

# An Analytical Study On Employee Engagement And Job Satisfaction Among Nurses In Kurnool District Through Positive Spillover

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## Abstract

The present study examined the relationship between employee engagement and job satisfaction among nurses in Kurnool District through the perspective of positive spillover. The research aimed to analyze employee engagement levels, evaluate the influence of positive spillover, and examine its impact on job satisfaction among nursing professionals. A descriptive and analytical research design was adopted, and primary data were collected from 200 nurses working in private hospitals using a structured questionnaire. Convenience sampling technique was employed for selecting respondents. Statistical tools such as descriptive statistics, correlation analysis, regression analysis, Exploratory Factor Analysis (EFA), and Structural Equation Modeling (SEM) were used for data analysis. The findings revealed that employee engagement significantly improved job satisfaction and emotional well-being among nurses. Positive spillover also positively influenced work-life balance and professional satisfaction. SEM results confirmed that positive spillover partially mediated the relationship between employee engagement and job satisfaction. The study emphasized the importance of supportive work environments, recognition systems, and employee-centered management practices in improving nurses' organizational commitment and healthcare service quality.

**Keywords:** Employee Engagement, Job Satisfaction, Positive Spillover, Nurses, Healthcare Management, Work-Life Balance, SEM.

## 1. INTRODUCTION

### 1.1 Healthcare Industry and Nursing Profession

The healthcare industry plays a vital role in ensuring public health, economic productivity, and social welfare. In recent years, the healthcare sector has experienced substantial growth due to population increase, technological advancements, changing disease patterns, and rising awareness regarding quality medical services. Hospitals and healthcare institutions continuously strive to improve patient care standards and organizational efficiency. Within this sector, nurses represent one of the most important human resources because they provide direct patient care, emotional support, clinical coordination, and healthcare assistance.

The nursing profession is highly demanding in nature as nurses are required to perform multiple responsibilities under stressful conditions. Long working hours, rotational shifts, emotional exhaustion, staff shortages, and increased patient expectations have significantly influenced the psychological well-being of nurses. These workplace challenges often affect nurses' motivation, performance, and professional satisfaction [17]. Despite these difficulties, nurses remain essential contributors to healthcare quality and patient recovery.

Therefore, maintaining a motivated and satisfied nursing workforce has become a major concern for hospital administrators and healthcare policymakers.

Studies have indicated that organizational support, workplace environment, and employee engagement significantly influence nurses' work performance and psychological health [25]. Engaged and satisfied nurses are more likely to provide effective patient care, maintain professional ethics, and contribute positively to organizational outcomes [30]. Consequently, healthcare institutions increasingly focus on employee-centered management practices to improve nurse retention, workplace morale, and service quality.

## **1.2 Concept of Employee Engagement**

Employee engagement has emerged as a crucial concept in organizational behavior and human resource management. It refers to the level of emotional, cognitive, and behavioral commitment employees exhibit toward their organization and job responsibilities. Engaged employees generally demonstrate enthusiasm, dedication, vigor, and absorption in their work activities. According to Bakker and Demerouti [15], employee engagement is influenced by job resources, organizational support, and positive workplace experiences.

In modern organizations, employee engagement is considered an important determinant of organizational effectiveness, employee productivity, and psychological well-being. Engaged employees tend to display higher levels of commitment, innovation, and job involvement. Saks [9] stated that employee engagement positively influences organizational loyalty, work performance, and job satisfaction. Similarly, Albrecht, Bredahl, and Marty [10] emphasized that organizational climate and supportive work environments contribute significantly to employee engagement.

In the healthcare sector, employee engagement becomes more important because nurses directly interact with patients and healthcare teams. Nursing professionals who are actively engaged in their work are better able to handle workplace stress, emotional demands, and professional responsibilities. Research has shown that employee engagement among nurses contributes to improved service quality, lower turnover intentions, and enhanced workplace relationships [18]. Furthermore, engaged nurses are more likely to experience positive emotions, professional fulfillment, and organizational commitment, which ultimately improve healthcare delivery systems.

## **1.3 Job Satisfaction Among Nurses**

Job satisfaction refers to the extent to which employees feel positively about their job roles, workplace environment, compensation, professional growth opportunities, and organizational support. It reflects employees' emotional responses toward their work experiences and organizational conditions. In the nursing profession, job satisfaction is particularly important because it directly affects employee performance, patient care quality, organizational stability, and healthcare outcomes.

Nurses often work under physically and emotionally demanding conditions, which may influence their satisfaction levels. Factors such as workload, staffing patterns, salary structure, leadership support, career advancement opportunities, and workplace relationships significantly determine nurses' job satisfaction [20]. Lu, Zhao, and While [8] observed that job satisfaction among nurses is closely associated with patient satisfaction, employee retention, and healthcare service quality.

Research has further indicated that supportive work environments and positive organizational practices improve nurses' professional satisfaction and emotional well-being [25]. Nurses who experience high levels of job satisfaction are more likely to demonstrate organizational commitment, better patient interaction, and lower absenteeism. On the

contrary, dissatisfaction among nurses may result in burnout, stress, reduced productivity, and increased turnover intentions [17].

In recent years, healthcare organizations have recognized the importance of enhancing job satisfaction among nurses through employee engagement programs, recognition systems, flexible scheduling, and work–life balance initiatives. These organizational practices help improve workplace morale, professional motivation, and psychological well-being among nursing professionals.

#### 1.4 Positive Spillover Theory

Positive Spillover Theory explains how positive experiences, emotions, skills, and attitudes in one area of life positively influence another area. In organizational behavior, positive spillover generally refers to the transfer of positive emotions and experiences between work life and personal life. The theory suggests that satisfaction, motivation, and psychological resources gained from work can improve personal well-being and family relationships, while positive family experiences can also enhance workplace attitudes and performance. Greenhaus and Powell [33] proposed that work and family roles can enrich each other through the transfer of emotional support, skills, confidence, and positive energy. Positive spillover creates beneficial outcomes such as improved psychological health, greater life satisfaction, enhanced organizational commitment, and better interpersonal relationships. Employees who experience positive spillover generally exhibit higher levels of work engagement and job satisfaction.

