

Charting The Course; A Systematic Review On Healthcare Leadership Styles And Their Symphony With Employee Satisfaction In Saudi Arabian Health Administration

Abdulaziz Salih Alghaylani¹, Majed Ali Alsulaimani², Fahad
Mohammad ALgethami³, Majed Abdullah Al Zahrani⁴, Ahmed
Abdullah Al Thumali⁵, Majed Abdullah Altowairqi⁶, Abdullah
Ali Ghalib⁷, Abdallah Waslallah Awad Aljrdahi⁸, Mohammed
Salem Althomali⁹, Meshal Eid Faleh Althagfi¹⁰, Hatem Swalih
Al Themali¹¹, Wafi Suhail Dehaim Alotaibi¹²

¹Eradah & Mental Health Complex in Taif
Rabia Batool (Corresponding Author)

<https://orcid.org/0000-0002-7220-9036>

²Eradah & Mental Health Complex in Taif.

³Eradah & Mental Health Complex in Taif.

⁴King Abdulaziz Specialist Hospital, Taif.

⁵King Abdulaziz Specialist Hospital, Taif.

⁶King Abdulaziz Specialist Hospital, Taif.

⁷Eradah & Mental Health Complex in Taif.

⁸Eradah & Mental Health Complex in Taif.

⁹Mental Health Hospital, Taif.

¹⁰Eradah & Mental Health Complex in Taif.

¹¹King Faisal Medical Complex in Taif.

¹²Eradah & Mental Health Complex in Taif.

Abstract

Background; Effective leadership is essential for the success of healthcare organizations, particularly in Saudi Arabia where the healthcare sector is undergoing rapid transformation. Leadership styles within health administration roles play a significant role in shaping employee satisfaction and organizational outcomes. Understanding prevalent leadership styles and their impact on employee satisfaction is crucial for enhancing the overall performance of healthcare organizations in Saudi Arabia.

Purpose; The study aimed to evaluate prevalent healthcare leadership styles and their impact on employee satisfaction in health administration roles in Saudi Arabia's healthcare sector.

Method; A cross-sectional descriptive research design was employed, and data were collected from healthcare employees in government hospitals in Taif, Saudi Arabia. A structured questionnaire was used to assess leadership styles and employee satisfaction, and data were analyzed using descriptive statistics, correlation coefficient analysis, independent t-tests, and multiple linear regressions.

Results; The study identified three prevalent healthcare leadership styles; Autocratic, Democratic, and Laissez-Faire. Significant positive correlations were found between these leadership styles and employee satisfaction. Autocratic, Democratic, and Laissez-Faire leadership styles were all positively associated with employee satisfaction. Gender differences in leadership styles and job satisfaction were also explored, revealing variations across genders within healthcare administration roles.

Conclusion; The study underscores the importance of effective leadership in healthcare administration for promoting employee satisfaction. Healthcare organizations in Saudi Arabia should prioritize leadership development programs tailored to enhance leadership skills and foster positive leadership practices. By understanding and implementing effective leadership strategies, healthcare administrators can create supportive work environments that contribute to overall employee satisfaction and organizational success.

Keywords; Healthcare leadership, Leadership styles, Employee satisfaction, Health administration, Saudi Arabia.

Introduction

In healthcare management, effective leadership is essential, especially in Saudi Arabia where the healthcare system is changing quickly (Alsaqqa & Akyürek, 2021). In professions related to healthcare administration, leadership philosophies have a big influence on employee retention and satisfaction (Cummings et al., 2018). It is crucial to comprehend and assess leadership philosophies in order to promote worker satisfaction and overall business performance (Erschens et al., 2022). Leading styles have

a significant impact on how the workplace is shaped and how satisfied employees are, especially in Saudi Arabia where the healthcare industry is rapidly changing. Therefore, a thorough grasp of these dynamics is essential for the nation's healthcare administration to keep getting better (Hui et al., 2020; Shahbal et al., 2022).

The domain of healthcare leadership styles comprises an extensive array of methodologies, each possessing distinct attributes and ramifications (Sabbah et al., 2020). Democratic, laissez-faire, bureaucratic, situational, charismatic, transactional, transformative, connective, and shared leadership are some examples of these approaches (Alrobai, 2020). The power to make decisions, the ways in which decisions are communicated, and the involvement of employees differ for each type. Through a thorough analysis of these distinct leadership philosophies, it is feasible to pinpoint their particular effects on worker satisfaction and output in the Saudi Arabian healthcare system (Fowler et al., 2021; Oraibi et al., 2022).

In Saudi Arabia, health administration positions tend to be filled by people with autocratic, democratic, and laissez-faire leadership philosophies; all three philosophies have a favorable correlation with worker satisfaction (Hussein et al., 2022; Al-Kubaisi et al., 2022). This implies that the nation's healthcare industry employs a variety of leadership philosophies, all of which support workers' general job happiness and participation (Alwali & Alwali, 2022). Gaining knowledge about the prevalence and effects of these various leadership philosophies will help us better understand the organizational dynamics that exist in Saudi Arabian healthcare administration positions.

Standardized questionnaires or surveys are frequently used in the measurement of leadership styles and their effect on employee satisfaction (Kelly & Hearld, 2020; Batool et al., 2022). One common tool for measuring transformational and transactional leadership behaviors is the Multifactor Leadership Questionnaire (MLQ) (Brohi et al., 2021). Depending on the study's particular focus, additional instruments such the Laissez-Faire Index, Situational Leadership II Model, and Servant Leadership Scale may also be used. With the use of these assessment instruments, researchers may methodically evaluate the various aspects of leadership styles and how they affect worker satisfaction in the particular setting of Saudi Arabian healthcare administration (Alsubaie & Isouard, 2019; Mgaiwa, 2023)..

