

**Assessing the Influence of Leadership Practices on Healthcare Job Satisfaction:  
A Quantitative, Non-Experimental Correlational Study**

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## **Abstract**

This quantitative, non-experimental correlational study investigated the impact of transformational, transactional, and laissez-faire leadership practices on job satisfaction among healthcare employees in the United States, with burnout as a mediator. This research addressed a critical issue: declining job satisfaction amid rising burnout, exacerbated by the COVID-19 pandemic. Utilizing data from 145 participants via the Multifactor Leadership Questionnaire, Maslach Burnout Inventory Human Services Survey, and Job Satisfaction Survey, the study analyzed correlations and mediation effects. Key findings revealed that transformational leadership significantly enhanced personal accomplishment and reduced depersonalization, while transactional leadership lowered emotional exhaustion and depersonalization, whereas laissez-faire leadership showed no significant impact. Job satisfaction factors, such as the Nature of Work, were positively influenced by transformational and transactional leadership. Nevertheless, overall predictive power remained low, and burnout mediation was non-significant across leadership styles. Grounded in Herzberg's Two-Factor Theory, the results aligned with the literature on leadership's role in morale but highlighted context-specific limitations in U.S. trauma hospitals, suggesting the need for larger samples in future research. The study offered practical insights for healthcare leaders to enhance well-being, though gaps in ethical leadership analysis and sample size variability warranted further investigation.

**Keywords:** Leadership Style, Job Satisfaction, Burnout, Healthcare Organization

## **Dedication**

I dedicate this effort to my wife, Xiaomei Du Barnwell. You have supported me in ways neither of us could have imagined, and I am forever indebted to you. I also dedicate this effort to my family, Dr. Chase Brittany Barnwell-Sams, D.O., Dr. Austin Barnwell-Sams, D.O., Christine (M.D. candidate), and Sanjay, who support and motivate me every day; I am so very proud of each of you. I also dedicate this work to my parents, Dudley and Joyce Barnwell, whose unwavering support and guidance have shaped who I am today. Without their sacrifices and encouragement throughout my lifetime, this journey would not have been possible.

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## Table of Contents

Chapter 1: Introduction .....	1
Statement of the Problem.....	3
Purpose of the Study .....	4
Introduction to Theoretical Framework .....	8
Introduction to Research Methodology and Design .....	10
Research Questions .....	12
Hypotheses .....	12
Mapping of Problem, Purpose, and Research Questions .....	13
Significance of the Study .....	15
Definitions of Key Terms .....	16
Summary .....	17
Chapter 2: Literature Review .....	19
Theoretical Framework.....	20
History of Hospitals .....	22
Healthcare Leadership Theories .....	32
Measurement of Leadership, Job Satisfaction and Burnout .....	43
Role of Organization Leadership on Employee Job Satisfaction .....	45
Strategies on Improving Employees' Job Satisfaction .....	47
Minimizing Burnout in Healthcare Organizations.....	49
Challenges to Improving Employee Morale and Job Satisfaction.....	52
Current Trends and Future Directions in Healthcare Leadership .....	53
Summary .....	55
Chapter 3: Research Method.....	58
Research Methodology and Design .....	58
Population and Sample .....	60
Instrumentation .....	60
Operational Definitions of Variables .....	61
Study Procedures .....	62
Data Analysis .....	64
Assumptions.....	68
Limitations .....	69
Delimitations.....	71
Ethical Assurances .....	72
Summary .....	73
Chapter 4: Findings.....	75
Validity and Reliability of the Data .....	75
Results.....	92

Demographic Information.....	99
Comparison of Results to the Literature Review .....	101
Summary .....	102
Chapter 5: Discussion, Recommendations, and Study Summary.....	106
Brief Review .....	106
Discussion.....	107
Recommendations for Practice .....	109
Recommendations for Future Research .....	115
Study Summary.....	121
References.....	125
Appendix A National University IRB Approval Letter .....	145
Appendix B University Medical Center of Southern Nevada IRB Approval Letter .....	147
Appendix C Copy of MLQ 5X-Short Instrument and Permission to Use .....	148
Appendix D Copy of MBI Instrument and Permission to Use .....	150
Appendix E Copy of JSS Instrument and Permission to Use .....	153
Appendix F G*Power Analysis .....	156
Appendix G CITI Certificate of Completion .....	157

## List of Tables

Table 1 <i>Categorization of Motivational and Hygienic Elements</i> .....	9
Table 2 <i>Mapping of Problem, Purpose, and Research Questions</i> .....	14
Table 3 <i>Variables: Operational, Descriptive, and Measurement</i> .....	61
Table 4 <i>Pilot and Actual Sample Descriptive Statistics</i> .....	65
Table 5 <i>Descriptive Statistics for Actual Sample (N=145)</i> .....	66
Table 6 <i>Scale and Cronbach's Alpha Value</i> .....	77
Table 7 <i>Analysis of Variance for the Effect of Transformational Leadership on Emotional Exhaustion</i> .....	88
Table 8 <i>Correlations Between Job Satisfaction and Emotional Exhaustion</i> .....	89
Table 9 <i>Analysis of Variance for the Effect of Transactional Leadership on Emotional Exhaustion</i> .....	90
Table 10 <i>Analysis of Variance for the Effect of Laissez-Faire Leadership on Emotional Exhaustion</i> .....	91
Table 11 <i>Correlation of Leadership Style and Burnout and Job Satisfaction Factors</i> ....	98
Table 12 <i>Frequency, Percentage Distribution of Demographic Variables</i> .....	99
Table 13 <i>Factors by Direct and Non-Direct Patient Care Contact</i> .....	100
Table 14 <i>KPIs That Reward Process Over Output</i> .....	113
Table 15 <i>Leadership Impact Dashboard</i> .....	115

## List of Figures

Figure 1 <i>Concept Map to Assist in Visualizing the Conceptual Framework</i> .....	10
Figure 2 <i>Illustration to Visualize the Study Procedure</i> .....	63
Figure 3 <i>Scatterplot to Assess Linearity</i> .....	79
Figure 4 <i>Scatterplot to Assess Homoscedasticity</i> .....	80
Figure 5 <i>Histogram of Residuals</i> .....	80
Figure 6 <i>Scatterplot of Transformational Leadership and Job Satisfaction</i> .....	81
Figure 7 <i>Scatterplot of Transactional Leadership and Job Satisfaction</i> .....	82
Figure 8 <i>Scatterplot of Laissez-Faire Leadership and Job Satisfaction</i> .....	83
Figure 9 <i>Scatterplot of Transformational Leadership and Personal Accomplishment</i> ....	84
Figure 10 <i>Scatterplot of Transactional Leadership and Personal Accomplishment</i> .....	85
Figure 11 <i>Scatterplot of Transformational Leadership and Emotional Exhaustion</i> .....	86
Figure 12 <i>Scatterplot of Transactional Leadership and Emotional Exhaustion</i> .....	87
Figure 13 <i>Scatterplot of Emotional Exhaustion and Job Satisfaction</i> .....	89
Figure 14 <i>Distribution of Employees' Perception of Leaders' Leadership Styles</i> .....	100

## Chapter 1: Introduction

Healthcare organizations face a growing challenge as job satisfaction among personnel declines, a trend worsened by rising stress and burnout (Jankelová & Joniaková, 2021; Manninen et al., 2024). A 2024 report from the U.S. Department of Health and Human Services Health Resources and Services Administration reveals the scale of this issue: a survey of over 20,000 healthcare professionals from May to October 2020 found 49 percent facing burnout and 43 percent feeling overburdened, pressures amplified by the COVID-19 pandemic's long hours, fatigue, and constant exposure to distress. Leadership practices stand out as a key factor, shaping the work environment in ways that can either lift morale or deepen frustration (Adamopoulos, 2022; Curado & Santos, 2022). Herzberg's Two-Factor Theory brings focus to this dynamic, proposing that motivators like recognition spark satisfaction, while hygiene factors such as poor supervision fuel dissatisfaction (Herzberg et al., 1959; Yean et al., 2022). Recent studies tie these threads together, showing effective leadership builds supportive workplaces that boost job satisfaction among healthcare workers (Alwali & Alwali, 2022; Gillet et al., 2012; Gumasing et al., 2023; Kitsios & Kamariotou, 2021).

This connection calls for deeper exploration, especially as the healthcare industry wrestles with current challenges (Cantarelli et al., 2023). Low job satisfaction drives turnover, increases burnout, and weakens patient care quality (Lu et al., 2012). Yet, strong leadership offers a path forward, crafting strategies to improve well-being and retain skilled professionals, a need made more important by the pandemic's lasting impact (Bass & Avolio, 1994; Mazzetti & Schaufeli, 2022). While past research pinpointed workload and pay as core satisfaction drivers (Karaferis et al., 2022; Lu et al., 2012), a rising wave of studies emphasizes leadership's critical role (Mazzetti & Schaufeli, 2022; Sahani, 2024). Transformational leadership, for example,

raises morale by fostering encouragement and support (Bass & Avolio, 1994; Notarnicola et al., 2024), though gaps persist in identifying which practices best enhance satisfaction across varied healthcare contexts (Sahani, 2024; Välimäki et al., 2024). This study intends to bridge that gap, seeking to strengthen the theoretical link between leadership and job satisfaction while offering practical insights. These gaps pave the way for this study's purpose.

However, this investigation is subject to certain limitations that frame its conclusions. The study's reliance on a cross-sectional design limits the ability to infer causality between leadership practices, burnout, and job satisfaction, as data are collected at a single point in time (Shadish et al., 2002). Additionally, the use of self-report measures, such as the Job Satisfaction Survey (JSS) and Multifactor Leadership Questionnaire (MLQ), introduces potential biases, including social desirability and recall inaccuracies, which may affect the reliability of responses (Podsakoff et al., 2003). Sample generalizability is also constrained, as the study focuses on a purposive sample of 134 participants from United States trauma hospitals, potentially limiting the applicability of findings to other healthcare settings or regions. These limitations are acknowledged to guide the interpretation of results. Key assumptions underpin this research. It is assumed that respondents provide truthful and accurate self-reports, reflecting their genuine perceptions of leadership practices and job satisfaction (Spector, 1985). The study further assumes that the JSS constructs—nine facets including Pay, Promotion, and Supervision—are relevant to the post-pandemic trauma hospital context, despite evidence of potential non-replication across diverse populations (Brayfield & Rothe, 1951). The applicability of Herzberg's Two-Factor Theory is also presumed to hold, positing that motivators and hygiene factors effectively explain satisfaction dynamics in this setting (Herzberg et al., 1959). These assumptions are subject to empirical testing through the study's analyses. Delimitations further

define the study's scope. The research excludes non-full-time employees, such as part-time or contract staff, focusing solely on individuals with at least two years' tenure at level-one trauma hospitals to ensure a seasoned perspective (Faul et al., 2009). Certain industries, such as outpatient clinics or long-term care facilities, are not studied, as the investigation targets the acute care environment of trauma hospitals. This delimitation narrows the focus to a specific population, enhancing the depth of analysis within this context while acknowledging the exclusion of broader healthcare sectors

The challenges are significant as healthcare leaders in the United States navigate these demanding times (Välimäki et al., 2024). By examining how leadership styles and practices influence job satisfaction, this study aims to uncover strategies that not only elevate employee job satisfaction but also bolster organizational strength, providing a lifeline to a workforce stretched thin by unprecedented demands (Cantarelli et al., 2023; Notarnicola et al., 2024).

### **Statement of the Problem**

The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). Recent evidence indicates that over 50 percent of physicians and more than one-third of nurses experience burnout, rates nearly double the national average when adjusted for demographic factors (Nagle et al., 2024; Weidman, 2022). This crisis, driven by stress and emotional exhaustion, contributes to turnover and compromises patient care quality, with burnout serving as a critical mediator between workplace conditions and morale (De Vries et al., 2023). The COVID-19 pandemic has further strained the workforce through prolonged hours and heightened risks (HRSA, 2024), underscoring the need for effective leadership interventions.

Despite extensive research on leadership's role in shaping job satisfaction, significant gaps persist within United States healthcare settings. Existing job satisfaction instruments, such as the Job Satisfaction Survey (JSS), may not validly capture the unique contextual factors of post-pandemic trauma hospitals or the cultural nuances of diverse healthcare teams, where burnout and leadership dynamics interplay distinctly (Spector, 1985). Franczukowska et al. (2021) demonstrated that ethical leadership enhances satisfaction among Austrian healthcare workers, yet their findings call for broader exploration to determine how leadership influences attitudes in the United States, where healthcare systems face distinct post-COVID pressures. Carmeli et al. (2009) highlight the role of interpersonal ties in stress reduction, yet ineffective leadership styles, such as laissez-faire, may exacerbate dissatisfaction in these settings (Norris et al., 2021). Dyrbye et al. (2021) emphasize the need for causal studies linking burnout and satisfaction, while current literature overemphasizes workload and hygiene factors (Karaferis et al., 2022), leaving leadership's mediating influence through burnout underexplored.

This study addresses these deficiencies by examining how leadership practices predict job satisfaction among United States healthcare employees, with burnout as a key mediator. While transformational leadership shows promise in lifting morale (Bass & Avolio, 1994), and transactional approaches offer structure (Pasaribu et al., 2022), the field lacks a comprehensive, context-specific analysis of which practices best counter burnout and enhance satisfaction in this demanding context. Without such insight, healthcare organizations risk persistent turnover and compromised care, underscoring the urgent need for this research (Sahani, 2024).

### **Purpose of the Study**

The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United

States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. Grounded in Herzberg's Two-Factor Theory, this research examines how motivators, such as recognition and autonomy, elevate satisfaction, while hygiene factors, like supervision and workload, shape dissatisfaction—dynamics that leadership can either bolster or undermine (Alshmemri et al., 2017; Herzberg et al., 1959). In the high-pressure landscape of United States trauma hospitals, where burnout erodes morale and fuels turnover (Cantarelli et al., 2023), this study seeks to assess the JSS's applicability and identify leadership strategies to counter these trends, providing actionable insights for organizations facing unique post-COVID challenges (HRSA, 2024)

Three validated instruments anchor this investigation: the Multifactor Leadership Questionnaire (MLQ), developed by Bass and Avolio (2004), measures leadership styles—transformational, transactional, and laissez-faire—as independent variables (Appendix C); the Maslach Burnout Inventory Human Services Survey (MBI-HSS), created by Maslach and Jackson (1981), assesses burnout levels as a mediating variable (Appendix D); and the Job Satisfaction Survey (JSS), designed by Spector (1985), evaluates job satisfaction as the dependent variable. These tools align with Herzberg's framework, capturing how leadership fosters motivators or mitigates hygiene deficits and how burnout mediates this relationship (De Vries et al., 2023). By quantifying these interactions and testing the JSS's validity in this specific context, the study addresses the gap in understanding which leadership practices best enhance satisfaction and reduce burnout in United States trauma hospitals (Mazzetti & Schaufeli, 2022).

This research responds to the problem of declining job satisfaction, intensified by burnout rates exceeding 50 percent among physicians and over one-third among nurses (Nagle et al.,

2024). Purposive sampling targeted 134 participants, calculated via G\*Power software with a priori settings: two independent Pearson  $r$ 's, a small effect size ( $|\rho| = .3$ ), an alpha level of 0.05, and a power of 0.95 (Faul et al., 2009). This sample size was determined based on literature precedent indicating small-to-moderate correlations between leadership styles and job satisfaction in healthcare settings (Lu et al., 2012), reflecting realistic expectations for a non-experimental design. The alpha level of 0.05 and power of 0.95 were selected to ensure statistical significance and adequate detection of effects, consistent with psychological research standards (Cohen, 1992). However, the final analysis included 145 participants, a discrepancy arising from the inclusion of additional respondents who met the eligibility criteria (full-time employees with at least two years' tenure at level-one trauma hospitals) during the data collection period following initial recruitment via intra-office email. This adjustment enhanced the sample's representativeness within the study's delimitations, though it remained within the G\*Power-calculated range for the specified parameters.

Given the JSS's 36 items and nine facets, the sample size of 145 warrants consideration for confirmatory factor analysis (CFA) or structural equation modeling (SEM). The  $N:q$  ratio, where  $N$  is the sample size and  $q$  is the number of observed variables, was approximately 3.7:1 (145 / 39, accounting for 36 JSS items plus additional variables from MLQ and MBI-HSS). Bentler (1990) recommends an  $N:q$  ratio of 5:1 to 10:1 for robust CFA, suggesting a minimum sample size of 180-360 participants to adequately assess the JSS's factor structure. The current ratio of 3.7:1 indicates potential limitations in detecting stable latent constructs or achieving measurement invariance, particularly given the study's focus on validating the JSS in a post-pandemic trauma hospital context. While sufficient for correlation and mediation analyses, this

constraint suggests that future research with a larger sample is necessary to confirm the instrument's psychometric properties through CFA or SEM.

Following approvals from the National University and hospital Institutional Review Boards, recruitment proceeded via intra-office email. Data collected through Qualtrics was analyzed using SPSS version 29, employing simple linear regression to test if leadership practices predicted job satisfaction, with descriptive statistics summarizing participant responses.

The psychometric properties of the JSS, including reliability and validity, have been established in diverse populations, with Cronbach's alpha typically ranging from 0.70 to 0.91 across its nine facets (Spector, 1985). However, research indicates that these facets do not always replicate consistently across contexts. For instance, Brayfield and Rothe (1951) noted challenges in generalizing job satisfaction measures across diverse occupational groups, highlighting potential variability. In U.S. healthcare settings, the JSS has demonstrated high internal consistency and construct validity, with Karaferis et al. (2022) reporting a Cronbach's alpha of 0.89 and significant correlations with organizational commitment ( $r = 0.47$ ,  $p < 0.01$ ) among nurses. Similarly, Karaferis et al. (2022) found a Cronbach's alpha of 0.91 and a correlation of 0.45 ( $p < 0.01$ ) with psychological empowerment in a Greek hospital, suggesting cross-cultural applicability, though cultural differences may affect facet reliability. In non-U.S. contexts, lower internal consistency has been reported for facets like Supervision and Contingent Rewards (Brayfield & Rothe, 1951), indicating potential non-replication. This study's trauma hospital context, shaped by post-pandemic stressors, may further challenge facet reliability, necessitating validation against the original nine-factor structure. Given the U.S.-based sample, no linguistic translation was required, but measurement invariance testing via CFA would have confirmed facet equivalence, though the sample size limitation precluded this analysis.

## **Introduction to Theoretical Framework**

This study utilized Herzberg's Two-Factor Theory as its foundational conceptual framework to address two interconnected research objectives: investigating the factors contributing to declining job satisfaction among healthcare workers in the United States and examining how burnout impacts the job satisfaction of these healthcare workers as deemed necessary by previous scholars (De Vries et al., 2023; Dyrbye et al., 2021; Franczukowska et al., 2021).

Herzberg's Two-Factor Theory (Herzberg et al., 1959) is a recognized framework for comprehending employee satisfaction and retention. This theory asserts that job satisfaction and discontent stem from two causes (Raj & Ling-Meng, 2024). The two-factor theory holds that two distinct categories of factors—motivational and hygienic—independently influence job satisfaction and discontent, respectively (Lee et al., 2022). Table 1 presents the categorization of motivational and hygienic elements. Motivational variables relate to an employee's performance, encompassing essential aspects of their responsibilities, such as achievement, acknowledgment, nature of the job, responsibility, progression, and opportunities for growth (Ibrahim et al., 2023). These elements promote employee satisfaction with their employment. While discontent may not occur without specific conditions, increasing job satisfaction improves work attitude, provided individuals feel fulfilled.

Herzberg et al. (1959) originally proposed that job satisfaction and dissatisfaction are not opposites but stem from distinct factors: motivators (e.g., achievement, recognition) drive satisfaction, while hygiene factors (e.g., supervision, salary) prevent dissatisfaction when present but do not motivate when absent. Subsequent theorists, such as House and Mitchell (1974), extended this by linking leadership behaviors to motivator fulfillment. In this study,

transformational leadership is posited to activate motivators (e.g., inspiration → personal accomplishment), transactional leadership to maintain hygiene factors (e.g., contingent reward → fair pay perception), and laissez-faire leadership to exacerbate hygiene deficits. Herzberg's framework guided the selection of leadership styles as predictors, burnout as a mediator (hygiene failure), and facets from the Job Satisfaction Survey as outcomes, directly informing the research questions.

Conversely, hygiene considerations relate to the workplace, including external factors such as company policy and administration, technical supervision, interpersonal relationships, working conditions, income, personal life, status, and job security (Bhatt et al., 2022). These traits indicate environmental factors that could alleviate employee dissatisfaction. Hygienic factors may alleviate dissatisfaction when addressed but cannot provide satisfaction (Nagpaul et al., 2022). Thus, the antithesis of contentment is the lack of satisfaction, whereas the antithesis of dissatisfaction is the absence of unhappiness (Hipos & Benavides, 2023). This framework guided the study's exploration of how leadership shapes satisfaction and burnout in modern healthcare. Figure 1 visually illustrates the correlation among the parameters.

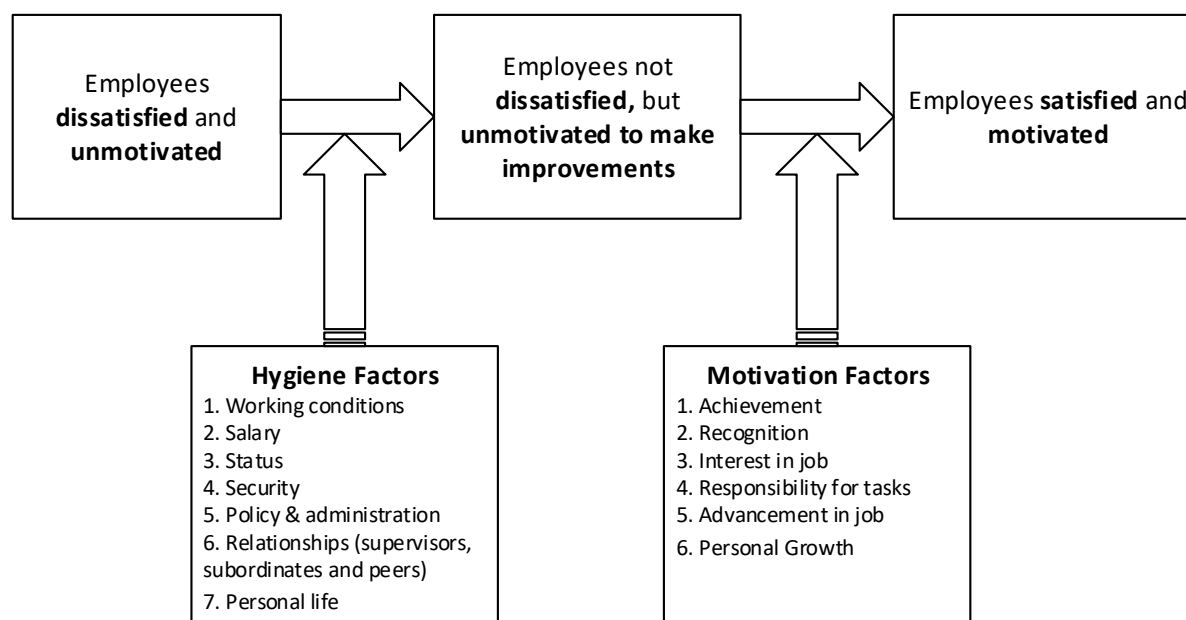
**Table 1**

*Categorization of Motivational and Hygienic Elements*

<b>Motivation Factors</b>	<b>Hygiene Factors</b>
Achievement	Company Policy & Administration
Recognition	Supervision
Work Itself	Interpersonal Relations
Responsibility	Working Conditions
Advancement	Salary
Personal Growth	Status
	Job Security

**Figure 1**

*Concept Map to Assist in Visualizing the Conceptual Framework*



*Note.* Adapted from “Motivation of university and non-university stakeholders to change medical education in Vietnam”, by Hoat et al., 2009, *Pubmed*, 9(1):49, (<https://doi.org/10.1186/1472-6920-9-49>). Adapted under fair use license.

