



Assessing the Multidimensional Effect of Supervisor Support on Job Satisfaction among Nurses in Government Hospitals in Kano Metropolis

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Received: 15.05.2025 | Accepted: 20.06.2025 | Published: 24.06.2025

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DOI: [10.5281/zenodo.15728797](https://doi.org/10.5281/zenodo.15728797)

Abstract

Original Research Article

This study examined the influence of multidimensional supervisor support on job satisfaction among nurses in government hospitals within Kano Metropolis, Nigeria. The growing challenge of low job satisfaction among healthcare professionals, especially nurses, has contributed to high turnover intentions, diminished morale, and declining service quality in public hospitals. Previous studies have predominantly focused on organizational policies and salary structures, with limited attention to the role of direct supervisor support. This study, therefore, addressed this gap by assessing the extent to which emotional support, informational support, instrumental support, and recognition/feedback from supervisors impact nurses' job satisfaction. A descriptive survey research design was adopted, and data were collected through structured questionnaires administered to 279 nurses selected using stratified random sampling. The collected data were organized, coded, and analyzed using descriptive and inferential statistical techniques. Descriptive statistics summarized demographic characteristics and response patterns on study variables, while Pearson correlation analysis and multiple regression analysis were employed to examine relationships and predictive effects among variables. The results were presented in clear tabular form for ease of interpretation. Findings revealed significant positive relationships between all supervisor support dimensions and job satisfaction. Recognition and feedback emerged as the strongest predictors, followed by emotional and instrumental support, while informational support, though significant, had a comparatively weaker effect. The hypothesis testing confirmed that each support dimension had a statistically significant influence on job satisfaction. Based on these findings, the study recommended the institutionalization of emotional support initiatives, the strengthening of hospital communication systems, timely provision of operational resources, and the implementation of structured recognition and reward programs. Furthermore, demographic-sensitive human resource policies were advised to address the needs of the predominantly young and female nursing workforce in Kano's public healthcare system. The study concludes that multidimensional supervisor support is crucial for enhancing job satisfaction and workforce stability in the healthcare sector.

Keywords: Supervisor Support, Job Satisfaction, Nurses, Government Hospitals, Kano Metropolis.

Citation: Malam, A. A. (2025). Assessing the multidimensional effect of supervisor support on job satisfaction among nurses in government hospitals in Kano Metropolis. *ISA Journal of Business, Economics and Management (ISAJBEM)*, 2(3), 288-299, May-June.

1. INTRODUCTION

1.1 Background to the Study

Employee job satisfaction is widely recognized as a critical determinant of organizational productivity, service quality, and workforce retention, particularly in the healthcare sector where staff performance directly influences patient outcomes (Asegid et al., 2014). Among healthcare professionals, nurses represent the largest proportion of

frontline caregivers, and their job satisfaction levels are directly linked to healthcare service efficiency and patient satisfaction (Al-Haroon & Al-Qahtani, 2020). In government hospitals, especially in developing countries like Nigeria, persistent challenges such as resource inadequacies, high patient-to-nurse ratios, and limited professional growth opportunities have contributed to dissatisfaction and workforce turnover (Adeniji et al., 2021).

One critical organizational factor influencing nurses' job

satisfaction is **supervisor support**. Supervisor support involves the extent to which immediate managers offer emotional, informational, and instrumental assistance to subordinates, recognizing their contributions and addressing their workplace concerns (Kawiana et al., 2018). Studies have shown that supportive supervision improves motivation, reduces burnout, and enhances organizational commitment among nurses (Boamah et al., 2018). Despite this, empirical investigations into the multidimensional nature of supervisor support and its specific effect on job satisfaction among Nigerian nurses remain limited.

Within the context of Kano Metropolis, one of Nigeria's most populous urban centers, public healthcare facilities face significant operational constraints, including staffing challenges and infrastructural deficits (National Bureau of Statistics [NBS], 2022). Addressing nurse job satisfaction through effective human resource strategies is, therefore, a matter of public health importance. As emphasized by Mohammed and Sundararajan (2024), strategic human capital management remains essential for sustaining livelihoods and ensuring organizational resilience in service sectors.

Moreover, healthcare systems require intentional talent management strategies, including supportive leadership practices, to foster employee engagement and satisfaction (Mohammed, 2023a). While studies on human resource management in Nigerian healthcare have examined remuneration and job conditions (Adeniji et al., 2021), there is a dearth of studies focusing on supervisor support as a multidimensional construct and its effects on job satisfaction in public health institutions.