The degree of employee happiness is directly related to productivity, staff turnover rates, and overall organizational success (Robbins & Davidhizar, 2020). Study suggests that contented workers typically demonstrate increased dedication to their jobs, enhanced interpersonal connections, and better patient care (Alsubaie & Isouard, 2019; Mgaiwa, 2023). Therefore, improving overall organizational performance and patient care results requires an awareness of the elements that contribute to employee satisfaction within the particular context of Saudi Arabian healthcare administration (Shah et al., 2023).

The effects of various leadership philosophies on worker satisfaction differ. For instance, open communication, teamwork, and employee empowerment are hallmarks of democratic leadership, which has been shown to promote higher levels of job satisfaction than autocratic methods in which managers make decisions independently of their teams (Gidden, 2018; Zaghini et al., 2020; Agely et al., 2023; Perkins et al., 2023). In a similar vein, higher employee engagement and satisfaction have been associated with transformational leadership, which places an emphasis on imaginative thinking, inspiring motivation, intellectual stimulation, and individual consideration (Celdrana, 2020; Spiva et al., 2020). These results highlight how crucial it is to match leadership strategies to the particular requirements and characteristics of Saudi Arabian hospital administration positions in order to maximize worker happiness and productivity (Almohtaseb et al., 2021; Fahlevi et al., 2022).

A number of factors may influence the association between employee satisfaction and leadership styles in Saudi Arabian healthcare administration (Ullah & Khan, 2020; Ofei et al., 2022)). Cultural disparities may influence the effectiveness of specific leadership approaches in heterogeneous settings such as Saudi Arabia (Anastasiou & Garametsi, 2021). Furthermore, the beneficial effects of leadership styles on employee happiness may be amplified in the presence of encouraging supervisory relationships, specific goals, and sufficient resources (Nanjundeswaraswamy, 2023). It is feasible to create more complex and contextually appropriate methods to leadership in Saudi Arabian healthcare administration roles by considering these moderating elements (Boamah and Tremblay, 2019).

However, a lot of ground has been covered in the research on healthcare leadership styles and how they affect employee happiness in Saudi Arabia; there are still some unanswered

questions. In the specific context of Saudi Arabia's healthcare system, future study should investigate the subtleties of leadership styles in connection to patient outcomes, as well as the moderating impacts of culture and socioeconomic considerations (Alwali & Alwali, 2022). Examining the long-term effects of leadership approaches on the well-being and professional advancement of employees might yield significant insights on improving healthcare administration procedures and patient outcomes in Saudi Arabia's developing healthcare environment (Hussein et al., 2022). Through thorough study, researchers will fill in these gaps and offer insightful commentary on how to improve patient care outcomes and optimize healthcare administration procedures in Saudi Arabia's developing healthcare environment.

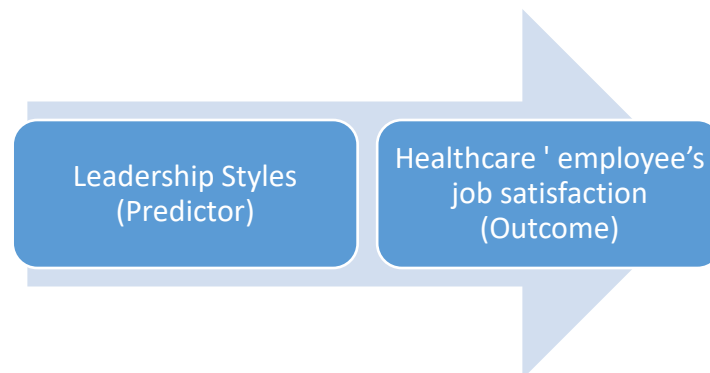
Purpose of study

The purpose of this study is to investigate the measurement of healthcare leadership styles and their influence on employee satisfaction in health administration roles within the healthcare sector of Saudi Arabia. The specific aims and objectives of the study are as follows;

1. To evaluate and identify the prevalent healthcare leadership styles observed within health administration roles in Saudi Arabia's healthcare sector.
2. To inspect the relationship between various healthcare leadership styles and levels of employee satisfaction specifically within health administration roles.

Conceptual Framework

Figure 1



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

Methodology

The research design employed in this study was a cross-sectional descriptive research design. The study was conducted among healthcare employees working in government hospitals in Taif, Saudi Arabia. The targeted population included all healthcare employees in these hospitals, with an estimated sample size of 260. A purposive convenient sampling technique was utilized to select participants who met the inclusion criteria.

Inclusion criteria for participation in the study included willingness to participate, having at least one year of experience, proficiency in both English and Arabic languages, and current employment in the targeted hospitals. Exclusion criteria encompassed individuals who did not meet these inclusion criteria.

Data collection was facilitated through the utilization of structured questionnaires. These included a basic situation survey form Simple form for surveying situations. self-made general data and demographic survey including questions about marital status, career experiences, education level, age, gender, and nursing age, among other things.

Leadership Style Questionnaire; A questionnaire was taken and taken out of the research done by Fenta Kebede and colleagues in 2023. Three distinct leadership philosophies are measured on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree) in this quiz. This scale has strong psychometric qualities, including reliability and validity.