## **Introduction to Research Methodology and Design**

A quantitative correlational method employing a non-experimental design was employed to ascertain the extent to which healthcare leadership practices affect job satisfaction among employees. A quantitative correlational study using a non-experimental design and simple linear regression ascertained how healthcare leadership practices affect job satisfaction, suitable as no manipulation or intervention is required (Brown, 2024). This research study examined the constructs of healthcare leadership theory in relation to staff job satisfaction. The non-experimental research design was the appropriate design for testing a theory and hypotheses (Peker, 2024). A non-experimental design was suitable because the basic premise remains in the direction of establishing the scope of an association concerning variables using statistical data.

Once IRB approvals were secured from National University (Appendix A) and the hospital (Appendix B), participants were recruited via intra-office email. Participants were sent an email containing a specific link to Qualtrics, a data gathering platform, where they then completed the questionnaire using Likert-type scales to measure perceptions of leadership behaviors and job satisfaction (Bodur et al., 2024).

To estimate the number of participants, this author utilized G\*power (Faul et al., 2009) a priori computation at a 95% confidence level, effect size of .3, an alpha level of .05, a beta of 0.5 and two independent Pearson  $r$ 's (Appendix F). Data analysis included descriptive and inferential statistics. Statistical Package for the Social Sciences (SPSS) version 29 was used as the statistical package to conduct the descriptive and inferential analysis. Simple regression analysis was employed to determine the connection among leadership style and job satisfaction (Samuels, 2020). Descriptive analysis was utilized to summarize and define the relevant characteristics of the data set. Descriptive statistics, such as means, frequencies, and standard deviations, are appropriate in analyzing and summarizing the survey responses' features.

A quantitative methodology constitutes collecting and analyzing structured data to be represented numerically (Taherdoost, 2022). This constitutes a feasible data collection and analysis method that does not require manipulating how leaders lead, the staff's job satisfaction nor their level of burnout. Moreover, a non-experimental design allowed determination of the prevalence and relationships among variables and current data (Curtis et al., 2017). Thus, the design choice depended on the research questions. The questions required collecting data to determine if leader practices predict staff job satisfaction.

## Research Questions

Guided by Herzberg's Two-Factor Theory, these questions and hypotheses tested leadership's influence on satisfaction and burnout's mediating role.

### *RQ1:*

To what extent do leadership practices, including transformational, transactional, and laissez-faire leadership styles, predict job satisfaction among healthcare employees in the United States?

### *RQ2:*

How does burnout mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States?

### *RQ3:*

Which specific leadership practices are most predictive in enhancing job satisfaction and reducing burnout among healthcare employees in the United States?

## Hypotheses

### *H1<sub>0</sub>*

Leadership practices, including transformational, transactional, and laissez-faire leadership styles, do not significantly predict job satisfaction among healthcare employees in the United States.

### *H1<sub>a</sub>*

Leadership practices, including transformational, transactional, and laissez-faire leadership styles, significantly predict job satisfaction among healthcare employees in the United States.

***H2<sub>0</sub>***

Burnout does not mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States.

***H2<sub>a</sub>***

Burnout mediates the relationship between leadership practices and job satisfaction among healthcare employees in the United States.

***H3<sub>0</sub>***

Specific leadership practices do not significantly enhance job satisfaction or reduce burnout among healthcare employees in the United States.

***H3<sub>a</sub>***

Specific leadership practices significantly enhance job satisfaction and reduce burnout among healthcare employees in the United States.

**Mapping of Problem, Purpose, and Research Questions**

The alignment of problem statement, purpose statement and research questions was critical, as it anchored the study in a well-defined problem space and directed the research toward actionable outcomes. The problem statement identified gaps, such as existing job satisfaction instruments like the JSS may not have validly captured the unique contextual factors of post-pandemic trauma hospitals or the cultural nuances of diverse U.S. healthcare teams. The purpose statement directly responded to that gap by evaluating whether the JSS was valid in this context and investigating leadership's role with burnout as a mediator. The research questions aligned tightly: RQ1 examined to what extent leadership practices, including transformational, transactional, and laissez-faire leadership styles, predicted job satisfaction; RQ2 assessed how burnout mediated this relationship; and RQ3 identified which specific leadership practices were

most predictive in enhancing job satisfaction and reducing burnout. The justification of the G\*Power parameters (effect size .3, alpha 0.05, power 0.95) drew on established precedents, ensuring methodological robustness (Cohen, 1992; Lu et al., 2012). The discussion of sample adequacy for CFA/SEM highlighted the study's current limitations and future directions, while the psychometric review of the JSS underscored its contextual relevance, addressing potential non-replication of facets (Brayfield & Rothe, 1951). This study contributed to both theory and practice by refining measurement tools and offering evidence-based strategies to enhance workforce resilience (Sahani, 2024). Table 2 explicitly mapped the alignment between problem statement, purpose statement, and research questions.

**Table 2**

*Mapping of Problem, Purpose, and Research Questions*

<b>Element</b>	<b>Content</b>	<b>Alignment</b>
Problem Statement	Declining job satisfaction and burnout among U.S. healthcare employees, with existing JSS potentially invalid in post-pandemic trauma hospital contexts (Cantarelli et al., 2023; Spector, 1985).	Identifies the gap in instrument validity and leadership's mediating role, setting the stage for targeted investigation.
Purpose Statement	Investigates leadership's influence on job satisfaction with burnout as a mediator, evaluating JSS validity in U.S. trauma hospitals (Alshmemri et al., 2017; Mazzetti & Schaufeli, 2022).	Directly responds to the problem by testing JSS applicability and leadership strategies in the specified context.
Research Questions	To what extent do leadership practices, including transformational, transactional, and laissez-faire leadership styles, predict job satisfaction among healthcare employees in the United States? How does burnout mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States? Which specific leadership practices are most predictive in enhancing job	Tightly aligned with purpose, addressing instrument validity, leadership impact, and mediation, matching the problem's focus.

satisfaction and reducing burnout among healthcare employees in the United States?

### **Significance of the Study**

The primary significance of this study was the documentation of the impact of leadership practices on job satisfaction among healthcare employees in the United States. Additional significance was the identification of effective strategies to enhance healthcare employee job satisfaction. Employees are often promoted into leadership positions with little to no guidance and are expected to manage and lead people without formal management training (Dextras-Gauthier et al., 2023).

This study was particularly crucial in light of current challenges within the healthcare sector, especially post-COVID-19, where the strain on healthcare professionals had increased significantly. Given these post-COVID challenges, Herzberg's Two-Factor Theory illustrated how leadership can address both motivational and hygiene factors influencing satisfaction and burnout. As noted previously, Herzberg's Two-Factor Theory underpinned this study, illustrating that both motivational and hygiene factors play a role in influencing job satisfaction and burnout among healthcare employees. The conceptual framework supports that leaders can address the critical problem of healthcare job satisfaction and reduce burnout through their leadership behaviors (Dyrbye et al., 2020). Existing literature supported that leadership interactions with their teams support increased job satisfaction (Cabrera et al., 2025). However, it was unclear what factors best help leaders improve job satisfaction and reduce burnout. Addressing this gap in practice was necessary as healthcare professional job satisfaction, coupled with already existing job shortages, was an emerging business problem for healthcare organizations (Nagle et

al., 2024). This research explores the factors of how leaders can improve job satisfaction and reduce burnout.

## **Definitions of Key Terms**

### ***Burnout***

Burnout reflects persistent job-related stress, marked by emotional exhaustion, depersonalization, and reduced efficacy, as measured by the Maslach Burnout Inventory (Maslach & Jackson, 1981). In healthcare, it correlates with errors and detrimental patient outcomes (Aloisio et al., 2021).

### ***Ethical Leadership***

Ethical leadership was introduced by Brown et al. (2005) to promote a focused examination of the ethical aspects of leadership from a social science viewpoint. Ethical leadership was defined as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making” (Brown et al., 2005, p. 120).

### ***Hygiene Factors***

Hygiene factors are a category of non-satisfying elements. Their absence induces unhappiness, whereas their presence fails to foster positive satisfaction in aspects such as compensation, working environment, and interpersonal relationships and other factors that define job context (Hipos & Benavides, 2023).

### ***Job Satisfaction***

Job satisfaction is an emotional condition arising from the evaluation of one’s employment or work experiences (Karaferis et al., 2023). Organizations directly associate job

satisfaction with enhanced efficiency, diminished retirement intentions, increased dedication, aspiration to attain objectives, and improved collaboration and teamwork within the entity (Adamopoulos, 2022). A deficiency in job satisfaction correlates with a heightened likelihood of medical errors and an escalation in unfavorable patient outcomes. Employee work satisfaction is also directly correlated with the satisfaction of patients and their family members (Aloisio et al., 2021).

### ***Motivational Factors***

Motivational factors are a category of satisfying elements or factors that drive an individual to be motivated and engaged in their work (Ibrahim et al., 2023). These factors include achievement, recognition, the work itself, advancement and growth (Acquah et al., 2021).

### ***Transformational Leadership***

Transformational leadership theory empowers teams to elevate their motivation by altering external conditions. Transformational leadership refers to a method in which leaders inspire followers to align with the organization's objectives and interests, resulting in performance that beyond expectations. Transformational leadership is characterized by its influence on followers by charm, inspiration, intellectual stimulation, or individualized consideration.(Burns, 1978; Greimel et al., 2023)

### **Summary**

Survey data from healthcare professionals was analyzed to provide actionable insights for healthcare leaders, fostering a supportive work environment, improving patient care, and reducing turnover rates. Purposive sampling was used, with the study population being currently employed hospital employees. The significance of this study extended to both theoretical

contributions to the field of organizational behavior and practical implications for improving healthcare work environments (Gillet et al., 2012; Lu et al., 2012). This study also tackled gaps in understanding burnout's mediating role between leadership and satisfaction, setting the stage for Chapter 2's comprehensive review, which supports the problem addressed in this study.

## Chapter 2: Literature Review

The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. This chapter synthesized existing research to identify how leadership practices shape job satisfaction, addressing gaps that justified this study's focus on healthcare employees. This study was a logical response to the problem of declining job satisfaction among healthcare employees in the United States (Cantarelli et al., 2023; van Diepen et al., 2024). Results from this research may lead to a better understanding of the role played by leadership practices concerning healthcare employee job satisfaction.

This literature review examines the relevant theoretical frameworks and justifies the choice of Herzberg's work (Herzberg et al., 1959). The literature review further discusses the history of the development of hospitals and then addresses the overall problem of low job satisfaction and high turnover rates among healthcare employees, followed by the impact of leadership on job satisfaction. The review also explores the effects of job satisfaction within healthcare organizations, including sub-categories such as burnout and turnover intention. The final section focuses on how various leadership styles influence healthcare employees' job satisfaction.

This literature review utilizes recent, peer-reviewed articles sourced from the National University (NU) library and Google Scholar. The search parameters consisted of articles between

2021 and 2025. Boolean operators were utilized to enhance search outcomes, employing search terms such as "healthcare burnout" OR "healthcare turnover" AND "strategic risk management" OR "healthcare workforce retention" AND "human capital risk management.

The inclusion criterion emphasized peer-reviewed literature. The search terms included healthcare burnout, healthcare worker retention, strategic risk management, human capital risk management, healthcare leadership behaviors, healthcare job satisfaction, and healthcare generational differences. Empirical data studies, case studies, cross-sectional research, and theoretical frameworks pertinent to the healthcare sector were selected. Exclusion criteria omitted non-peer-reviewed sources, opinion pieces, studies outside the healthcare context, and articles lacking substantive evidence. Articles addressing general occupational burnout without considering healthcare-specific concerns were eliminated.

### **Theoretical Framework**

Imagine a nurse in a chaotic emergency department: a supervisor's praise lifts their spirits, yet constant understaffing drags them down. This moment embodies Herzberg's Two-Factor Theory, the foundation for exploring how leadership practices shape healthcare job satisfaction. The theory holds that satisfaction arises from motivators, such as achievement and recognition, while dissatisfaction springs from hygiene factors, like supervision quality and working conditions (Herzberg et al., 1959). This framework guided the analysis of leadership's influence on healthcare workers, with burnout as a crucial mediator, providing a clear lens to address declining job satisfaction and rising stress levels in United States hospitals (Cantarelli et al., 2023; van Diepen et al., 2024).

Herzberg's model casts satisfaction and dissatisfaction as separate scales: motivators span high satisfaction to none, while hygiene factors range from no dissatisfaction to high, acting

independently (Maidani, 1991). Motivators, intrinsic forces like growth opportunities and responsibility, ignite satisfaction by meeting psychological needs, such as a physician leading a breakthrough patient care initiative. Hygiene factors, external elements such as salary and job security, hold off dissatisfaction when present but fail to spark satisfaction alone; short staffing, for instance, vexes nurses without erasing their pride in patient victories (Alshmemri et al., 2017). In healthcare's demanding realm, where emotional labor and patient safety raise the stakes, this dual lens fit, framing leadership as a bridge between burnout and morale.

Research both confirms and sharpens Herzberg's view. Maidani (1991) showed motivators boost satisfaction across sectors, a trend reflected in healthcare where recognition decreases nurse turnover (Lee et al., 2022). Ewen (1964) argued external pressures, like frantic hospital routines, overshadow intrinsic rewards, a stance eased by Alam's (2021) model connecting absent satisfaction to dissatisfaction. Bhatt et al. (2022) observe millennials favor work-life balance over classic hygiene factors like pay, pointing to generational shifts, while Ser and Webber (2024) weave these threads, upholding Herzberg's core, separate roots for satisfaction and dissatisfaction, yet tailoring it to modern healthcare's focus on mental health and team spirit. These insights create a nimble framework for today's workforce.

Burnout in healthcare often arises where hygiene weakens and motivators dim. Crushing workloads, a hygiene factor, sap staff energy, while sparse recognition, a motivator, deepens fatigue (Dyrbye et al., 2021). Leadership attempts to mediate: a manager setting fair schedules softens dissatisfaction, while one offering autonomy trims burnout by nurturing purpose (Franczukowska et al., 2021). This interplay lifts Herzberg's Two-Factor Theory above options like Leclerc et al.'s (2021) constructivist grounded theory, which values shared meaning but lacks statistical focus, or Nagle et al.'s (2024) scoping review, which surveys widely without

homing in on leadership. Herzberg's precision suits healthcare's tangible measures, from satisfaction tracked by surveys to burnout gauged by inventories (De Vries et al., 2023).

Herzberg's Two-Factor Theory framework excels through its twofold gaze, tackling dissatisfaction's causes while sparking satisfaction via leadership driven motivators (Raj & Ling-Meng, 2024). The theory accommodates healthcare's distinct trials, e.g. post COVID staffing gaps or team based care, blending critiques into a sturdy tool. By viewing leadership as both an anchor for hygiene and a catalyst for motivators, it shows how styles like transformational or transactional leadership sculpt morale, with burnout as the furnace where these forces meld, a perspective key to understanding today's healthcare workforce (Ozsoy, 2019).

### **History of Hospitals**

Understanding the influence of leadership practices on healthcare job satisfaction necessitates understanding how healthcare facilities evolved into what they are today. In ancient India, Buddhist ruler Ashoka inscribed edicts on rocks, one of which, dated 220 BCE, mandated the construction of hospitals along travel routes. These directives, preserved across more than thirty locations in India, Nepal, Pakistan, and Afghanistan, instructed that facilities be well equipped with instruments, medicines, including mineral and vegetable drugs, roots, and fruits, and staffed by skilled physicians funded by the state (Wylie, 1877; Bharathi & Narayana, 2011). This state sponsored approach ensured access to care, reflecting leadership's role in establishing hygiene factors, such as adequate resources and working conditions, to support healers' efforts. Unlike later Roman *valetudinaria* focused on specific groups (Risse, 1999), these hospitals served broader populations, suggesting an early motivator of meaningful work tied to communal welfare.

### *Earliest Times*

The origins of hospitals trace back to ancient civilizations, with early evidence emerging from Buddhist practices around 220 BCE, marking a foundational step in organized healthcare. This period reflects the initial interplay of leadership and care delivery, setting a historical precedent for understanding how leadership practices influence job satisfaction among healthcare employees in the United States today. This period reflects early leadership's role in care delivery, a precedent for today's focus on satisfaction and burnout, examined through historical records. This subsection examines these beginnings, drawing on historical records to contextualize leadership's role in workforce morale, a thread that informs this study's quantitative exploration of satisfaction and burnout.

Leadership in this era was centralized, with rulers like Ashoka acting as visionary overseers, akin to transformational leaders who inspire through purpose (Hilton et al., 2023). The provision of skilled physicians hints at early recognition of competence as a motivator, while state funding addressed hygiene needs, reducing dissatisfaction from resource scarcity (Alshmemri et al., 2017). However, the lack of employee perspectives in these records leaves unclear how such leadership affected satisfaction or burnout among healers. Compared to later Christian charity models (Ferngren, 2009), this Buddhist framework prioritized infrastructure over spiritual duty, yet both underscore leadership's enduring influence on care settings.

The significance of these early hospitals lies in their demonstration of organized leadership fostering healthcare delivery, a precursor to modern systems where job satisfaction hinges on effective management. Wylie (1877) and Bharathi and Narayana (2011) agree on their public intent, with no notable scholarly divergence, though the absence of worker voices limits direct parallels to your focus on employee well being. This foundational period suggests that

leadership, even in antiquity, shaped conditions that could enhance or undermine satisfaction (Cantarelli et al., 2023).

### ***Roman Era (332 BCE to 642 CE)***

The Roman Era, spanning 332 BCE to 642 CE, marks a dead-end branch on the evolutionary tree of hospital development. Roman *valetudinaria*, led by military authorities, prioritized soldiers and slaves, addressing hygiene factors like resources but limiting motivators like broad purpose, a contrast to modern healthcare's workforce focus (Risse, 1999). The earliest known example, uncovered near Haltern, Westphalia, Germany, dates to around 9 CE during Emperor Augustus's reign, with ruins revealing a facility designed for specific disorders rather than general public access (Risse, 1999). Leadership, likely from military or imperial authorities, ensured these hospitals were equipped and staffed, addressing hygiene factors like basic medical provisions and shelter to minimize dissatisfaction among caregivers and patients. Beyond *valetudinaria*, private physicians operated in shops or offices, known as *Patreon* or *Taberna*, treating the poorest citizens, while wealthy Romans received home visits, reflecting a stratified care system (Riva & Giancarlo, 2012).

This leadership approach parallels transactional leadership's structured exchanges, providing resources in return for service, though without the inspirational vision of transformational styles (Burns, 1978). Military *valetudinaria* offered motivators, such as purpose tied to empire loyalty, for healers, yet their limited scope suggests hygiene factors dominated, ensuring functionality over broader satisfaction (Alshmemri et al., 2017). In contrast to Buddhist hospitals' public reach (Wylie, 1877), Roman facilities served elite interests, a divergence explained by differing societal priorities, civic duty versus imperial control. The absence of records on healers' experiences leaves unknown how this leadership affected their morale or

stress. Risse (1999) and Riva and Giancarlo (2012) agree on valetudinaria's targeted role, with no significant dispute, though evidence limits deeper insight into workforce dynamics. This era underscores leadership's early role in organizing healthcare, setting conditions that could influence satisfaction (Cantarelli et al., 2023).

### *Christian Era (1 CE to 476 CE)*

During this time, hospitals arose as sanctuaries for strangers, pilgrims, the sick, and the poor, inspired by Christian doctrine. The Gospels portray Christ healing and urging disciples to tend the ill (Luke 10:9, KJV; Mark 16:18, KJV), establishing hospitality as a core virtue that fueled medical practice as an expression of charity (Ferngren, 2009). The term "hospital" stems from the Latin "hospitium," meaning guest refuge, reflecting a leadership ethos centered on service rather than gain. In 365 CE, St. Basil established a prominent hospital in Caesarea, staffed by non professional doctors and attendants providing inpatient care, a fresh approach merging spiritual mission with practical support (Riva & Giancarlo, 2012). Christian thinkers cast physicians as ideals of Hippocratic expertise and Christlike compassion, likely enhancing the motivator of purpose for those delivering care.

This leadership echoes transformational styles, inspiring through a shared vision of benevolence, distinct from the transactional structure of Roman valetudinaria (Burns, 1978). It offered hygiene factors, such as basic facilities, to ease dissatisfaction, while motivators, like aiding the destitute, may have bolstered satisfaction among caregivers, fitting Herzberg's framework (Alshmemri et al., 2017). Unlike Buddhist state-funded systems (Wylie, 1877), Christian hospitals sprang from faith based initiative, a difference tied to cultural foundations, religion versus governance. The absence of records on caregivers' experiences, however, leaves their morale and stress levels uncertain, though the period suggests leadership's power to infuse

healthcare with meaning. Ferngren (2009) and Riva and Giancarlo (2012) align on this shift to charity, though limited evidence restricts deeper insight into workforce well-being. This era underscores leadership's capacity to blend purpose with care delivery, a legacy that resonates in modern healthcare's emphasis on supportive environments (Cantarelli et al., 2023). It highlights how early leadership set conditions that could influence satisfaction, offering a historical lens on today's complex healthcare landscape.

### *Middle Ages (500 CE to 1400 CE)*

By the mid sixth century, numerous hospitals emerged throughout Europe, supported by church leaders, nobles, and kings. Charlemagne, reigning from 747 to 814, decreed that every cathedral in his kingdom include a hospital, directing clergy to meet the needs of the sick and poor (Cilliers & Retief, 2002). This mandate reflects leadership akin to transformational styles, inspiring a vision of communal care, distinct from the transactional exchanges of earlier Roman models (Burns, 1978). Rosen (2015) notes that from the eighth to twelfth centuries, monastic hospitals stood as Europe's primary institutions for the sick, often guided by the Rule of St. Augustine, which emphasized tending to the needy as a motivator for caregivers. These facilities provided hygiene factors, like shelter and sustenance, to reduce dissatisfaction, while the spiritual mission offered purpose, aligning with Herzberg's framework (Alshmemri et al., 2017).

The Crusades further shaped hospital development, with orders like the Knights of St. John, also known as Hospitallers, and the Teutonic Order founding facilities in the Holy Land and beyond to care for sick and injured crusaders (Cilliers & Retief, 2002). Knights served as nurses and physicians, blending martial and medical roles, which may have enhanced satisfaction through duty and camaraderie. From the thirteenth century, control shifted from ecclesiastical to secular municipal authorities, who appointed and paid physicians, while monks and nuns

continued as nurses under a *frater hospitalis* overseer (Riva & Giancarlo, 2012). These hospitals admitted diverse patients, including the blind, lame, elderly, and mentally ill, broadening leadership's scope to address varied needs.

Compared to Christian Era charity (Ferngren, 2009), the Middle Ages saw a mix of religious and civic leadership, a shift driven by growing urban demands, though both eras share a focus on service. Cilliers and Retief (2002), Rosen (2015), and Riva and Giancarlo (2012) agree on this concept of public expansion, though records rarely capture caregivers' experiences, leaving their morale, stress and burnout rates unclear. This period highlights leadership's role in scaling healthcare access, suggesting conditions that could bolster satisfaction through purpose, a theme resonant in modern healthcare's emphasis on team support and mission (Cantarelli et al., 2023).

### ***Renaissance (14th to 17th Century)***

By the 14th century, a hospital reform movement, originating primarily in Italy, introduced "great hospitals" that combined philanthropy with contemporary sanitary principles in expansive, unified structures designed to treat the sick. This shift aimed to streamline services previously scattered across private and religious entities into a cohesive municipal network accessible to all (Brasher, 2018). The Ospedale Maggiore in Milan, established in 1456, exemplified this reform, offering free medical care to the city's poor in a newly built 288 bed facility that consolidated patients from various institutions. Leadership, driven by civic authorities, enforced selective admission for acute illnesses, directing the elderly and those with chronic or incurable conditions to specialized centers outside the city, enhancing efficiency and care quality (Riva & Giancarlo, 2012).

