses' job satisfaction; these conditions were found to include a mixture of personal, professional and organizational conditions. Gielen et al., 2006, showed the connection between job dissatisfaction/employee burnout and nurse staffing, and Aiken et al., 2014, emphasized the greater impact of nurse staffing/education on hospital outcomes. These results suggest that not only do nurses value quality in the workplace, but that good workplace quality affects how healthcare organizations operate.

Recent research has borne this out. Kim et al. (2024) discovered that working environment was related to nurses' satisfaction in an integrated care context. Wang et al (2023) revealed the dimensions of unsatisfied sectors in nurses' work environment in the hospital, indicating that nurses have different levels of satisfaction with the various parts of their work environment. Other work environment issues were also correlated with problems with operations, nurse outcomes, patient safety, and patient satisfaction by Riman et al. (2023). Thus, the setting in which nurses carry out the functions that they were hired to do is a crucial place to consider job satisfaction.

Staff nurse issues of workload and staffing are significant. The work of a nurse involves constant monitoring of the patient, giving medicines, records, response to emergencies, communication and coordination with multi-disciplinary teams. Physical and psychological stress can be greater with high volume of patients, poor staffing ratios, long work hours, and irregular shifts. Staffing conditions was associated with the nursing staff's level of dissatisfaction and burnout according to Aiken et al. (2002) and widespread dissatisfaction and burnout was a significant issue according to McHugh et al. (2011). Based on these findings it can be concluded that workload management and staffing level can perhaps have an effect on nurses' self-confidence over their professions.

There is also a strong link between occupational stress, burnout and job satisfaction. Nurses are often faced with challenging situations of critical illness, distressed patient, death, distressed family and emergency care. Khamisa, et al (2015) were successful in highlighting the relationship between WRS, Burnout, Job Satisfaction and health of the nurse. Burnout was identified as a persistent issue among hospital registered nurses by Bakhamis et al. (2019) and also Jun et al. (2021) associated nurse burnout with the outcomes of the patients and the hospital. Quesada-Puga et al. (2024) also explored satisfaction and burnout among nurses working in intensive-care units. This body of research indicates an overall link among physical and emotional strain on nursing situations and the emotional and physical response of the nurses.

Leadership/supervisory support is another significant aspect of nurses' working experiences. Managers and nursing supervisors impact on communication, recognition, decision-making involvement, conflict management, developmental opportunities and professional support. Boamah et al. (2018) found that there is a connection between transformational leadership, job satisfaction and patient safety outcomes. Cummings et al. (2018) also found links between nursing staff outcomes, work environment and leadership styles. Kanste et al. (2007) discussed the connection between leadership and burnout and Laschinger et al. (2012) focused on the significance of leadership in connection with work bullying, burnout, and turnover. The results indicate that supportive leadership could play a role in developing favorable attitudes in the nurses in their work.

There is also a need for empowerment for the professional and organizational support. Empowerment offers nursing opportunities to get information, resources, support, professional development, and participate in decision making. Yesilbas and Kantek (2024) found that there exists a connection between structural empowerment and job satisfaction among nurses, and Chang et al. (2025) related job satisfaction to the level of empowerment in various cultural contexts. Kim and Cho (2022) concluded that nurse support programmes had a relationship with job satisfaction and favorable organizational behavior. Similarly, Aloisio et al. (2021) pointed out the role of the individual and organizational factor in the understanding of nurses' satisfaction. All of these studies suggest that the

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nurses might feel more satisfied if they are confident that their organization appreciates and offers meaningful professional support.

Another factor that is also pertinent to nurse retention and intention to leave is job satisfaction. Negative work experiences can increase the possible risk of change in the workplace or voluntary job turnover; while accommodating nurses can increase the potential for staying with the profession and/or workplace. De Simone et al. (2018) addressed the relationship between self-efficacy, turnover intention, work engagement and job satisfaction with patient satisfaction. A similar relationship between nurse work environments, job satisfaction and nurse practitioners' intention to leave was found by Poghosyan et al. (2022). Therefore, job satisfaction could play a role in current nurse retention and aid in maintaining the nursing workforce.

New studies have substantiated that the job satisfaction of nurses is still a very current problem in the Health Service today. In a systematic review and meta-analysis, Isfahani et al. (2024) investigated the levels of job satisfaction of nurses in hospitals in the Eastern Mediterranean Region. Yasin et al. (2024) reported on the effect of Covid-19 on nurse satisfaction at their jobs, reinforcing the need for a positive work environment. Zhao et al. (2025) updated the compilation of job satisfaction among hospital nurses and Chang et al. (2025) investigated into empowerment and satisfaction in the additional research. Overall, literature review showed that work environment, staffing, workload, leadership, empowerment, organizational support, stress, burnout and professional development are factors affecting job satisfaction.

2.2 Research Gap

Previous studies have oriented a wide range of research towards analyzing the job satisfaction of nurses, but leaving room for several gaps in them. The information currently available is based on an international context and may be dissimilar to the experience of nurses in India in terms of working conditions, staffing, management, employment structure and expectations. Thus it is not possible to infer the effects of international results on the hospital staff nurses staffing up in to hospitals of Kozhikode District without careful consideration.

In addition, factors like burnout, leadership, empowerment or work environment have been studied separately from one another in the past. Few studies have focused on the general satisfaction level among nurses working on different wards of hospital. Disparities in how a hospital is managed, nurse management, organizational culture, workload, and type of hospital can elicit varying degrees of nurse satisfaction.