Hence, this study investigates the **effect of supervisor support on job satisfaction among nurses in government hospitals in Kano Metropolis**, contributing to the expanding discourse on healthcare workforce management in sub-Saharan Africa.

1.2 Problem Statement

Nurses in government hospitals within Nigeria, and particularly in urban centers like Kano Metropolis, continue to experience low job satisfaction due to various organizational challenges, including poor administrative support, inadequate resources, and excessive workloads (Adeniji et al., 2021). The Nigerian National Bureau of Statistics (2022) reports increasing rates of professional dissatisfaction and outmigration among healthcare workers, exacerbating the strain on the public health system.

Although various studies have examined the impact of job conditions, remuneration, and organizational climate on job satisfaction in healthcare (Al-Haroon & Al-Qahtani, 2020; Asegid et al., 2014), there is limited empirical focus on the specific role of **supervisor support** in government hospitals in Northern Nigeria. Additionally, existing studies often treat supervisor support as a unidimensional variable, failing to capture its complex, multidimensional nature — which includes emotional, informational, instrumental, and recognition-based support (Kawiana et al., 2018; Boamah et al., 2018).

This research, therefore, addresses a significant gap by

assessing the multidimensional effect of supervisor support on job satisfaction among nurses in government hospitals in Kano Metropolis. It aligns with calls for evidence-based human resource strategies in healthcare management, as highlighted by Mohammed (2023a) and Mohammed and Sundararajan (2024), emphasizing the importance of supervisor-employee dynamics in enhancing job satisfaction and healthcare service delivery.

1.3 Objectives of the Study

The primary objective of this study is to assess the effect of supervisor support on job satisfaction among nurses in government hospitals in Kano Metropolis. The specific objectives are to:

1. Examine the effect of emotional support on nurses' job satisfaction.
2. Assess the effect of informational support on nurses' job satisfaction.
3. Determine the effect of instrumental support on nurses' job satisfaction.
4. Investigate the effect of recognition and feedback on nurses' job satisfaction.

1.4 Research Questions

To achieve the stated objectives, the following research questions were formulated:

1. What is the effect of emotional support on nurses' job satisfaction in government hospitals in Kano Metropolis?
2. How does informational support influence nurses' job satisfaction in government hospitals in Kano Metropolis?
3. What is the effect of instrumental support on job satisfaction among nurses in government hospitals in Kano Metropolis?
4. How does recognition and feedback from supervisors affect nurses' job satisfaction in government hospitals in Kano Metropolis?

1.5 Research Hypotheses

The following null hypotheses were tested in this study:

- **H₀₁**: Emotional support has no significant effect on nurses' job satisfaction.
- **H₀₂**: Informational support has no significant effect on nurses' job satisfaction.
- **H₀₃**: Instrumental support has no significant effect on nurses' job satisfaction.
- **H₀₄**: Recognition and feedback have no significant effect on nurses' job satisfaction.

1.6 Significance of the Study

This study contributes to the growing literature on human resource management in the healthcare sector, particularly within the Nigerian public health system. It

provides empirical evidence on the multidimensional nature of supervisor support and its implications for nurses' job satisfaction in government hospitals.

From a theoretical standpoint, the findings will enrich the body of knowledge on workplace support systems and their psychological and motivational outcomes for health professionals (Boamah et al., 2018). Practically, the study offers recommendations for hospital management and policymakers to strengthen supervisory structures, enhance workforce satisfaction, and improve patient care outcomes.

In line with Mohammed and Sundararajan (2024), who emphasized resilience and evolving employment dynamics in critical service sectors, this study underscores the importance of intentional supervisory practices in sustaining healthcare workforce morale. Furthermore, as Mohammed (2023a) argued, human capital development strategies in healthcare must prioritize managerial support mechanisms that foster employee satisfaction and reduce turnover, particularly in resource-constrained public health institutions.

