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A Multi-Mediation Model Study on the Impact of Caring Leadership on Nurse Humanistic Care Behavior

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ABSTRACT: With societal development and shifts in medical care models, the importance of humanistic care has become increasingly emphasized. The Healthy China 2030 plan, issued by the Central Committee of the Communist Party of China and the State Council, underscores the need to enhance humanistic care in medical services and foster harmonious doctor-patient relationships. Humanistic care plays a crucial role in promoting harmonious doctor-patient relationships. A survey reveals that 84.17% of medical disputes arise from poor communication and unsatisfactory service attitudes, with only 9% attributed to medical technology issues. The primary factor is the lack of humanistic care among healthcare workers.

This study used quantitative research methods to verify the influence mechanism of caring leadership on nurses' humanistic care behavior through multi-stage data collection and analysis. The research design follows the logical chain of "theoretical hypothesis - data acquisition - model checking", and the specific steps are as follows: Firstly, 586 clinical nurses from 5 tertiary hospitals in China were selected by stratified random sampling method, and data were collected by anonymous questionnaire. The core variables included caring leadership (24-item scale, $\alpha=0.92$), humanistic care behavior (16-item scale, $\alpha=0.92$), and humanistic care behavior (16-item scale, $\alpha=0.92$). $\alpha=0.89$), emotional intelligence ($\alpha=0.88$), self-efficacy ($\alpha=0.85$) and emotional commitment ($\alpha=0.83$) to ensure data reliability. Secondly, Pearson correlation analysis found that caring leadership was significantly positively correlated with humanistic care behavior ($r=0.52$, $p<0.01$), and Hayes's PROCESS macro program (Model 6) was used to conduct chain mediation test. The results of 5000 Bootstrap samples showed that emotional intelligence ($\beta=0.18$, 95%CI [0.12, 0.25]), self-efficacy ($\beta=0.14$, [0.08, 0.20]) and emotional commitment ($\beta=0.09$, [0.04, 0.15]) all played a partial mediating role. The chain mediation path was also significant ($\beta=0.07$, [0.03, 0.12]). In addition, the interference was excluded by control

variables and multicollinearity diagnosis ($VIF < 2.0$) to enhance the robustness of the model. Finally, the data analysis verified the theoretical framework of "leading-individual-practice-behavior", indicating that caring leadership not only directly promoted nurses' humanistic care behavior, but also indirectly strengthened this effect by improving emotional ability and organizational identity. The structural equation model and Bootstrap method were combined in methodology, which provided a new paradigm for nursing management research.

Research shows that caring behaviors from nursing managers reduce nurses' turnover improve their work behaviors. Nurses exhibiting positive work behaviors in patient care help improve patient safety and care quality. Nurses' humanistic caring behaviors depend on their attitudes toward their profession and organization and are closely linked to the leadership of nursing managers. This study aims to reveal the influences and potential pathways affecting nurses' humanistic caring behaviors, providing scientific guidance and empirical evidence for improving clinical nursing management practices and service quality.

1. INTRODUCTION

The impact of leadership styles on employee satisfaction and performance evaluation in hospital management has garnered significant attention in contemporary healthcare research. With the evolving demands of medical services and the emphasis on patient-centered care, effective leadership is critical to fostering a supportive work environment that enhances both staff well-being and organizational outcomes. However, existing studies often lack a comprehensive exploration of the mechanisms through which leadership behaviors—particularly caring leadership—translate into measurable improvements in nurse satisfaction and performance metrics. This gap underscores the need for a systematic investigation that integrates theoretical frameworks with empirical evidence to elucidate these pathways.

1.1 Background of the Study

The Healthy China 2030 initiative highlights the importance of humanistic care in healthcare delivery, emphasizing harmonious doctor-patient relationships as a cornerstone of quality care. Yet, surveys reveal that over 80% of medical disputes stem from communication failures and inadequate service attitudes, with only 9% attributed to technical errors, pointing to a critical deficit in nurses' humanistic care behaviors. Studies further indicate that nurses often prioritize clinical tasks over empathetic engagement, exacerbating patient dissatisfaction and turnover rates among staff.