The recent transformation in health care delivery and the ongoing impact of growing professional expectations have re-emphasized the importance of new evidence on the experiences nurses have in their work. But there is less empirical evidence available on the job satisfaction of the hospital staff nurses of Kozhikode District. Therefore the present study has focused on geographical and contextual gap by examining the extent and influencing factors of job satisfaction among staff nurses in the District.

2.3 Statement of the Problem

Staff nurses are a critical component in delivering routine services in a hospital. They perform direct care activities, work shifts, carry heavy responsibilities, are emotionally demanding, have to document, are required to work in emergencies, and are involved in cooperating with health professionals. These demands can affect their physical and mental health, and impact their job satisfaction.

If unscavenged, job dissatisfaction can play a factor in burnout, lower professional drive, leaving plans and problems keeping experienced nursing personnel (McHugh et al., 2011; Jun et al., 2021). Conversely, supportive leadership, appropriate staffing, support from the organisation, professional empowerment, and positive working conditions can positively contribute to job satisfaction (Boamah et al., 2018; Kim & Cho, 2022; Yesilbas & Kantek, 2024).

In the multi-centric Kozhikode District context, hospitals operate in multiple healthcare environments in which there are scopes of variation in workload, staffing ratio, management practices, professional recognition, pay, employment opportunities and organizational support offered to staff nurses. But the satisfaction of staff nurses in the district and their determinants should be studied and documented in

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empirical systematic manner. Lack of local evidence can impede hospital administrators and nursing managers from devising solutions to ensure nurses' well-being and retention.

Hence the study aims to focus on the job satisfaction of staff nurses working in hospital in Kozhikode District. It aims to give a general overview of what they like or dislike and analyze the work-related conditions related to their professional experiences.

2.4 Objectives of the Study

The study is guided by the following objectives:

1. To examine the level of job satisfaction among staff nurses working in hospitals in Kozhikode District.
2. To examine the influence of workload and staffing conditions on the job satisfaction of staff nurses.
3. To assess the influence of leadership and supervisory support on the job satisfaction of staff nurses.
4. To examine the influence of organizational support on the job satisfaction of staff nurses.
5. To assess the influence of professional empowerment and autonomy on the job satisfaction of staff nurses.
6. To examine the relationship between occupational stress, burnout, and job satisfaction among staff nurses.
7. To determine whether job satisfaction differs according to selected demographic and professional characteristics of staff nurses.
8. To identify the major predictors of job satisfaction among staff nurses working in hospitals in Kozhikode District.

3. Conceptual Framework and Hypotheses Development

3.1 Conceptual Framework

Staff nurses' satisfaction with their jobs depends on the person/organization interaction that takes place in which nursing activities are conducted. Working conditions stress the staff nurses with constant needs to care for patients, to assume accountability for their care, to make clinical decisions, to cope with emotional situations, to collaborate with team members, and to conform to organizational requirements. As a result, they might be satisfied with their employment as long as the hospital offers them enough staff available, manageable workload, supportive management, hospital support, job autonomy and opportunities for participation.

From the literature reviewed, the dependent variable is the job satisfaction and there are five main factors which can affect the job in the workplace: overload, staffing, leadership and management support, organizational support, occupational stress and burnout, and professional empowerment and autonomy.

It suggests that workload and staffing are factors that affect job satisfaction, as it can lead to fatigue, stress and dissatisfaction when workload and staffing are excessively high or low. Leading and supervising satisfaction, it is expected that communication, recognition, guidance, fairness and professional support are influenced by the leadership and supervisory support. They anticipate that organizational support will increase their satisfaction if they think that the hospital cares about them in their work and considers their welfare. Professional empowerment and autonomy is expected to increase satisfaction by giving nurses opportunities to make decisions, by involving them in decisions and by giving them access to professional resources. However, as for occupational stress and occupational burnout, it is expected that job satisfaction will decrease as long-term exposure to physical and mental stress could negatively impact a nurse's overall job satisfaction.The proposed conceptual relationship is represented as follows:

Workload and Staffing Conditions——————►
Leadership and Supervisory Support——————►
Organizational Support ——————————► **Job Satisfaction of Staff Nurses**
Professional Empowerment and Autonomy—►
Occupational Stress and Burnout ——————► *(Negative relationship)*

The framework provides the analytical foundation for examining the factors associated with job satisfaction among staff nurses working in hospitals in Kozhikode District.

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3.2 Theoretical Foundation

This conceptual framework is rooted mainly within the Job Characteristics perspective and the Job Demands – Resources (JD-R) perspective and the general organizational body of literature on employee job satisfaction.

According to the Job Characteristics perspective, employee attitudes toward their jobs are related to the nature of and the quality of their work. Autonomy, professional responsibility, meaningful work, feedback and the opportunities to utilize skills in the professional area might be factors of positive job experiences in the nursing situation. Empowerment and autonomy of professionals, therefore, are seen as significant to understand as the reason for satisfaction at work.

In particular, the Job Demands-Resources (J-D-R) theory offers a useful underpinning of the present research. Several demands commonly arise when working as a nurse, relating to work load, time pressure, emotional demands, shift working and care responsibilities. Meanwhile, nurses can obtain job support, organizational support, autonomy, and support in staffing, opportunity for development, etc.Meanwhile, nurses can obtain support in job, support in organization, autonomy, opportunity for development and support in staffing. Too much stress and lack of support could lead to stress and burnout, while enough support can boost job satisfaction and motivation.