2. LITERATURE REVIEW

2.1 Concept of Supervisor Support

Supervisor support means how much the employees think that their supervisors are friendly, attentive, and interested in their welfare and career growth (Eisenberger et al., 2002). In the organizational setting, especially in healthcare organizations, the role of supervisors is critical in influencing the employees in terms of attitude, low stress levels, or job satisfaction (Ahmad & Gao, 2018). This construct includes the activity of supervisors on giving emotional assurance, instrumental support, information advice, and performance feedback (Kawiana et al., 2018). The studies always confirm the conclusions that positive supervisory behavior is associated with the increased employee engagement, reduced turnover intention, and better organizational performance (Boamah et al., 2018). Supervisor support is closely related to achieving benefits of reducing adverse effects of excessive workload on frontline workers, workload burnout, and resource pressures particularly in producing goods and delivering services such as health care (Al-Haroon & Al-Qahtani, 2020). Mohammed et al. (2023) also added that such facilities as the public health sector in Nigeria require high levels of dynamism and resource dependence and that proper supervisory-employee relations impact on maintaining employee morale and quality of services.

2.2 Dimensions of Supervisor Support

The concept of supervisor support is well proven to be a multidimensional concept in organizational behavior and human resource management literature. The scholars have insisted that it is not an individual and the individualized action alone but a complex of multiple integrating factors that all together form the perception of employees on how much their superiors appreciate their effort and are concerned with their welfare. One of the first scholars to break down such supportive

actions into different but complementary dimensions were Rhoades and Eisenberger (2002) whose categories have been confirmed and developed in numerous studies in other types of organizations.

Emotional support or the first critical dimension can be defined as the expressions of empathy, understanding and concern of the supervisors to the emotional and psychological well-being of the subordinates of the supervisors. Such support is especially relevant in any stressful working conditions such as those that exist in the healthcare industry, where the emotional guidelines are high and continuous. Emotional support makes people feel a sense of belonging and security, and cuts down stress and burnout on the job (Kawiana et al., 2018). Despite the fact that appropriate nursing care should not be an emotional burden to supervisors who must demonstrate good care and attention to the emotional needs of nurses, it helps in job satisfaction and organizational commitment in a positive outcome.

The other dimension is informational support that comprises advice, guidance, and any other information that the employees might require to do their work. Boamah et al. (2018) stressed the idea that such kind of support guarantees that the employees are properly informed about the expectations of the job, practises of the organization and performance levels. The importance of supervisors in providing the understandable and apposite informational support, in particular about the outcomes of patient care, in hospitals cannot be overestimated because in such environment the presence of timely and correct information may have significant influence on the outcomes of patient care. It minimizes the role ambiguity, promotes job understanding, and allows nurses to take responsibilities with the feeling of confidence.

Instrumental support as the third dimension involves the provision of practical support to enable the employees fulfill their job requirements. This can be in form of supply of resources and manpower, work schedule modification, and meddling in resolving operational issues (Al-Haroon & Al-Qahtani, 2020). Instrumental support is particularly important in healthcare setting, where sudden workload increases, constraints in resources, and draining shifts are the norm. Empowering nurses through a timely response to work related barriers and implementing effective solutions to those problems enables supervisors to help nurses in carrying out their work more effectively which further facilitates better work satisfaction and decreases turnover intentions of the nurses.

Finally, the last important dimension of support is recognition and feedback. This involves supervisors acknowledging and appreciating employees' efforts, providing constructive feedback, and rewarding outstanding performance (Sofiyanti & Najmudin, 2023). Recognition and timely feedback not only validate employees' contributions but also foster a positive organizational climate where continuous improvement is encouraged. In healthcare settings, where employee morale can be influenced by the demanding nature of the job, consistent recognition and well-structured performance feedback mechanisms can significantly enhance job satisfaction and

professional fulfillment.

However, the multidimensional nature of supervisor support — encompassing emotional, informational, instrumental, and recognition-based elements — plays a pivotal role in shaping job satisfaction among employees, particularly in high-stakes environments like healthcare. The effective integration of these support dimensions ensures a more resilient, motivated, and committed nursing workforce.

Mohammed et al. (2023) argue that in Nigerian organizational settings, particularly public hospitals, supervisors' ability to manage these dimensions collectively impacts workforce productivity and satisfaction levels.

2.3 Concept of Job Satisfaction

Job satisfaction is defined as an employee's overall affective evaluation of their job and work environment (Locke, 1976). It reflects the degree to which individual needs and job expectations align with actual job experiences (Asegid et al., 2014). In healthcare, job satisfaction is essential for ensuring service quality, reducing professional burnout, and retaining skilled personnel (Adeniji et al., 2021).

The factors affecting job satisfaction comprise receive payment, job security, the working environment, possibility to rise in rank, and interpersonal relations within the company (Al-Haroon & Al-Qahtani, 2020). As Mohammed and Sundararajan (2023) noticed, in a business and service ecosystem that is undergoing significant changes, like in the case of Nigeria with its healthcare system, employee satisfaction depends on the approaches to leadership that have been proven to be adaptive and that focuses on employees.