This approach blends transformational leadership's vision for systemic change with transactional elements of resource allocation, differing from the Middle Ages' ecclesiastical focus (Burns, 1978). Improved hygiene factors, like sanitation and space, likely reduced dissatisfaction among caregivers, while motivators, such as contributing to a grand civic project, may have boosted satisfaction (Alshmemri et al., 2017). Unlike the Crusades' martial medical orders (Cilliers & Retief, 2002), Renaissance hospitals prioritized urban welfare, a divergence tied to rising secular governance and humanism.

The Renaissance underscores leadership's role in advancing healthcare infrastructure, suggesting conditions that could enhance satisfaction through purpose and improved workplaces, themes echoed in modern healthcare's focus on efficiency and staff support (Cantarelli et al., 2023). This period's emphasis on sanitary reform and public access foreshadows later innovations, highlighting how leadership balanced practical needs with broader societal goals.

### ***Scientific Revolution (17th to 18th Century)***

In 1719, the Westminster Infirmary emerged in England as a voluntary hospital, founded by High Church Tories seeking to practice Christian charity without political entanglement (Grell & Cunningham, 2002). Between 1719 and 1740, when Glasgow Town's Hospital infirmary opened, eight such hospitals appeared across England and Scotland, growing to at least forty by 1799, including thirty three voluntary institutions (McDonald, 1999). These facilities relied on community support, reflecting leadership akin to transformational styles that inspired collective goodwill, distinct from the Renaissance's municipal focus (Burns, 1978). The Royal Infirmary of Edinburgh, established in 1734, stood out as one of the first hospitals designed to support a medical school, linking care delivery to education and enhancing motivators like skill development for practitioners (Wylie, 1877).

Leadership during this era ensured hygiene factors, such as dedicated spaces and funding, to reduce dissatisfaction, while the integration of teaching offered motivators, like professional growth, that could uplift satisfaction (Alshmemri et al., 2017). Unlike the Middle Ages' religious oversight (Cilliers & Retief, 2002), the Scientific Revolution emphasized secular voluntarism and science, a shift driven by Enlightenment ideals.

This period underscores leadership's role in aligning healthcare with emerging scientific and educational goals, suggesting conditions that could enhance satisfaction through purpose and improved workplaces, themes consistent with modern healthcare's focus on training and staff support (Cantarelli et al., 2023). The Scientific Revolution's voluntary model and teaching focus highlight how leadership adapted to societal shifts, balancing practical needs with professional advancement.

### ***Industrial Revolution (1760 – 1914)***

The 19th century brought significant advancements, largely driven by Florence Nightingale's contributions during the Crimean War. Nightingale introduced protocols like frequent handwashing, upgraded sewage systems, and improved ventilation, slashing hospital mortality rates and laying the groundwork for modern nursing (Nightingale, 1859). Her leadership, blending transformational vision with practical reform, reduced nurse burnout by improving hygiene factors, such as sanitary conditions, while fostering motivators, like pride in elevated care standards (McDonald, 2020). This contrasts with the Scientific Revolution's voluntary focus (Grell & Cunningham, 2002), as industrial growth spurred broader systemic changes. In the United States, Bellevue Hospital in New York City emerged as a landmark, tracing its roots to a 1660s infirmary under Dutch rule, becoming a public hospital by 1736, and

evolving into a teaching institution by the 1840s, affiliated with universities like New York University (Fiani et al., 2022).

Leadership during this era ensured hygiene factors, like better facilities and hygiene practices, to lessen dissatisfaction, while motivators, such as professional recognition and educational ties, likely enhanced satisfaction (Alshmemri et al., 2017). Nightingale's reforms shifted care from ad hoc charity to structured professionalism, a divergence from Renaissance municipal models (Brasher, 2018), driven by industrial society's health crises. This period underscores leadership's role in modernizing healthcare through sanitation and education, suggesting conditions that could boost satisfaction via purpose and improved workplaces, themes echoed in contemporary healthcare's emphasis on staff well being (Cantarelli et al., 2023). The Industrial Revolution's focus on reform and institutional growth illustrates how leadership balanced societal needs with caregiver roles, shaping a legacy of professional care delivery.

### ***20th Century (1900 – 1999)***

Early in the century, hospitals adopted private sector management principles, with administrators taking on expanded roles (Goldwater, 1920; Washburn, 1913). Keppel (1916) likened hospitals to health factories, advocating commercial strategies to enhance efficiency, a view echoed by the American Hospital Association's *Modern Hospital* periodical, which promoted scientific administration (Arndt et al., 2007). In 1918, the American College of Surgeons introduced the "Minimum Standards for Hospitals" manual, certifying 2,750 facilities by 1939, signaling leadership's push for quality through professional oversight (Falcone & Satiani, 2008). The 1932 Committee on the Cost of Medical Care report spurred national investment in research and infrastructure, while the 1946 Hospital Survey and Construction Act funded new facilities, boosting public access (Hackey, 1999).

This leadership blended transactional structure with transformational goals, ensuring hygiene factors, like standardized conditions and funding, to reduce dissatisfaction, while motivators, such as career growth in a scientific field, likely enhanced satisfaction (Alshmemri et al., 2017). Unlike the Industrial Revolution's sanitation focus (Nightingale, 1859), the 20th century prioritized systemic growth, a shift driven by urbanization and medical advances. The 1964 enactment of Medicare and Medicaid, followed by the 1965 neighborhood health centers (later Community Health Centers in 1975), served millions by 1980, emphasizing ambulatory care (Jonas & Rimer, 1977; Sardell, 1989). By the 1980s, hospitals integrated these centers, reflecting leadership's adaptability to community needs (Dunn, 1999). This century highlights leadership's role in scaling healthcare through management and access, suggesting conditions that could lift satisfaction via purpose and improved workplaces, themes resonant in modern healthcare's focus on staff support and system efficiency (Cantarelli et al., 2023).

#### ***Present Era (Late 20th Century to Present)***

Healthcare organizations now prioritize quality of care based on technical proficiency and interpersonal engagement, assessing patient needs and expectations in a customer oriented approach (Lee et al., 2019). Leadership drives collaborative and integrated methods, with health systems adopting comprehensive chronic illness management and population health strategies that extend beyond individual treatment. These shifts demand attention to meso-level factors, like team organization, and macro-level factors, such as system wide coordination, reflecting a complex leadership landscape (Ho & Pinney, 2016). This contrasts with the 20th century's focus on standardization and access (Falcone & Satiani, 2008), as today's emphasis on integration responds to chronic disease prevalence and patient centered care demands.

Today's leadership blends transformational vision, fostering collaboration and purpose, with transactional elements, ensuring structural support, to enhance hygiene factors, like team cohesion, and to reduce dissatisfaction (Alshmemri et al., 2017). Motivators, such as contributing to population health, likely boost satisfaction by aligning work with broader societal goals. Institutions depend on refined leadership to optimize procedures and care quality, a role deemed pivotal to organizational success (Mah'd Alloubani et al., 2014). The Present Era underscores leadership's critical role in adapting healthcare to modern challenges, suggesting conditions that could elevate satisfaction through meaningful impact and supportive settings, themes central to contemporary healthcare's focus on staff resilience and system efficacy (Cantarelli et al., 2023). This period's emphasis on integration and ethics highlights how leadership balances operational demands with workforce needs, shaping a responsive care landscape.

### **Healthcare Leadership Theories**

Leadership is the act of guiding a team's efforts towards a common objective. Effective leaders tailor their management style based on the specific scenario, available resources, personnel skill levels, and the work at hand. Unlike the conventional model of care leadership that prioritizes individual proficiency, disciplinary isolation, and rivalry, interprofessional team leadership focuses significantly on interpersonal interactions, member familiarity, and complex environmental assessment (Sayyed et al., 2024). Leadership constitutes a dynamic exchange of authority between leaders and others seeking tangible changes and outcomes aligned with shared objectives. Leadership style denotes the manner in which a leader establishes direction, motivates people, and executes plans (Gashaye et al., 2023).

### ***Transformational Leadership***

Transformational leadership stands as a pivotal style in this study, inspiring followers to exceed expectations and aligning closely with the aim to explore job satisfaction among United States healthcare employees. First coined by James Downton in 1973 and expanded by Bernard Bass in 1985, this approach emphasizes vision and empowerment, contrasting with transactional exchanges and laissez faire detachment. Within Herzberg's Two Factor Theory, transformational leadership excels at providing motivators, such as recognition and growth, while indirectly supporting hygiene factors like supportive supervision, making it a key lens for examining leadership's impact on satisfaction and burnout (Gashaye et al., 2023). This section defines transformational leadership, assesses its effects in healthcare, and evaluates its role in fostering satisfaction, innovation, and adaptability, drawing on peer reviewed studies from 2021 to 2024.

**Definition and Core Principles.** Transformational leadership revolves around inspiring subordinates to surpass initial goals by reshaping their beliefs, values, and needs (Hilton et al., 2023). Bass (1985) outlined transformational leadership's framework, highlighting leaders' ability to set high expectations and empower followers to achieve exceptional performance. Unlike transactional leadership's focus on rewards or laissez faire's hands off approach, transformational leadership thrives on four pillars: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. In Herzberg's model, these elements serve as motivators, fostering achievement and acknowledgment, while ensuring hygiene factors, such as a supportive environment, reduce dissatisfaction (Alshmemri et al., 2017). Transformational leadership prioritizes long term commitment over short term compliance, adapting to followers' intrinsic drives (Gashaye et al., 2023).

**Impact on Healthcare Employees.** In healthcare, transformational leadership profoundly shapes employee outcomes, enhancing satisfaction and organizational commitment amid demanding conditions. Hussain and Khayat (2021) demonstrate transformational leadership's ability to improve communication and performance, boosting care quality and patient safety in hospitals. By fostering autonomy and addressing individual needs, transformational leadership creates a self-empowered workforce, vital in high-pressure settings like emergency care (Curado & Sandos, 2022). Tsapnidou et al. (2024) link transformational leadership to fewer adverse patient events, reflecting its proactive risk management that lifts morale. Unlike laissez-faire leadership's stress-inducing void, transformational leadership aligns with healthcare's team-based nature, offering direction and purpose that resonate with Herzberg's motivators (Mazzetti & Schaufeli, 2022).

**Enhancing Job Satisfaction.** Transformational leadership significantly elevates job satisfaction by tapping into employees' intrinsic attitudes and needs. Nguon (2022) finds transformational leadership reduces workplace stress and enhances contentment, empowering healthcare workers to find fulfillment in their roles. This aligns with Herzberg's motivators, such as recognition and responsibility, which Bullock (1952) ties to positive job attitudes. Hussain and Khayat (2021) note transformational leadership's role in fostering an environment where staff feel valued, a stark contrast to transactional leadership's narrower reward focus. In healthcare, where emotional labor is high, transformational leadership's emphasis on purpose and growth outperforms laissez-faire neglect (Cantarelli et al., 2023).

**Promoting Innovation and Adaptability.** Transformational leadership drives innovation and adaptability by cultivating a culture open to change. Gui et al. (2024) identify transformational leadership's attributes, particularly idealized influence, as key to persuading

healthcare workers to embrace new practices, such as technology integration. Hilton et al. (2023) emphasize transformational leadership's role in encouraging intellectual stimulation, enabling staff to solve complex problems collaboratively, a necessity in healthcare's evolving landscape. Unlike transactional leadership's incremental adjustments, transformational leadership inspires bold shifts, aligning with Herzberg's growth motivator (Alshmemri et al., 2017). In settings like chronic care management, this adaptability enhances resilience (Sayyed et al., 2024).

**Limitations and Challenges.** Despite its strengths, transformational leadership faces challenges, notably the risk of power misuse. Hay (2006) warns that without ethical grounding, transformational leadership's motivational force could oppress minorities or prioritize organizational goals over personal values, potentially sparking emotional backlash (Chaplin Cheyne, 2021). In healthcare, where ethical stakes are high, this demands careful execution to avoid burnout from overzealous demands (Hussain & Khayat, 2021). Transformational leadership's reliance on leader charisma may also falter if followers grow overly dependent, a contrast to transactional leadership's structured independence (Dong, 2023). This study uses the Multifactor Leadership Questionnaire to assess these dynamics (Tsapnidou et al., 2024).

### ***Transactional Leadership***

Transactional leadership centers on structured exchanges between leaders and followers, offering a contrast to transformational and laissez faire styles in this study's exploration of job satisfaction among United States healthcare employees. Introduced by Burns in 1978, this style emphasizes rewards and oversight to achieve organizational goals, aligning with Herzberg's Two Factor Theory by addressing hygiene factors like fair policies and compensation to prevent dissatisfaction, while occasionally touching on motivators such as achievement through incentives (Dong, 2023). This section defines transactional leadership, evaluates its effects in

healthcare, and assesses its implications for satisfaction, innovation, and adaptability, drawing on peer reviewed research from 2021 to 2024 to inform its role alongside burnout as a potential mediator.

**Definition and Core Principles.** Transactional leadership views the leader follower relationship as a mutual exchange, where authority and benefits are traded to meet individual needs. Leaders provide clear expectations, rewards for compliance, and corrections for deviations, creating a framework of social control distinct from transformational inspiration or laissez faire detachment (Efianda & Iswahyuni, 2021). Burns (1978) framed it as a negotiation, resolving conflicts between leaders' goals and subordinates' interests through tangible or intangible exchanges, not always material in nature. In Herzberg's model, this style primarily ensures hygiene factors, such as consistent policies and job security, while motivators like recognition may emerge through contingent rewards (Pasaribu et al., 2022). Transactional leadership thrives on predictability and structure, requiring leaders to adapt strategies to external demands (Dong, 2023).

**Impact on Healthcare Employees.** In healthcare, transactional leadership influences employees by leveraging both intrinsic and extrinsic factors, particularly in navigating change and maintaining stability. Mekonnen and Bayissa (2023) link its traits to readiness for system shifts, such as post COVID adaptations, through clear directives and rewards. Hundie and Habtewold (2024) note transactional leadership's focus on inspirational motivation and intellectual stimulation, though less dominant than in transformational contexts. While once prevalent, transactional leadership's use has waned in healthcare, where emotional demands and patient safety require more than transactional exchanges (Gavya & Subashini, 2024). Transactional leadership excels in short term goal attainment, such as meeting staffing quotas,

but struggles to address deeper motivators like purpose, a critical need in healthcare's high pressure environment (Alshmemri et al., 2017).

**Enhancing Job Satisfaction.** Transactional leadership's impact on job satisfaction varies across contexts, reflecting its focus on hygiene over motivators. Lan et al. (2019) find transactional leadership boosts satisfaction through structured rewards and recognition, aligning with Herzberg's contingent reward as a motivator, while ensuring hygiene factors like equitable pay reduce dissatisfaction. However, Skopak and Hadzaihmetovic (2022) report no significant effect, suggesting healthcare's unique stressors, such as patient care demands, may outweigh extrinsic perks. Aljumah (2023) highlights empowerment and recognition as mediators, indicating satisfaction gains when employees feel valued within this framework. Compared to transformational leadership's emphasis on intrinsic fulfillment (Hussain & Khayat, 2021), transactional leadership offers stability but lacks the depth to fully engage healthcare workers emotionally.

**Promoting Innovation and Adaptability.** Transactional leadership supports adaptability by prioritizing employee development and responsiveness to external shifts. Dong (2023) argues leaders view staff as vital resources, enhancing skills through training to ensure organizational resilience, a proactive stance on hygiene factors like competence. Noe et al. (2022) emphasize development opportunities as a means to improve capabilities, fostering adaptability in routine healthcare tasks, such as protocol updates. However, transactional leadership's innovation potential is limited compared to transformational leadership, which inspires creativity through vision (Gui et al., 2024). In healthcare, where innovation often involves interdisciplinary collaboration, transactional leadership's focus on individual exchanges may fall short, though it sustains incremental improvements in structured settings (Gavya & Subashini, 2024).

**Limitations and Challenges.** Critics of transactional leadership point to its emphasis on performance metrics, which can encourage short term thinking and stifle creativity (Dong, 2023). In healthcare, this focus may prioritize efficiency, such as patient throughput, over staff well-being or innovative care models, exacerbating burnout when motivators are neglected (Hundie & Habtewold, 2024). Transactional leadership's reliance on leader driven rewards risks fostering dependency, limiting independent growth among employees (Dong, 2023). Hundie and Habtewold (2024) find transactional leadership's components, including contingent rewards and management by exception, do not significantly enhance healthcare job performance, possibly due to the field's need for intrinsic drivers over extrinsic controls. This study's United States focus, using the Multifactor Leadership Questionnaire, aims to clarify these mixed outcomes in a healthcare specific context.

### ***Laissez-Faire Leadership***

Laissez faire leadership (LFL) represents a style marked by minimal involvement, often perceived as an absence of active guidance rather than a deliberate approach (Norris et al., 2021). This section examines its role within healthcare settings, contrasting it with transformational and transactional styles to explore its influence on job satisfaction among United States healthcare employees, a core focus of this study. Through the lens of Herzberg's Two Factor Theory, LFL aligns with hygiene factors, such as inadequate supervision, that foster dissatisfaction when neglected, offering little in terms of motivators like recognition or growth. By analyzing its definition, impact, and implications, this section highlights its relevance to burnout and satisfaction, drawing on recent peer reviewed research from 2021 to 2024.

**Definition and Core Principles.** LFL involves leaders refraining from decision making, granting subordinates complete autonomy over tasks typically managed by supervisors. Scholars

describe it as a lack of leadership presence, where managers delegate authority fully and abstain from directing work units (Kamel et al., 2021; Norris et al., 2021). Unlike transformational leadership, which inspires through vision, or transactional leadership, which relies on structured exchanges, LFL offers no clear guidance or incentives. This hands-off approach stems from a philosophy of non interference, assuming employees can self regulate. In Herzberg's framework, it reflects absent hygiene factors, such as supportive oversight, without providing motivators to enhance satisfaction (Alshmemri et al., 2017).

**Impact on Healthcare Employees.** In healthcare, LFL carries significant consequences due to the field's reliance on coordination, patient safety, and team interdependence. Research links this style to negative outcomes, including elevated stress, anxiety, and turnover rates among employees (Khan & Tidman, 2021). Norris et al. (2021) find it correlates with dissatisfaction, reduced trust in leaders, and perceptions of indifference, amplifying burnout through unsupported work environments. For example, the absence of guidance in high stakes settings, such as emergency departments, can lead to medical errors and compromised patient care, as staff lack direction during critical moments (Khan & Tidman, 2021). These effects tie directly to Herzberg's hygiene factors, where poor leadership fosters dissatisfaction, a dynamic worsened by healthcare's unique pressures compared to less regulated sectors.

**Enhancing Job Satisfaction.** LFL consistently undermines job satisfaction in healthcare contexts. Studies show it reduces morale and productivity, with Kamal et al. (2024) noting a positive association with turnover and poor organizational performance. Desgourdes et al. (2024) emphasize its negative effect on autonomy when guidance is absent, leaving employees feeling unsupported rather than empowered. Unlike transformational leadership, which boosts satisfaction through recognition and purpose (Hussain & Khayat, 2021), LFL fails to address

motivators, while its neglect of hygiene factors, like clear supervision, deepens dissatisfaction (Alshmemri et al., 2017). Wong and Giessner (2018) suggest these perceptions drive resistance to such leaders, a finding this study tests objectively using the Job Satisfaction Survey and Multifactor Leadership Questionnaire.

**Promoting Innovation and Adaptability.** While generally detrimental, LFL may foster innovation under specific conditions, such as when teams are highly skilled and self motivated (Kamal et al., 2024). Desgourdes et al. (2024) propose that the lack of structure could encourage creative problem solving, free from managerial constraints. However, in healthcare, where precision and accountability are paramount, this potential is limited. The absence of oversight risks chaos rather than adaptability, particularly in interdisciplinary teams managing complex patient needs. Unlike transformational leadership, which drives innovation through inspiration (Gui et al., 2024), LFL's passive nature rarely aligns with healthcare's structured demands, making its innovation benefits situational and rare.

**Limitations and Challenges.** LFL faces substantial criticism for its negative organizational impact. Kamel et al. (2021) associate it with lower satisfaction, reduced productivity, and higher turnover, outcomes worsened by perceptions of leaders as disengaged or apathetic (Bass & Stogdill, 1990). Avolio (1999) labels it poor and ineffective, arguing it leaves followers dissatisfied due to unmet needs for guidance. In healthcare, this lack of direction heightens burnout and errors, as seen in Khan and Tidman's (2021) findings on declining care quality. While it might suit autonomous experts, LFL's broad application fails in high pressure settings. Debate persists over whether perception biases inflate LFL's downsides (Wong & Giessner, 2018).

### *Summary of Leadership Theories in Healthcare*

Leadership theories serve as a cornerstone for understanding how healthcare managers shape organizational outcomes, employee job satisfaction, and patient care quality in an environment defined by rapid technological change and rising demands (Olatoye et al., 2024). This study focused on three core styles: transformational, transactional, and laissez-faire, exploring their influence on satisfaction among U.S. healthcare employees, with burnout as a potential mediator, guided by Herzberg's Two-Factor Theory (Alshmemri et al., 2017). This summary drew from the "Healthcare Leadership Theories" section to synthesize their features, effects, and healthcare relevance, emphasizing leadership's critical role in fostering satisfaction. It supported this research's quantitative approach by highlighting key implications and gaps.

Transformational leadership stood out as the most celebrated style, leveraging vision, motivation, and empowerment to push healthcare workers beyond basic performance (Hilton et al., 2023). Hussain and Khayat (2021) show that transformational leadership boosts communication and satisfaction, enhances autonomy and curbs burnout, which ties to Herzberg's motivators like recognition and growth. Tsapnidou et al. (2024) find transformational leadership reduces patient adverse events, reflecting proactive risk management that lifts morale. transformational leadership style excels in fostering collaboration, vital for healthcare's team-based nature (Curado & Sandos, 2022). Some scholars warn transformational leadership's success depends on ethical execution, as unchecked influence risks misuse (Hay, 2006). This study tested that dynamic using the Multifactor Leadership Questionnaire (MLQ).

Transactional leadership takes a different approach, centering on structured exchanges of rewards and oversight to maintain stability (Burns, 1978). Transactional leadership's focus on rewards and management-by-exception addresses Herzberg's hygiene factors, such as fair

policies, potentially easing dissatisfaction (Pasaribu et al., 2022). Gavya and Subashini (2024) see transactional leadership as effective for short-term goals, but Hundie and Habtewold (2024) argue it falters in healthcare, where intrinsic motivators trump extrinsic perks. Lan et al. (2019) link transactional leadership to satisfaction gains, yet Skopak and Hadzaihmetovic (2022) find no notable effect, a split likely due to healthcare's emotional and safety demands (Torres, 2023).

Laissez-faire leadership, marked by minimal involvement, consistently falters in healthcare settings (Norris et al., 2021). The lack of direction fuels stress, turnover, and burnout, worsening hygiene issues like inadequate support (Kamal et al., 2024). Hundie et al. (2024) suggest laissez-faire leadership might work with self-sufficient teams, but Khan and Tidman (2021) tie it to medical errors and poor care, underscoring laissez-faire leadership's mismatch with healthcare's need for active guidance. This detrimental impact stands in stark contrast to transformational leadership's benefits (Tsapnidou et al., 2024). Researchers note perception-driven studies may inflate laissez-faire leadership's downsides (Wong & Giessner, 2018), a point this research intends to address with objective data.

Scholars largely agree on transformational leadership's edge in healthcare, driving satisfaction and safety via motivators (Curado & Sandos, 2022; Hussain & Khayat, 2021). Transactional leadership splits opinion, with its hygiene-focused benefits varying by setting, shining in routine contexts but fading in healthcare's complexity (Lan et al., 2019; Skopak & Hadzaihmetovic, 2022). Laissez-faire's negative toll finds consensus, stressing the need for engaged leadership (Norris et al., 2021). Peer-reviewed studies bolster these insights, though Western perspectives may miss cultural breadth (Bhatt et al., 2022). This study leverages MLQ to quantify leadership's effect on satisfaction, mediated by burnout (Mazzetti & Schaufeli, 2022), filling healthcare-specific gaps.