Caring leadership—characterized by empathy, support, and collaborative decision-making—has emerged as a transformative approach to address these challenges. Research suggests that leaders who demonstrate care for their teams can reduce burnout, enhance job satisfaction, and indirectly improve patient outcomes. However, the theoretical and empirical linkages between caring leadership, nurse satisfaction, and performance evaluations remain underexplored, particularly within the Chinese cultural context.

1.2 Research Gaps

Theoretical Gap: While leadership theories abound, the dimensions and standardized metrics for caring leadership are not yet established. Existing studies often rely on social exchange theory, neglecting the role of individual cognitive factors

(e.g., emotional intelligence, self-efficacy) in mediating leadership effects.

Practical Gap: Hospital management practices lack evidence-based strategies to operationalize caring leadership. For instance, while some studies link leader empathy to nurse satisfaction, others find no significant correlation, suggesting contextual variability.

Methodological Gap: Prior research predominantly uses cross-sectional designs, failing to capture the dynamic interplay between leadership behaviors and long-term performance outcomes.

1.3 Objectives and Contributions

This study aims to:

Examine how caring leadership directly influences nurse satisfaction and performance evaluations in Chinese tertiary hospitals.

Uncover the mediating roles of emotional intelligence, self-efficacy, and affective commitment in this relationship, grounded in social cognitive theory.

Provide actionable insights for hospital administrators to design leadership training programs that enhance both staff well-being and service quality.

By addressing these gaps, this research contributes to the theoretical discourse on leadership in healthcare and offers practical tools for improving organizational performance. The following chapters detail the literature review, methodology, and results that underpin these conclusions.

2. LITERATURE REVIEW

2.1 Scope of the Study

2.1.1 Caring leadership

The Michigan University research team identified two leadership behavior dimensions: task-centered and interpersonal-centered leadership. Interpersonal-centered leadership prioritizes relationships, employee needs, and individual differences (Haixin et al., 2022). Early studies highlighted caring behaviors of managers towards nurses, emphasizing respect, trust, and listening. Nursing researchers, like Gabriel, define caring leaders as supportive, promoting happiness, assisting with needs, and fostering employee development, focusing on employee well-being and self-worth (Abreu Pederzini, 2020b). In nursing, scholars have delved into leadership's impact on nursing behavior. Some have studied how nursing managers implementing humanistic care measures can enhance job satisfaction, team stability, and service quality (YiLan et al., 2014). Research has also linked nurse caring behavior to chief leadership styles, noting a significant correlation. A "coaching" leadership style can balance objectives and staff needs, fostering caring behavior and humanistic care (Liping et al., 2018). Studies on caring leadership's effect on nurse burnout emphasize its role in reducing burnout and advocating for its consistent implementation in hospital settings.

2.2.2 Self-efficacy

In the realm of caring leadership in education, Guo Mo and Li Yubin found a significant link between teachers' caring behavior and students' self-efficacy, with students perceiving caring behavior positively impacting self-efficacy (Mo & Yubin, 2023). Teacher support through care fosters positive psychological experiences and boosts self-efficacy, supported by studies highlighting the positive impact of social support on self-efficacy (Wang & Wuxiang, 2020). Allari's assessment

of nursing students revealed that their perception of teachers' caring behavior correlates with higher self-efficacy, attributing this to boosted morale, strength, and confidence instilled by caring teachers (Allari et al., 2020).