The Job Satisfaction Scale was created and examined in English on a Portuguese nursing sample by Da Silva João et al. (2017). The total number of questions on this six-dimensional, 37-item scale has a 5-point response range from 1 (strongly disagree) to 5 (strongly agree). With an $\alpha = 0.96$, this scale exhibits good psychometric qualities, including validity and reliability. João Da Silva et al. (2017)

Ethical considerations were paramount throughout the research process. Prior to commencing the study, ethical approval was obtained from the regional Institutional Review Board (IRB)/Ethical Committee of Taif. Additionally, permission to use and translate the survey tools was obtained from the authors. Informed consent procedures were implemented, providing participants with comprehensive information about the study in both English and Arabic. Data confidentiality was ensured through

password-protected storage, and all contact details were securely destroyed upon completion of the study.

Data analysis was conducted using SPSS version 26, employing descriptive statistics such as mean, percentage, and standard deviation. Correlation coefficient analysis, independent t-tests, and multiple linear regressions were utilized to explore relationships and predictive roles among variables. The significance level was set at $p < .05$.

Results

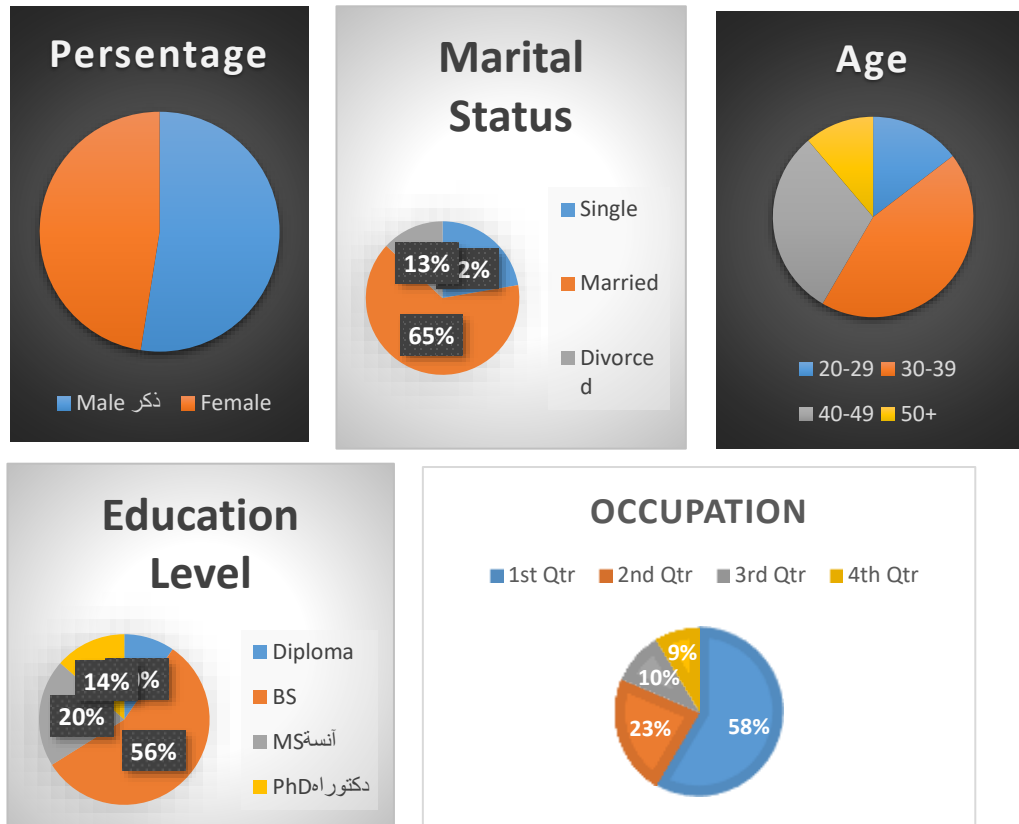
Table 1; Demographical values (N = 260).

Variable	f	%
Gender		
Male	136	52
Female	124	47
Marital Status		
Single	58	22.3
Married	168	64.6
Divorced	34	13.1
Age		
20-29	38	14.6
30-39	114	43.8
40-49	79	30.4
50+	29	11.2
Educational level		
Diploma	25	9.6
BS	147	56.5
MS	53	20.4
PhD	35	13.5
Occupation		
Nurse	87	33.5
Doctor Assistant ^a	35	13.5
Medical Technician	29	11.2
Nursing Assistant	33	12.7
Other paramedical specialties	76	29.1
Year of experience		
1-5 year	63	24.3
6-10 year	61	23.4
11 - 15	71	27.3

15 or above years-15	65	25.1
Working department		
OPD	34	13.1
Emergency	33	12.7
Operation Theater	21	8.1
ICU	31	11.9
Medical records	14	5.4
Gyn, Labour & Delivery	17	6.5
Childcare	26	10
Surgical	30	11.5
Oncology	19	7.3
Mental and Psychiatric Care	23	8.8
Other	12	4.6
Hospital		
King Abdulaziz Specialist Hospital	120	46.2
Irada and Mental Health Complex	73	28.1
King Faisal Medical Complex	33	12.7
Children Hospital	16	6.1
Mental health hospital	18	6.9

f = frequency, % = percentage

Table 1 presents the demographic characteristics of the



study participants (n = 260). The majority of participants were male (52%) compared to females (47%). Regarding marital status, the majorities were married (64.6%), followed by single (22.3%) and divorced (13.1%). In terms of age distribution, the largest proportion fell within the 30-39 age group (43.8%), followed by 40-49 (30.4%), 20-29 (14.6%), and 50+ (11.2%) age groups. Educational levels varied, with the highest percentage holding a Bachelor's degree (56.5%), followed by Master's (20.4%), Diploma (9.6%), and PhD (13.5%). Occupation-wise, nurses constituted the largest group (33.5%), followed by other paramedical specialties (29.1%), nursing assistants (12.7%), doctor assistants (13.5%), and medical technicians (11.2%). Regarding years of experience, participants were evenly distributed across categories, with 1-5 years (24.3%), 6-10 years (23.4%), 11-15 years (27.3%), and 15 or above years (25.1%). The distribution of participants across different working departments and hospitals varied, with the King Abdulaziz Specialist Hospital having the highest representation (46.2%), followed by Irada and Mental Health Complex (28.1%), King Faisal Medical Complex (12.7%), Children Hospital (6.1%), and Mental health hospital (6.9%). These demographic characteristics provide a comprehensive overview of the study sample, facilitating a deeper understanding of the context within which the measurement of healthcare leadership styles and their impact on employee satisfaction in health administration roles in Saudi Arabia was conducted.