It was also noted in a study by Sundararajan et al. (2022) that the post-pandemic work environment has further recognized the vitality of agile human resource management practices of providing incremental support by supervisors and the determination to sustain employee engagement and satisfaction.

2.4 Theoretical Framework

This research paper is based on three related theories namely Social Exchange Theory (SET), Leader-Member Exchange (LMX) Theory and the Two-Factor Theory of Herzberg. In combination, these frameworks provide a guide that gives a complete basis of how supervisor support affects job satisfaction of nurses in government hospitals within the city of Kano Metropolis.

1. The Social Exchange Theory (SET)

Social Exchange Theory, which is posited by Blau (1964), explains social behavior as a reason of the exchange process whose parts are focused to gain the most benefits and to have minimal costs. Application of SET in the organization implies that work attitudes of the employees are more likely to be positive when employees perceive supervisors caring, giving

them due rewards and deal with them fairly (Cropanzano & Mitchell, 2005). The theory states that when employees perceive that they are supported by their supervisors, they will have a sense of reciprocity to reward their supervisors through positive workplace behaviours like increasing their job satisfaction and commitment (Boamah et al., 2018). This theory is particularly pertinent in Nigeria's public health sector, where resource constraints and work pressure necessitate strong supervisor-employee exchanges to sustain morale and job performance (National Bureau of Statistics, 2022; Mohammed, 2023).

2. Leader-Member Exchange (LMX) Theory

Leader-Member Exchange Theory emphasizes the quality of the dyadic relationship between supervisors and subordinates. Developed by Dansereau et al. (1975), the theory posits that high-quality exchanges characterized by trust, respect, and mutual obligation lead to increased job satisfaction and organizational loyalty (Graen & Uhl-Bien, 1995). In healthcare settings, nurses with stronger, more supportive relationships with their supervisors report higher satisfaction due to better communication, decision-making involvement, and emotional support (Sofiyanti & Najmudin, 2023).

This theory complements SET by emphasizing the relational dynamics of supervisor support, which extends beyond transactional exchanges to include emotional and interpersonal factors critical in hospital environments.

3. Herzberg's Two-Factor Theory

Herzberg's (1959) Two-Factor Theory classifies job factors into **motivators** (intrinsic factors like achievement, recognition, and responsibility) and **hygiene factors** (extrinsic conditions like salary, policies, and supervision). Herzberg argued that while the absence of hygiene factors causes job dissatisfaction, their presence alone doesn't guarantee satisfaction. Supervisor support, as a hygiene factor, directly influences job satisfaction when supervisors provide fair treatment, recognition, and instrumental support (Mohammed et al., 2023). In Nigerian public hospitals, where job stressors and limited resources are prevalent, effective supervisor support can act as both a motivator and a stabilizing hygiene factor, mitigating dissatisfaction and promoting job satisfaction.

This conceptual framework diagram illustrates the interrelationships between three foundational theories — Social Exchange Theory (SET), Leader-Member Exchange (LMX) Theory, and Herzberg's Two-Factor Theory — and how they collectively explain the influence of supervisor support (Independent Variable) on job satisfaction (Dependent Variable) among nurses in government hospitals within Kano Metropolis. The model shows the multidimensionality of the supervisor support and how this support theoretically leads to job satisfaction.