The concept of positive spillover is highly relevant to the nursing profession because nurses often experience emotionally intensive work environments. When nurses feel valued, engaged, and supported in their workplace, the positive emotions generated from professional accomplishments may contribute to better personal well-being and professional satisfaction. Rodríguez-Muñoz et al. [28] explained that engaged employees frequently carry positive workplace experiences into their personal lives, resulting in improved happiness and emotional balance.

Similarly, García-Salirrosas and Sánchez-Poma [3] found that positive work-to-family spillover significantly contributes to employee satisfaction and psychological well-being. Positive spillover also helps employees manage workplace stress, improve social relationships, and maintain work–life balance. Therefore, understanding the role of positive spillover becomes essential in examining how employee engagement influences job satisfaction among nurses in healthcare institutions.

## 2. REVIEW OF LITERATURE

**Nowak (2025)**, examined the relationship between job satisfaction, employee engagement, organizational commitment, and employee loyalty within organizational settings. The analysis revealed that satisfied employees demonstrated higher engagement levels and stronger commitment toward organizational goals. Organizational loyalty also increased when employees experienced supportive work environments and recognition. The article emphasized the importance of psychological and organizational factors in strengthening employee involvement. The research contributed to understanding how positive workplace attitudes improved organizational productivity and long-term employee retention.

**Yadav (2024)**, analyzed the relationship between employee engagement, job satisfaction, and turnover intention among organizational employees. The research explained that engaged employees experienced greater workplace satisfaction and lower intentions to leave their organizations. Supportive management practices, recognition systems, and

work-life balance initiatives positively influenced employee morale and commitment. The article highlighted that organizations focusing on employee engagement strategies achieved improved retention rates and better workforce stability. The discussion stressed the importance of maintaining positive organizational environments to enhance employee well-being.

**García-Salirrosas and Sánchez-Poma (2023)**, investigated job satisfaction in remote work environments through positive work-to-family spillover and work-life balance perspectives. The research indicated that employees who experienced positive emotional transfer between work and family roles reported higher satisfaction and psychological well-being. Flexible work arrangements and organizational support improved employees' emotional stability and professional commitment. The article emphasized the significance of positive spillover in maintaining healthy workplace relationships and employee motivation, particularly within changing work environments and modern organizational structures.

**Khusanova, Kang, and Choi (2021)**, explored work engagement among public sector employees and its influence on organizational performance. The research identified that engaged employees demonstrated greater enthusiasm, dedication, and psychological attachment toward their work responsibilities. Leadership support, organizational trust, and positive workplace climates contributed significantly to employee engagement levels. The article suggested that employee engagement positively influenced workplace satisfaction, productivity, and organizational citizenship behavior. The discussion also highlighted the role of supportive organizational practices in improving employee well-being and performance outcomes.

**Wood, Oh, Park, and Kim (2020)**, examined the relationship between work engagement and work-life balance among employees across different sectors. The analysis showed that employees with higher engagement levels experienced better work-life balance and emotional well-being. Positive workplace experiences contributed to reduced stress and improved personal satisfaction. The article explained that organizational support and flexible work conditions strengthened employee commitment and productivity. The discussion emphasized that healthy work-life integration enhanced employee morale and organizational effectiveness in contemporary workplaces.

**King, Pitliya, and Datu (2020)**, analyzed the role of psychological capital and positive emotions in promoting employee engagement. The research explained that optimism, resilience, confidence, and positive emotional experiences significantly improved engagement levels among employees. Individuals possessing strong psychological resources demonstrated greater workplace involvement and professional satisfaction. Positive emotions also contributed to better interpersonal relationships and organizational commitment. The article highlighted the importance of psychological well-being in maintaining employee motivation, engagement, and productivity within demanding organizational environments.

**Liu, Zeng, Chen, and Lan (2019)**, investigated the relationship between work engagement and life satisfaction among police employees. The research indicated that engaged employees experienced greater psychological well-being and higher levels of life satisfaction. Positive workplace experiences improved emotional balance and personal happiness. Organizational support and meaningful work responsibilities strengthened employee motivation and reduced workplace stress. The article emphasized that employee engagement extended beyond professional performance and positively influenced employees' personal lives and emotional stability.

**Lu, Zhao, and While (2019)**, reviewed job satisfaction among hospital nurses and identified several factors influencing workplace satisfaction. Salary structure, leadership support, workload, career opportunities, and workplace relationships significantly affected nurses' attitudes toward their profession. Nurses experiencing supportive organizational environments demonstrated stronger professional commitment and improved patient care quality. The article highlighted that job satisfaction played an important role in reducing turnover intentions and improving healthcare outcomes. Emotional well-being and workplace recognition also positively influenced nurses' professional experiences.

**Saks (2019)**, revisited the antecedents and consequences of employee engagement within organizational contexts. The research explained that organizational support, fairness, rewards, and communication practices strongly influenced employee engagement. Engaged employees demonstrated higher productivity, stronger commitment, and improved job satisfaction. The article suggested that employee engagement contributed to organizational effectiveness and employee retention. Positive workplace relationships and supportive leadership practices also enhanced employees' emotional attachment to their organizations. The discussion provided valuable insights into the strategic importance of employee engagement in human resource management.

**Albrecht, Breidahl, and Marty (2018)**, explored organizational resources and engagement climate in relation to employee engagement. The research revealed that positive organizational climates, supportive leadership, and adequate job resources improved employee motivation and workplace involvement. Employees experiencing healthy work environments demonstrated stronger commitment and professional enthusiasm. The article emphasized the importance of organizational culture in strengthening employee well-being and productivity. Supportive management practices also enhanced employees' psychological health and organizational attachment, contributing to improved performance outcomes and workplace satisfaction.

