

The Measurement of Healthcare Leadership Styles and Impact on Employees' Satisfaction in Health Administration Roles in Saudi Arabia; Systematic Review

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Abstract

Background: The healthcare sector in Saudi Arabia is undergoing rapid expansion, making it crucial to understand the impact of leadership styles on employee satisfaction in health administration roles. Employee satisfaction is linked to organizational performance and patient outcomes, necessitating an exploration of effective leadership approaches. **Aim:** This study aimed to assess prevalent healthcare leadership styles within health administration roles and examine their relationship with employee satisfaction in the Saudi Arabian healthcare sector. **Method:** A cross-sectional descriptive research design was employed among healthcare employees in Taif, Saudi Arabia. Data was collected using self-administered questionnaires assessing leadership styles and job satisfaction. The study included 250 participants, and data analysis was conducted using SPSS v26. **Results:** The prevalent leadership styles were identified as Autocratic ($M = 20.5920$), Democratic ($M = 17.0720$), and Laissez-Faire ($M = 27.8400$). Significant positive correlations were found between all leadership styles and employee satisfaction. Multiple regression analysis demonstrated that Autocratic ($\beta = 0.326, p < 0.001$), Democratic ($\beta = 0.145, p = 0.020$), and Laissez-Faire ($\beta = 0.437, p < 0.001$) leadership styles significantly predicted employee satisfaction. **Conclusion:** The study highlights the prevalence of various leadership styles within health administration roles and their positive association with employee satisfaction. Effective leadership practices, regardless of style, contribute to a positive work environment and enhanced employee well-being. These findings underscore the importance of tailored leadership development strategies to improve healthcare administration and employee satisfaction in Saudi Arabia.

Keywords: Healthcare Leadership Styles, Employee Satisfaction, Health Administration, Saudi Arabia, Cross-Sectional Study.

1. Introduction

Healthcare leadership styles play a crucial role in shaping the organizational climate, employee satisfaction, and overall performance within healthcare settings (Alsaqqa & Akyürek, 2021). In Saudi Arabia, where the healthcare sector is rapidly evolving and expanding, understanding the impact of leadership styles on employee satisfaction is of

paramount importance to ensure high-quality healthcare delivery and effective health administration. (Cummings et al., 2018)

The performance of healthcare staff is associated with patient outcomes, and nursing leadership styles have an impact on meeting organizational goals during times of dramatic organizational changes in health systems, nursing management is both a challenging and difficult task (Erschens et al., 2022).

Healthcare leadership behaviors have been found to influence nurse's ability to exceed their employer's expectation in meeting organizational goals (Hui et al., 2020). According on Fowler et al. (2021); It is very important to understand the significance of management and supervisor's way of communicating to their subordinates in order to maintain the patients' safety, care and improvement (Sabbah et al., 2020).

Effective leadership is vital in healthcare administration roles as it sets the tone for organizational culture, employee engagement, and job satisfaction (Alrobai, 2020). Different leadership styles, such as transformational, transactional, and laissez-faire, have been identified and studied in various contexts, but their specific impact on employee satisfaction within healthcare administration roles in Saudi Arabia remains relatively unexplored. (Fowler et al., 2021)

Employee satisfaction is a critical factor in healthcare settings as it affects staff morale, productivity, and the quality of patient care (Hussein et al., 2022). High levels of employee satisfaction are associated with increased retention rates, reduced burnout, and improved organizational performance (Alwali & Alwali, 2022). Understanding the relationship between healthcare leadership styles and employee satisfaction can provide valuable insights for healthcare leaders and policymakers in Saudi Arabia to enhance the work environment and promote positive outcomes for both staff and patients. (Fowler et al., 2021)

The measurement of healthcare leadership styles and their impact on employee satisfaction requires comprehensive research methodologies (Kelly & Heard, 2020). It involves collecting and analyzing data on leadership behaviors, employee perceptions, and satisfaction levels within health administration roles (Brohi et al., 2021). By examining the relationship between leadership styles and employee satisfaction, healthcare organizations can identify areas for improvement and develop strategies to enhance leadership effectiveness and promote a positive work environment. (Alsubaie & Isouard, 2019; Mgaiwa, 2023)