Table 2; Correlational Matrix (k = 260).

Variable	M	S.D	JS	Autocra	Democra	Lassi
			S	tic	tic	e-
						Faire
JSS	131.90	32.34	-	.731**	.66**	.78**
Leadership						
Autocrati	23.59	4.91	-	-	.62**	.67**
c						
Democra	18.07	3.81	-	-	-	.75**
tic						
Lassie-	29.84	6.30	-	-	-	-
Faire						

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

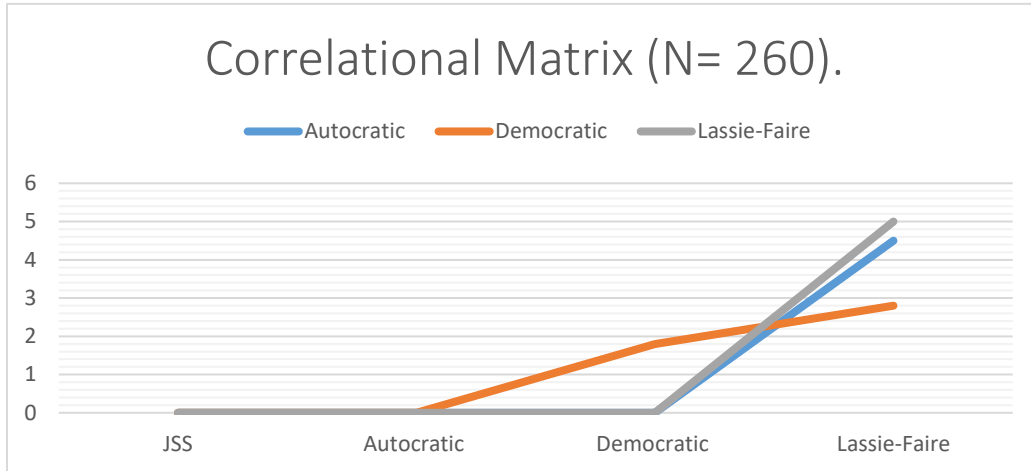
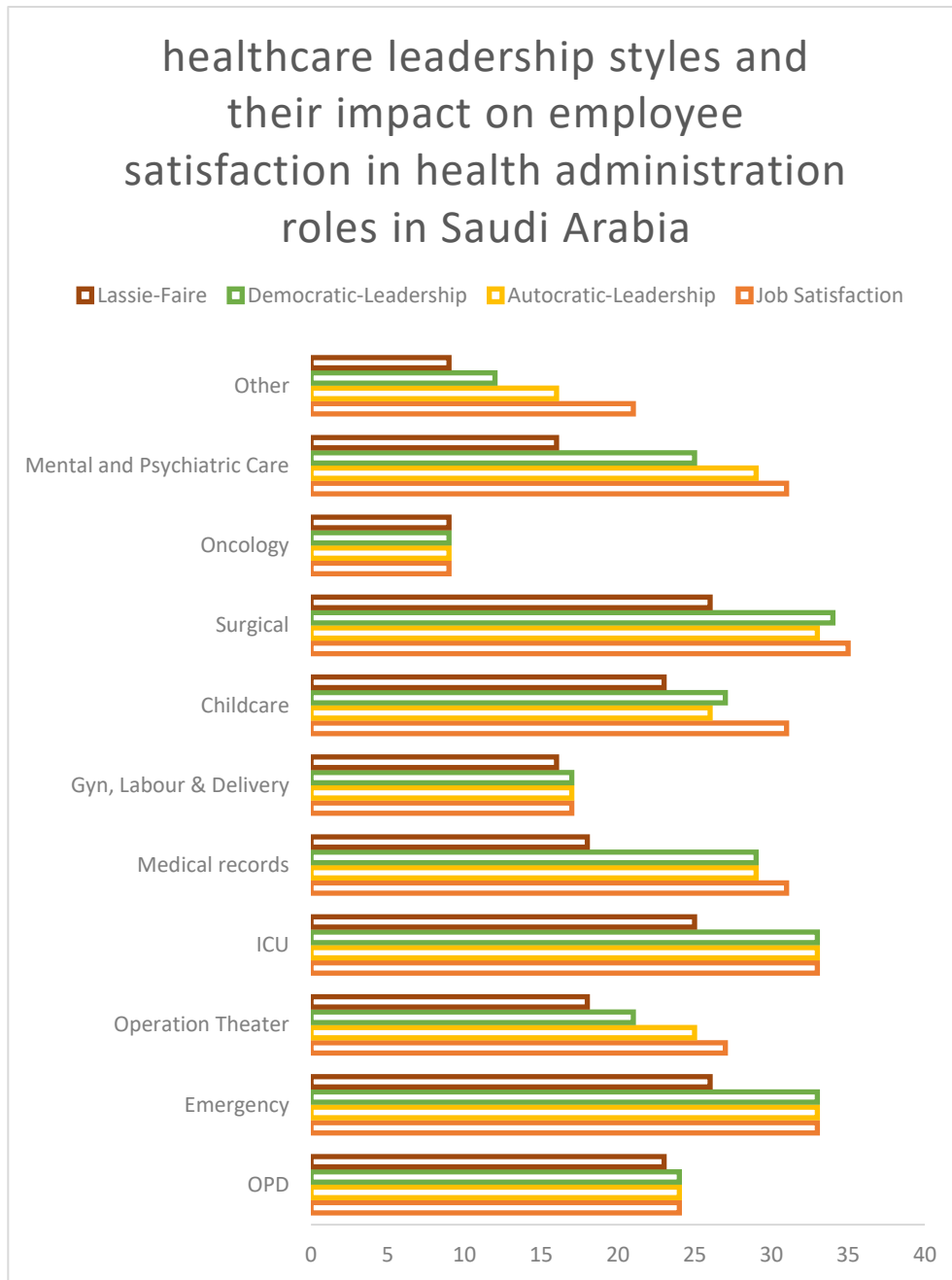