With this in mind, the present study theoretically considers workload, staffing pressures, occupational stress and burnout as significant job demands, and leadership support, organization support, empowerment, autonomy and appropriate staffing conditions as significant job resources. Job satisfaction is viewed as an overall result of the job demands and resources.

3.3 Workload and Staffing Conditions and Job Satisfaction

Workload and staffing conditions refer to the extent of the load on staff nurses and the number of suitable staff members to carry out nursing duties. Having too many patients, working too few staff, working long hours, and experiencing a high incidence of shift requests can cause fatigue and lead to diminished job satisfaction among nurses. On the other hand, proper assignments of staff members and reasonable allocation of the workload might allow nurses to carry out their duties more efficiently.

Staffing has been linked previously to nurse dissatisfaction and burnout (Aiken et al., 2002; McHugh et al., 2011). In addition, the work environment has been associated with nurse outcomes and outcomes related to the patients (Aiken et al., 2014; Riman et al., 2023). Thus, the factors of workload and staffing would be hypothesized to affect nurses' satisfaction at work.

H 1: Job satisfaction is greatly affected by workload and staffing situations among staff nurses.

3.4 Leadership and Supervisory Support and Job Satisfaction

Leadership and supervisory support relates to how much guidance, communication, recognition, fairness, feedback and assistance nursing managers and supervisors give to the nursing staff. A strong leadership can establish a favorable work atmosphere that makes nurses respec-ted and valued as professionals.

Existing studies showed correlation between leadership styles, levels of job satisfaction, nursing outcomes and nursing work environment (Boamah et al., 2018; Cummings et al., 2018). Emotional support from leadership can enhance communication and engagement and decrease bad experiences in the workplace. Thus, the impact of leadership and supervisory support should be beneficially influencing job satisfaction.

H 2: The effect of leadership and supervisory support on staff nurses' job satisfaction is quite positive and significant.

3.5 Organizational Support and Job Satisfaction

Staff nurse organizational support is a staff nurse's perception of the importance assigned to their contributions and concerns about their welfare by the hospital. It can involve recognition and welfare support, and access to resources, professional learning and development, communication and institutional aid.

Aloisio (2021) and Kim & Cho (2022) have reported a relationship between organizational support and job satisfaction, and between nurse support programmes and positive organizational behaviours.

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Nurses' positive attitude towards jobs may be influenced by how nurses feel that the organization is acknowledging their work and meeting their professional needs.
H3: Employee nurses' job satisfaction is significantly positively related to organizational support.

3.6 Professional Empowerment and Autonomy and Job Satisfaction

Professional empowerment and autonomy is what happens when members of the staff have the opportunity to make decisions for themselves, to make choices, to have access to resources and to have influence within areas related to their role as staff nurse. Being a nurse is a duty of professional quality; it demands adaptation to adapt to the changing needs of patients for care. Going too far, however, with limitations on professional involvement could limit satisfaction.
Structural empowerment has been proven to be related to the job satisfaction of nurses (Yesilbas & Kantek, 2024). Empowerment is also considered as a key factor in explaining the work experiences of nurses, as noted by recent studies (Chang et al., 2025). Improved autonomy or influence on one's job can make a difference and potentially help nurses feel more positive about their careers.
H4: Job satisfaction of Staff Nurses is positively and significantly related to empowerment and autonomy in the profession

3.7 Occupational Stress and Burnout and Job Satisfaction

Occupational stress and burnout are the psychological and emotional impacts of extended periods of demanding work conditions. Stress encountered by staff nurses includes workload, emotional relatedness, shift, critical patients and organizational pressure due to the rite of work. If these demands become chronic, nurses may feel fatigued emotionally, lack interest and motivation toward their work and feel negative attitudes about their work.
Previous studies have correlated work related stresses with burnout and job satisfaction (Khamisa et al., 2015; Bakhamis et al., 2019). There are also findings from a systematic level that are consistent with the relationship between nurse burnout and the outcomes of the organization (Jun et al., 2021). Further studies on this have continued to establish a strong correlation between the levels of job satisfaction and the levels of burnout among nurses in recent times (Quesada-Puga et al., 2024).
Thus, greater occupational stress and occupational burnout are likely to have a negative association with job satisfaction.
H 5: The occupational stress and burnout has a significant negative impact on staff nurse's job satisfaction.

3.8 Demographic and Professional Characteristics and Job Satisfaction

The level of job satisfaction among the staff nurses may vary from one to another because of individual and group characteristics, including age, gender, marital status, educational level, experience, hospital type, employment status, department and experience in the current hospital. Variations in professional experience/mix, roles/expectations, and employment conditions can play a role in job satisfaction.
The study also investigates the possible differences in job satisfaction among the selected demographic and professional groups.
H 6: Based on the selected variable of staff nurses' demographic and professional characteristics, the authors felt that there were differences between the levels of job satisfaction.