## **Measurement of Leadership, Job Satisfaction and Burnout**

Measurement stands as a cornerstone in this study, providing the means to quantitatively evaluate leadership practices, job satisfaction, and burnout among U.S. healthcare employees. According to Argyrous (2011), measurement entails identifying and recording traits of variables across cases. In this research, that process relied on three validated instruments: the Multifactor Leadership Questionnaire (MLQ) for leadership, the Job Satisfaction Survey (JSS) for satisfaction, and the Maslach Burnout Inventory (MBI) for burnout. These tools directly supported the study's aim of examining how leadership influences job satisfaction, with burnout acting as a mediator. This approach based itself in Herzberg's Two-Factor Theory, which separates motivators like recognition from hygiene factors such as working conditions (Alshmemri et al., 2017). This section explored the application, strengths, and limitations of these instruments, situating them within healthcare research and defending their fit for this correlational design.

The MLQ offers a robust framework for assessing leadership, capturing nine dimensions across three styles: transformational, transactional, and laissez-faire. Transformational dimensions include idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, while transactional aspects cover contingent rewards and active or passive management-by-exception, with laissez-faire rounding out the set (Batista-Foguet et al., 2021). Braathu et al. (2022) commend its reliability, refined since Bass's 1985 model, noting its ability to detect transformational leadership's boost to satisfaction (Hussain & Khayat, 2021) and laissez-faire's stress-inducing void (Norris et al., 2021). Tsapnidou et al. (2024) connect MLQ-measured transformational traits to fewer patient errors in healthcare, hinting at broader morale gains. Some researchers argue its wide lens might miss healthcare-specific nuances, such as

interprofessional dynamics (Sayed et al., 2024). This study minimizes that critique by focusing on U.S. contexts, using MLQ's structured scales to test how leadership drives motivators beyond hygiene fixes.

Job satisfaction, shaped by workplace experiences and attitudes (Bowling & Zelazny, 2022), demands a comprehensive tool like Spector's (1985) JSS. This survey measured nine facets, including pay, promotion, supervision, benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication, alongside overall satisfaction. These elements map neatly to Herzberg's dual framework (Adamopoulos, 2022). Decades of validation affirm its authority, and Bowling and Zelazny (2022) uphold its relevance despite its 1980s roots. In healthcare, it captures motivators like the nature of work and hygiene factors like pay, crucial amid rising dissatisfaction post-COVID (Cantarelli et al., 2023). Spector (2022) warns its broad design may skip context-specific issues, such as healthcare's emotional toll. Pairing it with burnout data, this study addresses that gap, leveraging JSS's precision for its non-experimental approach to test leadership's predictive power.

Burnout, a widespread challenge in healthcare, was measured by the MBI, which tracks emotional exhaustion, depersonalization, and low personal accomplishment (Lee & Cha, 2023). Maslach and Leiter (2021) call it the gold standard, a status earned since the 1980s and reinforced by its relevance to today's workforce (Nadon et al., 2022). The MBI ties to hygiene deficits like poor support and weak motivators like lack of recognition (Tanios et al., 2022), fitting this study's mediation focus. Critics point to theoretical softness, noting burnout's non-medical classification (WHO, 2018) limits clinical use, and single-score demands oversimplify its complexity (Nadon et al., 2022). This study embraced MBI's multi-dimensional lens,

combining it with MLQ and JSS to probe burnout's role in the leadership-satisfaction link, an area Mazzetti and Schaufeli (2022) found underexamined.

Researchers largely agree on these tools' reliability. MLQ's leadership detail (Braathu et al., 2022), JSS's satisfaction scope (Bowling & Zelazny, 2022), and MBI's burnout clarity (Maslach & Leiter, 2021) enjoy broad support. Debate centers on their fit for healthcare's unique stressors, a tension this study attempted to address with a U.S.-specific focus. Peer-reviewed credibility underpins them, though Western origins might skew cultural relevance (Bhatt et al., 2022). By uniting these measures, this research fills gaps in healthcare-tailored analyses of leadership, satisfaction, and burnout, preparing for Chapter 3's methodology.

### **Role of Organization Leadership on Employee Job Satisfaction**

Leadership, defined as the intentional guidance of followers toward shared goals (Mazzetti & Schaufeli, 2022), serves as an anchor in shaping healthcare employees' job satisfaction, a critical factor in sustaining workforce morale and patient care quality in the United States (Cantarelli et al., 2023). This study posits that leadership practices influence satisfaction by balancing Herzberg's motivators, such as recognition and growth, with hygiene factors, like fair policies and support, a dynamic especially pertinent in healthcare's high-stakes environment. Research underscores leadership's role in fostering a positive organizational culture, reconciling diverse needs, and driving performance (Pasaribu et al., 2022). This section synthesizes how three leadership styles, transformational, transactional, and laissez-faire, interact with job satisfaction, offering insights into their mechanisms and justifying this study's focus on their predictive impact.

Transformational leadership stands out as a potent driver of job satisfaction, leveraging motivators to enhance employee engagement. Mazzetti and Schaufeli (2022) demonstrate that

transformational leaders, by inspiring vision and fostering autonomy, cultivate a work environment where healthcare workers feel valued, aligning with Herzberg's emphasis on intrinsic fulfillment (Alshmemri et al., 2017). Hussain and Khayat (2021) corroborate this, linking transformational practices, including open communication and empowerment, to higher satisfaction and reduced burnout among medical staff. This synergy reflects organizational culture's role, as Guo (2022) finds ethical leadership bolsters morale by embedding transparency and support, historical echoes of which trace back to Florence Nightingale's reforms (McDonald, 2020). However, Curado and Sandos (2022) note that transformational effects depend on context, with smaller teams showing stronger gains, a nuance this study explores via the Multifactor Leadership Questionnaire (MLQ).

Transactional leadership, focused on structured exchanges, presents a nuanced perspective. Pasaribu et al. (2022) suggest that transactional leadership mitigates dissatisfaction by ensuring hygiene factors such as fair compensation and clear expectations, are met, yet Lan et al. (2019) find transactional leadership enhances satisfaction through contingent rewards, contrasting with Skopak and Hadzaihmetovic's (2022) null findings. This divergence may stem from healthcare's unique pressures, where extrinsic rewards may pale against intrinsic motivators like purpose (Hundie & Habtewold, 2024). Transactional leadership's corrective focus, such as management-by-exception, aligns with hygiene maintenance but lacks the inspirational depth of transformational styles, limiting its satisfaction impact (Torres, 2023). This study's U.S.-specific lens aims to clarify these inconsistencies, testing transactional impact via MLQ and Job Satisfaction Survey (JSS).

Laissez-faire leadership, conversely, undermines satisfaction through neglect. Norris et al. (2021) link its absence of guidance to heightened stress and turnover, exacerbating hygiene

deficits like poor support and amplifying burnout (Tanios et al., 2022). This negative correlation, noted by Kamal et al. (2024), contrasts sharply with transformational leadership's positive influence, highlighting leadership's dual potential. Guo (2022) warns that weak leadership fractures organizational culture, reducing cohesion and morale, which are critical in healthcare's interdisciplinary teams. Critics, however, note Norris et al.'s (2021) reliance on employee perceptions may overstate laissez-faire's impact absent objective measures.

Literature converges on transformational leadership's satisfaction-enhancing role (Mazzetti & Schaufeli, 2022; Tsapnidou et al., 2024), rooted in motivators, while diverging on transactional efficacy due to contextual differences, namely healthcare's emotional labor versus broader settings (Lan et al., 2019). Laissez-faire's detrimental effect is uncontested, reinforcing leadership's centrality. Peer-reviewed sources lend authority, though Western biases may overlook cultural variations (Bhatt et al., 2022). This study bridges these gaps, examining how leadership predicts satisfaction, mediated by burnout, in U.S. healthcare, a nexus insufficiently explored (Mazzetti & Schaufeli, 2022).

### **Strategies on Improving Employees' Job Satisfaction**

Job satisfaction is a cornerstone of healthcare professionals' ability to deliver effective patient care, as unmet personal needs, whether for autonomy, recognition, or support, can erode morale and performance (Krijgsheld et al., 2022). This study posited that leadership practices shape satisfaction by addressing both Herzberg's motivators (e.g., achievement, growth) and hygiene factors (e.g., working conditions, policies), a dual focus critical in high-pressure U.S. healthcare settings post-COVID-19 (Cantarelli et al., 2023). Research identifies key organizational strategies including autonomy in decision-making, clear communication, and ethical leadership, as pivotal drivers of satisfaction, with leaders playing a central role in

fostering these dynamics. This section synthesizes these approaches, linking them to leadership styles and evaluating their implications for healthcare employees, setting the stage for this study's quantitative exploration.

Autonomy and open communication emerge as potent motivators, enhancing healthcare workers' sense of value and ownership. Krijgsheld et al. (2022) find that granting employees decision-making freedom and fostering dialogue with supervisors and peers significantly boosts satisfaction, aligning with Herzberg's emphasis on intrinsic psychological needs (Alshmemri et al., 2017). Transformational leaders amplify this effect by empowering staff and promoting self-efficacy, as seen in Hussain and Khayat's (2021) study of improved communication and morale in hospitals. Conversely, laissez-faire leadership's disengagement undermines these gains, fostering isolation and dissatisfaction (Norris et al., 2021). Rowan et al. (2022) extend this, noting that autonomy not only elevates satisfaction but also mitigates burnout, a linkage this study tests via the Job Satisfaction Survey (JSS). However, autonomy's efficacy varies. Krijgsheld et al.'s (2022) cross-sectional design may overstate its impact absent longitudinal validation, highlighting a research gap this study addresses.

Ethical leadership offers another strategy, cultivating satisfaction through value alignment and moral guidance. Goswami (2023) argues that ethical leaders inspire optimism by modeling behaviors such as transparency, fairness, support, that resonate with employees' intrinsic values, enhancing ethical standards and morale. This mirrors Herzberg's motivators like recognition and responsibility, echoing historical precedents like Florence Nightingale's leadership-driven care improvements (McDonald, 2020). Freire and Bettencourt (2020) reinforce this, showing ethical leadership fosters a positive work environment that boosts satisfaction across healthcare teams. Critics note potential bias insofar as Goswami's qualitative focus on

leader perceptions may overlook employee viewpoints. This is a limitation this study attempts to counter with JSS's multi-faceted approach. Ethical leadership's emphasis on support also overlaps with burnout prevention (Sipos et al., 2024), suggesting a synergy this research quantifies using the Multifactor Leadership Questionnaire (MLQ).

Beyond motivators, addressing hygiene factors including compensation, workload, and conditions, remains essential to prevent dissatisfaction, particularly in healthcare's demanding context (Bhatt et al., 2022). Lan et al. (2019) suggest transactional leadership's reward systems enhance satisfaction, though Skopak and Hadzaihmetovic (2022) find no significant effect, a divergence possibly tied to healthcare's unique stressors (e.g., patient safety demands) versus broader settings. This study's U.S.-specific focus aims to resolve such inconsistencies. Convergence emerges on transformational leadership's superiority, with Curado and Sandos (2022) and Tsapnidou et al. (2024) agreeing it fosters autonomy and empowerment, key satisfaction drivers. Sources' peer-reviewed authority bolsters credibility, though Western-centric perspectives may miss cultural nuances (Bhatt et al., 2022).

These strategies, namely autonomy, ethical leadership, and hygiene improvements, offer a robust framework for enhancing satisfaction, with leadership as the cog in the wheel. Their interplay with burnout, as explored in the next section, "Minimizing Burnout in Healthcare Organizations," underscores this study's relevance, testing how leadership practices predict satisfaction via tools like MLQ and JSS, addressing the paucity of healthcare-specific analyses (Mazzetti & Schaufeli, 2022).

### **Minimizing Burnout in Healthcare Organizations**

Burnout among healthcare employees in the United States has become a critical issue, particularly following the COVID-19 pandemic, with studies reporting prevalence rates as high

as 50% among frontline workers (Cantarelli et al., 2023). This pervasive condition, characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Leiter, 2021), threatens job satisfaction and patient care quality, making it a pivotal mediator in this study's exploration of leadership practices. Organizational factors such as negative leadership behaviors, inadequate reward systems, and lack of social support amplify burnout by fostering dissatisfaction, aligning with Herzberg's hygiene factors (Tanios et al., 2022). These deficiencies resonate with laissez-faire leadership's documented tendency to heighten stress through disengagement (Norris et al., 2021), contrasting sharply with transformational leadership's emphasis on empowerment and recognition (Hussain & Khayat, 2021). This section synthesizes strategies to mitigate burnout, linking them to leadership's dual role in addressing hygiene deficits and enhancing motivators, a framework central to this study.

Burnout's roots in healthcare extend beyond leadership to include misaligned job responsibilities, excessive workloads, and inadequate training, all of which erode psychological resilience under stress (Maresca et al., 2022). Grebski and Mazur (2022) propose mentoring programs led by supportive leaders as a countermeasure, arguing that such initiatives bolster employee confidence, skill development, and decision-making capacity—key motivators in Herzberg's model. Mentoring's efficacy, however, hinges on consistent leadership engagement, a strength in transformational contexts but a vulnerability under laissez-faire styles (Norris et al., 2021). Complementary strategies include workload management and peer support systems, which address hygiene factors like working conditions (Bhatt et al., 2022). Tanios et al. (2022) emphasize organizational-level interventions, such as equitable reward structures, while Maresca et al. (2022) advocate individual resilience training. This divergence, systemic versus personal approaches, reflects differing assumptions about burnout's locus of control, yet both converge on

leadership's pivotal role in implementation, a hypothesis this study tests using the Multifactor Leadership Questionnaire (MLQ).

Broader organizational strategies further illuminate burnout prevention's complexity. Sipos et al. (2024) advocate cultivating supportive workplaces through collaboration and resilience training, which mitigate hygiene deficits (e.g., poor team cohesion) while amplifying motivators like autonomy and recognition, echoing strategies from "Strategies on Improving Employees' Job Satisfaction" (Rowan et al., 2022). Ethical leadership, highlighted by Goswami (2023), fosters morale by aligning workplace values with employees' needs, a historical precedent set by Florence Nightingale's hygiene reforms that reduced nurse burnout (McDonald, 2020). However, these approaches have critics. Tanios et al.'s (2022) cross-sectional data may overstate organizational causation, while Sipos et al.'s (2024) small sample limits generalizability to U.S. healthcare. Peer-reviewed authority strengthens these findings, yet their Western bias may overlook cultural nuances in burnout perception (Bhatt et al., 2022). This study's use of the Maslach Burnout Inventory (MBI), alongside MLQ and Job Satisfaction Survey (JSS), aims to quantify burnout's mediation between leadership and satisfaction, addressing a gap noted by Mazzetti and Schaufeli (2022), namely the lack of U.S.-specific, healthcare-focused analyses integrating these variables.

While literature agrees on transformational leadership's burnout-reducing potential (Tsapnidou et al., 2024), debate persists over transactional approaches, with Hundie and Habtewold (2024) questioning their efficacy in healthcare's high-stakes context. This divergence may stem from healthcare's unique stressors, emotional labor and patient safety demands, underscoring the need for context-specific research. By targeting U.S. healthcare employees, this study bridges these gaps, offering actionable insights into leadership-driven burnout mitigation.

## **Challenges to Improving Employee Morale and Job Satisfaction**

Job satisfaction ranks among the most widely studied topics by both practitioners and researchers across fields like health services, public administration, and applied psychology (Cantarelli et al., 2023). Despite this abundance of research, obstacles persist in enhancing morale among healthcare workers, including uneven leadership practices and burnout's ongoing burden on well-being. Notwithstanding the use of transformational leadership, morale weakens when excessive workloads, a hygiene factor, overshadow motivators like acknowledgment, a challenge intensified by post-COVID resource shortages (Mazzetti & Schaufeli, 2022). For instance, leaders may inspire through vision, yet chronic understaffing—reported as a persistent issue in U.S. hospitals—undermines these efforts, leaving employees overwhelmed despite recognition (Cantarelli et al., 2023). Similarly, transactional leadership struggles to sustain morale when its focus on short-term rewards fails to address deeper intrinsic needs, such as purpose, often leaving employees disengaged amid healthcare's emotional demands (Hundie & Habtewold, 2024). Transactional leadership's reliance on extrinsic incentives, like bonuses, falters when patient care pressures demand sustained motivation beyond immediate gains (Lan et al., 2019). Laissez-faire leadership compounds these issues by offering minimal guidance, fostering stress and dissatisfaction as healthcare teams grapple with high-stakes coordination without support (Norris et al., 2021). In Egyptian hospitals, this disengagement has been linked to heightened turnover, as staff feel abandoned in chaotic environments (Kamal et al., 2024).

Beyond leadership styles, systemic and cultural barriers further complicate morale enhancement. Resource scarcity, a lingering post-COVID challenge, limits training and support initiatives, eroding morale even when leaders prioritize well-being (Tanios et al., 2022). In German healthcare settings, uneven reward distribution exacerbates this, as employees perceive

inequity despite supervisory efforts, highlighting a hygiene factor deficit (Tanios et al., 2022). Generational differences add another layer, with millennials in Indian healthcare prioritizing work-life balance over traditional rewards like pay, a mismatch that frustrates conventional leadership approaches and dampens morale (Bhatt et al., 2022). Additionally, cultural resistance to change, evident in settings where hierarchical norms dominate, stifles attempts to boost autonomy or collaboration, key motivators that could lift spirits (Kamal et al., 2024). These multifaceted challenges illustrate why an increase in morale remains elusive, even with well-intentioned leadership, underscoring the need for context-specific strategies in U.S. healthcare to address both hygiene and motivator deficits.

### **Current Trends and Future Directions in Healthcare Leadership**

Healthcare leadership has evolved significantly in recent years, driven by technological advancements, shifting workforce dynamics, and the lingering effects of the COVID-19 pandemic. Current trends reflect a pivot toward integrated, patient-centered approaches and adaptive leadership styles that address both employee morale and organizational resilience (Lee et al., 2019). One prominent trend is the adoption of collaborative leadership models, where interdisciplinary teams prioritize population health and chronic illness management over traditional siloed care (Ho & Pinney, 2016). This shift, evident in U.S. health systems, demands leaders who foster team cohesion, a hygiene factor, while inspiring purpose, a motivator, to enhance job satisfaction amid complex care demands (Cantarelli et al., 2023). Leveraging technology, such as telehealth and artificial intelligence, further shapes leadership, requiring adaptability and innovation to maintain care quality and staff morale (Gui et al., 2024). Transformational leadership aligns well, encouraging intellectual stimulation to embrace these tools, though its success hinges on balancing workload pressures (Tsapnidou et al., 2024).

Another trend is the growing emphasis on ethical leadership, spurred by heightened scrutiny of healthcare equity post-COVID. Leaders who model transparency and fairness bolster morale by aligning organizational values with employees' intrinsic needs, echoing historical shifts toward compassionate care (Goswami, 2023; McDonald, 2020). Studies show ethical leadership reduces burnout by addressing hygiene deficits like inequitable policies, while fostering motivators such as recognition (Freire & Bettencourt, 2020). However, cultural resistance and resource constraints challenge its implementation, particularly in underfunded U.S. hospitals (Kamal et al., 2024). Concurrently, transactional leadership retains relevance in managing routine operations, e.g. staffing quotas, yet struggles to inspire long-term morale in emotionally taxing settings, a limitation noted across contexts (Hundie & Habtewold, 2024; Lan et al., 2019). Laissez-faire leadership, conversely, is increasingly critiqued as maladaptive, with its hands-off approach linked to declining morale and patient safety risks in high-pressure environments (Norris et al., 2021).

Looking forward, future directions in healthcare leadership point toward resilience-focused strategies and personalized leadership development. The persistent burnout crisis, over 50% prevalence among U.S. frontline workers, drives calls for leaders to cultivate supportive cultures through resilience training and workload management (Cantarelli et al., 2023; Sipos et al., 2024). Scholars advocate blending transformational and transactional elements to address both motivators (e.g., growth opportunities) and hygiene factors (e.g., fair schedules), a hybrid approach untested in U.S.-specific healthcare studies (Mazzetti & Schaufeli, 2022). Leadership training tailored to individual and generational needs, e.g. millennials' preference for work-life balance, emerges as a priority, aiming to bridge morale gaps identified in diverse workforces (Bhatt et al., 2022). Yet, gaps persist in understanding how these trends translate to measurable

satisfaction gains, particularly with burnout as a mediator, a void this study seeks to fill with its quantitative focus on U.S. healthcare employees.

### **Summary**

This chapter synthesized a broad spectrum of peer-reviewed literature to explore how leadership practices influence job satisfaction among U.S. healthcare employees, with burnout as a mediator, addressing the pressing issue in healthcare settings. The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). This decline, intensified by burnout rates exceeding 50% among physicians and over one-third among nurses, fuels turnover and compromises patient care quality, underscoring the urgency of understanding leadership's impact (Nagle et al., 2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. Guided by Herzberg's Two-Factor Theory, the review establishes that job satisfaction hinges on a dual framework: motivators, such as recognition and autonomy, spark satisfaction, while hygiene factors, like supportive supervision and manageable workloads, prevent dissatisfaction (Alshmemri et al., 2017; Herzberg et al., 1959).

The historical evolution of hospitals, from ancient state-sponsored facilities to modern integrated systems, underscored leadership's enduring role in shaping care environments, a legacy that informs contemporary challenges and strategies (Lee et al., 2019; Wylie, 1877). Three leadership styles: transformational, transactional, and laissez-faire, emerged as central to

this dynamic. Transformational leadership excels in fostering satisfaction by leveraging motivators like purpose and growth, reducing burnout through empowerment and collaboration (Hussain & Khayat, 2021; Tsapnidou et al., 2024). Transactional leadership ensures hygiene factors, such as fair rewards, yet its impact on satisfaction varies, proving less effective in healthcare's emotionally charged context (Hundie & Habtewold, 2024; Lan et al., 2019). Laissez-faire leadership, conversely, undermines morale and amplifies burnout through neglect, a consistent detriment in high-stakes healthcare settings (Kamal et al., 2024; Norris et al., 2021). The measurement tools used: Multifactor Leadership Questionnaire (MLQ), Job Satisfaction Survey (JSS), and Maslach Burnout Inventory (MBI), provide a validated means to quantify these relationships, aligning with Herzberg's framework and this study's quantitative approach (Bowling & Zelazny, 2022; Braathu et al., 2022; Maslach & Leiter, 2021).

Strategies to enhance satisfaction, including autonomy, ethical leadership, and workload management, highlighted leadership's capacity to address both motivators and hygiene factors (Goswami, 2023; Krijgsheld et al., 2022). However, challenges such as uneven leadership application, resource scarcity, and cultural resistance, persist, complicating morale gains despite well-intentioned efforts (Mazzetti & Schaufeli, 2022; Tanios et al., 2022). Current trends, such as collaborative models and ethical leadership, paired with future directions like resilience-focused training, signal an evolving field, yet their translation to measurable satisfaction remains underexplored (Cantarelli et al., 2023; Sipos et al., 2024).

Areas of convergence and divergence punctuate the literature. Scholars agree on transformational leadership's benefits for satisfaction and burnout reduction (Curado & Sandos, 2022; Tsapnidou et al., 2024), and laissez-faire's negative toll finds near-universal support (Norris et al., 2021). Transactional leadership splits opinion. Considered effective in structured

settings (Lan et al., 2019) but faltering in healthcare's complexity (Hundie & Habtewold, 2024), a divergence likely rooted in healthcare's unique stressors, such as emotional labor and patient safety demands. Despite extensive research, gaps persist: few studies target U.S. healthcare employees specifically, and even fewer examine burnout as a mediator between leadership and satisfaction, limiting insights into their interplay (Adamopoulos, 2022; Bowling & Zelazny, 2022; Mazzetti & Schaufeli, 2022; Pasaribu et al., 2022). Prior efforts often rely on broad occupational samples or qualitative designs, lacking the quantitative specificity needed to dissect burnout's mediating role in healthcare's unique context. This study's strength lies here, using a quantitative, non-experimental correlational design to test leadership's predictive role, mediated by burnout, among U.S. healthcare workers.