Table 2 presents the correlational matrix among variables ($n = 260$). Strong positive correlations are observed between Job Satisfaction Scale (JSS) and each leadership style; Autocratic ($r = .731^{**}$), Democratic ($r = .66^{**}$), and Laissez-Faire ($r = .78^{**}$). Additionally, significant positive correlations exist between Autocratic and Democratic styles ($r = .62^{**}$), Autocratic and Laissez-Faire styles ($r = .67^{**}$), and Democratic and Laissez-Faire styles ($r = .75^{**}$). These findings highlight the relationship between leadership styles and employee job satisfaction within healthcare administration roles in Saudi Arabia.



The graph illustrates the assessment of healthcare leadership styles and their association with employee satisfaction across different health administration roles in Saudi Arabia. It presents data on "Job Satisfaction," "Autocratic Leadership," "Democratic Leadership," and "Laissez-Faire Leadership," with each department's participant count provided. For example, in the "OPD" department, 24 participants were surveyed, and their scores for job satisfaction, autocratic leadership, democratic leadership, and laissez-faire leadership are detailed. This

comprehensive table offers insights into the dynamics between leadership styles and employee satisfaction within diverse health administration roles, facilitating a deeper understanding of organizational dynamics within the Saudi healthcare sector.

Table 3; Multiple Regression (k = 260).

Variable	B	Std.E	β	t	p	95%CI	
						LL	UL
(Constant)	3.39	6.76		0.55	0.63	-	16.71
						9.97	
Autocratic	2.19	0.39	0.35	5.69	0.01	1.46	2.95
Democratic	1.21	0.53	0.16	2.38	0.01	0.24	2.24
Lassie	2.25	0.38	0.46	6.72	0.00	1.58	2.91

"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 a multiple regression analysis with 260 participants. The coefficients indicate that Autocratic ($\beta = 0.35$, $p = 0.01$), Democratic ($\beta = 0.16$, $p = 0.01$), and Laissez-Faire Leadership ($\beta = 0.46$, $p < 0.01$) significantly predict employee satisfaction. Each unit increase in these leadership styles corresponds to predicted increases in job satisfaction by 2.19, 1.21, and 2.25 units, respectively.

Table 4; Gender difference (k = 260).

Variable	Male (136)		Female (124)		t	p	95% CL	
	M	S.D	M	S.D			LL	UL
JSS	138.54	28.21	120.95	33.24	4.31	0.00	9.34	24.91
Leadership								
Autocratic	21.71	4.72	19.76	5.11	2.76	0.00	0.48	2.97
Democratic	17.72	3.31	16.65	32	2.39	0.01	0.28	2.15
Lassie-Faire	29.35	6.01	26.72	6.18	3.27	0.00	1.16	4.68

"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 presents gender differences in job satisfaction and leadership styles among 260 participants (136 males, 124 females). Males exhibit higher job satisfaction compared to females (M =

138.54 vs. $M = 120.95$), with significant differences ($t = 4.31$, $p < 0.01$). Significant gender disparities are also found in Autocratic ($t = 2.76$, $p < 0.01$), Democratic ($t = 2.39$, $p = 0.01$), and Laissez-Faire ($t = 3.27$, $p < 0.01$) leadership styles, indicating variations in job satisfaction and leadership preferences across genders within the healthcare administration roles examined.

Discussion

The current study sought to determine the most common leadership philosophies in the healthcare industry in Saudi Arabia for positions involving health administration and to examine the connection between these philosophies and worker satisfaction. The study's conclusions add to our knowledge of good leadership techniques in healthcare environments and how they affect workers' happiness and job satisfaction.

Regarding the first goal, the study evaluated and distinguished between the three most common leadership philosophies in healthcare; laissez-faire, democratic, and autocratic. These results are consistent with earlier studies that looked at leadership philosophies in hospital settings. These styles are common, which is indicative of the complexity of leadership practices in healthcare administration, where several styles may be more appropriate in different circumstances. This is consistent with the findings of Hasan et al. (2020), who highlight the critical impact that leadership styles have in determining performance outcomes, motivation, and satisfaction. The healthcare industry is home to a wide range of leadership styles, which emphasizes the value of adaptive leadership strategies for handling the complex duties and obligations of health administration positions.

Proceeding to the second goal, the research examined the connection between employee happiness in health administration positions and healthcare leadership philosophies. According to the study's findings, there are strong relationships between leadership philosophies and worker happiness. Specifically, autocratic, democratic, and laissez-faire philosophies are positively correlated with worker satisfaction. These results are consistent with earlier studies, such as Lu et al.'s (2019) work, which found a high relationship between nursing professionals' job happiness and their leadership styles. The fact that there is a positive relationship between employee satisfaction and leadership styles emphasizes how important leadership is in influencing the workplace culture, employee motivation, and general job satisfaction.