Given the evolving nature of healthcare leadership and the unique cultural context of Saudi Arabia, there is a need for specific research in this area (Robbins & Davidhizar, 2020). This study aims to fill the existing gap in literature by examining the measurement of healthcare leadership styles and their impact on employee satisfaction in health administration roles in Saudi Arabia (). The findings of this research can contribute to the development of evidence-based strategies for healthcare leaders to improve employee satisfaction and ultimately enhance the overall quality of healthcare delivery in the country. (Alsubaie & Isouard, 2019; Mgaiwa, 2023)

The proposed study on the measurement of healthcare leadership styles and their impact on employee satisfaction in health administration roles

in Saudi Arabia hold significant importance (Shah et al., 2023). By investigating the relationship between leadership styles and employee satisfaction, the study aims to enhance healthcare leadership practices in the country (). Understanding which leadership styles is most effective in promoting a positive work environment and improving employee satisfaction can guide healthcare leaders in their decision-making. (Gidden, 2018; Zaghini et al., 2020) This, in turn, can lead to increased employee retention and improved job performance, ultimately benefiting both staff and patients (Celdrana, 2020; Spiva et al., 2020). Additionally, the study's findings can contribute to the efficiency of health administration processes by identifying areas for improvement in leadership practices, decision-making, and communication (Almohtaseb et al., 2021). The research's contextual relevance to the Saudi Arabian healthcare system adds value by acknowledging the cultural and organizational nuances specific to the country (Fahlevi et al., 2022). Overall, the study's significance lies in its potential to advance knowledge, inform evidence-based practices, and drive positive change in healthcare leadership in Saudi Arabia.

According to the Boamah and Tremblay (2019), beyond improving clinical practices or care management, positive nursing leadership, of any kind (transactional, transformational or authentic), seems to contribute to the feeling the personal effectiveness of nurses and empowerment of care in organizations. The nursing leadership would therefore not only be linked to a level higher performance and job performance but also at a increased level of nurses' involvement in challenges organizational structure of health care systems (Perkins et al., 2023).

The leadership is also associated with the notion accountability, which is a characteristic attesting to a professional maturity. Research shows ultimately than leadership is more present in healthcare settings that are associated with related to nursing education programs, level of satisfaction with job and job performance as outcome, that address leadership as a skill and which integrates key behaviors associated with the objectives of traineeship. (Ullah & Khan, 2020; Ofei et al., 2022)

The lack of comprehensive research on the measurement of healthcare leadership styles and their impact on employee satisfaction in health administration roles in Saudi Arabia. While leadership styles and employee satisfaction have been widely studied in various contexts, there is a notable gap in the literature specifically pertaining to the Saudi Arabian healthcare system (Nanjundeswaraswamy, 2023). This knowledge gap hinders the development of evidence-based practices and strategies to enhance employee satisfaction, improve organizational outcomes, and ultimately, elevate the quality of healthcare delivery in Saudi Arabia (Anastasiou & Garametsi, 2021). Thus, there is a need for a focused investigation to

understand the specific dynamics of healthcare leadership styles and their influence on employee satisfaction within health administration roles in Saudi Arabia.

Purpose of the study

The aims and objectives of the study on the measurement of healthcare leadership styles and their impact on employee satisfaction in health administration roles in Saudi Arabia are as follows;

1. To assess and identify the prevalent healthcare leadership styles within health administration roles in Saudi Arabia's healthcare sector.
2. To examine the relationship between different healthcare leadership styles and employee satisfaction in health administration roles.

Conceptual Framework

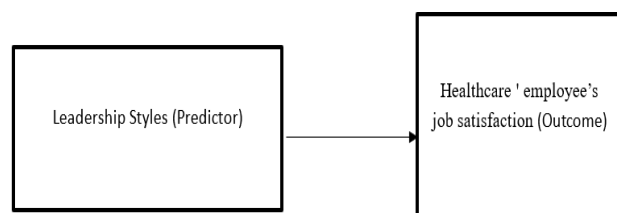


Figure 1

Role of Leadership Styles as predictor on Healthcare 'employee's job satisfaction as outcome variable.

2. Methods

Research design

A cross sectional descriptive research design was applied.

Setting

The study was conducted among healthcare employees working hospitals government in Taif, Saudi Arabia.

Study Population and Sampling

All healthcare employees working hospitals government in Taif, Saudi Arabia was considered as targeted hospital. While the estimated sample size is 250. And for this purposive convenient sampling technique were applied.