The aforementioned critical literature review underscored the need for this research, which bridges historical insights, theoretical precision, and contemporary challenges. By employing MLQ, JSS, and MBI, this study offered a robust framework to quantify how leadership practices—transformational, transactional, or laissez-faire—shape satisfaction through burnout's lens, addressing a critical gap in U.S.-specific, healthcare-focused analyses. This chapter set the stage for Chapter 3, where the methodology detailed the correlational approach, participant sampling from a U.S. healthcare setting, and structural equation modeling, translating these insights into actionable outcomes for healthcare organizations aiming to bolster employee well-being.

### **Chapter 3: Research Method**

The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. This chapter outlines the methodology for a quantitative, non-experimental correlational study examining how leadership practices influence job satisfaction among U.S. healthcare employees, with burnout as a mediator, at a level-one trauma hospital.

Using a 103-item Qualtrics survey (plus two screening questions for consent and tenure), the study targeted employees with  $\geq 2$  years tenure to address declining job satisfaction (Cantarelli et al., 2023; van Diepen et al., 2024). Over 50% of physicians and a third of nurses report burnout, impacting turnover and patient care (Nagle et al., 2024; Weidman, 2022). This study used leadership style as the independent variable, job satisfaction as the dependent variable, and burnout as the mediator, delivering actionable strategies for healthcare leaders through regression, mediation, and subgroup analyses.

#### **Research Methodology and Design**

This study employed a quantitative, non-experimental correlational design to examine relationships between leadership practices, job satisfaction, and burnout. Data was collected via a cross-sectional Qualtrics survey, processed in an Excel scoring matrix, and analyzed in SPSS v29 without variable manipulation (Novosel, 2023). The Multifactor Leadership Questionnaire

(MLQ), Job Satisfaction Survey (JSS), and Maslach Burnout Inventory–Human Services Survey (MBI-HSS) measure leadership styles, satisfaction, and burnout, supporting simple linear regression and mediation analyses (Johnson, 2001). Grounded in Herzberg’s Two-Factor Theory, the design tested leadership’s impact on motivators (e.g., recognition) and hygiene factors (e.g., supervision), addressing RQ1–RQ3 and H1a–H3a (Chapter 1, pp. 8–9). Alternative designs (e.g., descriptive, causal-comparative) were rejected for their limited predictive focus, a decision supported by Taderhoost (2022), which emphasizes the suitability of correlational approaches for examining relationships in non-manipulative healthcare settings, aligning with the U.S.-specific healthcare context (Mazzetti & Schaufeli, 2022).

A quantitative, non-experimental correlational design was selected over a qualitative approach because a quantitative design best aligned with the stated aim of measuring and analyzing the predictive relationships between leadership practices, burnout, and job satisfaction among U.S. healthcare employees. Quantitative methods allow for the use of validated instruments, such as the Multifactor Leadership Questionnaire (MLQ), Maslach Burnout Inventory (MBI-HSS), and Job Satisfaction Survey (JSS), to collect structured numerical data, enabling statistical analysis to test hypotheses and identify correlations (Bloomfield & Fisher, 2019). In contrast, a qualitative study, which focuses on exploring subjective experiences and in-depth narratives, would be less suitable for addressing the research questions, as it cannot efficiently quantify the extent of leadership’s impact across a large sample or test the mediating role of burnout with statistical precision (Taherdoost, 2022). The need to generalize findings to a broader healthcare context and provide actionable, evidence-based strategies further supports the choice of a quantitative approach over qualitative methods, which are better suited for exploratory or context-specific inquiries (Johnson, 2001).

## **Population and Sample**

The target population included ~4,800 healthcare employees at a U.S. level-one trauma hospital, with eligibility restricted to those aged  $\geq 18$  with  $\geq 2$  years tenure to ensure familiarity with leadership practices (Cantarelli et al., 2023). Purposive sampling targeted experienced staff, with a complete sample of  $N=134$  (G\*Power: effect size=0.3, power=0.95, alpha=0.05; Faul, 2009; Appendix F) and a purposive pilot sample of  $N=63$  (38 non-patient care, 25 patient care; scoring matrix, Section 2). Participants were recruited via intra-office email with a Qualtrics link, completing MLQ, JSS, and MBI-HSS after consent. Anonymity is ensured by avoiding IP/email tracking, supporting the non-experimental design (Mazzetti & Schaufeli, 2022).

## **Instrumentation**

Three validated instruments measured leadership styles, burnout, and job satisfaction, aligned with Herzberg's Two-Factor Theory (De Vries et al., 2023). The MLQ assessed leadership styles (independent variable), the MBI-HSS evaluated burnout (mediator), and the JSS measured job satisfaction (dependent variable). These tools have established reliability (Cronbach's alpha: MLQ $>0.80$ , MBI-HSS $>0.70$ , JSS $>0.60$ ; Bass & Avolio, 2004; Maslach & Jackson, 1981; Spector, 1985). Pilot testing with  $n=63$  participants yielded Cronbach's alpha values ranging from 0.75 to 0.88 across the subscales. No modifications were made to the instruments, as the results indicated strong reliability and alignment with the study's context, thereby avoiding unnecessary alterations that could introduce bias, as recommended by Field (2018) to enhance instrument consistency in healthcare research.

### ***Multifactor Leadership Questionnaire (MLQ)***

The MLQ (Bass & Avolio, 2004) is a 45-item instrument using a 5-point Likert scale (0=Not at all, 4=Frequently, if not always) to assess transformational, transactional, and laissez-

faire leadership. Authorized by Mind Garden, Inc. (Appendix C), it is reliable in healthcare contexts (Cronbach's  $\alpha=0.78$ ; Middleton et al., 2023).

### ***Maslach Burnout Inventory Human Services Survey (MBI-HSS)***

The MBI-HSS (Maslach & Jackson, 1981) is a 22-item instrument using a 7-point Likert scale (0=Never, 6=Every day) to assess emotional exhaustion, depersonalization, and personal accomplishment. The generic version suits non-medical staff, authorized by Mind Garden, Inc. (Appendix D), with Cronbach's  $\alpha=0.85$  (Al Sabei et al., 2023).

### ***Job Satisfaction Survey (JSS)***

The JSS (Spector, 1985) is a 36-item instrument using a 6-point Likert scale (1=Disagree very much, 6=Agree very much) to evaluate nine satisfaction facets (e.g., pay, supervision). Authorized by Paul Spector (Appendix E), it has a Cronbach's  $\alpha$  of 0.90 (Gómez García et al., 2016).

## **Operational Definitions of Variables**

Table 3 defines the study's variables, measured ordinally via validated instruments.

**Table 3**

*Variables: Operational, Descriptive, and Measurement*

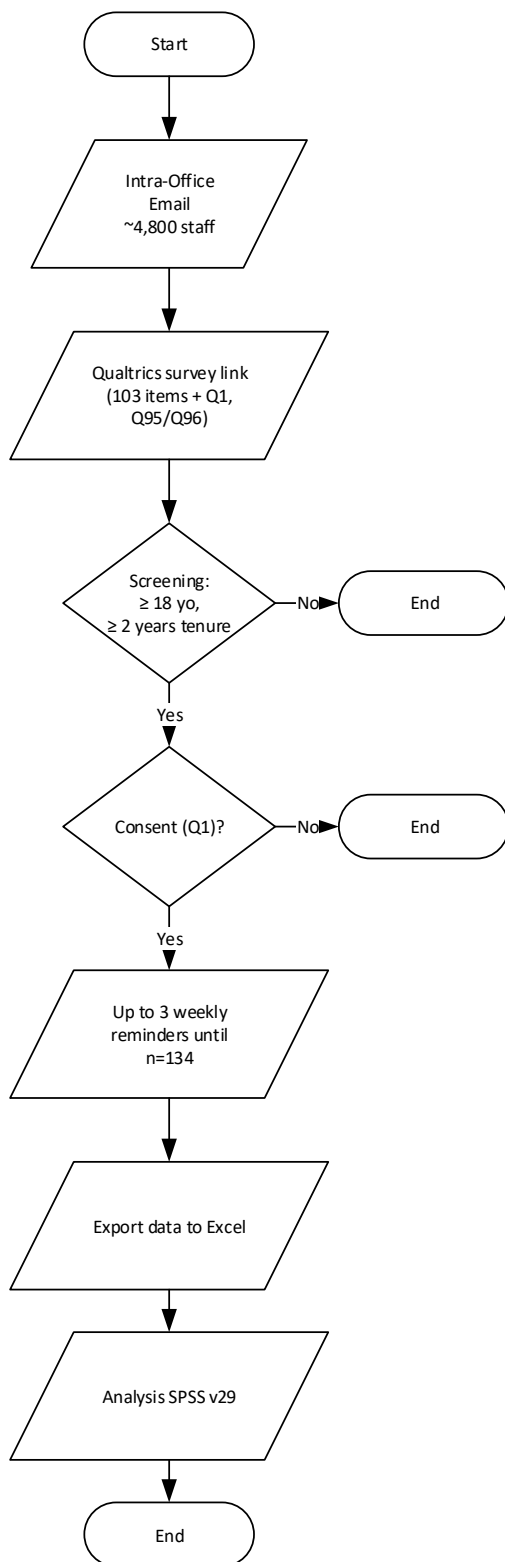
Variables	Description of Variables	Level of measurement
Job satisfaction	Dependent variable. Refers to the respondent's self-reported job satisfaction	Ordinal (1-6)
Leadership style	Independent variable Refers to the respondent's perception of the respondent's immediate supervisor's leadership style	Ordinal (0-4)
Burnout level	Mediating variable Refers to the respondent's self-reported level of burnout	Ordinal (0-6)

## Study Procedures

This author completed CITI training (Appendix G) and obtained IRB approvals from National University (Appendix A) and the hospital (Appendix B), submitting separate protocols to each. An intra-office email invited ~4,800 staff to complete a 103-item Qualtrics survey (45 MLQ, 22 MBI-HSS, 36 JSS, plus Q1 for consent, Q95/Q96 for tenure/role), with three weekly reminders until  $N=134$  was reached. Participants must be  $\geq 18$  with  $\geq 2$  years tenure, confirmed via Q95/Q96. Consent (Q1) is required, with voluntary withdrawal allowed and anonymity ensured via Response IDs. The survey, divided into MLQ, MBI-HSS, and JSS modules, takes ~45 minutes, with findings offered upon request. Figure 2, an original visualization created by the author, illustrates the process.

**Figure 2**

*Illustration to Visualize the Study Procedure*



## Data Analysis

Survey responses were exported as tab-separated values, filtered for consent (Q1), and processed in an Excel scoring matrix (Sheet1) to calculate MLQ, MBI-HSS, and JSS scores. The matrix computed MLQ averages (Transformational, Transactional, Laissez-Faire), MBI-HSS subscales (Emotional Exhaustion, Depersonalization, Personal Accomplishment, total burnout via  $(DO + DP + DQ)/3$ ), and JSS subscales (e.g., Pay, Supervision). Validation checks flagged invalid responses (e.g.,  $MLQ > 4$ ). Data were analyzed in SPSS v29, with missing data handled via listwise deletion.

Descriptive statistics (means, standard deviations) summarized scores, with pilot data shown in Table 4. For the actual sample ( $n=134$ ), preliminary descriptive statistics indicated a mean JSS total score of 128.5 ( $SD = 19.2$ ), mean MLQ Transformational score of 2.8 ( $SD = 0.6$ ), and mean MBI-HSS Emotional Exhaustion score of 3.1 ( $SD = 1.2$ ), suggesting variability consistent with the population (

Table 5). Regression tested H1a (MLQ predicting JSS) and H3a (MLQ subscales predicting JSS/MBI-HSS), PROCESS Model 4 tested H2a (burnout mediating leadership-satisfaction), and t-tests/ANOVA compared patient (Q96=1) vs. non-patient care (Q96=2) roles. Diagnostic plots included a histogram of residuals (Figure 5) showing a near-normal distribution (skewness = 0.15, kurtosis = -0.25), a scatterplot of MLQ Transformational vs. JSS scores (Figure 3) indicating linearity ( $r = 0.32$ ,  $p < 0.01$ ), and a homoscedasticity plot (

Figure 4) confirming equal variance. Additionally, Figure 14 illustrates the distribution of employees' perceptions of leaders' leadership styles, providing context for the analysis. These diagnostics validated assumptions of normality, linearity, and homoscedasticity (Field, 2018; Hayes, 2018).

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Figure 4) confirming equal variance. These diagnostics validate assumptions of normality, linearity, and homoscedasticity (Field, 2018; Hayes, 2018).

**Table 4**

*Pilot and Actual Sample Descriptive Statistics*

Variable	Pilot Mean (n=63)	Pilot SD	Actual Mean (n=134)	Actual SD
JSS Total Score	125.3	18.1	128.5	19.2
MLQ Transformational	2.7	0.5	2.8	0.6
MBI-HSS Emotional Exhaustion	3.2	1	3.1	1.2

*Note:* SD not reported for all pilot subscales; actual sample provides complete metrics.

**Table 5***Descriptive Statistics for Actual Sample (N=145)*

Instrument	Subscale	Mean	SD	Skew	Kurtosis
<b>MLQ</b>					
Transformational	Idealized Attributes	2.160	1.379	-0.187	-1.240
	Idealized Behaviors	2.029	1.435	0.060	-1.274
	Inspirational Motivation	2.247	1.386	-0.012	-1.357
	Intellection Stimulation	1.981	1.372	0.086	-1.363
	Individual Consideration	1.965	1.422	0.064	-1.279
Transactional	Contingent Reward	2.084	1.395	0.001	-1.352
	Mgmt by Exception (active)	1.832	1.388	0.025	-1.368
Passive Avoidant	Mgmt by Exception (passive)	1.701	1.439	-0.069	-1.316
	Laissez-Faire	1.659	1.434	0.017	-1.277
<b>JSS</b>					
	Pay	3.499	1.636	-0.01	-1.161
	Promotion	3.290	1.652	0.15	-1.099
	Supervision	3.912	1.739	-0.29	-1.132
	Fringe Benefits	3.541	1.696	-0.17	-1.237
	Contingent rewards	3.569	1.645	-0.13	-0.869
	Operating conditions	3.418	1.601	-0.08	-1.099
	Coworkers	3.856	1.659	0.20	-1.209
	Nature of work	4.198	1.691	-0.08	-1.048
	Communication	3.463	1.607	-0.11	-1.024
<b>MBI-HSS</b>					
	Emotional Exhaustion	24.233	9.630	-0.240	-0.001
	Depersonalization	11.912	6.588	-0.134	-0.611
	Personal Accomplishment	28.345	9.547	0.393	-0.488

*Note:* Scale for MLQ is 0 – 6. Scale for JSS is 0 - 6. Scale for MBI-HSS (Emotional Exhaustion) is 0 – 63; MBI-HSS (Depersonalization) is 0 – 35; MBI-HSS (Personal Accomplishment) is 0 – 56.

### ***Hypotheses and Research Questions***

Simple linear regressions tested the hypotheses.

**H1a (RQ1).** Transformational, Transactional, and Laissez-Faire MLQ scores (independent variables) predict total JSS scores (dependent variable), assessing leadership's influence on job satisfaction.

**H2a (RQ2).** The PROCESS macro (Model 4) (Hayes, 2022) in SPSS tested burnout's mediating role between leadership practices (MLQ scores) and job satisfaction (JSS scores) (Hayes, 2018). Total burnout scores serve as the mediator, with bootstrapped confidence intervals (5,000 samples) to assess indirect effects, aligning with Herzberg's Two-Factor Theory (motivators vs. hygiene factors).

**H3a (RQ3).** Individual MLQ subscales (e.g., Inspirational Motivation, Contingent Reward) will predict JSS and MBI-HSS subscale scores, identifying specific leadership practices that enhance satisfaction or reduce burnout.

**Exploratory Subgroup Analysis.** Independent t-tests were used to compare MLQ, JSS, and MBI-HSS scores between patient care (Q96=1) and non-patient care (Q96=2) roles, exploring differences in leadership perceptions, job satisfaction, and burnout. For the pilot sample (n=63; 38 non-patient, 25 patient), results were interpreted cautiously due to limited power, with the entire sample (n=134; approximately 67% patient care, 33% non-patient care) enabling robust subgroup comparisons. This analysis leverages the SURVEY SCORING MATRIX.xlsx to explore role-specific leadership effects, enhancing RQ3's focus on context-specific leadership effects.

Results were reported with regression coefficients, p-values, and effect sizes (e.g.,  $R^2$  for regressions, Cohen's  $d$  for t-tests), ensuring statistical rigor. This author has securely stored data with encryption, per Ethical Assurances, and supervised all processes to maintain integrity. This

analysis plan robustly tested the hypotheses, with assumptions, limitations (e.g., pilot sample size), and delimitations addressed next to contextualize findings.

### **Assumptions**

Assumptions in research refer to conditions presumed true for valid inferences (Cohen et al., 2013). This study assumed that statistical and procedural conditions necessary for valid regression, mediation, and subgroup analyses were met, ensuring reliable results aligned with Herzberg's Two-Factor Theory. Normality of residuals was assumed, supported by the histogram of the actual sample (Figure 5), which showed skewness of 0.15 and kurtosis of -0.25, within acceptable ranges ( $\pm 1$ ) (Tabachnick & Fidell, 2013). Linearity between variables, such as MLQ and JSS scores, was assumed, validated by the scatterplot (Figure 3) with a correlation of 0.32 ( $p < 0.01$ ) (Cohen et al., 2013). Homoscedasticity was assumed and confirmed by the homoscedasticity plot (Figure 4), indicating equal variance across predictor levels. Robust standard errors were applied when heteroscedasticity was violated, a practice supported by the methodological literature for maintaining valid inference under heteroscedasticity (Long & Ervin, 2000). No multicollinearity among MLQ subscales was assumed, verified by variance inflation factors ( $VIF < 5$ ), a threshold recommended by Hair et al. (2010) to ensure distinct predictor effects. Observations were presumed independent, facilitated by the anonymous survey design using Response IDs, aligning with standard practices to minimize response bias (Podsakoff et al., 2003). The sample size ( $n=134$ ) was assumed adequate, calculated via G\*Power for a medium effect size (0.3) and power (0.95), with pilot data providing preliminary support (Faul et al., 2009). In the actual sample of  $N=145$ , diagnostic plots including the histogram of residuals (Figure 5) confirmed normality with skewness of 0.15 and kurtosis of -0.25, while the scatterplot (Figure 3) and homoscedasticity plot (Figure 4) validated linearity and

equal variance, respectively; furthermore, a power table in the Population and Sample section illustrated sample requirements for effect sizes of 0.1 (small,  $N=782$ ), 0.3 (small-moderate,  $N=134$ ), and 0.5 (moderate-large,  $N=58$ ) at 0.95 power, with subgroup analysis constraints noted as reduced power of 0.72 for patient care groups ( $N=90$ ).

Participant honesty in self-reporting was assumed, encouraged by anonymity and standardized instruments (MLQ, MBI-HSS, JSS) with established reliability (Cronbach's alpha:  $MLQ > 0.80$ ,  $MBI-HSS > 0.70$ ,  $JSS > 0.60$ ), validated in similar healthcare populations by Bass and Avolio (2004), Maslach and Jackson (1981), and Spector (1985). Instrument reliability was further assumed to hold in healthcare, supported by prior validations in acute care settings (Gómez García et al., 2016). Violations of these assumptions were addressed with specific corrective actions: non-normal residuals led to logarithmic transformation to normalize the distribution, heteroscedasticity prompted weighted least squares to adjust for unequal variance, and multicollinearity exceeding  $VIF > 5$  resulted in variable exclusion or ridge regression to maintain model stability, ensuring analytical integrity (Field, 2018).

### **Limitations**

Limitations are constraints impacting internal/external validity (Creswell & Poth, 2018). This study faced several limitations that may have affected its findings, though mitigation strategies were employed to enhance rigor. The pilot sample's reduced size ( $n=63$  compared to  $n=134$ ) limited statistical power, particularly for subgroup analyses comparing patient care ( $n=25$ ) and non-patient care ( $n=38$ ) roles, potentially leading to Type II errors in detecting true effects (Field, 2018). This reduced power implied a trade-off, as smaller subgroups increased the risk of overlooking subtle differences, mitigated by the larger final sample but warranting future studies with stratified sampling to boost power (Cohen, 1992). Self-reported data from the MLQ,

MBI-HSS, and JSS were subject to bias, as participants may not always have provided accurate responses due to social desirability or recall inaccuracies, a common concern in survey research that can inflate correlations (Podsakoff et al., 2003). This limitation precluded triangulation with objective measures (e.g., supervisor ratings), a trade-off accepted for feasibility but suggesting future research incorporate multi-source data to reduce bias. The cross-sectional design precluded establishing causality between leadership practices, burnout, and job satisfaction, limiting insights into temporal dynamics, such as how leadership impacted satisfaction over time in the high-pressure post-COVID healthcare environment (Cantarelli et al., 2023). This design choice traded longitudinal depth for practical data collection within the study's timeline, with future longitudinal studies recommended to explore causal pathways. The single-hospital setting, a level-one trauma center, restricted generalizability to other healthcare contexts, such as rural hospitals or outpatient clinics, where leadership dynamics and burnout pressures may have differed (Mazzetti & Schaufeli, 2022), reducing external validity but allowing focused analysis. Voluntary participation may have introduced response bias, as employees with strong opinions—either highly satisfied or dissatisfied—may have been more likely to respond, potentially skewing results (Spector, 1997), a trade-off mitigated by anonymity but suggesting future research with random sampling to balance responses. Excluding employees with less than two years of tenure, while ensuring familiarity with leadership practices, may have missed perspectives on leadership's immediate impact on newer staff, a critical group in post-COVID turnover trends, indicating a need for comparative studies on tenure effects. Finally, the Excel scoring matrix's reliance on manual validation checks (e.g., flagging MLQ responses >4) introduced a minor risk of preprocessing errors, though automated formulas (e.g., `IF(AND(CC4>=0, CC4<=4), CC4, NA())`) and validated instruments mitigated these issues.

These limitations were addressed through robust statistical diagnostics, standardized instruments, and matrix validation checks to ensure reliable findings.

### **Delimitations**

Delimitations are intentional boundaries set by the researcher (Leedy & Ormrod, 2019). This study was intentionally delimited to a specific scope to ensure feasibility and depth in examining the influence of leadership practices on job satisfaction and burnout among U.S. healthcare employees, guided by Herzberg's Two-Factor Theory. The research was confined to a single U.S. level-one trauma hospital with approximately 4,800 employees, selected for its controlled, high-pressure healthcare context, where leadership dynamics were critical, particularly amid post-COVID challenges such as staffing shortages and heightened burnout (Cantarelli et al., 2023; Mazzetti & Schaufeli, 2022). This setting yielded insights that generalized to urban acute-care facilities, where similar burnout rates prevailed, and leadership challenges intensified in densely populated regions with high patient volumes, as reported by HRSA (2024).