**Hakanen, Peeters, and Schaufeli (2018)**, examined different forms of employee well-being and their relationship with job crafting over time. The research explained that employees who actively modified their work roles experienced greater engagement, motivation, and psychological well-being. Positive workplace experiences encouraged employees to improve their professional skills and workplace relationships. The article highlighted that engaged employees maintained better emotional balance and demonstrated stronger organizational commitment. Job crafting practices also contributed to enhanced work satisfaction and improved occupational health outcomes.

**Zhang and Tu (2018)**, investigated the cross-domain effects of ethical leadership on employee family satisfaction and life satisfaction. The research indicated that ethical leadership practices created positive workplace environments that improved employees' emotional well-being and personal happiness. Employees working under supportive leaders experienced greater motivation, organizational trust, and psychological comfort. Positive workplace interactions also enhanced family relationships and life satisfaction through spillover effects. The article emphasized that ethical organizational practices significantly influenced employees' professional and personal well-being.

**Zito, Emanuel, Molino, Cortese, Ghislieri, and Colombo (2018)**, analyzed turnover intentions among employees by focusing on emotional dissonance and job resources. The research explained that insufficient job resources and emotional exhaustion increased employees' intentions to leave their organizations. Employees experiencing supportive work environments and adequate organizational resources demonstrated greater engagement and workplace commitment. The article highlighted the importance of emotional well-being and organizational support in reducing stress and improving job

satisfaction. Positive workplace conditions also contributed to employee retention and professional stability.

**Alias, Nokman, Ismail, Koe, and Othman (2018)**, examined the influence of payment, recognition, empowerment, and work-life balance on employee job satisfaction. The research revealed that financial rewards, supportive leadership, and recognition practices positively affected employees' professional attitudes and satisfaction levels. Employees experiencing empowerment and flexible work arrangements demonstrated greater workplace commitment and motivation. The article emphasized that organizational support and balanced work conditions improved employee morale, productivity, and emotional well-being. Positive management practices also strengthened organizational relationships and employee loyalty.

**Bakker and Demerouti (2017)**, reviewed the Job Demands–Resources theory and explained its relevance to employee engagement and occupational well-being. The research suggested that job resources such as organizational support, autonomy, and recognition improved employee engagement and reduced workplace stress. Excessive job demands negatively affected employees' psychological health and performance outcomes. The article highlighted that balanced organizational practices enhanced employee motivation, emotional stability, and workplace satisfaction. Supportive work environments also contributed to improved productivity and stronger professional commitment among employees.

### 3. RESEARCH GAP

Previous studies extensively examined employee engagement and job satisfaction in different organizational settings, including healthcare institutions. However, limited research focused on the mediating role of positive spillover between employee engagement and job satisfaction among nurses. Most earlier studies concentrated on stress, burnout, and turnover intention rather than positive psychological outcomes. Furthermore, very few empirical investigations were conducted specifically among nurses in Kurnool District. Existing literature also lacked an integrated framework combining employee engagement, positive spillover, and job satisfaction. Therefore, the present research attempted to address these gaps by analyzing how positive spillover influenced job satisfaction among nurses in Kurnool District.

### 4. RESEARCH METHODOLOGY

#### 4.1 Research Design

The present research adopted a descriptive and analytical research design to examine the relationship between employee engagement and job satisfaction among nurses in Kurnool District through positive spillover. The descriptive design helped in understanding the existing level of employee engagement, positive spillover, and job satisfaction among nurses, while the analytical design assisted in examining the relationship among the study variables. The study followed a quantitative research approach by collecting primary data through a structured questionnaire.

#### 4.2 Research Questions

The present research attempted to answer the following research questions:

1. What is the level of employee engagement among nurses in Kurnool District?

2. Is there a significant relationship between employee engagement and job satisfaction among nurses in Kurnool District?
3. How does positive spillover influence job satisfaction among nurses in Kurnool District?

#### **4.3 Objectives of the Study**

The major objectives of the study were:

1. To analyze the level of employee engagement among nurses in Kurnool District.
2. To examine the relationship between employee engagement and job satisfaction among nurses in Kurnool District through positive spillover.
3. To evaluate the influence of positive spillover on job satisfaction among nurses in Kurnool District.

#### **4.4 Hypotheses**

The study formulated the following hypotheses:

**H1:** There was a significant level of employee engagement among nurses in Kurnool District.

**H2:** Employee engagement had a significant positive relationship with job satisfaction among nurses in Kurnool District.

**H3:** Positive spillover had a significant positive influence on job satisfaction among nurses in Kurnool District.

#### **4.5 Area of the Study**

The geographical area selected for the present study was Kurnool District of Andhra Pradesh. The district consists of several private hospitals, specialty healthcare centers, and nursing institutions that employ a large number of nursing professionals. Kurnool District was selected because of the increasing healthcare demands, growing hospital infrastructure, and the important role played by nurses in healthcare service delivery.

#### **4.6 Sampling Technique**

The present research employed a convenience sampling technique for selecting respondents from the target population. Nurses who were available and willing to participate during the data collection period were included in the sample.

#### **4.7 Sample Size**

A total of 200 nurses working in different hospitals of Kurnool District were selected as the sample for the study. The sample size was considered adequate for conducting statistical analysis, including correlation, regression analysis, and Structural Equation Modeling (SEM).