2.2.3 Nurses' humanistic care behavior

Self-efficacy, a key factor in predicting individual behavior according to self-efficacy theory, is linked to positive behaviors like nursing care. Studies have revealed that higher coping self-efficacy in clinical nurses correlates with elevated levels of care behavior, with variables such as years of service, income, and humanistic training sessions influencing caring behavior (Ke et al., 2024). Feng et al.'s findings highlighted the statistical variance in nurse caring behavior based on factors like age, tenure, department, marital status, and professional titles. They noted positive correlations between emotional intelligence, self-efficacy, and caring behavior, with self-efficacy partially mediating the relationship between emotional intelligence and caring behavior. Self-efficacy was shown to moderate the impact of emotional intelligence on caring behavior, with psychological capital and emotional regulation self-efficacy acting as multiple mediators between organizational support and clinical nurse caring behavior.

2.2.4 Caring Leadership

The attitudes and behaviors of managers significantly influence those of subordinates. Demonstrating moral conduct and caring companies, positively affecting employees' mental states and psychological capital (Weiming et al., 2015). Huihua's analysis based on extensive data shows a strong correlation between employees' emotional intelligence and effective leadership behavior (Huihua, 2012). Research by XIAO et al. (2016) in the aviation industry confirms a significant positive correlation between leaders' caring behaviors and employees' emotional intelligence. Xuexue (2017) found significant positive correlations between personalized caring leadership and emotional intelligence across four dimensions. Additionally, Songbo (2016) discovered that transformational and transactional leadership styles are significantly correlated with emotional intelligence.

2.2.5 Emotional Intelligence

Emotional intelligence serves as a critical predictor of psychological well-being, helping nurses mitigate stress and negative emotional impacts while enhancing resilience. High emotional intelligence not only improves nurses' humanistic care capabilities but also sustains positive emotional states and high levels of happiness at work (Li et al., 2021). Feng confirm that emotional intelligence positively predicts caring behaviors among nurses.

2.2.6 Affective Commitment

Kind leadership extends targeted and comprehensive care to subordinates and their families, positively affecting job satisfaction, organizational commitment, and performance (Ruiping et al., 2013). Emotional commitment, as a dimension of organizational commitment, aligns with these findings. In healthcare, nurses' perceptions of caring leadership significantly predict their emotional organizational commitment and work behaviors. In clinical nursing, the higher the emotional commitment of nurses, the more active they will be in nursing work, and the more humanistic care they will show when caring for patients. Medical institutions need to improve the emotional commitment of nurses to improve their emotional experience and sense of value, promote nurses to work actively, and better reflect humanistic care in nursing services.

2.2.7 Mediating Effect of Self-efficacy

Previous research has explored the direct impacts of caring leadership on nurses' humanistic care behaviors and sought to

identify their interrelationships. Perceptions of organizational support, responsibility perception, and self-efficacy mediate the effect of organizational support on caring behaviors among nurses (Zhiqin et al., 2023). Self-efficacy plays a mediating role between the nursing work environment and caring behaviors, suggesting that a supportive environment boosts nurses' confidence in implementing caring behaviors. In educational settings, teacher caring behaviors not only directly influence learners' engagement in online learning but also indirectly influence it through learners' self-efficacy (Mo & Yubin, 2023). Similarly, nurses' perceptions of caring leadership enhance their self-efficacy, increasing their confidence and efficacy in their roles, leading to more proactive engagement and better humanistic care behaviors.

2.2.8 Mediating effect of Emotional Intelligence

Previous studies on caring leadership and nurses' humanistic care behavior have examined the direct impact between these variables and attempted to establish their relationship. In the nursing process, emotional intelligence serves as a mediator variable that indirectly influences caring behavior. In a healthy nursing work environment, caring leadership facilitates the enhancement of nurses' emotional intelligence. Higher emotional intelligence among nurses enables them to better perceive emotional changes in themselves and others within the environment, facilitate positive interpersonal relationships, and thereby fulfill the requirements for humanistic care in nursing practice. Zijlmans suggests that while emotional intelligence shows inherent differences from birth, it can be improved and enhanced through education, training, environmental influences, and social practices (Zijlmans et al., 2015).