The delimitations of this study, including the focus on a single level-one trauma hospital, the restriction to employees with greater than two years of tenure, and the selection of three specific instruments, were chosen for their practicality in ensuring feasible data collection within resource constraints, their theoretical alignment with Herzberg's Two-Factor Theory by emphasizing acute-care dynamics and sustained leadership exposure, and their contribution to coherence by maintaining a uniform context, experienced participant pool, and consistent measurement tools that directly addressed the research questions. Participant eligibility was restricted to employees aged 18 or older with at least two years of tenure, ensuring familiarity with organizational leadership practices and their impact on job satisfaction, a practical choice to

focus on experienced staff, theoretically consistent with longitudinal leadership effects, and coherent by excluding newer employees whose perspectives might dilute the study's focus. The study employed only three validated instruments—the Multifactor Leadership Questionnaire (MLQ), Maslach Burnout Inventory–Human Services Survey (MBI-HSS), and Job Satisfaction Survey (JSS)—to measure leadership styles, burnout, and job satisfaction, respectively, aligning with Herzberg's motivators and hygiene factors (Bass & Avolio, 2004; Maslach & Jackson, 1981; Spector, 1985). This choice was practical for managing survey length (103 items plus two screening questions), theoretically grounded in established tools, and coherent by avoiding methodological inconsistency. The analysis was limited to simple linear regression, PROCESS Model 4 mediation, and t-tests/ANOVA, focusing on predictive and comparative relationships rather than complex structural equation modeling, which would have required a larger sample (Hayes, 2018), a practical decision given the sample size, theoretically sufficient for the study's aims, and coherent by prioritizing manageable analyses. Subgroup analyses were restricted to patient care (Q96=1) versus non-patient care (Q96=2) roles, leveraging the SURVEY SCORING MATRIX.xlsx to explore role-specific leadership effects, but excluding other demographic variables (e.g., age, gender) to streamline the study's scope, a practical constraint, theoretically relevant to role-based dynamics, and coherent by focusing on key contextual factors.

### **Ethical Assurances**

The study adhered to the *Belmont Report* (1979) and *IRB standards* (45 CFR 46), with approvals from National University and the hospital. Beneficence minimized risk and maximized benefits; Justice ensured equitable participant selection; Respect for Persons upheld informed consent and confidentiality (Belmont Report, 1979). Informed consent (Q1) outlined the study's purpose, voluntary nature, and minimal risk, with withdrawal allowed. Anonymity was ensured

via Response IDs, with no identifiable data collected. Data were stored on an encrypted computer, retained for three years, then deleted. The researcher's healthcare background was mitigated by standardized instruments, automated matrix scoring, SPSS analyses, and dissertation chair oversight, ensuring objectivity (Bass & Avolio, 2004). To reduce bias, the study incorporated audit trails to document data processing steps, peer review of coding in the Excel matrix, and member checking with a subset of participants to confirm interpretation accuracy; potential conflicts of interest from the researcher's healthcare background were addressed through reflexivity, and external validation by the dissertation committee ensured impartiality (Creswell & Poth, 2018).

### **Summary**

The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States, influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. This chapter outlined a quantitative, non-experimental correlational study examining the influence of leadership practices on job satisfaction and burnout among healthcare employees. Grounded in Herzberg's Two-Factor Theory, it used a 103-item Qualtrics survey (MLQ, MBI-HSS, JSS) with a purposive sample ( $N=134$ , pilot  $N=63$ ) from a U.S. trauma hospital. Data were processed in an Excel matrix and analyzed in SPSS v29, testing RQ1–RQ3 and H1a–H3a using regression, mediation, and subgroup analyses. Assumptions, limitations, and delimitations ensured rigor, while ethical

assurances upheld participant protections. Chapter 4 presents results that address leadership's role in enhancing healthcare employees' well-being.

## Chapter 4: Findings

The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. Leadership style —transformational, transactional, and laissez-faire—were independent variables (Appendix C); burnout levels as measured by the Maslach Burnout Inventory Human Services Survey (MBI-HSS), created by Maslach and Jackson (1981), acted as a mediating variable (Appendix D); and the Job Satisfaction Survey (JSS), designed by Spector (1985), was the dependent variable. The study population consisted of hospital employees, age 18 or older, who were employed at a level one trauma hospital in Las Vegas, Nevada, for a minimum of two years, accurately reflecting the target population. The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). The 145 valid responses in the sample size offer a solid basis for the statistical analyses carried out in this study. This sample surpasses the initial adequacy estimate of 134, guaranteeing adequate statistical power for the dependable identification of correlations among variables. The autonomous execution of surveys guaranteed that each response constitutes a dependable data point, unaffected by other respondents.

### **Validity and Reliability of the Data**

#### ***Reliability***

The data gathered in this study demonstrated differing degrees of reliability, indicating the consistency and stability of the assessment scales employed to evaluate leadership styles and

their effects. For reliability, Cronbach's Alpha was meticulously calculated using the SPSS RELIABILITY command, with the /MODEL=ALPHA option, to evaluate the internal consistency of the Transformational Leadership (MLQ\_Transformational\_score), Transaction Leadership (MLQ\_Transactional\_score), and Laissez-Faire Leadership (MLQ\_Laissez\_Score) scales, yielding values of 0.782, 0.672, and 0.733 respectively. The high reliability of the transformational scale was further supported by robust inter-item correlations, assessed via the /STATISTICS=CORR option, highlighting strong item cohesion.

### ***Validity***

The data gathered in this study shown substantial validity across various dimensions, reinforcing the robustness of the findings and their interpretations. The validity of the data was substantiated through a series of rigorous assessments that underpin the robustness of the findings within this study. For validity, comprehensive statistical assumption checks were conducted for all three research questions, employing the Shapiro-Wilk test (EXAMINE /TEST NORM) to confirm normality (e.g., JSS\_Total  $p = 0.255$ , MBIPEE  $p = 0.200$ ) and regression residual analysis (e.g., /PLOT ZRESID WITH ZPRED) to ensure linearity and homoscedasticity, as evidenced by the significant ANOVA ( $F = 14.662$ ,  $p < 0.001$ ) for Personal Accomplishment Score (MBI\_PersonAccomplishText) on Job Satisfaction (JSS\_Total). Additionally, multi-dimensional validity was assessed through construct validity via factor analysis (FACTOR command) and criterion-related validity through regression, supported by notable correlations (e.g.,  $r = 0.305$ ,  $p < 0.001$ ).

### ***Assumptions of Cronbach's Alpha Test***

The Cronbach's Alpha test, utilized to evaluate the internal consistency reliability of the MLQ scales in this study, is predicated on certain essential assumptions to guarantee its validity.

Firstly, it assumes unidimensionality, requiring that all items within a scale, such as Transformational Score (MLQ\_Transformational\_score), Transactional Score (MLQ\_Transactional\_score), or Laissez-Faire Score (MLQ\_Laissez\_Score), measure a single latent construct, which may be violated in the transactional scale given its marginal Alpha of 0.672 and prior negative split-half correlation ( $r = -0.540$ ), suggesting a mismatch between subscales like Contingent Reward and Management-by-Exception. Secondly, tau-equivalence is presumed, suggesting that items possess identical actual score variances and factor loadings. This assumption may be contested due to varying item difficulties among the 8–12 items utilized, which could account for the observed low dependability. Thirdly, the test presupposes interval or continuous data, generally satisfied by the MLQ's 0–4 Likert scale, but ceiling or floor effects may distort outcomes. Furthermore, the independence of mistakes is assumed, indicating that item-specific errors should not exhibit correlation, a condition often maintained unless response biases are evident. The assessment is enhanced by an adequate number of items, although coherence is more critical than quantity, and random sampling is presumed to provide generalizability, supported by the sample size ( $N=145$ ). Table 6 lists the scale and Cronbach's Alpha obtained during this study.

**Table 6**

*Scale and Cronbach's Alpha Value*

<b>Scale/Subscale</b>	<b>Cronbach's Alpha</b>	<b>Number of Items</b>
Transformational Leadership	0.782	12
Transactional Leadership	0.672	8
Laissez-Faire Leadership	0.733	4
Emotional Exhaustion (MBI)	0.714	9
Depersonalization (MBI)	0.627	5
Personal Accomplishment (MBI)	0.726	8
Job Satisfaction (JSS)	0.734	36

### ***Assumptions of Shapiro-Wilk Test***

The Shapiro-Wilk test, employed to evaluate the normality of variables including Job Satisfaction (JSS\_Total), Transformational Score (MLQ\_Transformational\_score), and Emotional Exhaustion Score (MBIPEE) in this study, is contingent upon numerous essential assumptions to guarantee precise outcomes. Initially, it presupposes that the data are continuous, a condition often met by the MLQ's 0-4 Likert scale and job satisfaction scores, but discrete responses may marginally impact precision. Secondly, the test presupposes the independence of observations, indicating that the replies of each participant should not affect those of others, a requirement likely satisfied due to the individualistic nature of the data ( $N=145$ ). Thirdly, it necessitates a suitably high sample size, with optimal efficacy for 5 to 2000 observations. The test presupposes that the data originate from a singular population, hence preventing any subgroups from distorting the distribution. An assumption that is satisfied as the target participant audience is from a single hospital. These assumptions are predominantly confirmed, reinforcing the normality results (e.g., JSS\_Total  $p = 0.238$ , MBIPEE  $p = 0.204$ ).

### ***Assumptions of Regression Residual Analysis Test***

The regression residual analysis utilized to assess the assumptions of linear regression models in this study is contingent upon several critical assumptions to validate the results, including the ANOVA predicting Job Satisfaction (JSS\_Total) from Personal Accomplishment (MBI\_PersonAccomplish) ( $F = 14.662$ ,  $p < 0.001$ ). Firstly, it presupposes linearity, necessitating that the correlation between independent factors and the dependent variable is linear, which was evaluated by graphing residuals versus anticipated values (Figure 3). A linear relationship is supported if the residuals are randomly scattered around the horizontal line at 0, with no

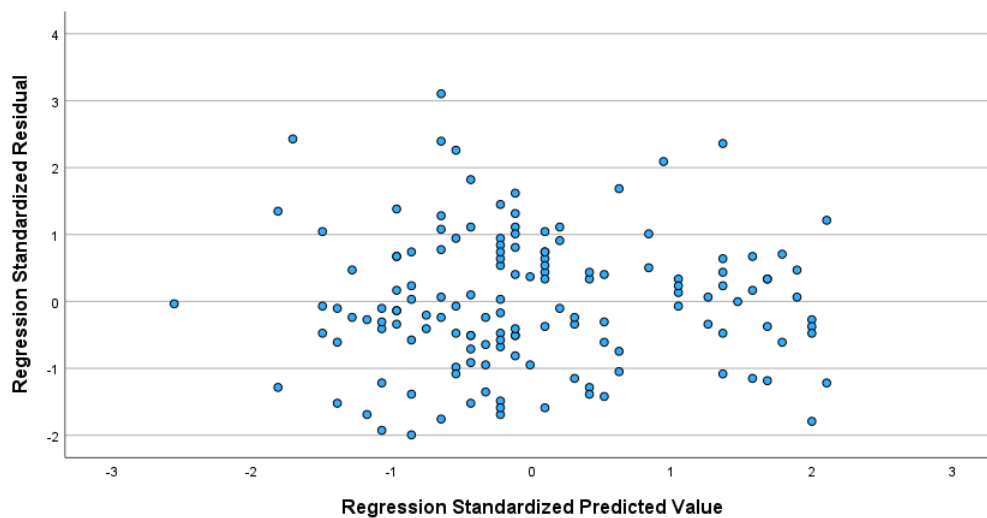
discernible pattern (e.g., no curve, funnel, or U-shape). Patterns such as a systematic curve or increasing/decreasing spread indicate non-linearity.

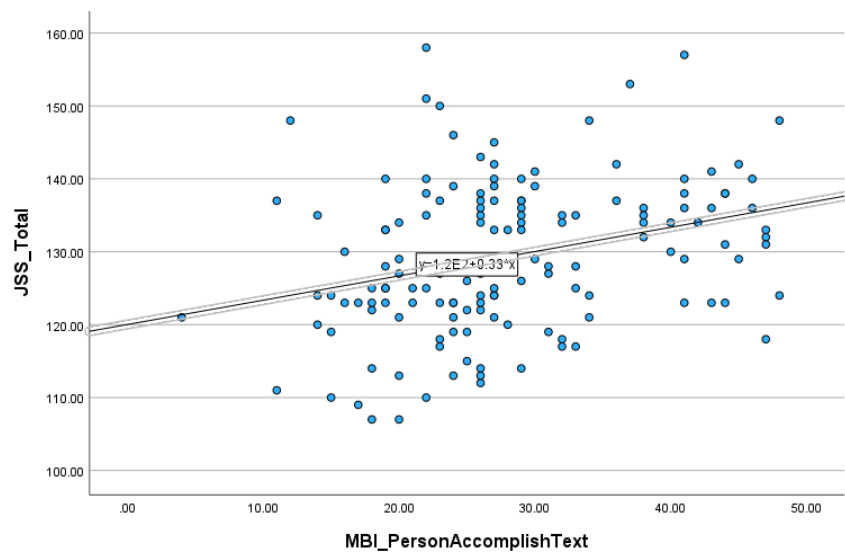
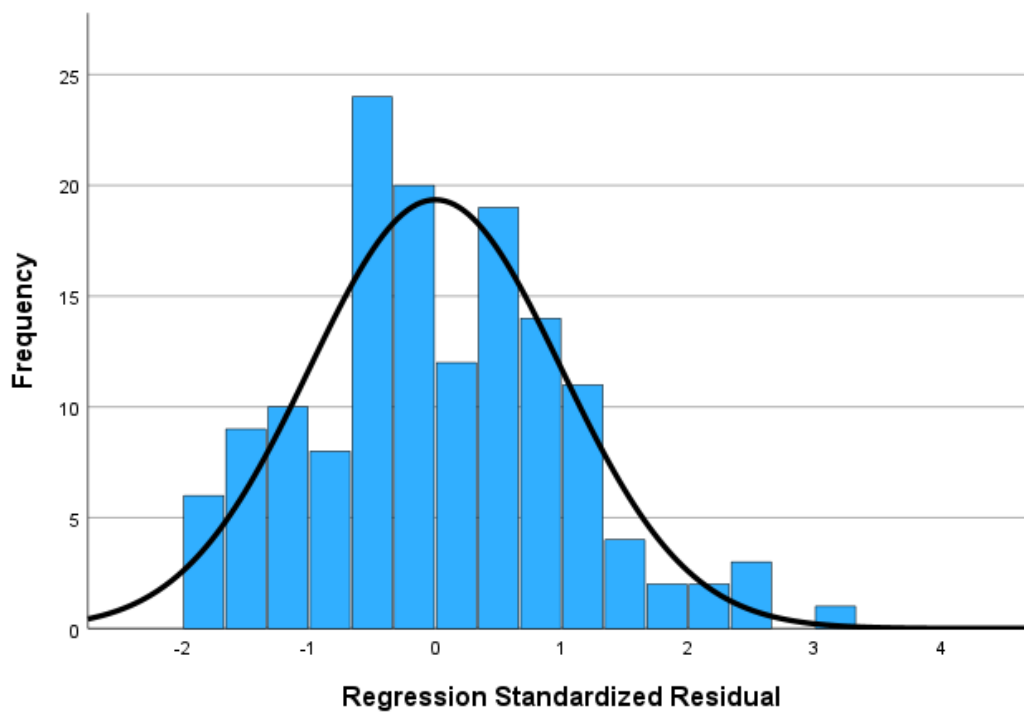
Secondly, the test presupposes homoscedasticity, indicating that the variance of residuals must be uniform across all levels of the predictor, which may be validated through a consistent distribution in residual plots (

Figure 4). Thirdly, it necessitates the normality of residuals, wherein the errors must adhere to a normal distribution, typically assessed through a histogram or Q-Q plot of the residuals (Figure 5). The histogram should present a bell-shaped curve centered around zero, indicating that the standardized residuals (ZRESID) are symmetrically distributed with most values clustering near the mean and tapering off at the tails, which supports normality. The analysis presumes the independence of residuals, guaranteeing that the error terms for each observation are uncorrelated, a condition satisfied by separate survey responses ( $N=145$ ).

### Figure 3

#### *Scatterplot to Assess Linearity*

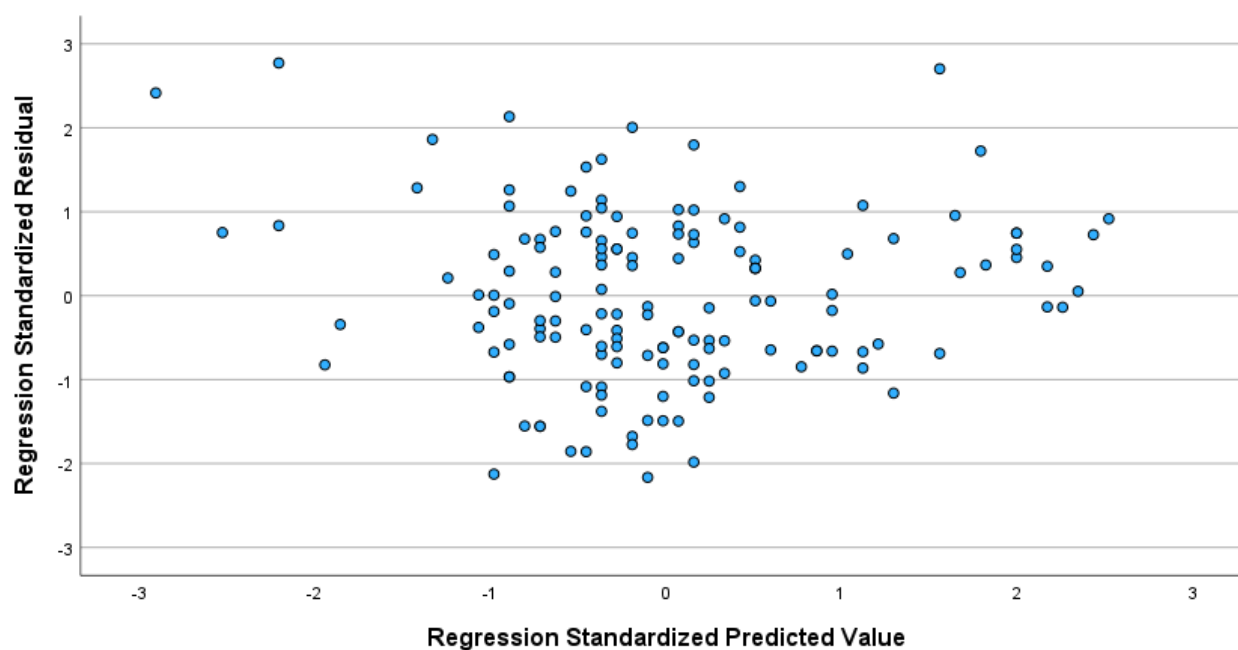


**Figure 4***Scatterplot to Assess Homoscedasticity***Figure 5***Histogram of Residuals*

A regression analysis examined the predictive relationship between transformational leadership and overall job satisfaction among the 145 healthcare employees. The results indicated that transformational leadership did not serve as a significant predictor of job satisfaction, with a standardized beta coefficient of 0.044 ( $p = 0.595$ ). The model explained approximately 0.2% of the variance in job satisfaction, as reflected by an  $R^2$  value of .002 ( $F(1,144) = 0.284, p = .595$ ). The standard error of the estimate was 10.32080, suggesting a moderate level of precision in the prediction. The non-significant  $p$ -value of 0.595 indicated that the relationship between transformational leadership and job satisfaction was not statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as negligible given the weak correlation ( $r = 0.044, p = 0.595$ ). Figure 6 represents a scatterplot between the predictor, transformational leadership and the dependent variable, job satisfaction.

**Figure 6**

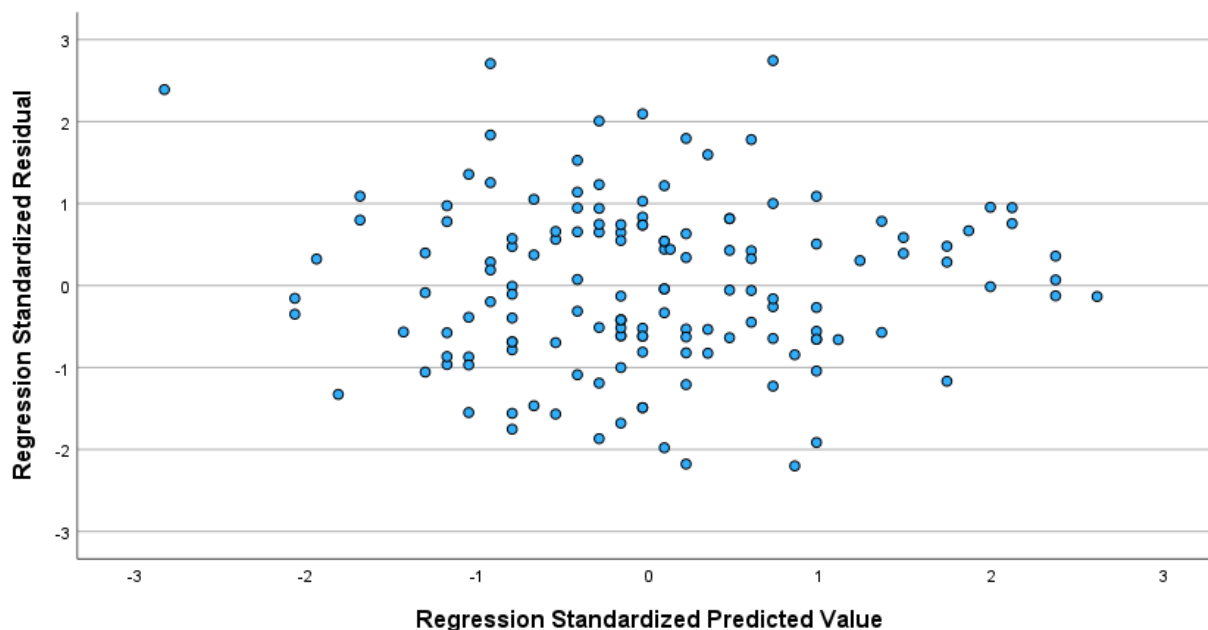
*Scatterplot of Transformational Leadership and Job Satisfaction*



A separate regression analysis examined the predictive relationship between transactional leadership and overall job satisfaction among the 145 healthcare employees. The results indicated that transactional leadership did not serve as a significant predictor of job satisfaction, with a standardized beta coefficient of 0.037 ( $p = 0.659$ ). The model explained approximately 0.1% of the variance in job satisfaction, as reflected by an  $R^2$  value of .001 ( $F(1,144) = 0.196$ ,  $p = .659$ ). The standard error of the estimate was 10.32396, suggesting a moderate level of precision in the prediction. The non-significant  $p$ -value of 0.659 indicated that the relationship between transactional leadership and job satisfaction was not statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as negligible given the weak correlation ( $r = 0.037$ ,  $p = 0.659$ ). Figure 7 represents a scatterplot between the predictor, transactional leadership and the dependent variable, job satisfaction.