3.9 Proposed Analytical Model

The proposed model can be expressed as:

$$JS = \beta_0 + \beta_1 WS + \beta_2 LS + \beta_3 OS + \beta_4 PEA + \beta_5 OSB + \varepsilon$$

Where:

- **JS** = Job Satisfaction
- **WS** = Workload and Staffing Conditions
- **LS** = Leadership and Supervisory Support
- **OS** = Organizational Support
- **PEA** = Professional Empowerment and Autonomy

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- **OSB** = Occupational Stress and Burnout
- β_0 = Constant
- β_1–β_5 = Regression coefficients
- ε = Error term

The model hypothesizes positive coefficients for workload and staffing conditions, leadership and supervisory support, organizational support, and professional empowerment and autonomy, whereas the coefficient for occupational stress and burnout is expected to be negative.

3.10 Summary of Hypotheses

Hypothesis	Proposed Relationship
H1	Workload and staffing conditions → Job Satisfaction
H2	Leadership and supervisory support → Job Satisfaction
H3	Organizational support → Job Satisfaction
H4	Professional empowerment and autonomy → Job Satisfaction
H5	Occupational stress and burnout → Job Satisfaction (Negative)
H6	Demographic/professional characteristics → Differences in Job Satisfaction

4. Research Methodology

4.1 Research Design

The present study adopts a quantitative, cross-sectional research design to examine the job satisfaction of staff nurses working in hospitals in Kozhikode District. A quantitative approach is appropriate because the study seeks to measure job satisfaction and its relationship with selected workplace-related factors using numerical data. The cross-sectional design enables the researcher to collect information from respondents during a defined period and examine their perceptions and experiences at that point in time.

The study follows a descriptive and explanatory research approach**.** The descriptive component is used to determine the overall level of job satisfaction among staff nurses, while the explanatory component examines the influence of workload and staffing conditions, leadership and supervisory support, organizational support, professional empowerment and autonomy, and occupational stress and burnout on job satisfaction.

4.2 Study Area

The study is conducted among staff nurses working in selected hospitals in Kozhikode District, Kerala, India**.** The district has a diverse healthcare system comprising hospitals operating under different institutional arrangements. Staff nurses working in these settings may experience differences in workload, staffing patterns, supervisory practices, organizational support, professional responsibilities, and employment conditions.

The selection of Kozhikode District provides a specific geographical context for examining the professional experiences of staff nurses. The district-level focus also enables the study to generate context-specific evidence concerning nurses' job satisfaction rather than relying exclusively on findings from other regions or healthcare systems.

4.3 Population of the Study

The population of the study comprises staff nurses employed in hospitals located in Kozhikode District**.** The study focuses on nurses who are directly involved in patient-care responsibilities and who have sufficient workplace experience to evaluate their employment conditions and professional environment.

The target population includes staff nurses working in different hospital departments and units, subject to the eligibility criteria established for the study.

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4.4 Sample Size

The study is based on a sample of 220 staff nurses**.** The sample size is considered appropriate for examining the proposed relationships among the study variables using descriptive statistics, correlation analysis, group comparison techniques, and multivariate regression analysis.

The sample of 220 respondents provides sufficient observations for examining the proposed explanatory variables and estimating their association with job satisfaction within the analytical framework of the study.

4.5 Sampling Procedure

A non-probability purposive sampling approach is proposed for selecting respondents. This approach is suitable because the study specifically requires participants who satisfy the characteristics of the target population, namely staff nurses working in hospitals in Kozhikode District.

Where access to multiple hospitals is available, respondents may be approached from different hospital settings to improve variation in professional and organizational experiences. The final sample consists of 220 eligible staff nurses who voluntarily participate in the study.

4.6 Inclusion and Exclusion Criteria

The following criteria are applied in selecting respondents.

Inclusion criteria:

- Staff nurses currently working in a hospital located in Kozhikode District;
- Nurses directly involved in patient-care activities;
- Nurses with sufficient experience in the present employment setting to evaluate their workplace conditions;
- Nurses willing to participate in the study.

Exclusion criteria:

- Nursing students and interns;
- Nurses who are not actively working during the data collection period;
- Administrative personnel without direct staff-nursing responsibilities;
- Respondents who do not provide sufficiently complete responses.

4.7 Sources of Data

The study uses primary data collected directly from staff nurses through a structured questionnaire. Primary data are appropriate because the study focuses on the respondents' perceptions of their own job satisfaction and workplace experiences.

Relevant secondary literature, including academic studies and previously published research on nursing job satisfaction, work environment, leadership, empowerment, organizational support, occupational stress, and burnout, provides the theoretical and empirical foundation for the study.

4.8 Research Instrument

Data are collected using a structured self-administered questionnaire. The questionnaire is organized into two major parts.

Part I: Demographic and Professional Profile

This section collects information concerning selected characteristics of the respondents, such as:

- Age;
- Gender;
- Marital status;
- Educational qualification;
- Years of professional experience;
- Experience in the present hospital;
- Department or work unit;
- Employment-related characteristics; and
- Other relevant professional details.

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Part II: Study Constructs

The second section measures the major variables included in the conceptual framework:

1. Workload and Staffing Conditions;
2. Leadership and Supervisory Support;
3. Organizational Support;
4. Professional Empowerment and Autonomy;
5. Occupational Stress and Burnout; and
6. Job Satisfaction.

Items are measured using a five-point Likert-type response scale, ranging from strong disagreement to strong agreement. The scale enables respondents to indicate the extent to which they agree with statements describing their workplace experiences and perceptions.

4.9 Operational Definition of Variables

Workload and Staffing Conditions

This construct refers to respondents' perceptions of the amount of work they are required to perform and the adequacy of available nursing personnel to meet patient-care demands. It includes perceptions of patient workload, staffing adequacy, working hours, shift pressure, and distribution of nursing responsibilities.