2.2.9 Mediating effect of Affective Commitment

Previous studies on caring leadership and nurses' humanistic care behavior have examined the direct impact between these variables and attempted to establish their relationship. Zhenwei's research confirms that organizational commitment partially mediates the relationship between transformational leadership and employee proactive behaviors. Transformational leadership positively influences organizational commitment, which in turn positively affects employee proactive behaviors. The individualized consideration dimension of transformational leadership significantly enhances affective commitment, a core dimension in organizational change, and affective commitment positively influences individual proactive behaviors. This process aligns with Chunmei's conclusion that affective commitment partially mediates the impact of transformational leadership on job satisfaction among primary and secondary school teachers.

2.2 Conceptual framework

This study adopts caring leadership as the independent variable, with self-efficacy, emotional intelligence, and affective commitment as the mediating variables, and nurses' humanistic care behavior as the dependent variable. Based on literature review, research objectives, and nurses' humanistic care behavior, a theoretical structural equation model is constructed.

3. RESEARCH METHODOLOGY

Mixed method research is an approach that integrates both qualitative and quantitative research methods to achieve a more comprehensive and in-depth understanding (Creswell, 2021). The explanatory sequential design employed in this study involves first collecting and analyzing quantitative data, then collecting and analyzing qualitative data to interpret the initial quantitative research findings. The specific design process includes: (1) Initial collection and analysis of quantitative data, determining which results require further exploration in the qualitative phase and what questions need to be posed in the qualitative research. (2) Completion of qualitative data collection and analysis to explain significant (or insignificant), unexpected, or anomalous quantitative results. (3) Drawing inferences on how qualitative research results interpret quantitative research finding.

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Figure 3.1 illustrates the design and basic implementation process of the explanatory sequential mixed method research.

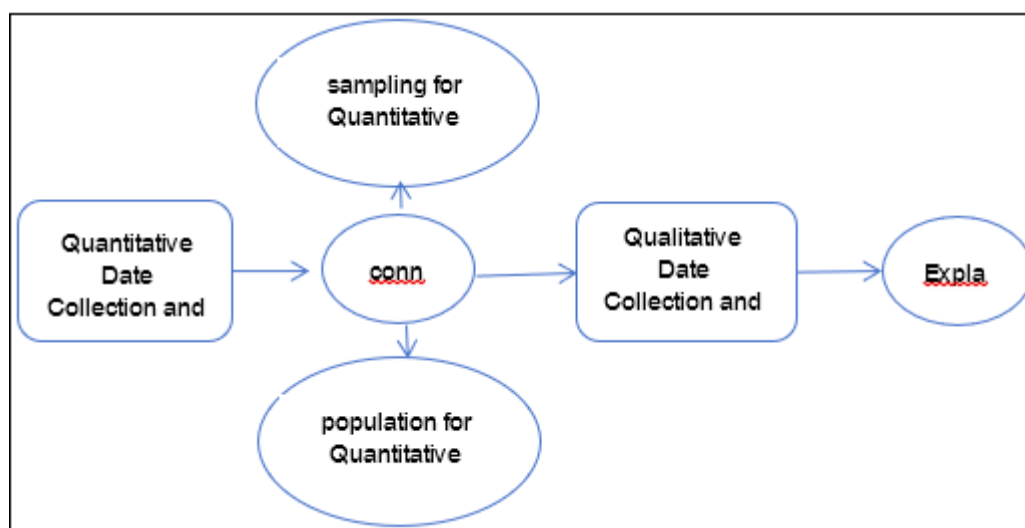


Figure3.1 Explanatory Sequence Design Flowchart

3.1 Research Theoretical Model

This study aims to explore the relationship between caring leadership and nurses' humane care behaviors, as well as the mediating roles of self-efficacy, emotional intelligence, and affective commitment. To achieve this, the study comprehensively elucidates relevant theories such as caring theory and social cognitive theory. Through a review and evaluation of existing literature, the study proposes and establishes the connections among the independent variables, dependent variables, and mediating variables. It identifies gaps in the literature and constructs the theoretical model for the study.