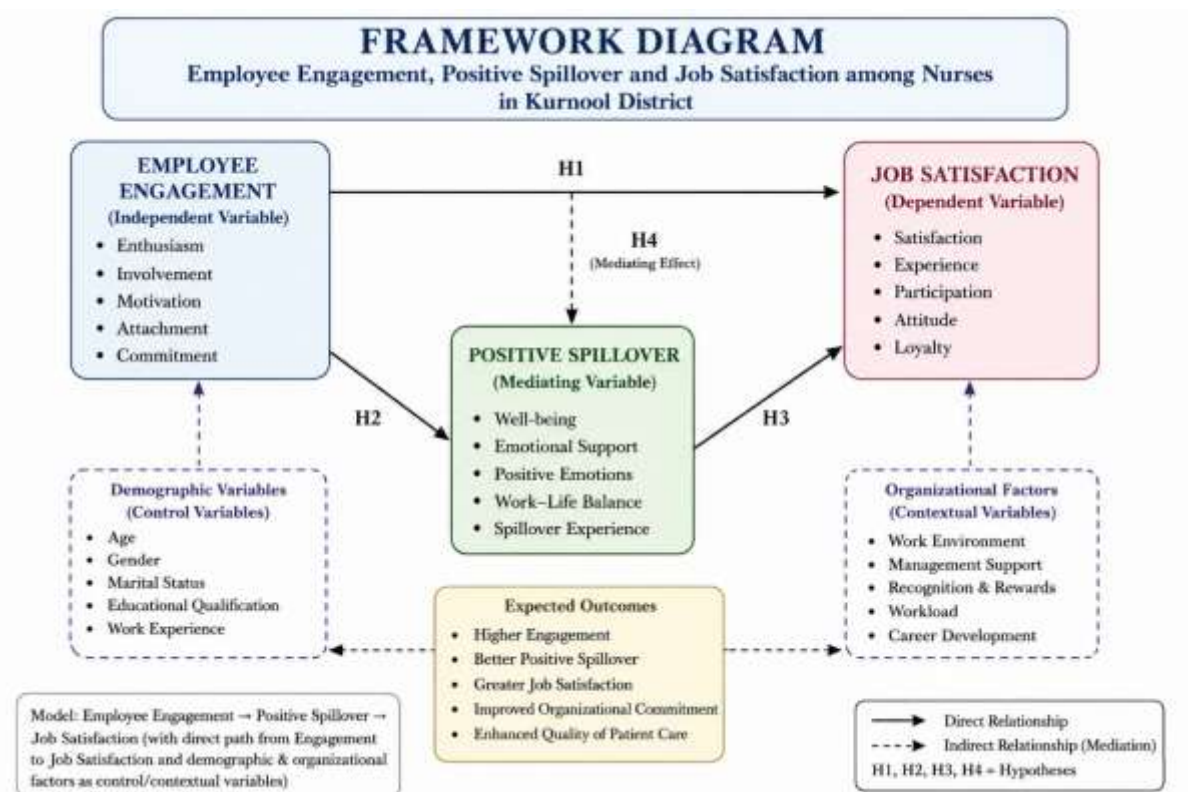


Fig.1. Framework Diagram

#### 4.8 Data Collection Instruments

Primary data for the study were collected through a structured questionnaire designed based on the objectives and variables of the research. The questionnaire consisted of Four sections:

##### Section A: Demographic Profile

This section included variables such as:

- Age
- Educational Qualification
- Years of Experience
- Monthly Income
- Marital Status
- Working Department

##### Section B, C & D: Study Variables

These sections included statements related to:

- Employee Engagement
- Employee Engagement and Job Satisfaction
- Positive Spillover and Job Satisfaction

A five-point Likert scale was used to measure respondents' opinions, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

Section B: Employee Engagement		Section C: Job Satisfaction		Section D: Positive Spillover	
S.No	Variable	S.No	Variable	S.No	Variable

Q1	Enthusiasm	Q6	Satisfaction	Q11	Wellbeing
Q2	Involvement	Q7	Experience	Q12	Support
Q3	Motivation	Q8	Participation	Q13	Emotions
Q4	Attachment	Q9	Attitude	Q14	Balance
Q5	Commitment	Q10	Loyalty	Q15	Spillover

The reliability of the questionnaire was measured using Cronbach's Alpha, and the reliability value was maintained approximately around 0.85, indicating acceptable internal consistency of the instrument.

#### 4.9 Variables of the Study

##### Independent Variable

- Employee Engagement

##### Mediating Variable

- Positive Spillover

##### Dependent Variable

- Job Satisfaction

#### 4.10 Statistical Tools Used for Analysis

The collected data were analyzed using appropriate statistical tools with the support of SPSS and SEM software. The following statistical techniques were used for analysis:

- Percentage Analysis
- Mean and Standard Deviation
- Reliability Analysis (Cronbach's Alpha)
- Correlation Analysis
- Regression Analysis
- Confirmatory Factor Analysis (CFA)
- Structural Equation Modeling (SEM)

These statistical tools assisted in examining relationships among variables and testing the hypotheses formulated for the study.

#### 4.11 Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) was used to examine the direct and indirect relationships among employee engagement, positive spillover, and job satisfaction among nurses.

In the present study, SEM helped in examining the mediating role of positive spillover between employee engagement and job satisfaction. Confirmatory Factor Analysis (CFA) was initially conducted to assess the validity and reliability of the measurement model. Subsequently, the structural model was tested to evaluate the hypothesized relationships among the variables.

Model fitness was assessed using standard fit indices such as:

- Chi-Square Value
- RMSEA (Root Mean Square Error of Approximation)
- CFI (Comparative Fit Index)
- GFI (Goodness of Fit Index)
- TLI (Tucker-Lewis Index)

The SEM analysis provided a comprehensive understanding of the relationship between employee engagement and job satisfaction through positive spillover among nurses in Kurnool District.