Inclusion and Exclusion Criteria

Those who are willing to take part, having at least one year experience, understand English and Arabic both and working in the targeted hospital were included. While all others were excluded.

Measurements

Basic situation survey form. Self-made general information and demographic survey, including gender, age, nursing age, level of education, professional experiences, marital status etc.

Leadership Style Questionnaire .

A questionnaire was adopted and extracted from the study of Fenta Kebede et al. (2023). This questionnaire has 5 point response option with

measuring 3 different styles of leadership with 1 (strongly disagree) to 5 (strongly agree). This scale holds good psychometric properties as validity and reliability.

Job Satisfaction Scale

It was developed and validated by Da Silva João et al. (2017), in the English language on a sample of nurses in Portugal. This scale was 6 dimensional with 37 items in total with a 5-point response option from as 1 (strongly disagree) to 5 (strongly agree). This scale holds good psychometric properties as validity and reliability with $\alpha = 0.96$. (Da Silva João et al., 2017)

Data collection and survey methods

After getting approval of the study from the research committee, the data collection process was started. For this permission was obtained and the permission of data collection from the concern departments like Ministry of Health in Taif. The data collection method consisted of a questionnaire through two valid and reliable structured questionnaires, and the survey was conducted by the researcher directly. It was take about 20 to 30 minutes to fill out the questionnaire, and a predetermined return product were provided to those who participated in the questionnaire..

Data Analysis

Analysis the data collection was performed by using the SPSS program with v26. was determine the mean, percentage, and standard deviation with the descriptive statistical was use. The correlation coefficient analysis and independent t test was used to identify correlations. Multiple linear regressions was used to check the predictive role. The level of acceptable significance was set at $p < .05$.

Ethical consideration

The first consideration in terms of ethics when performing research should be to do no harm. According to the type of research, which is quantitative research, we should consider some ethical consideration we should follow before starting in any methodology phase. First prior to beginning the study, some procedures was observed. Take an ethical approval was obtained from regional IRB/ ethical committee of Taif. The next step to get the approval for tool permission for translate and use the tool from the author who created the tools by sending emails. Informed consent was developed and was include participants' right. All participants were provided with an information statement written in English and Arabic, along with a clear and concise description of the study. Data was stored on password-protected computer files. After the study is completed, all contact details were destroyed. Data however was stored for following publication of the results.

3. Results

Table 1; Demographical values (k = 250).

Variable	f	%
Gender		
Male ذكر	132	52.8
Female انثى	118	47.2
Marital Status		
Single غير متزوج	58	23.2
Married متزوج	168	67.2
Divorced مُطلق	24	9.6
Age		
20-29	38	15.2
30-39	114	45.6
40-49	79	31.6
50-60	19	7.6
Educational level		
Diploma شهادة دبلوم	25	10.0
BS بكالوريوس	147	58.8
MS انستة	53	21.2
PhD دكتوراه	25	10.0
Occupation		
Nurse ممرضة	87	34.8
Doctor Assistant مساعد طبي	25	10.0
Medical Technician فني طبي	29	11.6
Nursing Assistant مساعد تمريض	33	13.2
Other paramedical specialties التخصصات الطبية الأخرى	76	30.4
Year of experience		
1-5 year سنة	63	25.2
6-10 year سنة	61	24.4
11 - 15	61	24.4
15 or above years-15 سنة او أكثر	65	26.0
Working department		
OPD	24	9.6
Emergency	33	13.2
Operation Theater	24	9.6
ICU	33	13.2
Medical records	14	5.6
Gyn, Labour & Delivery	17	6.8
Childcare	26	10.4
Surgical	35	14.0
Oncology	9	3.6
Mental and Psychiatric Care	23	9.2
Other	12	4.8
Hospital		
King Abdulaziz Specialist Hospital	120	48.0
Irada and Mental Health Complex	73	29.2
King Faisal Medical Complex	33	13.2
Children Hospital	11	4.4
Mental health hospital	13	5.2

f = frequency, % = percentage

Table 1 presents the demographic characteristics of the study participants (n = 250) working in government hospitals in Taif, Saudi Arabia. The gender distribution showed that 52.8% of participants were male and 47.2% were female. The majority of participants were married (67.2%), followed by single (23.2%) and divorced (9.6%) individuals. In terms of age, the largest proportion fell within the 30-39 age group (45.6%), while the 20-29, 40-49, and 50-60 age groups comprised 15.2%, 31.6%, and 7.6% respectively. Regarding education, the majority held a Bachelor's degree (58.8%), followed by Master's (21.2%), Diploma (10.0%), and PhD (10.0%).