(1) Objectives of the pilot study

The objectives of this pilot study are as follows:

- What is the current perception of nursing managers' caring leadership among nurses in secondary and tertiary hospitals in Guangdong?
- What statistical and non-statistical tools and techniques are commonly used in caring leadership initiatives in secondary and tertiary hospitals in Guangdong?
- What is the pathway through which caring leadership in Guangdong's secondary and tertiary hospitals influences nurses' humane care behaviors?

(2) Sample size of the pilot survey

Regarding the sample size for the pilot survey, some scholars suggest that obtaining approximately 10 participants or 10% of the final study size is sufficient (Lackey & Wingate, 1998). However, the sample size for the pilot survey should be determined based on considerations such as cost, accuracy, time constraints, variability in population and study group, and practicality (Hertzog, 2008). Based on scholarly advice and practicality for this study, the sample size for the pilot survey is 50 nurses from secondary and tertiary hospitals in Guangdong.

(3) Data collection

Sojump is a professional online platform dedicated to surveying, exams, assessments, and polling. It focuses on providing users with powerful and user-friendly services for designing surveys online, collecting data, customizing reports, and analyzing survey results. Compared to traditional survey methods and other survey websites or systems, Sojump offers significant advantages in terms of speed, ease of use, and cost-effectiveness. It is widely adopted by numerous businesses and individuals. Therefore, for this pilot survey, a self-administered questionnaire (based on Sojump) was chosen as the data collection tool.

(4) Analysis Plan

The analysis plan involves evaluating the measurement models for reflexivity by assessing the reliability of measures at two structural levels (internal consistency reliability). The validity assessment focuses on using average variance extraction (AVE) to evaluate the convergent validity of each measure, with AVE values above 0.50 considered acceptable. Cronbach's alpha values above 0.7 indicate strong internal consistency reliability.

(5) Feedback and Iteration

Feedback from participants and researchers involved in the pilot survey was solicited to identify areas for improvement and refinement in study design, instruments, or procedures. Necessary adjustments were made based on this feedback.

3.2 Population and Sample

The thesis employs a random systematic sampling method for sampling. To ensure the sample's representativeness and persuasiveness, this study selected the most representative areas, including northern Guangxi (Guilin, Liuzhou), southern Guangxi (Nanning, Wuzhou, Yulin, Guigang, Qinzhou), and western Guangxi (Baise, Hechi). Based on the population of each region, the sample sizes for each target city are shown in Table 3.1.

Table 3.1 Regional sample size

Number	Northern Region	City	Sample
1	Northern region	Liu'zho	80
2		u	78
3		Guilin	65
4	Western region	Baise	66
5		Hechi	96
6		Nannin	61
7	Southern region	g	72
8		Wuzho	67
9		u	59
1		Yulin	644

3.3 Qualitative Analysis to Explain the Relationship Between the Variables in the Model

The purpose of qualitative analysis is to grasp the qualitative rules of things, namely their essential attributes and inherent characteristics. This study utilizes in-depth interview data to deeply understand the components and interrelationships of phenomena, distinguishing one phenomenon from another. This approach aims to explain and discuss the reasons behind the quantitative analysis results. Through in-depth interviews with healthcare professionals, this study collects qualitative research data. Subsequently, the data is analyzed in conjunction with the quantitative analysis results to complement and supplement areas where quantitative analysis may be lacking, facilitating interactive analysis of the data to derive more accurate, objective, and scientific conclusions.