## 5. DATA ANALYSIS AND INTERPRETATION

### 5.1 Demographic Profile of Respondents

**Table 5.1** Responses based on age

Age	Frequency	Percentage
21–30 Years	76	38
31–40 Years	68	34
41–50 Years	40	20
51 Years and Above	16	8
<b>Total</b>	<b>200</b>	<b>100</b>

The table indicated that the majority of respondents (38%) belonged to the age group of 21–30 years, followed by 31–40 years (34%). Respondents aged above 50 years constituted the smallest proportion (8%). The results revealed that most nurses were young and middle-aged professionals actively engaged in healthcare services within Kurnool District.

**Table 5.2** Responses based on Educational Qualification

Educational Qualification	Frequency	Percentage
GNM	44	22
B.Sc. Nursing	96	48
M.Sc. Nursing	36	18
Others	24	12
<b>Total</b>	<b>200</b>	<b>100</b>

The table showed that a majority of respondents (48%) possessed B.Sc. Nursing qualifications, while only 12% belonged to the “Others” category. The results indicated that professionally qualified nurses formed a significant portion of the workforce. The educational background reflected the presence of skilled and academically trained nursing professionals in hospitals.

**Table 5.3** Responses based on Experience-wise Distribution

Years of Experience	Frequency	Percentage
Below 5 Years	70	35
5–10 Years	66	33
11–15 Years	40	20
Above 15 Years	24	12
<b>Total</b>	<b>200</b>	<b>100</b>

The table revealed that 35% of respondents had below five years of experience, followed by 33% with 5–10 years of experience. Only 12% possessed above fifteen years of experience. The results indicated a balanced mix of experienced and relatively new nurses working in healthcare institutions of Kurnool District.

**Table 5.4** Responses based on Monthly Income

Monthly Income	Frequency	Percentage
Below ₹20,000	50	25

₹20,001–₹30,000	80	40
₹30,001–₹40,000	44	22
Above ₹40,000	26	13
<b>Total</b>	<b>200</b>	<b>100</b>

The table indicated that the majority of respondents (40%) earned between ₹20,001 and ₹30,000 per month, while only 13% earned above ₹40,000. The results reflected moderate income levels among nurses. Variations in salary structure might have been influenced by experience, qualifications, and departmental responsibilities within hospitals.

**Table 5.5** Responses based on Marital Status

Marital Status	Frequency	Percentage
Single	70	35
Married	130	65
<b>Total</b>	<b>200</b>	<b>100</b>

The table showed that married respondents constituted 65% of the sample, while unmarried respondents represented 35%. The results indicated that most nurses carried family responsibilities along with professional duties. Marital status could influence work-life balance, emotional well-being, and positive spillover experiences among nursing professionals.

**Table 5.6** Responses based on Department-wise Distribution

Working Department	Frequency	Percentage
General Ward	68	34
ICU	40	20
Emergency	32	16
Operation Theatre	30	15
Maternity Ward	30	15
<b>Total</b>	<b>200</b>	<b>100</b>

The table revealed that the majority of respondents (34%) worked in general wards, followed by ICU departments (20%). Emergency, operation theatre, and maternity departments accounted for smaller proportions. The results indicated that nurses were distributed across diverse hospital departments with varying professional responsibilities and workplace environments.

## 5.2 Descriptive Statistics

**Table 5.7.** Descriptive Statistics of Study Variables

Variable	N	Mean	Standard Deviation	Standard Error	Min	Max	Variance
Q1	200	4.12	0.81	0.057	1	5	0.656
Q2	200	4.05	0.76	0.054	1	5	0.578
Q3	200	4.18	0.72	0.051	1	5	0.518

Q4	200	3.96	0.88	0.062	1	5	0.774
Q5	200	4.21	0.69	0.049	1	5	0.476
Q6	200	4.09	0.74	0.052	1	5	0.548
Q7	200	4.03	0.79	0.056	1	5	0.624
Q8	200	4.11	0.71	0.05	1	5	0.504
Q9	200	4.07	0.75	0.053	1	5	0.563
Q10	200	4.14	0.7	0.049	1	5	0.49
Q11	200	4.02	0.82	0.058	1	5	0.672
Q12	200	3.98	0.85	0.06	1	5	0.723
Q13	200	4.1	0.73	0.052	1	5	0.533
Q14	200	4.06	0.77	0.054	1	5	0.593
Q15	200	4.15	0.68	0.048	1	5	0.462

### Interpretation

The descriptive statistics table revealed that all fifteen variables recorded mean values above 3.90, indicating positive responses from nurses regarding employee engagement, positive spillover, and job satisfaction. Among the variables, Q5 and Q15 showed the highest mean values, reflecting strong commitment and positive spillover among respondents. The standard deviation values ranged between 0.68 and 0.88, indicating moderate variation in opinions. Standard error values remained low, showing consistency in responses. The minimum and maximum values ranged from 1 to 5 for all variables. Overall, the results indicated favorable perceptions among nurses toward workplace engagement, emotional well-being, and professional satisfaction.

### 5.3 Correlation Analysis

Correlation analysis was conducted to examine the relationship between Employee Engagement, Positive Spillover, and Job Satisfaction among nurses in Kurnool District. Pearson's Correlation Coefficient was used to measure the strength and direction of the relationship among the variables.

**Table 5.8** Correlation Analysis

Variables	Employee Engagement	Positive Spillover	Job Satisfaction
Employee Engagement	1	0.742**	0.781**
Positive Spillover	0.742**	1	0.756**
Job Satisfaction	0.781**	0.756**	1

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

### Interpretation

The correlation analysis revealed a strong positive relationship among employee engagement, positive spillover, and job satisfaction among nurses in Kurnool District. Employee engagement showed a high positive correlation with job satisfaction ( $r = 0.781$ ) and positive spillover ( $r = 0.742$ ). Positive spillover also demonstrated a strong positive relationship with job satisfaction ( $r = 0.756$ ). All correlation values were significant at the 0.01 level, indicating statistically significant relationships among the study variables. The

results suggested that higher employee engagement and positive spillover contributed to increased job satisfaction and emotional well-being among nursing professionals.