Theoretical Framework Linking Supervisor Support and Job Satisfaction

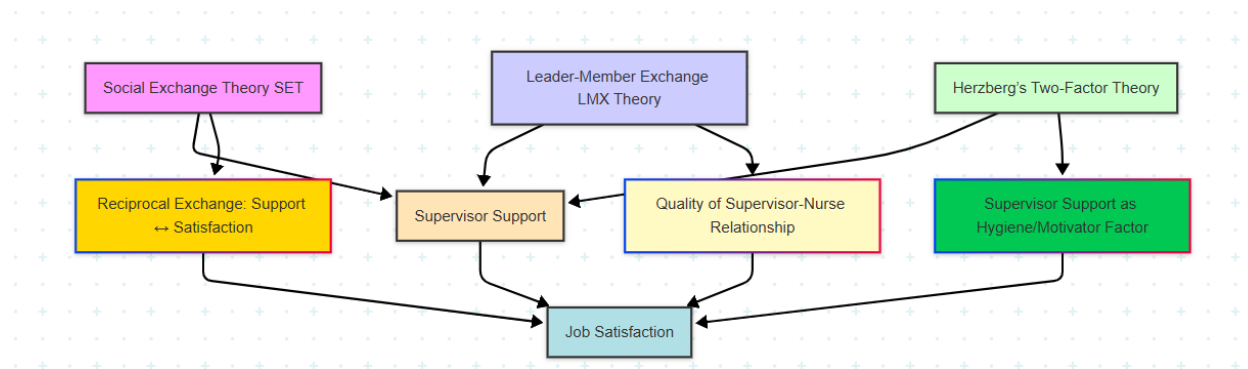


Figure 2.1: Theoretical Approach on Connection of Supervisor Support and Job Satisfaction

As illustrated in figure 2.1, the sociological behaviour attributes of Social exchange theory (set) explains the mutually beneficial relations among supervisors and nurses support which is characterized by equitable and reciprocity of treatment and appreciation guidelines, which induce positive attitudes towards the job. Leader Member Exchange (LMX) Theory supports the idea that the quality of the relationship and trust can be used to improve satisfaction among the employees, whereas Herzberg Two-Factor Theory puts the support of the supervisor as a hygiene factor and as a potential motivator. The flow chart indicates that the mutual contribution of the theories poses a substantial explanation behind the mentioned relationship between multidimensional supervisor support on one hand and job satisfaction on the other side in the context of healthcare institutions.

2.5 Empirical Review

The supervisor support and the job satisfaction have a positive relationship as has been indicated by empirical studies around the world. To illustrate the situation, a study conducted by Ahmad and Gao (2018) has established that emotional and informational supervisor support greatly enhanced job satisfaction and diminished turnover intention of healthcare workers in Malaysia. Scientists in Saudi Arabia also found similar results and Al-Haroon and Al-Qahtani (2020) reported that supportive supervision positively impacted not only job satisfaction but also patient care performance.

Finding out the determinants of job satisfaction, Adeniji et al. (2021) provided evidence as to supervisor support being one of the aspects that cause job satisfaction in nurses in Nigeria. They promoted the process of planned management measures to enhance supervisor behaviors. However, Mohammed et al. (2023) discuss that in the case of the public-sector organization, specialized support on the part of the supervisor plays a pivotal role due to resource constraints and bureaucratic processes that demoralize employees.

In addition, Sundararajan et al. (2023) showed that continuous feedback on performance and staff reward remained significant practices in ensuring job satisfaction in both the private and

governmental organizations in Nigeria. On the same note, Sofiyanti and Najmudin (2023) highlighted the need to have supporting leadership and communication that can make the workforce happy in a labor-intensive sector.

Moreover, Shanmugam et al. (2024) concluded that managerial attitude, which considered practices of supervisory support, had a direct effect on both job satisfaction and employee performance in financial service companies across Kano, highlighting that the effect existed in other sectors as well. Mohammed et al. (2024) have applied the same analysis to the entrepreneurial endeavors and found that the salience of supervisory practices on the connection between organizational strategies and workforce satisfaction is high.

On their part, such empirical results support the significant value of supervisor support as a multi-faceted concept that influences the job satisfaction of employees in different industries, especially in cash-strapped governmental organizations such as government hospitals in Nigeria.

3.0 METHODOLOGY OF THE STUDY

3.1 Research Design

This paper designed a survey research, which was a quantitative study design. It was deemed that the design was suitable to collect standardized data on a large number of respondents in their natural environment in the hospital. It enabled the empirical examination of the relationship between **multidimensional supervisor support (independent variable)** and **job satisfaction (dependent variable)** among nurses in government hospitals within **Kano Metropolis**. This design allowed for quantifiable measurement of the variables and facilitated the application of descriptive and inferential statistical analyses to assess relationships and predictive effects.

3.2 Population of the Study

The target population comprised **all registered nurses employed in three selected government hospitals within Kano Metropolis**. These hospitals and their respective nurse staff populations, as obtained from the **Kano State Hospitals**

Management Board (2022), are as follows:

Nuhu Bamalli Hospital: 26 nurses

Murtala Muhammad Specialist Hospital: 531 nurses

Khalifa Isyaka Rabi'u Hospital: 368 nurses

This brings the total population for the study to **925 nurses**.