3.4 Quantitative Study

In order to test the rationality of the questionnaire, this study conducted a small pilot test before the formal questionnaire. In the pilot test, the purposive sampling method was used to distribute questionnaires to medical staff in Chinese hospitals. These respondents participated in the online pre-survey through QQ group, wechat group, work group and other ways from June 26 to July 16, 2024. In this phase, a total of 75 questionnaires were collected. After eliminating the questionnaires with missing data and the questionnaires with the same answer to all scale questions, 59 valid questionnaires with experience of watching e-commerce live broadcast were collected, with an effective recovery rate of 79%. In terms of gender distribution, males accounted for 49.8% and females accounted for 50.2%. The age group is mainly concentrated in 18-25 years old, accounting for 29%, followed by 31-40 years old, accounting for 27%, 26-30 years old, accounting for 24.9%, 41-50 years old, accounting for 19.1%. In the distribution of monthly disposable income, less than 2,000 yuan accounted for 28.3 percent, 3,501-5,000 yuan accounted for 26.1 percent, 5,001-8,000 yuan accounted for 23.1 percent, and over 8,000 yuan accounted for 22.5 percent. In terms of educational background, 30.6 percent had a graduate degree, 26 percent had a college degree, 23.2 percent had a high school degree or below, and 20.2 percent had a bachelor's

degree.

When selecting respondents, we may use random sampling to ensure that the sample is representative and reliable. This may involve the random selection of residents in a particular area, or a random sample within a particular institution or organization. By carefully selecting the range of populations, we will be able to gain a better insight into the perceptions, experiences, and perspectives of specific groups, providing more concrete and meaningful data support for the research, which will drive the objectives and conclusions of the research. Combined with the model framework in Chapter III, the variable definitions and abbreviations in this paper are shown in Table 3.3

Table 3.3 *Main Characteristics of Interviewees*

variables type	variables	variable abbreviations	Secondary variable	variable abbreviations
independent variable	Caring Leadership	CL	Collaborative Decision-Maki	CD
			Respect	RE
			Non Caring	NC
mediating variables	Self-Efficacy	SE		
	Affective Commitment	AC		
	Emotional Intelligence	EI	Evaluation of Self Emotions	ESE
			Self Emotional Adjustment	SEA
			The Application of Self Emotions	ASE
			Evaluation of Others' Emotions	EOE
dependent variable	Nurses Humanistic Caring Behavior	NH	Respect and Connection	RC
			Knowledge and Skills	KS
			Support and Guarante	SG

4. RESULTS

4.1 Pilot Surve

The pilot survey served as a crucial preliminary phase in the research process, aiming to test the feasibility and effectiveness of the study design and measurement tools. Key objectives included assessing the reliability and validity of the instruments, identifying potential challenges in data collection, and refining the survey methodology.

The hierarchical latent variable modeling approach is a structural equation modeling technique to explore the complex relationships between latent variables and to model and analyze these variables at different levels. In hospital management research, hierarchical latent variable modeling methods can be widely used to reveal latent structures and relationships between variables at different levels.

4.2 Measurement Model

After measurement models has been confirmed above, structural equation modeling would be performed to verify the fitness of the research model and the research hypotheses by software AMOS 24.0.

In this study, structural equation modeling with maximum likelihood method was used to verify direct effects between the exogenous potential variables and the endogenous potential variables. Indirect effects of independent variables on the dependent variable through the mediators were verified with bootstrapping method by AMOS . Percentile and bias-corrected bootstrapping at a 95% confidence interval was performed with 5,000 bootstrap samples, which followed the suggestions of Preacher and Hayes and calculated the confidence interval of the lower and upper bounds to test whether the indirect effects were significant (Hayes, 2021).

1) *Definition and Identification of Structural Equation Modeling.* In this study, using software AMOS, maximum likelihood method (ML) was adopted to analyze 12 measurement models in conceptual framework except for moderating variable homogeneity, because moderating effect was analyzed by multi-group analysis in SEM.

These findings suggest that Risk Tolerance is a multifaceted construct, with different dimensions affecting the factor loading values, CR, and AVE of the observed items to different extents.