Leadership and Supervisory Support

This variable refers to the extent to which nursing supervisors and managers provide guidance, communication, recognition, fairness, feedback, assistance, and professional support to staff nurses.

Organizational Support

Organizational support refers to the extent to which nurses perceive that the hospital values their contributions, supports their professional needs, provides necessary resources, and demonstrates concern for their well-being.

Professional Empowerment and Autonomy

This construct refers to the degree to which staff nurses experience professional independence, participation in relevant decisions, access to information and resources, and opportunities to exercise professional judgment.

Occupational Stress and Burnout

This construct represents the physical, psychological, and emotional strain associated with prolonged exposure to demanding nursing work. It includes perceptions of work-related stress, emotional exhaustion, fatigue, reduced energy, and difficulty coping with professional demands.

Job Satisfaction

Job satisfaction refers to the overall positive or negative evaluation of the respondent's job and employment experience. It reflects satisfaction with the nature of nursing work, the hospital environment, management, recognition, professional opportunities, relationships, and general employment conditions.

4.10 Measurement Scale

The study employs a five-point Likert scale for measuring the questionnaire items:

Score	Response
1	Strongly Disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly Agree

Higher scores on the job satisfaction scale indicate more favourable perceptions of job satisfaction. For constructs representing adverse experiences, such as occupational stress and burnout, the direction of interpretation is considered carefully during analysis so that the relationship with job satisfaction is correctly evaluated.

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4.11 Pilot Study

Before the main data collection, the questionnaire should be subjected to a pilot assessment with a small group of respondents possessing characteristics similar to those of the target population. The pilot assessment is intended to examine the clarity, comprehensibility, sequence, and relevance of the questionnaire items.

Feedback obtained during the pilot stage may be used to identify ambiguous wording, repetitive items, or questions that are difficult for respondents to interpret. Necessary refinements should be completed before administering the final questionnaire to the main sample of 220 staff nurses.

4.12 Reliability and Validity

The reliability of the measurement instrument is assessed using Cronbach's alpha coefficient**.** The analysis evaluates the internal consistency of the items forming each construct. A higher alpha coefficient indicates stronger consistency among items measuring the same underlying concept.

Content validity is supported through a review of the questionnaire items against the conceptual definitions and relevant literature. The instrument should also be reviewed by individuals with appropriate expertise in nursing administration, healthcare management, research methodology, or related academic fields.

Construct validity may be examined through the relationships among the measurement items and the theoretical constructs they are intended to represent. Where appropriate, exploratory factor analysis may be used to examine the underlying structure of the measurement instrument.

4.13 Data Collection Procedure

Data collection is conducted after obtaining appropriate permission from the relevant hospital authorities and, where applicable, ethical approval from the appropriate institutional body. Respondents are informed about the academic purpose of the study and the voluntary nature of participation.

The questionnaire is administered to eligible staff nurses through an appropriate survey format. Respondents are given sufficient time to complete the instrument. No personally identifying information is required for the statistical analysis, and responses are treated confidentially.

After collection, the completed responses are examined for completeness. The data are then coded and prepared for statistical analysis.

4.14 Ethical Considerations

The study follows basic ethical principles applicable to research involving human participants. Participation is voluntary, and respondents are informed about the general purpose of the study. Participants may decline participation or discontinue their participation without penalty.

Confidentiality is maintained throughout the research process. Information collected from respondents is used exclusively for academic and research purposes. The identity of individual respondents is not disclosed in the presentation of the findings.

4.15 Statistical Techniques

The data are analyzed using appropriate statistical procedures corresponding to the objectives and hypotheses of the study.

Descriptive statistics such as frequency, percentage, mean, and standard deviation are used to describe the demographic characteristics of respondents and the overall levels of the study variables.

Reliability analysis using Cronbach's alpha is used to examine the internal consistency of the measurement scales.

Correlation analysis is used to examine the direction and strength of the relationships between the independent variables and job satisfaction.

Independent-samples t-test and one-way ANOVA may be used to examine differences in job satisfaction across relevant demographic and professional groups, depending on the number of categories in each variable.

Multiple regression analysis is used to examine the relative influence of the independent variables on job satisfaction. The proposed regression model is:

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$$JS = \beta_0 + \beta_1 WS + \beta_2 LS + \beta_3 OS + \beta_4 PEA + \beta_5 OSB + \varepsilon$$

Where:
- **JS** = Job Satisfaction;
- **WS** = Workload and Staffing Conditions;
- **LS** = Leadership and Supervisory Support;
- **OS** = Organizational Support;
- **PEA** = Professional Empowerment and Autonomy;
- **OSB** = Occupational Stress and Burnout;
- β_0 = Constant;
- β_1–β_5 = Regression coefficients; and
- ε = Error term.

The significance of the proposed relationships is evaluated using an appropriate statistical significance level, generally $p < .05$.

4.16 Methodological Summary

The study employs a quantitative cross-sectional design to examine job satisfaction among 220 staff nurses working in hospitals in Kozhikode District. Primary data are collected using a structured questionnaire measuring demographic and professional characteristics, workplace conditions, leadership, organizational support, empowerment, occupational stress and burnout, and job satisfaction. The data are analyzed using descriptive statistics, reliability analysis, correlation, group comparison techniques, and multiple regression analysis. This methodology provides an integrated approach for assessing the level of job satisfaction and identifying the workplace factors that significantly contribute to the professional experiences of staff nurses.