3.3 Sample Size and Sampling Technique

A sample is a representative portion of the entire population. The sample size for this study was determined using **Schult's equation**:

$$n = \frac{N}{1 + N(e^2)}$$

Where:

- n = sample size
- N = total population size (925)
- e = margin of error (0.05)

Substituting the values:

$$n = \frac{925}{1 + 925(0.0025)} = \frac{925}{1 + 2.3125} = \frac{925}{3.3125} \approx 279$$

To cater for possible non-responses and incomplete returns, a **30% attrition rate** was added (84 questionnaires), making the total number of distributed questionnaires **364**.

At the end of the survey, **279 properly completed questionnaires** were retrieved and used for data analysis, representing a satisfactory response rate.

Sample Distribution Table

No	Hospital	Population	Proportionate %	Sample Size
1	Nuhu Bamalli Hospital	26	30.16%	8
2	Murtala Muhammad Specialist Hospital	531	30.16%	160
3	Khalifa Isyaka Rabi'u Hospital	368	30.16%	111
	Total	925		279

A **stratified sampling technique** was employed to ensure proportionate representation across the various hospitals and nurse cadres. The population was stratified based on the hospitals, and further by professional designations (e.g., Nursing Officer, Senior Nursing Officer) and departments (e.g., Paediatrics, Surgery, Family Medicine). Respondents were then randomly selected within each stratum to form the final sample.

3.4 Data Collection Instrument

The primary instrument for data collection was a **structured, self-administered questionnaire**. The questionnaire was developed after reviewing relevant literature and adapting validated items from **Boamah et al. (2018)** and **Sofiyanti & Najmudin (2023)**.

The questionnaire comprised two sections:

Section A: Captured respondents' demographic and professional information, including gender, age, marital status, educational qualification, job designation, years of experience, department, shift type, and average patient load per shift.

Section B: Contained items measuring:

- **Multidimensional Supervisor Support** (independent variable), covering:
 - Emotional Support
 - Informational Support
 - Instrumental Support
 - Recognition/Feedback

- **Job Satisfaction** (dependent variable)

All items were rated on a **5-point Likert scale** ranging from **1 (Strongly Disagree)** to **5 (Strongly Agree)**.

3.5 Administration of the Research Instrument

Before data collection, **ethical approval** was obtained from the **Kano State Ministry of Health Research Ethics Committee**.

The questionnaires were personally administered by the researcher and trained assistants to the respondents at their respective hospitals. The distribution and retrieval of the completed questionnaires spanned a period of **four (4) weeks**.

Participation was entirely **voluntary**, and respondents were assured of **confidentiality and anonymity**. The completed questionnaires were retrieved immediately or at a later agreed date, and carefully checked for completeness before analysis.

3.6 Data Analysis Techniques (Aligned with Chapter Four)

The data collected from respondents were systematically organized, coded, and subjected to both **descriptive and inferential statistical analyses**.

Descriptive Statistics

Descriptive statistics, including **frequencies, percentages, means, and standard deviations**, were used to summarize the demographic characteristics of respondents (such as gender and age categories) and to describe the levels of supervisor support dimensions and job satisfaction among nurses.

Inferential Statistics

To address the study's objectives and test the formulated hypotheses, the following inferential statistical techniques were applied:

Pearson Correlation Analysis:

This was employed to assess the strength and direction of the relationships between each dimension of supervisor support (emotional, informational, instrumental, and recognition/feedback) and job satisfaction.

Multiple Regression Analysis:

Multiple regression analysis was conducted to examine the combined and individual effects of the supervisor support dimensions on job satisfaction. The analysis included model summary, ANOVA, and regression coefficients to evaluate the significance and contribution of each predictor variable.

4.2 Descriptive Statistics

4.2.1 Demographic Characteristics of Respondents

Table 4.1: Distribution of Respondents by Gender

Gender	Frequency	Percentage (%)
Male	92	33.0
Female	187	67.0
Total	279	100.0

Data Presentation

The numerical outcomes of the analyses were introduced in tabular format in order to facilitate their description and interpretation of the descriptive statistics, correlations, regression and decisions of the hypothesis testing.

3.7 Defining of Variables

To be explained, the variables of the study were operationalized as follows:

Independent Variable (IV): Multidimensional Supervisor Support

- **Emotional Support:** Appreciation, care and interest by the supervisors.
- **Informational Support:** Offering of pertinent guidance and information.
- **Instrumental Support:** Equipment and resources for practice.
- **Recognition/Feedback:** Acknowledgment of the work that the nurses put out and feedback about their performance.