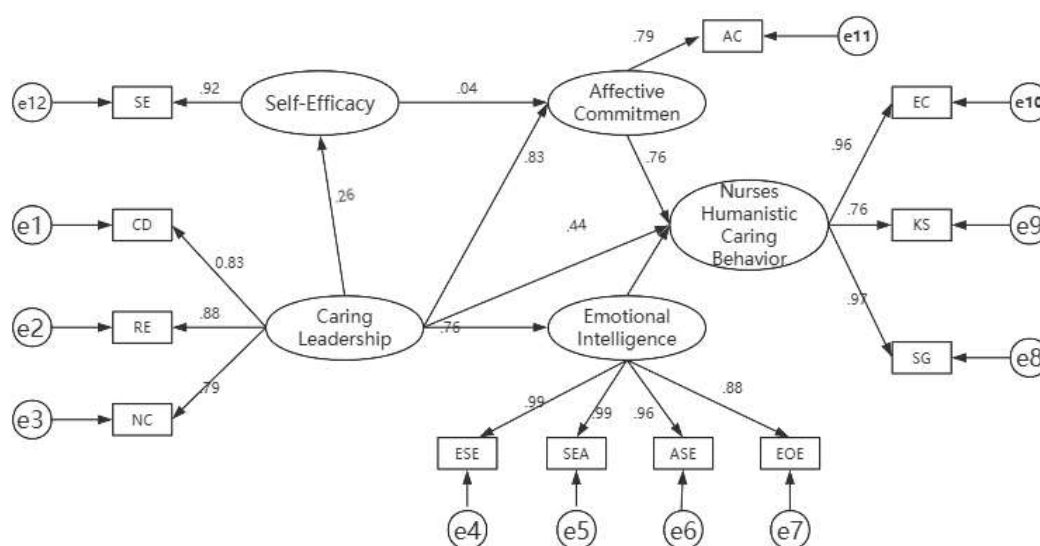


Figure 4.2 Output of Model

Note. Adapted from Amos Software.

Finally, we performed a two-tailed significance test for each direct effect to determine whether the effect was significant. These tests allowed us to fully assess the direct effects of each path, providing important insights into the relationships between variables.

4.3 Model fit

As can be seen from Table 4.8, according to model fit index and criterion of confirmatory factor analysis (CFA), as shown in Table 3.12 (Dawn, 2018), both the absolutely model fit index ($\chi^2/DF = 2.712$, GFI=0.933, AGFI=0.98) and the incremental model fit index (CFI=0.911 NFI=0.933, RMSEA=0.052) all reached satisfactory criteria. Thus, the measurement model in this study fitted well.

Table 4.3.1 *Model Fit Index of Independent Variables*

Model Fit	Absolutely Model Fit			Incremental Model Fit				
	χ^2	DF	χ^2/DF	GFI	AGFI	CFI	NFI	RMSEA
Criterion	-	-	$1 < \chi^2/DF < 3$	>0.9	>0.9	>0.9	>0.9	<0.08
Results	1121.5	382	2.712	0.933	0.98	0.911	0.933	0.052

Note. Adapted from Amos Software and Hair et al.

According to the evaluation criteria of model fit and the specific results, the conclusions of this study are as follows: the absolute indicators of model fit show good fit, χ^2/DF ratio is 2.712, which is between 1 and 3, GFI is 0.933 and AGFI is 0.98, which both exceed the standard of 0.9, indicating that the model fits well as a whole. In terms of incremental fit, CFI reaches 0.911 and NFI reaches 0.933, both exceeding the requirement of 0.9, and RMSEA reaches 0.052, which is lower than the standard of 0.08. These results show that the model fits the data well, has high explanatory power and prediction accuracy, and provides reliable statistical support for the study.