Occupationally, nurses constituted 34.8% of the participants, with doctor assistants (10.0%), medical technicians (11.6%), nursing assistants (13.2%), and other paramedical specialties (30.4%) making up the rest. Most participants had 6-10 years of experience (24.4%), while 25.2% had 1-5 years, 24.4% had 11-15 years, and 26.0% had 15+ years. The working departments varied, with Emergency (13.2%), Surgical (14.0%), and ICU (13.2%) being notable. The majority of participants were from King Abdulaziz Specialist Hospital (48.0%), followed by Irada and Mental Health Complex (29.2%) and King Faisal Medical Complex (13.2%).

Table 2; Correlational Matrix (k = 250).

Variable	M	S.D	JSS	Autocratic	Democratic	Lassie-Faire
JSS	129.9040	32.34774	-	.725**	.638**	.755**
Leadership						
Autocratic	20.5920	4.91959	-	-	.595**	.661**
Democratic	17.0720	3.81221	-	-	-	.710**
Lassie-Faire	27.8416	6.30444	-	-	-	-

M; mean. S.D = Standered Deviation. JSS = Job satisfaction scale,

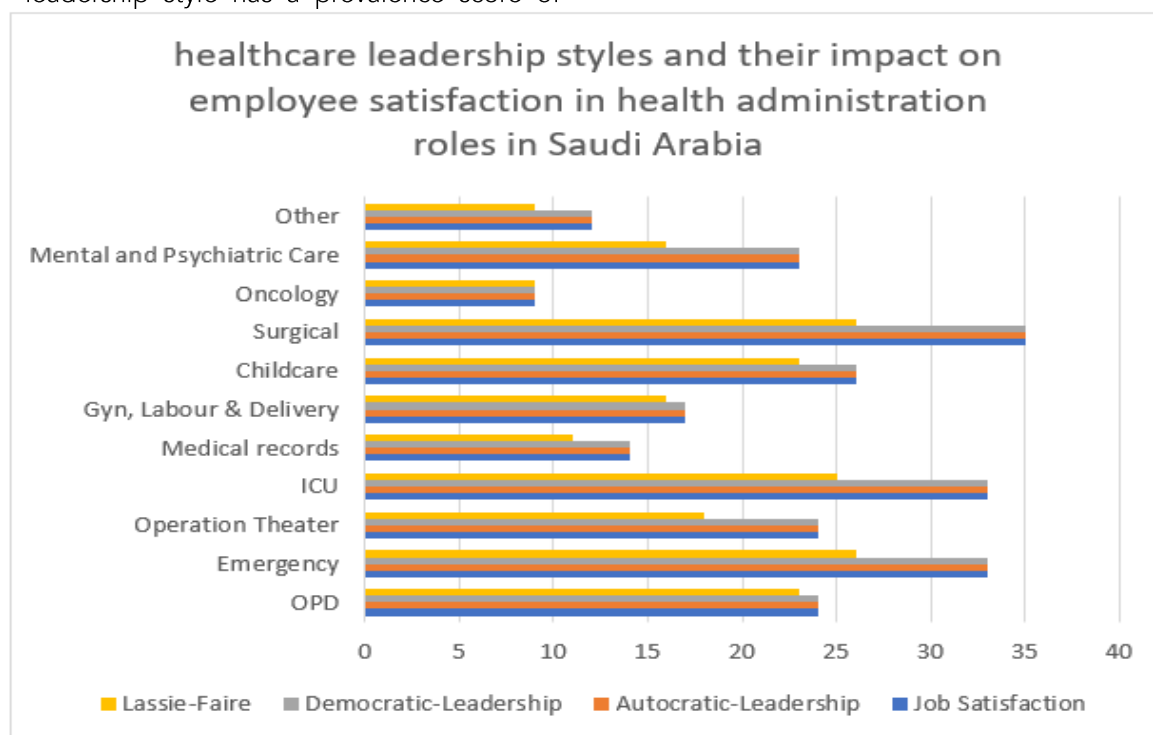
Table 2 presents the correlational matrix for the variables in the study (n = 250). The mean (M) and standard deviation (S.D) values are provided for each variable. The Job Satisfaction Scale (JSS) showed a