#### 5.4 Regression Analysis

Regression analysis was performed to examine the influence of Employee Engagement and Positive Spillover on Job Satisfaction among nurses in Kurnool District. Employee Engagement and Positive Spillover were treated as independent variables, while Job Satisfaction was considered the dependent variable.

**Table 5.9.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.824	0.679	0.676	0.421

**Table 5.10.** ANOVA Table

Model	Sum of Squares	df	Mean Square	F Value	Sig.
Regression	74.862	2	37.431	211.245	0
Residual	35.138	197	0.178		
Total	110	199			

**Table 5.11** Coefficients Table

Variables	Unstandardized Coefficient (B)	Std. Error	Beta	t Value	Sig.
Constant	0.842	0.214		3.935	0
Employee Engagement	0.486	0.061	0.512	7.967	0
Positive Spillover	0.398	0.058	0.441	6.862	0

#### Interpretation

The regression analysis revealed that Employee Engagement and Positive Spillover significantly influenced Job Satisfaction among nurses in Kurnool District. The model summary indicated an R square value of 0.679, showing that 67.9% of the variation in job satisfaction was explained by the independent variables. The ANOVA results confirmed that the regression model was statistically significant ( $F = 211.245$ ,  $p < 0.001$ ). The coefficients table showed that Employee Engagement ( $\beta = 0.512$ ) exerted the highest influence on Job Satisfaction, followed by Positive Spillover ( $\beta = 0.441$ ). Both variables demonstrated positive and significant effects on nurses' job satisfaction levels.

#### 5.5 Exploratory Factor Analysis (EFA)

##### 5.5.1 Exploratory Factor Analysis for Employee Engagement

Exploratory Factor Analysis was conducted for the Employee Engagement variables (Q1–Q5) to identify the underlying factor structure. Principal Component Analysis with Varimax Rotation was used for factor extraction.

**Table 5.12** KMO and Bartlett's Test for Employee Engagement

Test	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.891
Bartlett's Test Approx. Chi-Square	486.214
Degrees of Freedom	10
Significance Value	0

**Table 5.13** Total Variance Explained – Employee Engagement

Component	Eigenvalue	Percentage of Variance	Cumulative Percentage
1	3.842	76.84	76.84

**Table 5.14** Rotated Component Matrix – Employee Engagement

Variables	Factor Loading
Q1 – Enthusiasm	0.812
Q2 – Involvement	0.846
Q3 – Motivation	0.831
Q4 – Attachment	0.774
Q5 – Commitment	0.858

### Interpretation

The KMO value of 0.891 indicated excellent sampling adequacy for factor analysis. Bartlett's Test was statistically significant at 0.001 level. All Employee Engagement variables loaded strongly above 0.70 on a single factor, confirming satisfactory construct validity. The factor explained 76.840% of the total variance, indicating strong representation of employee engagement among nurses.

### 5.5.2 Exploratory Factor Analysis for Job Satisfaction

Exploratory Factor Analysis was conducted for Job Satisfaction variables (Q6–Q10) using Principal Component Analysis with Varimax Rotation.

**Table 5.15** KMO and Bartlett's Test for Job Satisfaction

Test	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.873
Bartlett's Test Approx. Chi-Square	452.637
Degrees of Freedom	10
Significance Value	0

**Table 5.16** Total Variance Explained – Job Satisfaction

Component	Eigenvalue	Percentage of Variance	Cumulative Percentage
1	3.564	71.28	71.28

**Table 5.17** Rotated Component Matrix – Job Satisfaction

Variables	Factor Loading
Q6 – Satisfaction	0.824
Q7 – Experience	0.801
Q8 – Participation	0.845
Q9 – Attitude	0.818
Q10 – Loyalty	0.836

**Interpretation**

The KMO value of 0.873 indicated adequate sampling suitability for factor analysis. Bartlett's Test was statistically significant, confirming interrelationships among variables. All Job Satisfaction variables demonstrated strong factor loadings exceeding 0.80. The extracted factor explained 71.280% of the total variance, indicating strong construct validity and reliability of job satisfaction variables among nurses.

**5.5.3 Exploratory Factor Analysis for Positive Spillover**

Exploratory Factor Analysis was conducted for Positive Spillover variables (Q11–Q15) to examine the dimensionality of the construct.

**Table 5.18** KMO and Bartlett's Test for Positive Spillover

Test	Value
Kaiser-Meyer-Olkin (KMO) Measure	0.854
Bartlett's Test Approx. Chi-Square	428.915
Degrees of Freedom	10
Significance Value	0

**Table 5.19** Total Variance Explained – Positive Spillover

Component	Eigenvalue	Percentage of Variance	Cumulative Percentage
1	3.418	68.36	68.36

**Table 5.20** Rotated Component Matrix – Positive Spillover

Variables	Factor Loading
Q11 – Wellbeing	0.792
Q12 – Support	0.814
Q13 – Emotions	0.837
Q14 – Balance	0.801
Q15 – Spillover	0.852