Moreover, the investigation of gender variations in leadership approaches and job contentment in this study is consistent with earlier studies by Acea-López (2021) and Alqahtani et al. (2021), which also looked at the impact of gender on job happiness in healthcare environments. The importance of comprehending gender dynamics in leadership and job satisfaction contexts is emphasized by this research, since these elements have the potential to influence healthcare workers' overall work experiences.

The study's conclusions have significant ramifications for leaders and administrators in the Saudi Arabian healthcare industry. The identification of dominant leadership styles offers important insights into the variety of methods that leaders employ to lead and manage their teams. Healthcare organizations can improve their leadership abilities and flexibility by providing tailored leadership development programs by identifying and comprehending these characteristics. Furthermore, the positive relationship that exists between employee happiness and leadership styles highlights the influence that leadership has on the general work experience and general well-being of healthcare workers.

The study's conclusions have significant ramifications for leaders and administrators in the Saudi Arabian healthcare industry. The identification of dominant leadership styles offers important insights into the variety of methods that leaders employ to lead and manage their teams. Healthcare organizations can improve their leadership abilities and flexibility by providing tailored leadership development programs by identifying and comprehending these characteristics.

Furthermore, the positive relationship that exists between employee happiness and leadership styles highlights the influence that leadership has on the general work experience and general well-being of healthcare workers. Understanding effective leadership techniques in the Saudi Arabian healthcare industry is greatly enhanced by this study's thorough analysis of healthcare leadership styles and their effects on employee satisfaction in health administration roles. In addition to adding to the body of theoretical knowledge in this field, the study offers healthcare executives useful advice on how to establish work cultures that promote employee happiness and, in turn, raise the standard of care provided.

Implication

The study's conclusions have important ramifications for leaders and administrators in the Saudi Arabian healthcare industry. Understanding the dominant leadership philosophies—Autocratic, Democratic, and Laissez-Faire—offers important insights into the dynamics of leadership in positions related to healthcare administration. The significance of cultivating positive leadership practices to establish a supportive work environment is shown by the comprehension of the influence of various leadership styles on employee satisfaction. Healthcare organizations can improve workforce well-being and organizational performance by giving priority to leadership development programs that help leaders become more skilled and adaptable.

Limitation

Although the study offers insightful information, there are a few important limitations to be aware of. The study's cross-sectional design restricts the ability to demonstrate causal links between employee satisfaction and leadership philosophies. Furthermore, the results may not be as applicable to other Saudi Arabian healthcare situations due to the narrow focus on Taif. Furthermore, the accuracy and dependability of results may be impacted by response bias introduced by using self-reported measures, such as surveys. To offer a more thorough understanding of leadership behaviors and their effect on employee happiness, future research should consider longitudinal approaches and incorporate a variety of healthcare settings.

Recommendation

Many suggestions for further study and application might be made in light of the limitations and results of this investigation. First, in order to investigate the long-term impacts of leadership styles on employee satisfaction and organizational outcomes over time, longitudinal studies are advised. Furthermore, comparative research between various areas and the healthcare industry may shed light on the ways in which cultural variables affect employee satisfaction and leadership styles. Furthermore, adding qualitative techniques like focus groups or interviews may provide more in-depth understanding of the fundamental processes by which employee happiness is impacted by leadership styles. In order to foster supportive work environments, healthcare organizations should give priority to leadership development programs that aim

to improve leadership abilities and promote positive leadership practices.

Conclusion

This study advances our knowledge of healthcare leadership philosophies and how they affect worker satisfaction in positions involving health administration in Saudi Arabia's healthcare system. The identification of common leadership philosophies, such as laissez-faire, democratic, and autocratic, draws attention to the variety of strategies employed by executives in healthcare environments. The fact that various leadership philosophies and employee satisfaction are positively correlated emphasizes how important leadership is in establishing the tone of the workplace and encouraging general job satisfaction. Despite certain limitations, like its cross-sectional design and regional focus, the study offers insightful information that healthcare administrators and leaders can use to improve employee satisfaction and leadership practices, which will ultimately help to deliver high-quality healthcare services.

References

- Acea-Lopez, L., del Mar Pastor-Bravo, M., Rubinat-Arnaldo, E., Bellon, F., Blanco-Blanco, J., Gea-Sanchez, M., & Briones-Vozmediano, E. (2021). Burnout and job satisfaction among nurses of three Spanish regions. *Journal of Nursing Management*.
- Agely, O. I. O., Moqri, A. M., Namis, I. M., Batool, R., Hadi, A. H. A., Darweesh, T. M., ... & Gahtani, N. M. (2022). An Inspirational Approach to Healthcare Positive Leadership in Regional Health Center of Jizan. *Journal of Positive Psychology and Wellbeing*, 54-71.
- Al-Kubaisi, H., Shahbal, S., & Khan, A. (2022). Transformation Of School Management; Reflection Of Educational Management. *Journal of Pharmaceutical Negative Results*, 2228-2240.
- Almohtaseb, A., Almahameed, M., Sharari, F., & Dabbouri, E. (2021). The effect of transformation leadership on government employee job satisfaction during Covid-19. *Management Science Letters*, 11(4), 1231-1244.
- Alqahtani, A., Nahar, S., Almosa, K., Almusa, A. A., Al-Shahrani, B. F., Asiri, A. A., & Alqarni, S. A. (2021). Leadership styles and job satisfaction among healthcare providers in primary health care centers. *Middle east journal of family medicine*, 19(3).