mean score of 129.9040 with a standard deviation of 32.34774. Notably, strong positive correlations were found between JSS and the Autocratic leadership style (r = .725**) as well as the Democratic leadership

style ($r = .638^{**}$). Additionally, a strong positive correlation was observed between JSS and the Laissez-Faire leadership style ($r = .755^{**}$). For the leadership styles, the Autocratic style had a mean of 20.5920 with a standard deviation of 4.91959, the Democratic style had a mean of 17.0720 with a standard deviation of 3.81221, and the Laissez-Faire style had a mean of 27.8416 with a standard deviation of 6.30444. These findings suggest significant associations between leadership styles and job satisfaction among the healthcare employees in the study.

The presented values represent the prevalence of healthcare leadership styles among the participants. The "Autocratic" leadership style has a prevalence score of 20.5920, the "Democratic" leadership style has a prevalence score of 17.0720, and the "Laissez-Faire" leadership style has a prevalence score of

27.8400. These scores indicate the relative frequency or occurrence of each leadership style within the studied healthcare context.



The provided graph displays the measurement of healthcare leadership styles and their correlation with employee satisfaction in different health administration roles in Saudi Arabia. The variables include "Job Satisfaction," "Autocratic Leadership," "Democratic Leadership," and "Laissez-Faire Leadership." Each health department's data is presented, with the respective counts for the number of participants in the

study. For instance, in the "OPD" department, there were 24 participants, and their corresponding scores for job satisfaction, autocratic leadership, democratic leadership, and laissez-faire leadership are also provided. The table gives an overview of the relationships between leadership styles and employee satisfaction within various health administration roles.

Table 3; Multiple Regression ($k = 250$).

Variable	B	Std.E	β	t	p	95%CI	
						LL	UL
(Constant)	3.384	6.757		0.501	0.617	-9.940	16.709
Autocratic	2.170	0.385	0.326	5.643	0.000	1.412	2.929
Democratic	1.191	0.506	0.145	2.353	0.020	0.193	2.188
Lassie	2.214	0.331	0.437	6.693	0.000	1.562	2.866

"B" represents unstandardized coefficients, " β " represents standardized coefficients, "Std.E" is standard error, "t" is t-value, and "p" is the p-value. "LL" and "UL" represent the lower and upper limits of the 95% confidence interval, respectively.

Table 3 presents the results of the multiple regression analysis conducted on the dataset of 250

participants. The table displays standardized coefficients (β), unstandardized coefficients (B),

standard errors (Std.E), t-values, and p-values for each predictor variable. The analysis includes a constant term, Autocratic leadership style, Democratic leadership style, and Laissez-Faire leadership style. The results show that Autocratic leadership has a significant positive effect on job satisfaction ($\beta = 0.326$, $p < 0.001$), as indicated by its positive unstandardized coefficient ($B = 2.170$) and significant t-value ($t = 5.643$). Similarly, the Democratic leadership style also positively

influences job satisfaction ($\beta = 0.145$, $p = 0.020$), with a positive unstandardized coefficient ($B = 1.191$) and significant t-value ($t = 2.353$). Moreover, the Laissez-Faire leadership style has a substantial positive impact on job satisfaction ($\beta = 0.437$, $p < 0.001$), with a positive unstandardized coefficient ($B = 2.214$) and significant t-value ($t = 6.693$). These results indicate that all three leadership styles significantly contribute to explaining the variance in job satisfaction levels among the healthcare employees in the study.

Table 4; Gender difference (k = 250).

Variable	Male (132)		Female (118)		t	p	95% CL	
	M	S.D	M	S.D			LL	UL
JSS	137.9697	28.98721	120.8814	33.62441	4.31	0.00	9.28799	24.88869
Leadership								
Autocratic	21.3939	4.52096	19.6949	5.20438	2.76	0.00	0.48748	2.91056
Democratic	17.6136	3.64377	16.4661	3.91945	2.39	0.01	0.20524	2.08983
Lassie-Faire	29.1667	6.10883	26.3191	6.21170	3.27	0.00	1.13496	4.56007
"M" represents mean, "S.D" represents standard deviation, "LL" and "UL" represent the lower and upper limits of the 95% confidence interval, respectively.								