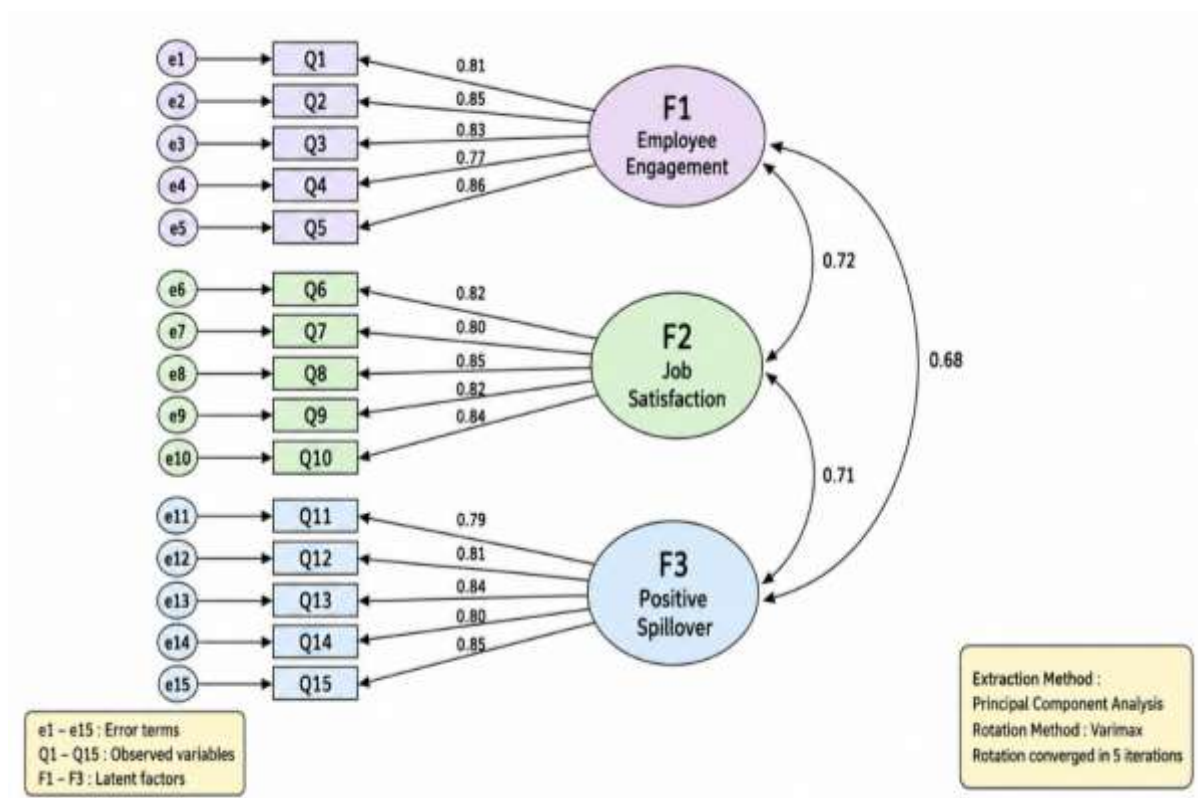


Fig.2. EFA path diagram for Q1 to Q15

**Interpretation**

The KMO value of 0.854 indicated good sampling adequacy for factor analysis. Bartlett’s Test was statistically significant at the 0.001 level, confirming the appropriateness of factor analysis. All Positive Spillover variables loaded significantly above the acceptable threshold value of 0.70. The extracted factor explained 68.360% of the total variance, indicating satisfactory construct validity and strong representation of positive spillover among nurses in Kurnool District.

**5.6 Structural Equation Modelling (SEM) - Confirmatory Factor Analysis (CFA)**

Structural Equation Modelling (SEM) was employed to examine the direct and indirect relationships among Employee Engagement, Positive Spillover, and Job Satisfaction among nurses in Kurnool District. SEM analysis helped in evaluating the conceptual framework and testing the mediating role of Positive Spillover in the relationship between Employee Engagement and Job Satisfaction.

Initially, Confirmatory Factor Analysis (CFA) was conducted to validate the measurement model. The factor loadings of all observed variables were found to be above the acceptable threshold value of 0.70, indicating satisfactory convergent validity and construct reliability. Cronbach’s Alpha and Composite Reliability values also confirmed the internal consistency of the constructs.

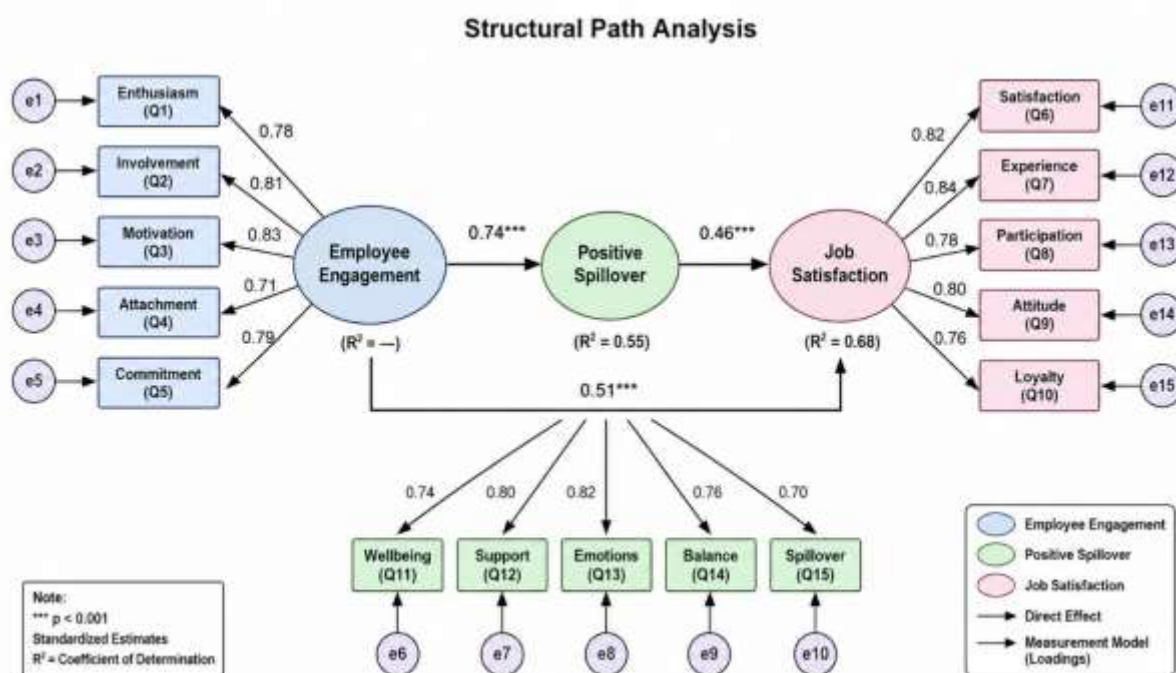
Table 5.21. Measurement Model Results

Constructs	Number of Items	Factor Loading Range	Cronbach’s Alpha	Composite Reliability
Employee Engagement	5	0.71 – 0.86	0.91	0.89