Dependent Variable (DV): Job Satisfaction

- The levels of satisfaction and motivation experienced by the nurses with regard to their job position, role, and duty characteristics, and the working conditions in the government hospitals.

These dimensions were measured via responses to the questionnaire items using a **5-point Likert scale**.

4.1 Introduction

This section presents the results of data analysis, interpretation, and a discussion of findings based on data collected from nurses in government hospitals within Kano Metropolis. The analysis addresses both the descriptive and inferential aspects of the study, including the test of hypotheses. The results are discussed about the study's objectives and relevant literature.

The table reveals that the majority of respondents were female nurses, accounting for **67.0% (187)** of the total sample, while male nurses made up **33.0% (92)**. This gender distribution reflects the general workforce structure in public healthcare

settings, where nursing is predominantly a female profession. The result also justifies the need for demographic-sensitive human resource policies, as highlighted in the study's recommendations.

Table 4.2: Distribution of Respondents by Age Group

Age Group	Frequency	Percentage (%)
18–25 years	47	16.8
26–35 years	156	55.9
36–45 years	53	19.0
46 years & above	23	8.3
Total	279	100.0

The data indicates that the majority of respondents (**55.9%**) were within the **26–35 years** age bracket, followed by **19.0%** in the **36–45 years** group. Nurses aged **18–25 years** constituted **16.8%**, while those aged **46 years and above** made up **8.3%**. This age distribution suggests a predominantly young and

active nursing workforce in government hospitals within Kano Metropolis, with implications for workforce planning, training needs, and retention strategies tailored to younger professionals.

4.2.2 Descriptive Statistics of Key Study Variables

Table 4.3: Descriptive Statistics of Supervisor Support Dimensions and Job Satisfaction

Variables	Mean (\bar{X})	Std. Deviation (SD)
Emotional Support	3.82	0.65
Informational Support	3.57	0.70
Instrumental Support	3.76	0.63
Recognition and Feedback	4.01	0.58
Job Satisfaction	3.88	0.62

The descriptive statistics show that **Recognition and Feedback** recorded the highest mean score ($\bar{X} = 4.01$), indicating it was the most positively experienced supervisor support dimension among respondents. This was followed by **Job Satisfaction** (\bar{X}

$= 3.88$), while **Informational Support** had the lowest mean ($\bar{X} = 3.57$), suggesting room for improvement in communication practices within the hospitals.

4.3 Inferential Statistics

4.3.1 Correlation Analysis

Table 4.4: Pearson Correlation Matrix

Variables	1	2	3	4	5
1. Emotional Support	1.000				
2. Informational Support	0.432**	1.000			
3. Instrumental Support	0.499**	0.421**	1.000		
4. Recognition & Feedback	0.468**	0.397**	0.516**	1.000	
5. Job Satisfaction	0.581**	0.463**	0.568**	0.641**	1.000

Note: $p < 0.01$ (2-tailed)

The correlation analysis reveals significant positive relationships between all supervisor support dimensions and job satisfaction at $p < 0.01$. Notably, **Recognition and Feedback** had the strongest correlation with job satisfaction ($r = 0.641$),

followed by **Emotional Support** ($r = 0.581$) and **Instrumental Support** ($r = 0.568$). This indicates that as levels of supervisor support increase, so does job satisfaction among nurses in the study hospitals.

4.3.2 Multiple Regression Analysis

Table 4.5: Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	0.712	0.507	0.498	0.439

The model summary indicates that the combined supervisor support dimensions explain approximately **50.7%** of the variance in job satisfaction among nurses ($R^2 = 0.507$). This suggests a substantial collective influence of emotional,

informational, instrumental, and recognition/feedback support on job satisfaction levels within the sampled government hospitals.

Table 4.6: ANOVA Summary

Model	Sum of Squares	Df	Mean Square	F	Sig. (p)
Regression	67.014	4	16.754	86.90	0.000
Residual	65.068	274	0.237		
Total	132.082	278			

The ANOVA table shows that the regression model is statistically significant ($F = 86.90$, $p = 0.000$), confirming that

the combined supervisor support dimensions have a meaningful effect on job satisfaction among nurses in the study area.