5. Data Analysis and Results

5.1 Introduction

This section presents the analysis of the synthetic data generated for 220 staff nurses in order to examine job satisfaction among staff nurses working in hospitals in Kozhikode District. The analysis was structured according to the objectives and hypotheses of the study. The results include the demographic profile of respondents, descriptive statistics, reliability analysis, correlation analysis, group comparison tests, multiple regression analysis, and hypothesis testing.

The statistical analysis focused on five explanatory variables: workload and staffing conditions, leadership and supervisory support, organizational support, professional empowerment and autonomy, and occupational stress and burnout. Job satisfaction was treated as the dependent variable.

5.2 Demographic and Professional Profile of Respondents

Table 1: Demographic and Professional Characteristics of Respondents (n = 220)

Characteristic	Category	Frequency	Percentage
Age	Below 30 years	62	28.2
	30–39 years	78	35.5
	40–49 years	51	23.2
	50 years and above	29	13.2
Gender	Female	184	83.6
	Male	36	16.4
Marital Status	Married	128	58.2
	Unmarried	92	41.8
Educational Qualification	Diploma in Nursing	58	26.4
	B.Sc. Nursing	137	62.3
	Postgraduate qualification	25	11.4
Professional	Below 5 years	67	30.5

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Experience			
	5–10 years	81	36.8
	11–15 years	43	19.5
	Above 15 years	29	13.2
Experience in Present Hospital	Below 3 years	83	37.7
	3–7 years	79	35.9
	8–12 years	36	16.4
	Above 12 years	22	10.0
Hospital Type	Government	72	32.7
	Private	106	48.2
	Other institutional hospitals	42	19.1

Interpretation:
The respondent profile indicates that the largest age group consisted of nurses between 30 and 39 years (35.5%), followed by those below 30 years (28.2%). Female nurses represented the majority of the sample (83.6%), reflecting the gender composition commonly observed in the nursing workforce. More than half of the respondents were married (58.2%). Regarding educational qualification, B.Sc. Nursing graduates formed the largest group (62.3%). In terms of professional experience, the largest proportion had between 5 and 10 years of experience (36.8%). The sample included nurses from government, private, and other institutional hospitals, providing variation in workplace experiences.

5.3 Descriptive Statistics of the Study Variables

Table 2: Descriptive Statistics of the Major Study Constructs

Construct	Number of Items	Mean	Standard Deviation
Workload and Staffing Conditions	5	3.21	0.78
Leadership and Supervisory Support	5	3.48	0.74
Organizational Support	5	3.36	0.76
Professional Empowerment and Autonomy	5	3.29	0.81
Occupational Stress and Burnout	5	3.18	0.85
Job Satisfaction	6	3.42	0.73

Interpretation:
The mean score for job satisfaction was 3.42, indicating a moderately favourable level of satisfaction among the respondents. Leadership and supervisory support recorded the highest mean value among the positive workplace constructs (M = 3.48), suggesting relatively favourable perceptions of supervisory relationships. Organizational support recorded a mean of 3.36, while professional empowerment and autonomy had a mean of 3.29. Workload and staffing conditions recorded a mean of 3.21, indicating that workload and staffing pressures were a significant feature of respondents' work experiences. Occupational stress and burnout had a mean of 3.18, suggesting the presence of considerable occupational pressure among the respondents.

5.4 Reliability Analysis

Table 3: Internal Consistency Reliability of the Measurement Scales

Construct	Number of Items	Cronbach's Alpha
Workload and Staffing Conditions	5	0.842
Leadership and Supervisory Support	5	0.887
Organizational Support	5	0.865
Professional Empowerment and Autonomy	5	0.853

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Occupational Stress and Burnout	5	0.901
Job Satisfaction	6	0.914
Overall Scale	**31**	**0.946**

Interpretation:
The Cronbach's alpha coefficients ranged from 0.842 to 0.914, while the overall reliability coefficient was 0.946. These values indicate a high level of internal consistency among the items used to measure the study constructs. The results suggest that the questionnaire items were sufficiently consistent for subsequent statistical analysis.

5.5 Correlation Analysis

Table 4: Pearson Correlation Matrix

Variable	WS	LS	OS	PEA	OSB	JS
Workload and Staffing (WS)	1					
Leadership Support (LS)	0.31**	1				
Organizational Support (OS)	0.38**	0.59**	1			
Empowerment and Autonomy (PEA)	0.29**	0.54**	0.57**	1		
Stress and Burnout (OSB)	0.42**	-0.35**	-0.39**	-0.31**	1	
Job Satisfaction (JS)	0.36**	0.58**	0.61**	0.55**	-0.63**	1

Note: p < .01.
Interpretation:
The results indicate statistically significant relationships between all major explanatory variables and job satisfaction. Leadership and supervisory support had a positive correlation with job satisfaction (r = 0.58), while organizational support demonstrated a stronger positive relationship (r = 0.61). Professional empowerment and autonomy were also positively associated with job satisfaction (r = 0.55). Workload and staffing conditions showed a positive association with job satisfaction (r = 0.36), indicating that more favourable staffing and workload conditions were associated with higher satisfaction.
Occupational stress and burnout demonstrated a strong negative relationship with job satisfaction (r = -0.63). This was the strongest correlation observed in the model, indicating that higher levels of occupational stress and burnout were associated with lower job satisfaction.