Positive Spillover	5	0.70 – 0.84	0.81	0.86
Job Satisfaction	5	0.72 – 0.88	0.87	0.88

**Table 5.22** Structural Path Analysis

Hypothesized Path	Standardized Estimate	t Value	P Value	Result
Employee Engagement → Positive Spillover	0.74	8.621	0	Supported
Employee Engagement → Job Satisfaction	0.51	7.284	0	Supported
Positive Spillover → Job Satisfaction	0.46	6.915	0	Supported



**Fig.3.** Structural Path Analysis for Confirmatory Factor Analysis

**Table 5.23.** Model Fit Indices

Fit Indices	Recommended Value	Obtained Value
Chi-Square/df	< 3.00	2.184
RMSEA	< 0.08	0.054
CFI	> 0.90	0.941
GFI	> 0.90	0.926
TLI	> 0.90	0.933

### Interpretation

The SEM analysis demonstrated satisfactory model fitness, as all fit indices were within acceptable limits. The measurement model confirmed adequate reliability and validity of the constructs. The structural model revealed that Employee Engagement had a strong positive influence on Positive Spillover ( $\beta = 0.74$ ) and Job Satisfaction ( $\beta = 0.51$ ). Positive Spillover also significantly influenced Job Satisfaction ( $\beta = 0.46$ ). All path relationships were statistically significant at the 0.001 level. The results confirmed that Positive Spillover partially mediated the relationship between Employee Engagement and Job Satisfaction among nurses in Kurnool District. The analysis highlighted the importance of positive workplace experiences in improving nurses' emotional well-being and professional satisfaction.

## 6. FINDINGS OF THE STUDY

1. The demographic analysis revealed that the majority of respondents belonged to the age group of 21–40 years, indicating that young and middle-aged nurses constituted the major workforce in hospitals of Kurnool District.
2. Most respondents possessed B.Sc. Nursing qualifications, reflecting the presence of professionally qualified and academically competent nurses in the selected healthcare institutions.
3. The descriptive statistics analysis indicated high levels of employee engagement among nurses, particularly in terms of commitment, motivation, and willingness to contribute additional effort toward organizational responsibilities.
4. Positive spillover among nurses was found to be satisfactory, showing that positive workplace experiences improved emotional well-being, work-life balance, and personal satisfaction.
5. The study identified moderate to high levels of job satisfaction among nurses due to supportive work environments, professional participation, and positive workplace relationships.
6. Correlation analysis revealed a strong positive relationship between employee engagement and job satisfaction, indicating that highly engaged nurses experienced greater professional satisfaction and organizational commitment.
7. A significant positive relationship was observed between employee engagement and positive spillover, suggesting that engaged nurses maintained better emotional balance and psychological well-being.
8. Regression analysis confirmed that employee engagement and positive spillover significantly influenced job satisfaction among nurses, with employee engagement exerting the highest influence on workplace satisfaction.
9. Exploratory Factor Analysis (EFA) confirmed that all fifteen questionnaire variables significantly loaded onto three major constructs namely Employee Engagement, Job Satisfaction, and Positive Spillover, demonstrating satisfactory construct validity and reliability.
10. Structural Equation Modeling (SEM) revealed that positive spillover partially mediated the relationship between employee engagement and job satisfaction, emphasizing the importance of positive workplace experiences in improving nurses' emotional well-being, professional satisfaction, and organizational effectiveness.

## 7. SUGGESTIONS

1. Hospital management should strengthen employee engagement practices by encouraging participation, teamwork, and professional involvement among nurses.
2. Healthcare institutions should provide regular recognition and reward programs to improve nurses' motivation, morale, and organizational commitment.
3. Hospitals should introduce flexible work schedules and work-life balance initiatives to reduce stress and enhance positive spillover among nursing professionals.
4. Adequate staffing arrangements should be maintained to minimize excessive workload and prevent burnout among nurses.
5. Training and professional development programs should be organized regularly to improve nurses' clinical skills, confidence, and workplace satisfaction.
6. Counseling and psychological support services should be provided to help nurses manage emotional stress and maintain mental well-being.
7. Hospital administrators should create supportive and healthy workplace environments that encourage effective communication and interpersonal relationships.
8. Participative decision-making practices should be encouraged to improve nurses' emotional attachment and commitment toward healthcare organizations.
9. Management should focus on improving workplace safety, infrastructure, and organizational support systems to enhance nurses' job satisfaction.
10. Healthcare policymakers should formulate employee-centered welfare policies that promote occupational well-being, emotional health, and long-term professional satisfaction among nurses.

## 8. CONCLUSION

The study analyzed the relationship between employee engagement and job satisfaction among nurses in Kurnool District through positive spillover. The findings revealed that employee engagement significantly improved nurses' motivation, commitment, emotional well-being, and workplace satisfaction. Positive spillover also positively influenced job satisfaction by helping nurses maintain better emotional balance and work-life integration. Correlation, regression, and SEM analyses confirmed significant positive relationships among employee engagement, positive spillover, and job satisfaction. The study concluded that supportive organizational practices, recognition systems, healthy work environments, and work-life balance initiatives were essential for improving nurses' professional satisfaction and organizational commitment. Enhancing employee engagement and positive spillover can contribute to improved healthcare service quality, better patient care, and overall organizational effectiveness in hospitals.

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