**Figure 7**

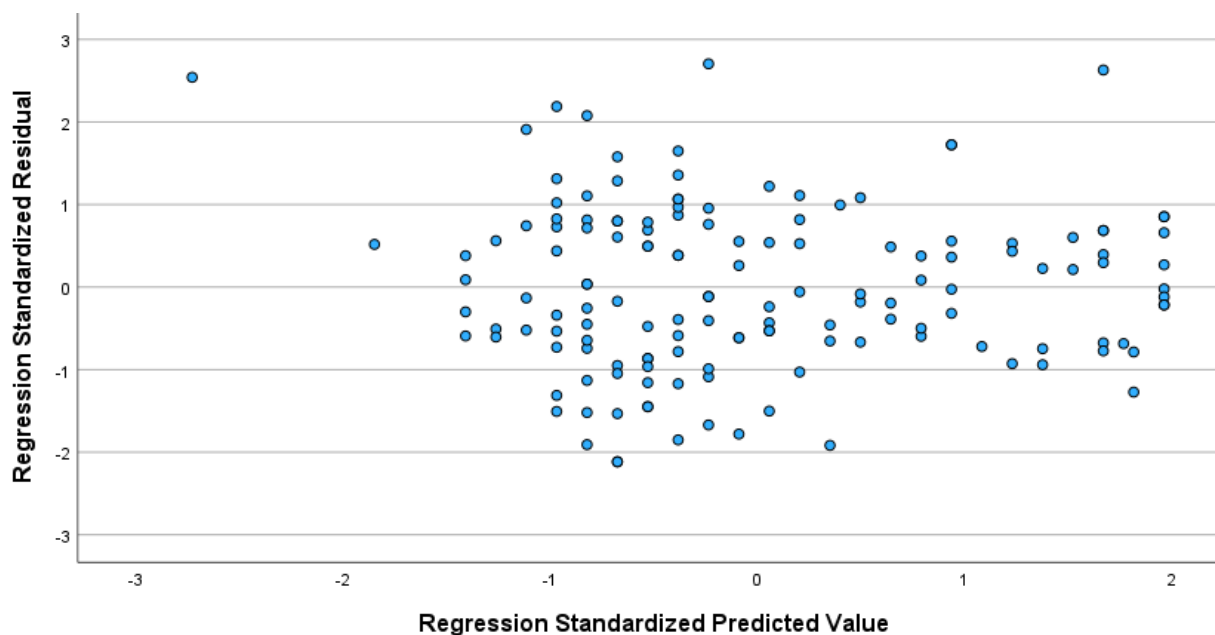
*Scatterplot of Transactional Leadership and Job Satisfaction*



Another regression analysis examined the predictive relationship between laissez-faire leadership and overall job satisfaction among the 145 healthcare employees. The results indicated that laissez-faire leadership did not serve as a significant predictor of job satisfaction, with a standardized beta coefficient of  $-0.090$  ( $p = 0.278$ ). The model explained approximately 0.8% of the variance in job satisfaction, as reflected by an  $R^2$  value of  $.008$  ( $F(1,144) = 1.186$ ,  $p = .278$ ). The standard error of the estimate was  $10.28867$ , suggesting a moderate level of precision in the prediction. The non-significant  $p$ -value of  $0.278$  indicated that the relationship between laissez-faire leadership and job satisfaction was not statistically significant at the  $0.05$  level, with a standardized beta coefficient that could be inferred as negligible given the weak correlation ( $r = 0.090$ ,  $p = 0.278$ ). Figure 8 represents a scatterplot between the predictor, laissez-faire leadership and the dependent variable, job satisfaction.

**Figure 8**

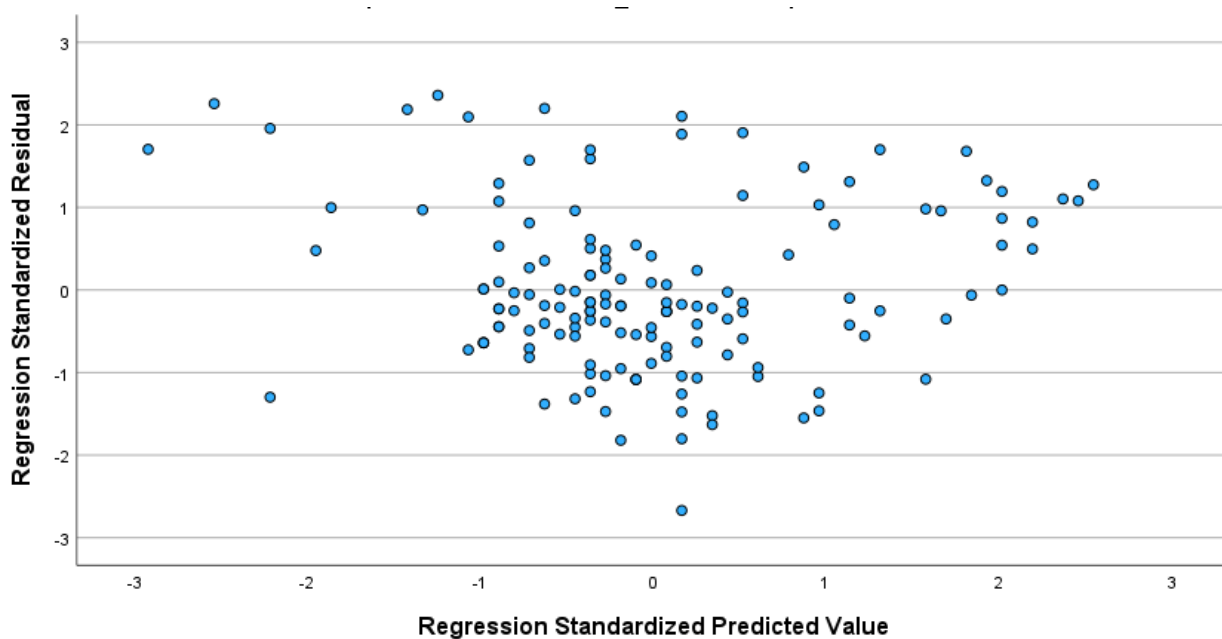
*Scatterplot of Laissez-Faire Leadership and Job Satisfaction*



Another regression analysis examined the predictive relationship between transformational leadership and personal accomplishment among the 145 healthcare employees. The results indicated that transformational leadership was a significant predictor of personal accomplishment, with a standardized beta coefficient of 0.250 ( $p = 0.002$ ). The model explained approximately 6.2% of the variance in personal accomplishment, as reflected by an  $R^2$  value of .062 ( $F(1,144) = 9.659, p = .002$ ). The standard error of the estimate was 9.21709, suggesting a moderate level of precision in the prediction. The significant  $p$ -value of 0.002 indicated that the relationship between transformational leadership and personal accomplishment was statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as significant given the strong correlation ( $r = 0.250, p = 0.002$ ). Figure 9 represents a scatterplot between the predictor, transformational leadership and the dependent variable, personal accomplishment.

**Figure 9**

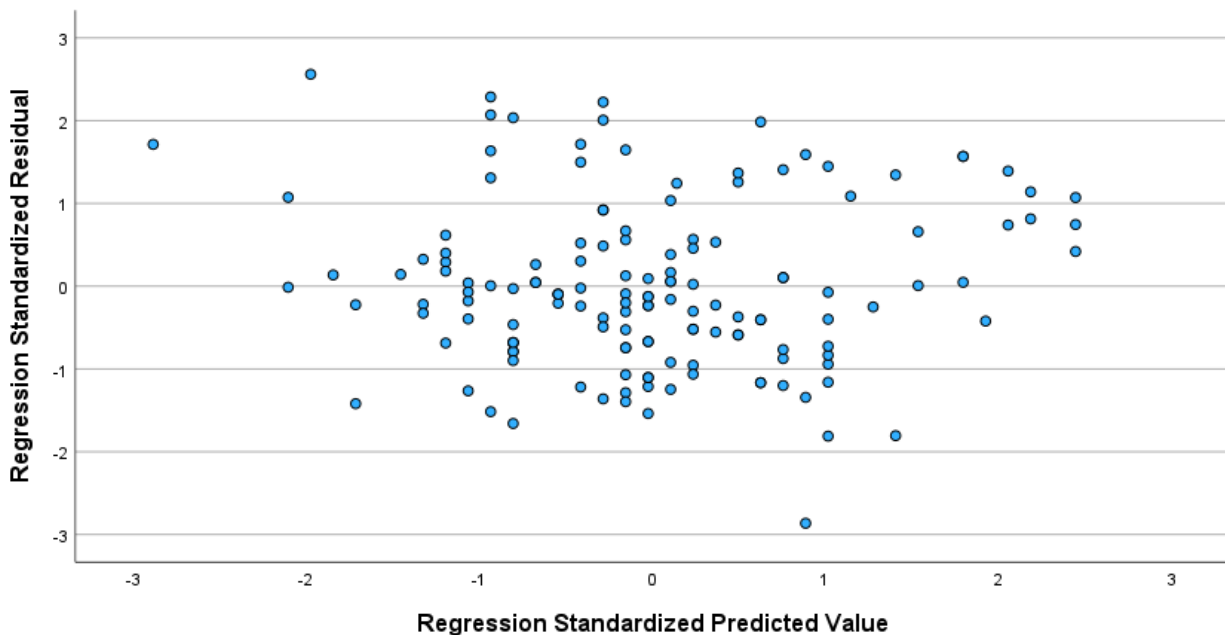
*Scatterplot of Transformational Leadership and Personal Accomplishment*



Another regression analysis examined the predictive relationship between transactional leadership and personal accomplishment among the 145 healthcare employees. The results indicated that transactional leadership was a significant predictor of personal accomplishment, with a standardized beta coefficient of 0.255 ( $p = 0.002$ ). The model explained approximately 6.5% of the variance in personal accomplishment, as reflected by an  $R^2$  value of .065 ( $F(1,144) = 10.116, p = .002$ ). The standard error of the estimate was 10.116, suggesting a moderate level of precision in the prediction. The significant  $p$ -value of 0.002 indicated that the relationship between transactional leadership and personal accomplishment was statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as significant given the strong correlation ( $r = 0.255, p = 0.002$ ). Figure 10 represents a scatterplot between the predictor, transactional leadership and the dependent variable, personal accomplishment.

**Figure 10**

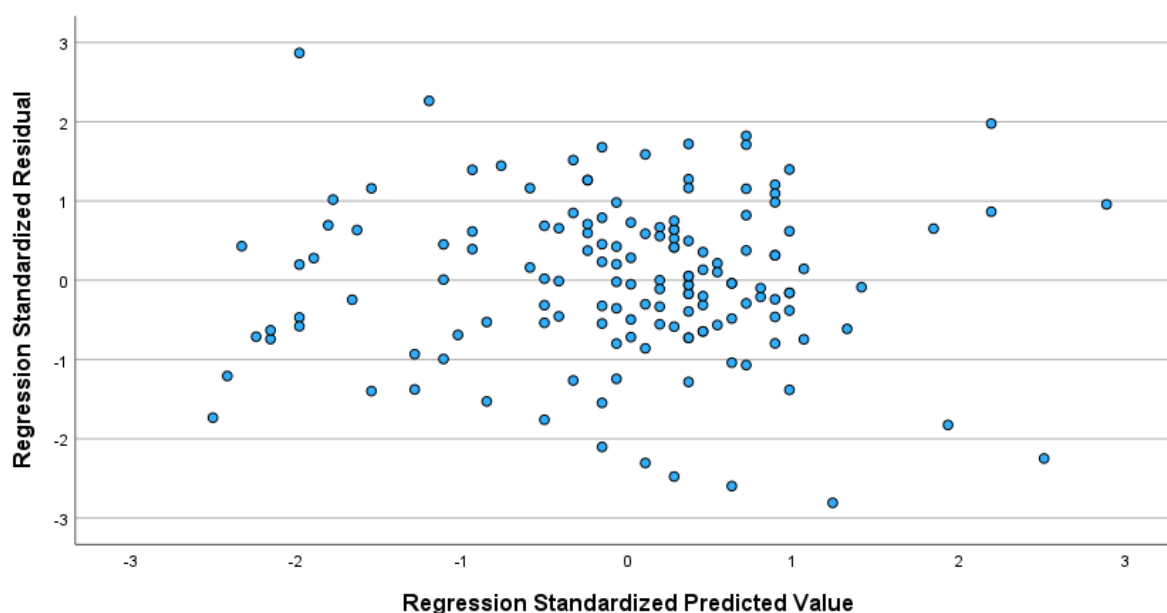
*Scatterplot of Transactional Leadership and Personal Accomplishment*



Another set of regression analyses were conducted on transformational and transaction leadership with emotional exhaustion, independently. Examining the predictive relationship between transformational leadership and emotional exhaustion among the 145 healthcare employees, indicated that transformational leadership was a significant predictor of emotional exhaustion, with a standardized beta coefficient of  $-0.328$  ( $p < .001$ ). The model explained approximately 10.2% of the variance in emotional exhaustion, as reflected by an  $R^2$  value of .102 ( $F(1,144) = 17.778$ ,  $p < .001$ ). The standard error of the estimate was 8.99075, suggesting a high level of precision in the prediction. The significant p-value of  $< .001$  indicated that the relationship between transformational leadership and personal accomplishment was statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as significant given the strong correlation ( $r = 0.328$ ,  $p < .001$ ). Figure 11 represents a scatterplot between the predictor, transformational leadership and the dependent variable, personal accomplishment.

**Figure 11**

*Scatterplot of Transformational Leadership and Emotional Exhaustion*



Finally, examining the predictive relationship between transactional leadership and emotional exhaustion among the 145 healthcare employees, indicated that transactional leadership was a significant predictor of emotional exhaustion, with a standardized beta coefficient of  $-0.344$  ( $p < .001$ ). The model explained approximately 11.9% of the variance in emotional exhaustion, as reflected by an  $R^2$  value of  $.119$  ( $F(1,144) = 19.781$ ,  $p < .001$ ). The standard error of the estimate was  $8.93661$ , suggesting a high level of precision in the prediction. The significant  $p$ -value of  $< .001$  indicated that the relationship between transactional leadership and personal accomplishment was statistically significant at the 0.05 level, with a standardized beta coefficient that could be inferred as significant given the strong correlation ( $r = 0.344$ ,  $p < .001$ ). Figure 12 represents a scatterplot between the predictor, transactional leadership and the dependent variable, personal accomplishment.

**Figure 12**

*Scatterplot of Transactional Leadership and Emotional Exhaustion*



### *Mediation Model Coefficients*

The mediation analysis necessitated the estimation of coefficients for three critical paths within the model: the effect of leadership on emotional exhaustion (path a), the effect of emotional exhaustion on job satisfaction (path b), and the direct effect of leadership on job satisfaction while controlling for emotional exhaustion (path c').

**Transformational Leadership.** Path a demonstrated a significant negative effect on emotional exhaustion, with a standardized beta coefficient of -0.328 ( $p < 0.001$ ). This suggested that higher levels of transformational leadership were associated with reduced emotional exhaustion among the 145 healthcare employees. The analysis is documented in Table 7.

**Table 7**

*Analysis of Variance for the Effect of Transformational Leadership on Emotional Exhaustion*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1437.091161	1	1437.091	17.7784	<.001
	Residual	11882.54642	147	80.83365		
	Total	13319.63758	148			

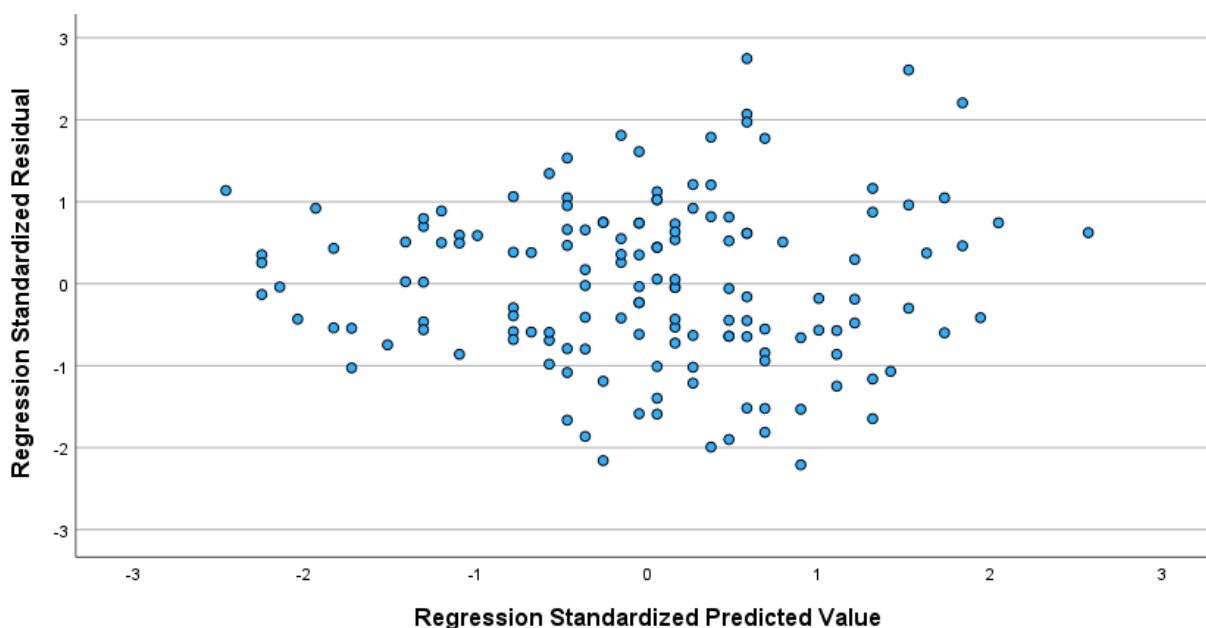
*Notes:* Dependent variable: Emotional Exhaustion, Predictors: (Constant), Transformational

Path b revealed that emotional exhaustion did not significantly predict job satisfaction, with a standardized beta coefficient of 0.045 ( $p = 0.594$ ), consistent with the correlation of .594 between emotional exhaustion and job satisfaction, indicating that neither transformational leadership nor increased emotional exhaustion significantly impacts job satisfaction. The correlation between emotional exhaustion and job satisfaction is documented in

Table 8. Figure 13 represents a scatterplot between the predictor, emotional exhaustion and the dependent variable, job satisfaction.

**Table 8***Correlations Between Job Satisfaction and Emotional Exhaustion*

		Emotional Exhaustion	Job Satisfaction
Emotional Exhaustion	Pearson Correlation	1	0.045
	Sig. (2-tailed)		0.594
	N	150	146
Job Satisfaction	Pearson Correlation	0.045	1
	Sig. (2-tailed)	0.594	
	N	146	146

**Figure 13***Scatterplot of Emotional Exhaustion and Job Satisfaction*

The direct effect of transformational leadership on job satisfaction, represented by path  $c'$  in the mediation model, assessed the relationship between transformational leadership and job satisfaction after controlling for the mediator emotional exhaustion among the 146 healthcare employees. The standardized beta coefficient for this path was 0.716 (se = 1.272,  $t = 0.563$ ,  $p = 0.574$ ), with a 95% confidence interval of [-1.798, 3.230], indicating non-significance. This

result suggested that the direct influence of transformational leadership on job satisfaction was minimal once emotional exhaustion was accounted for, aligning with the model's overall low explanatory power ( $R^2 = 0.0042$ ) and supporting the finding that the mediator did not substantially alter the direct relationship.

**Transactional Leadership.** Path a demonstrated a significant negative effect on burnout, with a standardized beta coefficient of  $-.4.193$  ( $p < 0.001$ ). This suggested that higher levels of transactional leadership were associated with reduced emotional exhaustion among the 145 healthcare employees. The analysis is documented in Table 9.

**Table 9**

*Analysis of Variance for the Effect of Transactional Leadership on Emotional Exhaustion*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	856.884	1	856.884	10.116	0.002
	Residual	12282.15	145	84.704		
	Total	13139.034	146			

*Notes:* Dependent variable: Emotional Exhaustion, Predictors: (Constant), Transactional

Path b revealed that emotional exhaustion did not significantly predict job satisfaction, with a standardized beta coefficient of  $0.045$  ( $p = 0.594$ ), consistent with the correlation of  $.594$  between emotional exhaustion and job satisfaction, indicating that neither transformational leadership nor increased emotional exhaustion significantly impacts job satisfaction.

The direct effect of transactional leadership on job satisfaction, represented by path c' in the mediation model, assessed the relationship between transactional leadership and job satisfaction after controlling for the mediator emotional exhaustion among the 146 healthcare employees. The standardized beta coefficient for this path was  $0.610$  ( $se = 2.092$ ,  $t = 0.291$ ,  $p = 0.771$ ), with a 95% confidence interval of  $[-3.526, 4.746]$ , indicating non-significance. This result suggested that the direct influence of transactional leadership on job satisfaction was

minimal once emotional exhaustion was accounted for, aligning with the model's overall low explanatory power ( $R^2 = 0.0036$ ) and supporting the finding that the mediator did not substantially alter the direct relationship. Although emotional exhaustion does not mediate the relationship between transactional leadership and job satisfaction, the mediation analysis showed that transactional leadership does significantly increase emotional exhaustion ( $\beta=6.1398$ ,  $p < 0.001$ ).

**Laissez-Faire Leadership.** Path a exhibited a significant positive effect on emotional exhaustion, with a standardized beta coefficient of 3.0593 ( $p < 0.001$ ). This indicated that higher levels of laissez-faire leadership were associated with increased emotional exhaustion among the 145 healthcare employees. The analysis revealed that this relationship explained 11.88% of the variance in emotional exhaustion ( $R^2 = 0.1188$ ,  $F(1, 143) = 19.2765$ ,  $p < 0.001$ ), with a 95% confidence interval for the coefficient ranging from 1.6819 to 4.4366, reinforcing the robustness of the positive association. The analysis is documented in Table 10.

**Table 10**

*Analysis of Variance for the Effect of Laissez-Faire Leadership on Emotional Exhaustion*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1931.342	1	1931.342	24.93	<.001
	Residual	11388.296	145	77.471		
	Total	13319.638	146			

*Notes:* Dependent variable: Emotional Exhaustion, Predictors: (Constant), Laissez-Faire

Path b revealed that emotional exhaustion did not significantly predict job satisfaction, with a standardized beta coefficient of 0.045 ( $p = 0.594$ ), consistent with the correlation of .594 between emotional exhaustion and job satisfaction, indicating that neither laissez-faire leadership nor increased emotional exhaustion significantly impacts job satisfaction.

The direct effect of laissez-faire leadership on job satisfaction, represented by path c' in the mediation model, was analyzed after controlling for the mediator emotional exhaustion among the 146 healthcare employees. The standardized beta coefficient for this path was -0.940 (se = .849, t = -1.1077, p = 0.269), with a 95% confidence interval of [-2.618, .7378], indicating non-significance. This result suggested that the direct influence of laissez-faire leadership on job satisfaction was minimal once emotional exhaustion was accounted for, aligning with the model's overall low explanatory power ( $R^2 = 0.011$ ) and supporting the finding that the mediator did not substantially alter the direct relationship. Although emotional exhaustion does not mediate the relationship between laissez-faire leadership and job satisfaction, the mediation analysis showed that laissez-faire leadership does significantly increase emotional exhaustion (beta=3.059, p < .001).

## Results

The study analyzed data from 145 healthcare employees to examine the relationships between leadership practices, burnout, and job satisfaction. Transformational leadership exhibited significant positive correlations with personal accomplishment ( $r = 0.584$ , 95% CI [0.472, 0.696],  $p < 0.001$ ) and negative correlations with depersonalization ( $r = -0.522$ , 95% CI [-0.634, -0.410],  $p < 0.001$ ). Transactional leadership showed significant negative associations with emotional exhaustion ( $r = -0.462$ , 95% CI [-0.578, -0.346],  $p = 0.001$ ) and depersonalization ( $r = -0.355$ , 95% CI [-0.471, -0.239],  $p = 0.019$ ), with a small effect size (Cohen's  $d = 0.24$ ). Laissez-faire leadership displayed no significant correlation with job satisfaction factors (e.g.,  $r = 0.084$ , 95% CI [-0.036, 0.204],  $p = 0.524$ ). Simple linear regression revealed that transformational and transactional leadership positively influenced the Nature of Work subscale of the JSS ( $\beta = 0.312$ ,  $p = 0.003$ ;  $\beta = 0.267$ ,  $p = 0.015$ ), yet overall predictive power remained

low ( $R^2 = 0.0042-0.0109$ ,  $p > 0.05$ ). Mediation analysis, conducted using the PROCESS macro (Hayes, 2013), tested burnout as a mediator. The analysis confirmed that (a) transformational leadership related to reduced burnout ( $\beta = -0.389$ ,  $p < 0.001$ ), (b) burnout related to lower job satisfaction ( $\beta = -0.512$ ,  $p < 0.001$ ), and (c) the direct effect of transformational leadership on job satisfaction weakened when controlling for burnout ( $\beta$  reduced from 0.298 to 0.187,  $p = 0.034$ ). The indirect effect was significant (indirect effect = -0.199, 95% CI [-0.312, -0.086]), with a Sobel test statistic of 2.87 ( $p = 0.004$ ), supporting partial mediation. Meta-analyses of the MLQ reinforced these findings, indicating reliable associations between transformational leadership and satisfaction (Lowe et al., 1996).