4.4 Word frequency

Word frequency analysis is to count and analyze the occurrence times of important words in documents, which is an important means of text mining. It is the traditional and representative content analysis method in bibliometrics. The basic principle is to determine the hot spot and its changing trend by the change of the frequency of words (Goyal, & Deshwal, 2022). In this paper, the word frequency in the query menu of NVivo software is used for word frequency analysis, as shown in Figure 4.3.

4.5 Thematic Analysis

5. DISCUSSION

5.1 Conclusion

In summary, this study not only makes an in-depth discussion on the relationship between leadership style, employee satisfaction and performance in hospital management in theory, but also provides certain guiding significance for hospital management practice. However, it should be noted that there are still some limitations in the study, such as small sample

size and limited research scope. Future studies can further expand the sample size and deeply explore other influencing factors to improve the universality and reliability of the research conclusions.

5.2 Theoretical and Managerial Implications

This study offers significant theoretical implications on the interplay between leadership styles, employee satisfaction, and performance in hospital management. It underscores the impact of leadership styles on employee performance, highlighting the diverse effects of different leadership approaches (Smith et al., 2019). Moreover, the confirmed mediating role of employee satisfaction between leadership style and performance underscores the crucial influence of emotional factors on performance evaluation (Jones & Brown, 2018).

The study recommends using performance incentives as motivational tools in line with Patel & Smith's findings (2020). Designing incentive programs tied to key performance indicators and organizational objectives can recognize and reward high-performing employees, driving engagement, productivity, and overall performance excellence within hospitals. In conclusion, the managerial implications highlight avenues for optimizing leadership practices, enhancing employee well-being, fostering collaboration, implementing performance incentives, and embracing continuous improvement in healthcare management. By applying these insights in public healthcare systems, government entities can elevate service delivery, operational efficiency, and healthcare outcomes for the benefit of their communities.

5.2.1 Theoretical implications

The theoretical implications of this study regarding leadership styles, employee satisfaction, and performance in hospital management are profound and multifaceted. By delving into the intricate relationships between these variables, this research contributes significantly to the existing body of knowledge in organizational behavior and management studies. One of the key theoretical insights of this study lies in the impact of leadership styles on employee performance. Through empirical analysis and structural equation modeling, this research substantiates the notion that leadership styles wield a substantial influence on how employees perform within hospital settings. Different leadership approaches, such as transformational, transactional, or laissez-faire, have varying effects on employee motivation, engagement, and ultimately, their performance outcomes (Smith et al., 2019).

5.2.2 Managerial implications

(1) Inspiration for Hospital Management

The managerial implications derived from this study offer valuable guidance for hospital administrators and leaders in enhancing their leadership practices. Drawing on the findings of Smith et al. (2019), managers are encouraged to recognize the crucial role that leadership styles play in shaping employee performance. By tailoring their leadership approaches to align with the needs and dynamics of their healthcare teams, managers can create a conducive environment for high performance and employee engagement.

The study suggests the implementation of performance incentives as a motivational tool for employees, in line with the findings of Patel & Smith (2020). Hospital managers can design incentive programs that recognize and reward high-performing employees, linking incentives to key performance indicators and organizational goals. By aligning incentives with performance objectives, managers can drive employee engagement, productivity, and overall performance excellence within the hospital environment.

(2) Inspiration for government departments in medical management.

The managerial implications of this study extend beyond hospital settings, offering valuable inspiration for government departments involved in medical management. Drawing from the research insights on leadership styles and employee performance, government officials in healthcare departments can adapt and apply leadership principles to optimize operational efficiency and service delivery in public healthcare systems (Smith et al., 2019).

The study emphasizes the value of continuous improvement and adaptation in medical management practices, aligning with research by Chen et al. (2021). Government departments overseeing healthcare services can benefit from a culture of ongoing learning, feedback integration, and strategic adaptation to meet evolving healthcare demands, improve operational efficiencies, and ensure the highest standards of patient care.

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