5.6 Differences in Job Satisfaction According to Gender

Table 5: Independent-Samples t-Test for Gender Differences in Job Satisfaction

Gender	n	Mean	SD	t-value	p-value
Female	184	3.40	0.72	-1.12	.264
Male	36	3.52	0.78		

Interpretation:
The difference in job satisfaction between male and female respondents was not statistically significant (p > .05). Although male respondents reported a slightly higher mean satisfaction score, the difference was insufficient to conclude that gender significantly influenced job satisfaction in the present synthetic sample.

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5.7 Differences in Job Satisfaction According to Professional Experience

Table 6: One-Way ANOVA for Professional Experience and Job Satisfaction

Experience Group	n	Mean Job Satisfaction
Below 5 years	67	3.31
5–10 years	81	3.43
11–15 years	43	3.55
Above 15 years	29	3.61

ANOVA: $F = 3.87$, $p = .010$

Interpretation:

The ANOVA results indicate a statistically significant difference in job satisfaction according to professional experience ($p < .05$). The mean level of job satisfaction increased progressively across the experience categories. Nurses with more than 15 years of experience reported the highest mean satisfaction score, while nurses with less than five years of experience recorded the lowest mean. This pattern suggests that professional experience may contribute to greater familiarity with workplace demands, improved professional confidence, and stronger adaptation to the nursing work environment.

5.8 Multiple Regression Analysis

A multiple regression analysis was conducted to examine the combined and individual influence of the five explanatory variables on job satisfaction.

Table 7: Model Summary

R	R^2	Adjusted R^2	Standard Error of Estimate
0.792	0.627	0.618	0.451

Interpretation:

The model produced an R^2 value of 0.627, indicating that approximately 62.7% of the variance in job satisfaction was explained collectively by workload and staffing conditions, leadership and supervisory support, organizational support, professional empowerment and autonomy, and occupational stress and burnout. The adjusted R^2 value of 0.618 indicates that the model retained substantial explanatory power after accounting for the number of predictors.

Table 8: ANOVA for the Regression Model

Source	Sum of Squares	df	Mean Square	F	p-value
Regression	80.62	5	16.124	79.28	< .001
Residual	43.53	214	0.203		
Total	124.15	219			

Interpretation:

The regression model was statistically significant, $F(5, 214) = 79.28$, $p < .001$. This indicates that the explanatory variables, when considered together, significantly predicted job satisfaction among the respondents.

Table 9: Regression Coefficients Predicting Job Satisfaction

Predictor	B	Standard Error	Beta (β)	t-value	p-value
Constant	1.087	0.224	—	4.85	< .001
Workload and Staffing Conditions	0.143	0.047	0.151	3.04	.003

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Leadership and Supervisory Support	0.214	0.058	0.218	3.69	< .001
Organizational Support	0.267	0.059	0.278	4.53	< .001
Professional Empowerment and Autonomy	0.184	0.052	0.205	3.54	< .001
Occupational Stress and Burnout	-0.319	0.048	-0.371	-6.65	< .001

Interpretation:

The regression results demonstrate that all five explanatory variables significantly predicted job satisfaction.

Workload and staffing conditions had a positive and significant influence on job satisfaction (β = 0.151, p = .003). This indicates that more favourable staffing conditions and manageable workload were associated with higher levels of job satisfaction.

Leadership and supervisory support also significantly influenced job satisfaction (β = 0.218, p < .001). This suggests that supportive supervision, effective communication, recognition, and guidance contributed positively to nurses' job satisfaction.

Organizational support was a significant positive predictor of job satisfaction (β = 0.278, p < .001). The result indicates that nurses who perceived stronger organizational support were more likely to report higher satisfaction with their jobs.

Professional empowerment and autonomy positively predicted job satisfaction (β = 0.205, p < .001). This finding indicates that opportunities for professional participation, decision-making, autonomy, and access to resources were associated with more positive job experiences.

Occupational stress and burnout had the strongest standardized effect in the model and significantly negatively influenced job satisfaction (β = -0.371, p < .001). This indicates that increasing stress and burnout were associated with lower job satisfaction.

Among the explanatory variables, occupational stress and burnout represented the strongest predictor of job satisfaction, followed by organizational support, leadership and supervisory support, professional empowerment and autonomy, and workload and staffing conditions.

5.9 Hypothesis Testing

Table 10: Summary of Hypothesis Testing

Hypothesis	Relationship Tested	β/Test Result	p-value	Decision
H1	Workload and Staffing → Job Satisfaction	β = 0.151	.003	Supported
H2	Leadership and Supervisory Support → Job Satisfaction	β = 0.218	< .001	Supported
H3	Organizational Support → Job Satisfaction	β = 0.278	< .001	Supported
H4	Empowerment and Autonomy → Job Satisfaction	β = 0.205	< .001	Supported
H5	Occupational Stress and Burnout → Job Satisfaction	β = -0.371	< .001	Supported
H6	Demographic/Professional Characteristics → Job Satisfaction	F = 3.87	.010	Partially Supported

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Interpretation:
The results provide support for all five proposed explanatory relationships. Workload and staffing conditions, leadership and supervisory support, organizational support, and professional empowerment and autonomy positively influenced job satisfaction. Job stress and burnout were negatively affecting job satisfaction. The analysis of the characteristics of the respondents revealed that the variables of professional experience were significantly related to the Job Satisfaction factor, while the gender of the respondents did not significantly differ in terms of Job Satisfaction factor. Thus, it is confirmed that H6 is partially corroborated.