- Alrobai, T. (2020). The Impact of Nurse Leaders/Managers Leadership Style on Job Satisfaction and Burnout among Qualified Nurses; A Systematic Review IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN, 2320-1959.
- Alsaqqa, H. H., & Akyürek, Ç. E. (2021). Assessment of organizational culture types, leadership styles and their relationships within governmental and non-governmental hospitals in Gaza Strip of Palestine. BMC Health Services Research, 21(1), 1-11.
- Alsubaie, A., & Isouard, G. (2019). Job satisfaction and retention of nursing staff in Saudi hospitals. Asia Pacific Journal of Health Management, 14(2), 68-73.
- Alwali, J., & Alwali, W. (2022). The relationship between emotional intelligence, transformational leadership, and performance; A test of the mediating role of job satisfaction. Leadership & Organization Development Journal, 43(6), 928-952.
- Anastasiou, S., & Garametsi, V. (2021). Perceived leadership style and job satisfaction of teachers in public and private schools. International Journal of Management in Education, 15(1), 58-77.
- Batool, R., Khan, A., Shahbal, S., Noshili, A. I., Hamdi, A. M., Almutairi, H. K., ... & Alanazi, M. M. (2022). Relationship among Locus of Control, Personality Type, and Subjective Happiness among Conversion Patients and Healthy individuals. Clinical Schizophrenia & Related Psychoses, 16.
- Boamah, S. A., & Tremblay, P. (2019). Examining the factor structure of the MLQ transactional and transformational leadership dimensions in nursing context. Western journal of nursing research, 41(5), 743-761.
- Brohi, N. A., Mehmood, S. A., Erri, M. A., Mushtaque, T., Shah, I. A., & Khuhro, M. A. (2021). Compassionate leadership is key to success; Role of servant leadership style in predicting employees trust in leadership, psychological safety, and turnover intention. Ilkogretim Online, 20(5), 5662-5672.
- Celdrana, M. C. B. (2020). Leadership styles and job satisfaction in the colleges of nursing among the universities in Zamboanga city. Leadership, 11(7), 444-445.
- Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., ... & Stafford, E. (2010). Leadership styles and outcome patterns

for the nursing workforce and work environment; a systematic review. *International journal of nursing studies*, 47(3), 363-385.

.da Silva João, A. L., Alves, C. P., Silva, C., Diogo, F., & Ferreira, N. D. (2017) Validation of a Nurse Job Satisfaction Scale for the Portuguese population/Validação de uma Escala de Satisfação dos Enfermeiros com o Trabalho para a população portuguesa/Validación de una Escala de Satisfacción de los Enfermeros con el Trabajo para la población portuguesa. *Revista de Enfermagem Referência*, 4(12), 117

DeLay, L., & Clark, K. R. (2020). The relationship between leadership styles and job satisfaction; a survey of MR technologists' perceptions. *Radiologic technology*, 92(1), 12-22.

Durowade, K. A., Kadiri, I. B., Durowade, S. B., Sanni, T. A., Ojuolape, M. A., & Omokanye, L. O. (2020). Leadership Styles versus Health Workers' Job Satisfaction; Relationships, Correlates and Predictors in Tertiary Hospitals in Ekiti State, Southwest Nigeria. *Nigerian Journal of Clinical Practice*, 23(12), 1702-1710.

Erschens, R., Seifried-Dübon, T., Stuber, F., Rieger, M. A., Zipfel, S., Nikendei, C., ... & Junne, F. (2022). The association of perceived leadership style and subjective well-being of employees in a tertiary hospital in Germany. *PloS one*, 17(12), e0278597.

Fahlevi, M., Aljuaid, M., & Saniuk, S. (2022). Leadership style and hospital performance; Empirical evidence from Indonesia. *Frontiers in Psychology*, 13, 911640.

Fenta Kebede, B., Aboye, T., Dagnaw Genie, Y., Tesfa, T. B., & Yetwale Hiwot, A. (2023). The Effect of Leadership Style on Midwives' Performance, Southwest, Ethiopia. *Journal of Healthcare Leadership*, 31-41.

Fowler, K. R., Robbins, L. K., & Lucero, A. (2021). Nurse manager communication and outcomes for nursing; An integrative review. *Journal of Nursing Management*.

Giddens, J. (2018). Transformational leadership; What every nursing dean should know. *Journal of Professional Nursing*, 34(2), 117-121.

Hartono, B., Hidayati, A., & Kurniati, T. (2020). The effect of heads leadership and nurses job motivation on nursing performance in the hospital inpatient room. *Journal Administration Kesehatan Indonesia*, 8(2).