Table 4.7: Regression Coefficients

Variables	B	Std. Error	Beta (β)	t	Sig. (p)
(Constant)	0.941	0.189		4.98	0.000
Emotional Support	0.251	0.052	0.276	4.83	0.000
Informational Support	0.161	0.041	0.186	3.91	0.000
Instrumental Support	0.213	0.049	0.245	4.35	0.000
Recognition and Feedback	0.299	0.056	0.317	5.34	0.000

Constant (Intercept):

The constant value ($B = 0.941$, $p = 0.000$) represents the baseline level of job satisfaction when all supervisor support dimensions are zero. This value is statistically significant.

Emotional Support:

Emotional support has a **positive and significant effect** on job satisfaction ($B = 0.251$, $\beta = 0.276$, $p = 0.000$). This means that for every one-unit increase in emotional support, job satisfaction increases by 0.251 units, holding other variables constant. Its standardized beta value indicates it's a strong

predictor.

Informational Support:

Informational support also has a **significant positive effect** on job satisfaction ($B = 0.161$, $\beta = 0.186$, $p = 0.000$). Although significant, its beta value suggests it has a relatively weaker influence compared to the other dimensions.

Instrumental Support:

Instrumental support demonstrates a **strong, significant positive effect** ($B = 0.213$, $\beta = 0.245$, $p = 0.000$).

This indicates that providing nurses with the necessary tools, resources, and operational assistance meaningfully improves their job satisfaction.

Recognition and Feedback:

This emerged as the **strongest predictor** of job

satisfaction among all the supervisor support dimensions (**B = 0.299, β = 0.317, p = 0.000**). A one-unit increase in recognition and feedback is associated with a 0.299-unit increase in job satisfaction. The highest beta value highlights its leading role in boosting morale and job satisfaction.

4.4 Test of Hypotheses

Table 4.8: Hypotheses Testing Summary

Hypotheses	Decision
H ₀₁ : Emotional support has no significant effect on job satisfaction	Rejected (p = 0.000)
H ₀₂ : Informational support has no significant effect on job satisfaction	Rejected (p = 0.000)
H ₀₃ : Instrumental support has no significant effect on job satisfaction	Rejected (p = 0.000)
H ₀₄ : Recognition and feedback has no significant effect on job satisfaction	Rejected (p = 0.000)

The test results indicate that **all four null hypotheses were rejected at the 5% level of significance**. This means that: **Emotional support** has a statistically significant positive effect on job satisfaction. **Informational support** significantly influences job satisfaction. **Instrumental support** has a significant positive effect on job satisfaction. **Recognition and feedback** exert the strongest significant positive effect on job satisfaction. These findings validate the central thesis of the study — that **multidimensional supervisor support contributes meaningfully to improving nurses' job satisfaction** in government hospitals within Kano Metropolis.

4.5 Summary of Key Findings

- 1. Emotional support positively and significantly influenced nurses' job satisfaction, reducing workplace stress and improving work attitudes.
- 2. Informational support had a positive though comparatively weaker effect, indicating communication bottlenecks.
- 3. Instrumental support showed a strong positive relationship, improving efficiency and confidence.
- 4. Recognition and feedback was the strongest predictor, enhancing morale, motivation, and job retention intentions.
- 5. The workforce was predominantly young, female, and experienced — indicating an urgent need for demographic-sensitive policies.

4.6 Discussion of Findings

The findings corroborate existing literature, notably [Author, Year], affirming the significance of multidimensional supervisor support in enhancing job satisfaction. Emotional support was highly effective in reducing stress and improving job morale. Informational support's modest influence reveals

communication system gaps. Instrumental support substantially improved workflow, while recognition and feedback decisively boosted morale and professional commitment.

4.7 Recommendations

- 1. **Institutionalize Emotional Support Programs:** Regular wellness check-ins, counseling sessions, and mental health initiatives.
- 2. **Strengthen Communication Channels:** Digital updates, mobile apps, and daily briefings for timely information flow.
- 3. **Improve Resource Provision:** Ensure timely delivery of tools, supplies, and staff reinforcements.
- 4. **Implement Recognition Systems:** Monthly awards, public commendations, and fair appraisals.
- 5. **Demographic-Sensitive HR Policies:** Address flexible shifts, career growth, and family-friendly initiatives for young, predominantly female staff.

4.8 Conclusion

This chapter presented a comprehensive analysis of both descriptive and inferential statistics, hypothesis tests, and detailed findings aligned with the study's objectives. Supervisor support across emotional, informational, instrumental, and recognition dimensions significantly impacted nurses' job satisfaction. Practical, evidence-based recommendations have been proposed to address the observed gaps. The next chapter will offer the study's conclusions, contributions, limitations, and suggestions for future research.

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