Table 4 compares gender differences in means and t-values for various variables among 250 participants. Male participants show significantly higher job satisfaction ($M = 137.9697$) than females ($M = 120.8814$), with a t-value of 4.31 ($p < 0.001$). Similarly, in leadership styles, males score higher than females in Autocratic ($t = 2.76$, $p < 0.01$), Democratic ($t = 2.39$, $p < 0.05$), and Laissez-Faire ($t = 3.27$, $p < 0.001$) categories. Gender influences job satisfaction and leadership styles in the study's healthcare employees.

4. Discussion

The present study aimed to investigate the prevalent healthcare leadership styles within health administration roles in Saudi Arabia's healthcare sector and explore the relationship between these leadership styles and employee satisfaction. The study's findings contribute to the broader understanding of effective leadership practices in healthcare settings and their impact on employee well-being and job satisfaction.

In relation to the first objective, the study assessed and identified three prevalent healthcare leadership styles; Autocratic, Democratic, and Laissez-Faire. These findings align with prior research that has examined leadership styles in healthcare contexts. The prevalence of these styles reflects the complexity of leadership practices in healthcare administration, where different styles may be more suitable depending on the situation. This echoes the findings of Hasan et al. (2020), who emphasize that leadership styles play a pivotal role in influencing motivation, satisfaction, and performance outcomes. The prevalence of different leadership styles in the healthcare sector underscores the importance of adaptive leadership approaches that can address the multifaceted challenges and responsibilities of health administration roles.

Moving on to the second objective, the study delved into the relationship between healthcare leadership

styles and employee satisfaction within health administration roles. The study's results indicated significant correlations between leadership styles and employee satisfaction, where Autocratic, Democratic, and Laissez-Faire leadership styles were positively associated with employee satisfaction. These findings resonate with previous research, such as the work of Lu et al. (2019), which identified a strong correlation between leadership styles and job satisfaction among nursing professionals. The positive correlation between leadership styles and employee satisfaction underscores the critical role that leadership plays in shaping the work environment, employee motivation, and overall job contentment.

Furthermore, the study's exploration of gender differences in leadership styles and job satisfaction aligns with previous research conducted by Acea-López (2021) and Alqahtani et al. (2021), which also examined the influence of gender on job satisfaction in healthcare settings. Such research emphasizes the significance of understanding gender dynamics within leadership and job satisfaction contexts, as these factors can shape the overall work experience of healthcare employees.

The study's findings hold important implications for healthcare administrators and leaders in Saudi Arabia's healthcare sector. The identification of prevalent leadership styles provides valuable insights into the diversity of approaches used by leaders to manage and guide their teams. By recognizing and understanding these styles, healthcare organizations can offer targeted leadership development programs to enhance leadership skills and adaptability. Moreover, the positive correlation between leadership styles and employee satisfaction emphasizes the role of leadership in shaping the overall work experience and well-being of healthcare employees.

While this study sheds light on the relationships between leadership styles and employee

satisfaction, there are certain limitations. The cross-sectional design limits the establishment of causal relationships between variables. Additionally, the study's focus on a specific region might impact the generalizability of findings to other healthcare contexts. Future research could adopt a longitudinal approach to explore how leadership styles evolve over time and impact long-term employee outcomes. Comparative studies across different regions could also provide a broader understanding of how cultural factors influence leadership practices and their consequences on employee satisfaction. This study's comprehensive examination of healthcare leadership styles and their impact on employee satisfaction in health administration roles contributes significantly to the understanding of effective leadership practices within the Saudi Arabian healthcare sector. The study not only expands the theoretical knowledge in this area but also provides practical insights for healthcare leaders to create environments that foster employee satisfaction and, consequently, enhance the overall quality of healthcare services delivered.

5. Conclusion

This study contributes to the growing body of knowledge surrounding healthcare leadership styles and their impact on employee satisfaction within health administration roles in Saudi Arabia. The identification of prevalent leadership styles and the exploration of their relationships with job satisfaction provide valuable insights for healthcare organizations and leaders. By understanding which leadership styles are associated with higher levels of employee satisfaction, healthcare administrators can tailor their approaches to create positive work environments, enhance employee motivation, and ultimately improve the quality of healthcare delivery in the country.

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