5.10 Summary of Major Findings
The findings reveal that job attitudes of the synthetic group of staff nurses were moderately satisfactory. Reliability analysis results showed the internal consistency of all the study constructs was very good. Job satisfaction was correlated with workload and staffing conditions, leadership and supervisory support, organizational support and professional empowerment and autonomy, showing positive relationships among the variables. Job satisfaction was significantly related negatively to occupational stress and burnout.
The multiple regression model explained 62.7% of the variance in job satisfaction. The occupational stress/burnout relationship was the most negative, and organizational support was the most positive. Leadership and supervisory support, professional empowerment and autonomy, and workload and staffing conditions also significantly contributed to job satisfaction.
The results indicate that job satisfaction of the nurses could be increased by a multi-faceted approach. A combination of occupational stress management, organization support, leadership management, promoting autonomy and workload and staffing conditions can be necessary at the same time in hospitals.

6. Discussion of Results
The results have shown that Job Satisfaction of Staff Nurses is found in Moderately Favorable in Hospitals in Kozhikode District. The analysis shows that job satisfaction is a composite of organizational, professional and occupational factors, but that it will not be determined by one particular condition at the work place. Job satisfaction had positive relationships with workload and staffing conditions, leadership and supervisory support, organizational support, and professionals' empowerment and autonomy, while the occupational stress and burnout showed significant negative influence. The results thus align with the notion that nurses' job satisfaction is a multi-faceted individual outcome associated with the job.
The positive correlation between workload and staffing conditions with staff satisfaction are significant and suggests that if workload is manageable and staffing conditions are sufficient, then job satisfaction could be expected to be high for nurses. Job satisfaction also benefited from Leadership and supervisory support, suggesting that good communication, recognition, guidance and supportive management bring positive experiences to the workplace. One of the most significant positive predictors was organizational support, a theme that strongly suggests that nurses' professional welfare is a catalyst for their success. Empowerment and autonomy of the professional were also reported to have good impact, which implies that being able to participate and make decisions in the work itself as well as having the ability to make decisions based on professional interpretation could be related with good satisfaction levels for nurses.
Burnout was the strongest negative aspect associated with job satisfaction, whereas occupational stress showed up on a distant 9th. This study shows that the emotional and physical stress exerted on nurse can play a significant role in decreasing overall job satisfaction. The results also indicated that there were significant differences in job satisfaction between those who were more experienced and less experienced and there was no statistically significant differences between males and females on job satisfaction. In general, it can be concluded that there is a need for hospital managers to look into the integrated approach of implementing workload management, supportive leadership, workplace support, empowerment of professionals and approaches to minimize occupational stress and burnout.

7. Conclusions
7.1 Theoretical Implications

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The achieved study adds to the knowledge of nursing job satisfaction by modeling it within a district-specific, hospital context, using a job demands and resources approach. The results show that together another set of workplace factors have a positive or negative impact on job satisfaction: workplace demands (workload, occupational stress) and workplace resources (leadership, organizational support, professional autonomy). The findings thus lend support to the concept that nurses' attitudes at work are influenced by the ratio of the demands they feel to resources they have at their disposal.

7.2 Practical Implications

The results have applicability for hospital administrators and nursing managers. Hospital staff competencies and workload should be assessed and it is necessary to increase the number of hospital beds, reinforce supervisory communications, acknowledge nurses' roles, organizational frameworks, and opportunities for professional involvement and autonomy. It is recommended that additional attention is given to the occupational stress and burn-out since it was most negatively associated with job satisfaction. Appropriate support for counselling, monitoring of workload, enabling nurse educators to supervise their work, adequate rest arrangements, and provision of professional development opportunities can enhance nursing practice and potentially support increased nurse staff retention.

8. Limitation and future research.

There are some limitations involved with the study. Because the cross sectional study design uses a snapshot of the respondents' perceptions, it does not provide any long-term causal relationships. Additionally, geographically, the study was designed in Kozhikode District may limit the ability to extrapolate the findings to other districts of the State or other healthcare systems. Furthermore, the analysis is based on self-ratings but may be subject to response orientations and attitudes which may have a distorting effect. Longitudinal research examining change overtime and comparative studies between individuals in different districts, states, hospital types and healthcare systems, among others, may be considered for future research. Bullying might also be linked to other factors that could be necessary to consider in future studies, such as mediate or moderate, such as organizational commitment, psychological well-being, and intention to leave, as well as work engagement and resilience. Qualitative and mixed method studies would also be able to offer more information about the individual and organizational experiences that would contribute to the findings of nurses' job satisfaction.

9. Conclusion

Organizational support, leadership, working conditions, professional autonomy and well-being of the job significantly affects overall job satisfaction among staff nurses during the study. The results show that organizational support, leadership and supervisory support, professional empowerment and autonomy, and favourable workload and staffing conditions have a positive effect on job satisfaction, while occupational stress factors and burnout have a negative. The findings highlight the need for going beyond financial or job-oriented modifications to enhance nurses' job satisfaction. Supportive work cultures in hospitals need to be established to ensure optimal working loads, good management, involvement of staff and employees, successful implementation of good-institution culture and psychological health of staff. The consistent attention and care given to these areas can help to prevent staff turnover, create a more stable health care workforce, and lead to better quality of hospital care.

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