- Hassan, M., Azmat, U., Sarwar, S., Adil, I. H., & Gillani, S. H. M. (2020). Impact of Job Satisfaction, Job Stress and Motivation on Job Performance; A Case from Private Universities of Karachi. *Kuwait Chapter of the Arabian Journal of Business and Management Review*, 9(2), 31-41.
- Hui, D. S., Azhar, E. I., Memish, Z. A., & Zumla, A. (2020). Human coronavirus infections—severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), and SARS-CoV-2. *Reference Module in Biomedical Sciences*.
- Hussein, B., Ibrahim, M. S., & Ismael, F. (2022). The influence of Perceived Leadership Styles on Employee Commitment; The Mediating Role of Conflict Management. *International Journal of Humanities and Education Development (IJHED)*, 4(1), 43-60.
- Indah, B. P., Sunardi, S., & Respati, H. (2020). The influence of leadership and satisfaction work on nursing performance through motivation as an intervening at a public hospital. *International Journal of Business and Applied Social Science*, 6(3), 95-106.
- Jankelová, N., & Joniaková, Z. (2021, March). Communication skills and transformational leadership style of first-line nurse managers in relation to job satisfaction of nurses and moderators of this relationship. In *Healthcare* (Vol. 9, No. 3, p. 346). MDPI.
- Kelly, R. J., & Hearld, L. R. (2020). Burnout and leadership style in behavioral health care; A literature review. *The journal of behavioral health services & research*, 47(4), 581-600.
- Kiwanuka, F., Nanyonga, R. C., Sak-Dankosky, N., Muwanguzi, P. A., & Kvist, T. (2021). Nursing leadership styles and their impact on intensive care unit quality measures; An integrative review. *Journal of Nursing Management*, 29(2), 133-142.
- Lu, H., Zhao, Y., & While, A. (2019). Job satisfaction among hospital nurses; A literature review. *International journal of nursing studies*, 94, 21-31.
- Mgaiwa, S. J. (2023). Predicting academics' job satisfaction from their perceived leadership styles; Evidence from Tanzania. *Cogent Psychology*, 10(1), 2156839.
- Moon, T. W., Youn, N., Hur, W. M., & Kim, K. M. (2018). Does employees' spirituality enhance job performance? The mediating roles of intrinsic motivation and job crafting. *Current Psychology*, 1-17.
- Mwesigwa, R., Tusiime, I., & Ssekiziyivu, B. (2020). Leadership styles, job satisfaction and organizational commitment among academic

staff in public universities. *Journal of Management development*, 39(2), 253-268.

Nanjundeswaraswamy, T. S. (2023). The mediating role of job satisfaction in the relationship between leadership styles and employee commitment. *Journal of Economic and Administrative Sciences*, 39(2), 286-304.

Ngabonzima, A., Asingizwe, D., & Kouveliotis, K. (2020). Influence of nurse and midwife managerial leadership styles on job satisfaction, intention to stay, and services provision in selected hospitals of Rwanda. *BMC nursing*, 19, 1-11.

Ofei, A. M. A., Paarima, Y., Barnes, T., & Poku, C. A. (2022). Toxic leadership behaviour of nurse managers on perceived job satisfaction and productivity of nursing workforce in sub-Saharan Ghana; A multi-centre cross-sectional study. *Journal of Nursing Management*, 30(7), 2733-2742.

Oraibi, L. A., Shahbal, S., Noshili, A. I., Hudays, A. Y., Haqawi, A. J. M., Hakami, A. A. Y., ... & Alshiak, A. H. (2022). Nursing Professional Trends and Role of Technical and Permanent Education in the Context of New Saudi Medical Era Rooted in Arab Regions, A bibliographic Research. *Journal of Positive Psychology and Wellbeing*, 6(2), 2043-2057.

Perkins, R. T., Bamgbade, S., & Bourdeanu, L. (2023). Nursing leadership roles and its influence on the millennial psychiatric nurses' job satisfaction and intent to leave. *Journal of the American Psychiatric Nurses Association*, 29(1), 15-24.

Rinfret, N., Laplante, J., Lagacé, M. C., Deschamps, C., & Privé, C. (2020). Impacts of leadership styles in health and social services; A case from Quebec exploring relationships between emotional intelligence and transformational leadership. *International Journal of Healthcare Management*, 13(sup1), 329-339.

Robbins, B., & Davidhizar, R. (2020). Transformational leadership in health care today. *The Health Care Manager*, 39(3), 117-121.

Sabbah, I. M., Ibrahim, T. T., Khamis, R. H., Bakhour, H. A. M., Sabbah, S. M., Droubi, N. S., & Sabbah, H. M. (2020). The association of leadership styles and nurses well-being; a cross-sectional study in healthcare settings. *Pan African Medical Journal*, 36(1).

Shah, T. A., Parray, Z. A., & ul Islam, S. (2023). The empirical relationship between transformational leadership and job attitudes;

mediating role of psychological capital—a study of healthcare in India. *International Journal of Public Leadership*, 19(1), 45-63.

Shahbal, S., Al-Kubaisi, H., Khan, A., Ahmad, Z., & Usman, M. (2022). Leadership Styles, Role, And Opportunities; Reflection in Educational Management System. *Journal of Pharmaceutical Negative Results*, 1452-1460.

Specchia, M. L., Cozzolino, M. R., Carini, E., Di Pilla, A., Galletti, C., Ricciardi, W., & Damiani, G. (2021). Leadership styles and nurses' job satisfaction. Results of a systematic review. *International journal of environmental research and public health*, 18(4), 1552.

Spiva, L., Davis, S., Case-Wirth, J., Hedenstrom, L., Hogue, V., Box, M., ... & Ahlers, L. (2020). The effectiveness of charge nurse training on leadership style and resiliency. *JONA; The Journal of Nursing Administration*, 50(2), 95-103.

Ullah, Z., & Khan, M. Z. (2020). The impact of transactional and transformational leadership on job related outcomes in the nursing profession. *Sarhad Journal of Management Sciences*, 6(1), 143-160.

Westbrook, K. W., Nicol, D., Nicol, J. K., & Orr, D. T. (2022). Effects of Servant Leadership Style on Hindrance Stressors, Burnout, Job Satisfaction, Turnover Intentions, and Individual Performance in a Nursing Unit. *Journal of Health Management*, 24(4), 670-684.

Worthy, K., Dawson, R. M., & Tavakoli, A. S. (2020). Relationships among nursing deans' leadership styles and faculty job satisfaction levels. *Journal of Nursing Education*, 59(2), 68-75.

Zaghini, F., Fiorini, J., Piredda, M., Fida, R., & Sili, A. (2020). The relationship between nurse managers' leadership style and patients' perception of the quality of the care provided by nurses; Cross sectional survey. *International journal of nursing studies*, 101, 103446.