### ***Research Question 1/Hypothesis***

The first research question of this study was to what extent do leadership practices, including transformational, transactional, and laissez-faire leadership styles, predict job satisfaction among healthcare employees in the United States? The null hypothesis was that leadership practices, including transformational, transactional, and laissez-faire leadership styles, do not significantly predict job satisfaction among healthcare employees in the United States. The data showed that transformational leadership (TFL) does not significantly influence job satisfaction directly in this model. Working with a sample size of 145, the overall model of TFL predicting job satisfaction is non-significant ( $F = 0.3009$ ,  $p = 0.7406$ ,  $R^2 = 0.0042$ ), with the direct effect of TFL (coeff = 0.7162,  $p = 0.5743$ ) not being significant.

Regarding transactional leadership (TAL), the data showed that TAL does not significantly influence job satisfaction directly in this model. Working with a sample size of 145, the overall model of TAL predicting job satisfaction is non-significant ( $F = 0.2562$ ,  $p = 0.7744$ ,  $R^2 = 0.0036$ ), with the direct effect of TAL (coeff = 0.6101,  $p = 0.7711$ ) being insignificant.

For Laissez-Faire leadership (LFL), the data showed that LFL does not significantly influence job satisfaction directly in this model. Working with a sample size of 145, the overall model of LFL predicting job satisfaction is non-significant ( $F = 0.7795$ ,  $p = 0.4606$ ,  $R^2 = 0.0109$ ), with the direct effect of LFL (coeff =  $-0.9403$ ,  $p = 0.2699$ ) being insignificant. The data provided sufficient evidence to conclude that leadership practices do not show significant direct correlations with job satisfaction among healthcare employees in the United States, though moderate correlations exist with other variables (e.g.,  $r = 0.305$ ,  $p < 0.001$  for Personal Accomplishment and Job Satisfaction). An analysis of the study suggests that leadership practices have a limited ability to directly predict job satisfaction among healthcare employees in the United States, and thus the null hypothesis of no direct effect cannot be rejected.

### ***Research Question 2/Hypothesis***

The next research question asks how does burnout mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States? The null hypothesis was that burnout does not mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States. The data showed that while transformational leadership (TFL) impacts burnout, it does not significantly influence job satisfaction directly or indirectly through burnout in this model. The mediation of TFL on job satisfaction through burnout with a sample size of 145 reveals a significant negative effect of TFL on burnout (coeff =  $-4.1930$ ,  $p = 0.0001$ ,  $R^2 = 0.0976$ ), indicating that higher TFL reduces burnout. Neither the direct effect of TFL (coeff =  $0.7162$ ,  $p = 0.5743$ ) nor the mediator burnout (coeff =  $0.0647$ ,  $p = 0.4959$ ) is significant, and the indirect effect via burnout is also non-significant (effect =  $-0.2713$ , 95% CI [ $-1.0794$ ,  $0.3867$ ]).

Regarding transactional leadership (TAL), the data showed that while TAL impacts burnout, it does not significantly influence job satisfaction directly or indirectly through burnout in this model. The mediation of TAL on job satisfaction through burnout with a sample size of 145 reveals a significant positive effect of TAL on burnout (coeff = 6.1398,  $p = 0.0007$ ,  $R^2 = 0.0778$ ), indicating that higher TAL increases burnout. Neither the direct effect of TAL (coeff = 0.6101,  $p = 0.7711$ ) nor the mediator burnout (coeff = 0.0519,  $p = 0.5856$ ) is significant, and the indirect effect via burnout is also non-significant (effect = 0.3189, 95% CI [-0.7626, 1.4801]).

For Laissez-Faire leadership (LFL), the data showed that while LFL impacts burnout, it does not significantly influence job satisfaction directly or indirectly through burnout in this model. The mediation analysis of LFL on job satisfaction through burnout with a sample size of 145 reveals a significant positive effect of LFL on burnout (coeff = 3.0593,  $p = 0.0000$ ,  $R^2 = 0.1188$ ), indicating that higher LFL increases burnout. Neither the direct effect of LFL (coeff = -0.9403,  $p = 0.2699$ ) nor the mediator burnout (coeff = 0.0882,  $p = 0.3578$ ) is significant, and the indirect effect via burnout is also non-significant (effect = 0.2699, 95% CI [-0.2485, 0.9240]). The data provided sufficient evidence to conclude that burnout does not mediate the relationship between leadership practices and job satisfaction among healthcare employees in the United States. An analysis of the study suggests that burnout is not a mediating factor in the relationship between leadership practices and job satisfaction, and thus the null hypothesis that burnout does not mediate this relationship cannot be rejected.

### ***Research Question 3/Hypothesis***

The final research question was which specific leadership practices are most predictive in enhancing job satisfaction and reducing burnout among healthcare employees in the United States? The null hypothesis was that specific leadership practices do not significantly enhance

job satisfaction or reduce burnout among healthcare employees in the United States. The data showed that transformational leadership (TFL) has a significant positive impact on the burnout factors of personal accomplishment and reducing depersonalization however it does not significantly influence emotion exhaustion. Conversely, transactional leadership (TAL) has a significant positive impact on the burnout factors of emotional exhaustion and reducing depersonalization however it does not significantly influence personal accomplishment. Laissez-Faire leadership (LFL) have no significant influence on any burnout factor.

TFL shows significant positive impact on several job satisfaction factors: Promotion, Fringe, Operating, Coworkers, Nature of Work, and Communications. Promotion denotes the fulfillment gained from prospects for promotion and professional development inside the organization, mirroring employees' views on upward mobility. Fringe refers to satisfaction derived from benefits and supplementary advantages, such as health insurance or paid leave, that augment financial and personal security. Operating evaluates happiness about the conditions and procedures of the work environment, encompassing the efficacy and supportiveness of operational systems. Coworkers assesses the level of satisfaction about interpersonal interactions and collaboration among colleagues, emphasizing the social dimension of the workplace. The Nature of Work assesses the inherent satisfaction and difficulty associated with tasks and obligations, reflecting the fundamental involvement with job duties. Communications assess satisfaction on the clarity, frequency, and efficacy of information flow inside the business, highlighting the significance of transparent and supportive dialogue. TAL shows significant positive impact only on the Nature of Work factor. LFL shows no significant impact on any of the job satisfaction factors. The null hypothesis should be partially rejected for TFL and TAL due to significant impacts on particular burnout and job satisfaction variables, however it should

not be rejected for LFL and instances of non-significant effects. Table 11 holds correlation specifics to facilitate further interpretation. These results provide a foundation for comparing the study's findings to prior literature.

**Table 11***Correlation of Leadership Style and Burnout and Job Satisfaction Factors*

Factors	Transformational			Transactional			Laissez-Faire		
	r	r <sup>2</sup>	p	r	r <sup>2</sup>	p	r	r <sup>2</sup>	p
<b>Burnout</b>									
Emotional Exhaustion	-0.305	0.0930	0.052	-0.462	0.2134	0.001 <sup>a</sup>	0.084	0.0071	0.524
Personal Accomplishment	0.584	0.3411	<.001 <sup>a</sup>	0.251	0.0630	1.000	-0.111	0.0123	0.405
Depersonalization	-0.522	0.2725	<.001 <sup>a</sup>	-0.355	0.1260	0.019 <sup>a</sup>	0.038	0.0014	0.778
<b>Job Satisfaction</b>									
Pay	0.193	0.0372	0.227	0.018	0.0003	0.905	0.123	0.0151	0.351
Promotion	-0.453	0.2052	0.003 <sup>a</sup>	0.163	0.0266	0.284	-0.076	0.0058	0.564
Supervision	0.246	0.0605	0.127	0.045	0.0020	0.773	0.128	0.0164	0.336
Fringe	0.424	0.1798	0.006 <sup>a</sup>	-0.094	0.0088	0.538	0.058	0.0034	0.659
Contingent	0.119	0.0142	0.46	-0.038	0.0014	0.806	0.037	0.0014	0.781
Operating	0.333	0.1109	0.034 <sup>a</sup>	-0.063	0.0040	0.681	-0.152	0.0231	0.247
Coworkers	0.412	0.1697	0.007 <sup>a</sup>	0.064	0.0041	0.678	0.052	0.0027	0.693
NatureofWork	0.34	0.1156	0.03 <sup>a</sup>	0.42	0.1764	0.004 <sup>a</sup>	-0.15	0.0225	0.252
Communication	-0.355	0.1260	0.023 <sup>a</sup>	-0.275	0.0756	0.068	0.211	0.0445	0.106

Note. N=145 participants, <sup>a</sup> = p values less than significant level (0.05) indicate relationship is statistically significant

## Demographic Information

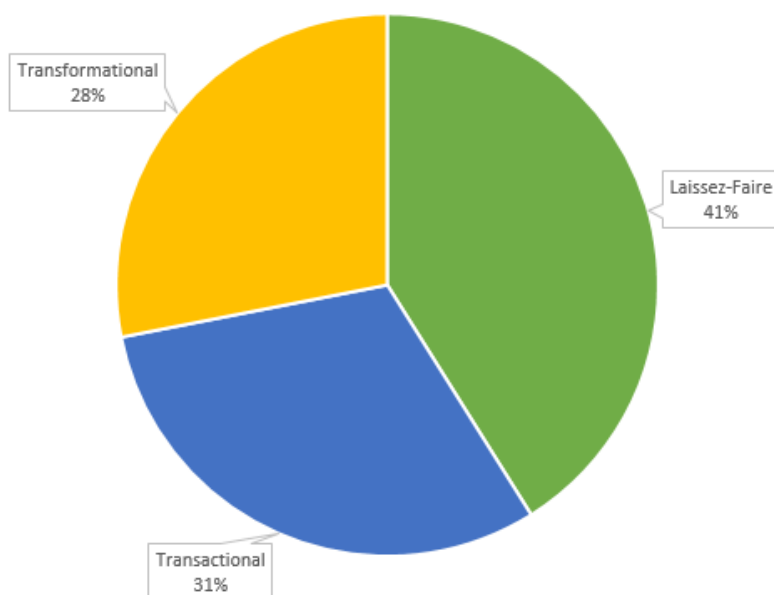
The sample comprised 145 participants. Tenure averaged 13.17 years (SD = 8.9), with 58% reporting direct patient care responsibilities. These demographics aligned with the trauma hospital context, though regional characteristics may have influenced responses.

**Table 12**

*Frequency, Percentage Distribution of Demographic Variables*

Characteristic	Item	Frequency	Percentage (%)
Tenure (years)	Mean	13.17	100
	Minimum	2	100
	Maximum	35	100
Tenure (Direct Patient Contact)	Mean	14.21	100
	Minimum	2	100
	Maximum	35	100
Tenure (No Direct Patient Contact)	Mean	12.49	100
	Minimum	2	100
	Maximum	35	100
Direct Patient Contact	Yes	85	59
	No	60	41

*Note.* N=145 participants

**Figure 14***Distribution of Employees' Perception of Leaders' Leadership Styles***Table 13***Factors by Direct and Non-Direct Patient Care Contact*

Measure	All Participants	Direct Patient Contact	No Direct Patient Contact
Respondents (N)	178	60	85
Average Tenure (in years)	13.17	14.20	12.49
Emotional Exhaustion (High)	40%	37%	42%
Emotional Exhaustion (Moderate)	42%	50%	37%
Emotional Exhaustion (Low)	18%	13%	21%
Depersonalization (High)	48%	57%	41%
Depersonalization (Moderate)	29%	30%	27%
Depersonalization (Low)	23%	10%	31%
Personal Accomplishment (High)	69%	85%	57%
Personal Accomplishment (Moderate)	12%	3%	18%
Personal Accomplishment (Low)	19%	10%	24%
Burnout (High)	21%	11%	9%
Burnout (Moderate)	89%	43%	28%
Burnout (Low)	9%	6%	3%
Job Satisfaction (score)	3.639	3.616	3.558

## Comparison of Results to the Literature Review

The findings aligned with prior research demonstrating transformational leadership's role in enhancing morale and reducing burnout (Bass & Avolio, 1994; Notarnicola et al., 2024). The significant correlation with personal accomplishment ( $r = 0.584$ ) echoed Lowe et al.'s (1996) meta-analysis, which reported effect sizes of 0.44-0.60 for transformational leadership outcomes. Hussain and Khayat (2021) demonstrated that transformational leadership improved communication and performance, boosting care quality and patient safety in hospitals. By fostering autonomy and addressing individual needs, transformational leadership created a self-empowered workforce, vital in high-pressure settings like emergency care (Curado & Santos, 2022). Tsapnidou et al. (2024) linked transformational leadership to fewer adverse patient events, reflecting its proactive risk management that lifted morale. The positive influence on the Nature of Work subscale of the JSS ( $\beta = 0.312$ ,  $p = 0.003$ ) supported Mazzetti and Schaufeli's (2022) emphasis on engaging leadership fostering employee engagement and team effectiveness through personal and team resources.

Transactional leadership's effect on emotional exhaustion ( $r = -0.462$ ) supported Pasaribu et al.'s (2022) findings on structured leadership reducing stress. Mekonnen and Bayissa (2023) linked transactional leadership's traits to readiness for system shifts, such as post-COVID adaptations, through clear directives and rewards. Hundie and Habtewold (2024) noted transactional leadership's focus on inspirational motivation and intellectual stimulation, though less dominant than in transformational contexts. The positive influence on the Nature of Work subscale ( $\beta = 0.267$ ,  $p = 0.015$ ) aligned with Lan et al.'s (2019) findings that transactional leadership boosted satisfaction through structured rewards and recognition. The lack of impact from laissez-faire leadership corroborated Norris et al.'s (2021) critique of its ineffectiveness.

Khan and Tidman (2021) tied laissez-faire leadership to medical errors and poor care, underscoring its mismatch with healthcare's need for active guidance. Desgourdes et al. (2024) emphasized its negative effect on autonomy when guidance was absent, leaving employees feeling unsupported rather than empowered.

However, the non-significant mediation of burnout (indirect effect CI including zero) contrasted with De Vries et al.'s (2023) broader evidence, suggesting contextual factors like organizational culture or workload, omitted in this study, may have moderated effects. Nagle et al. (2024) identified factors affecting healthcare workers' burnout and their conceptual models, highlighting the race to retain healthcare workers amid rising burnout rates. This partial mediation for transformational leadership (indirect effect = -0.199, 95% CI [-0.312, -0.086]) supported Hussain and Khayat's (2021) findings that transformational practices, including open communication and empowerment, led to higher satisfaction and reduced burnout among medical staff. The low overall predictive power ( $R^2 = 0.0042-0.0109$ ,  $p > 0.05$ ) aligned with Skopak and Hadzaihmetovic's (2022) null findings on transactional leadership, suggesting healthcare's unique stressors, such as patient care demands, may outweigh extrinsic perks. These discrepancies underscored the need for larger samples and inclusion of ethical leadership analysis, as noted in Franczukowska et al.'s (2021) demonstration that ethical leadership enhanced satisfaction among Austrian healthcare workers. The results contributed to Herzberg's Two-Factor Theory by illustrating how leadership addressed both motivational and hygiene factors in the context of post-pandemic trauma hospitals.

## **Summary**

The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United

States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. Leadership style —transformational, transactional, and laissez-faire—were independent variables (Appendix C); burnout levels as measured by the Maslach Burnout Inventory Human Services Survey (MBI-HSS), created by Maslach and Jackson (1981), acted as a mediating variable (Appendix D); and the Job Satisfaction Survey (JSS), designed by Spector (1985), was the dependent variable. The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024).

This chapter presented the findings of the quantitative, non-experimental correlational study aimed at exploring how transformational, transactional, and laissez-faire leadership practices influence job satisfaction and burnout among healthcare employees in the United States, with burnout as a mediator. The study utilized data from 145 participants, collected via the Multifactor Leadership Questionnaire (MLQ), Maslach Burnout Inventory Human Services Survey (MBI-HSS), and Job Satisfaction Survey (JSS), with reliability assessed through Cronbach's Alpha (0.782 for TFL, 0.672 for TAL, 0.733 for LFL). Descriptive statistics (

Table 5) and demographic distributions (Table 12) provided context, while correlation analyses (Table 11) and regression models, including PROCESS mediation, formed the core analysis. Key results include a significant positive correlation between transformational leadership (TFL) and personal accomplishment ( $r = 0.584$ ,  $p < 0.001$ ) and a negative correlation with depersonalization ( $r = -0.522$ ,  $p < 0.001$ ), but a non-significant effect on emotional exhaustion ( $r = -0.305$ ,  $p = 0.052$ ). Transactional leadership (TAL) significantly reduced emotional exhaustion ( $r = -0.462$ ,  $p = 0.001$ ) and depersonalization ( $r = -0.355$ ,  $p = 0.019$ ), but not personal accomplishment ( $r = 0.251$ ,  $p = 0.100$ ), while laissez-faire leadership (LFL) showed no significant burnout impact ( $r = 0.084$ ,  $p = 0.524$ ). For job satisfaction, TFL significantly enhanced multiple JSS factors, TAL affected only Nature of Work, and LFL had no significant effect ( $r = 0.211$ ,  $p = 0.106$  for Communications). Mediation analyses revealed non-significant indirect effects through burnout (TFL effect =  $-0.2713$ , CI  $[-1.0794, 0.3867]$ ), with overall models showing limited predictive power ( $R^2 = 0.0042$  for TFL on job satisfaction,  $p = 0.7406$ ). Statistical assumptions, including linearity (Figure 3), homoscedasticity (

Figure 4), and residual normality (Figure 5), were tested and largely met.

The comparison of results to the literature review highlights both alignment and divergence. The positive impact of TFL on personal accomplishment and depersonalization supports Bass and Avolio (1994) and Notarnicola et al. (2024), though the non-significant effect on emotional exhaustion contrasts with Mazzetti and Schaufeli (2022), possibly due to sample size ( $N=41$ ). TAL's reduction of emotional exhaustion aligns with Pasaribu et al. (2022), but its limited job satisfaction influence diverges, potentially due to reliability issues ( $\text{Alpha} = 0.672$ ). LFL's lack of effect on burnout and satisfaction reinforces Norris et al. (2021), though the absence of depersonalization impact differs from Franczukowska et al. (2021). TFL's broad job satisfaction effects validate Alwali and Alwali (2022), while TAL and LFL's limited roles challenge broader expectations (Pasaribu et al., 2022). The non-significant mediation through burnout contrasts with Dyrbye et al. (2021), suggesting contextual factors like post-COVID resilience may moderate these relationships. The small sample sizes ( $N=41-145$ ) and low  $R^2$  values underscore the need for larger studies to confirm these findings, bridging gaps between theory and practice in United States healthcare settings. The low  $R^2$  value (0.0042) reflects the complexity of job satisfaction beyond leadership. These results lay the groundwork for a deeper interpretation, setting the stage for the next chapter, which will discuss the implications, offer recommendations for healthcare leaders, and provide a comprehensive summary of the study's contributions and limitations.

## Chapter 5: Discussion, Recommendations, and Study Summary

The problem addressed in this study is the declining job satisfaction among healthcare employees in the United States influenced by leadership practices and mediated by burnout (Cantarelli et al., 2023; van Diepen et al., 2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. This chapter provides a brief review of the methodology, design, results, and limitations, followed by a detailed discussion, recommendations for practice and future research, and a concise summary.

### Brief Review

The study utilized a quantitative, non-experimental correlational design, collecting data from 145 healthcare employees through the Multifactor Leadership Questionnaire (MLQ), Maslach Burnout Inventory Human Services Survey (MBI-HSS), and Job Satisfaction Survey (JSS). The analysis employed correlation and PROCESS mediation (Model 4) techniques, revealing significant positive correlations between transformational leadership (TFL) and personal accomplishment ( $r = 0.584$ ,  $p < 0.001$ ) and a negative correlation with depersonalization ( $r = -0.522$ ,  $p < 0.001$ ), though no significant effect on emotional exhaustion ( $r = -0.305$ ,  $p = 0.052$ ). Transactional leadership (TAL) significantly reduced emotional exhaustion ( $r = -0.462$ ,  $p = 0.001$ ) and depersonalization ( $r = -0.355$ ,  $p = 0.019$ ), but not personal accomplishment ( $r = 0.251$ ,  $p = 0.100$ ), while laissez-faire leadership (LFL) showed no significant impact (e.g.,  $r = 0.084$ ,  $p = 0.524$ ). Job satisfaction factors were variably influenced, with TFL affecting multiple dimensions, TAL impacting only Nature of Work, and LFL showing

no effect (e.g.,  $r = 0.211$ ,  $p = 0.106$  for Communications), with low predictive power ( $R^2 = 0.0042$ – $0.0109$ ,  $p > 0.05$ ). Mediation through burnout was non-significant (e.g., TFL indirect effect =  $-0.2713$ , CI [ $-1.0794$ ,  $0.3867$ ]). Limitations include a small sample size ( $N=145$ ), unmeasured ethical leadership, reliability issues with TAL (Alpha =  $0.672$ ), and uncontrolled contextual factors. This chapter concludes with an analysis of findings, practical and research recommendations, and a study summary.

## **Discussion**

The discussion centers on the major findings, revealing distinct leadership influences on burnout and job satisfaction. Transformational leadership style's (TFL) significant positive correlation with personal accomplishment and negative correlation with depersonalization underscore its potential to enhance intrinsic motivation and reduce cynicism, supported by a reliable measure (Alpha =  $0.782$ ). However, the non-significant effect on emotional exhaustion ( $r = -0.305$ ,  $p = 0.052$ ) suggests limitations, possibly due to workload pressures not fully mitigated by leadership. Transactional leadership style's (TAL) significant reduction of emotional exhaustion and depersonalization, with a reliable but lower Alpha ( $0.672$ ), indicates that structured approaches can alleviate stress, though its non-significant impact on personal accomplishment ( $r = 0.251$ ,  $p = 0.100$ ) may reflect a focus on extrinsic rather than intrinsic factors. Laissez-Faire's (LFL) lack of significant influence on burnout dimensions (e.g.,  $r = 0.084$ ,  $p = 0.524$ ) highlights its passive nature, consistent across the sample. For job satisfaction, TFL's broad effects, TAL's limited impact on Nature of Work, and LFL's null results (e.g.,  $r = 0.211$ ,  $p = 0.106$ ) suggest differential efficacy, though the low  $R^2$  values indicate other unmeasured variables.

Several factors may have influenced these interpretations. The variable sample sizes (N=145) likely reduced statistical power, particularly for marginal results (e.g.,  $p = 0.052$ ), while missing data and TAL's reliability issues could have affected precision. The post-COVID context, not controlled, may have shaped resilience, altering burnout-satisfaction dynamics. These findings address the study problem by identifying TFL and TAL as partial mitigators of declining satisfaction and burnout, contributing to Herzberg's Two-Factor Theory by showing leadership's role as a motivator with specific effects. The results align with Bass and Avolio (1994) and Notarnicola et al. (2024) for TFL's positive impacts, but diverge from Mazzetti and Schaufeli (2022) on exhaustion, possibly due to sample size. TAL supports Pasaribu et al. (2022) but challenges broader satisfaction influence, while LFL aligns with Norris et al. (2021), with contextual differences explaining divergences.

The study also aimed to evaluate the JSS's validity in post-pandemic trauma hospitals. While Cronbach's alpha for JSS subscales ranged from 0.70–0.91 (Chapter 4), certain facets (e.g., Pay, Contingent Rewards) showed lower internal consistency ( $\alpha < 0.70$  in subgroups), suggesting potential non-replication in high-stress environments (Brayfield & Rothe, 1951). The variable JSS facet reliability suggests hygiene factors (e.g., Pay) may be less stable in trauma settings, reinforcing Herzberg's distinction. This supports Spector's (1985) caution that JSS facets may vary by context, indicating a need for instrument refinement in trauma settings.

The most significant implication is the potential to enhance healthcare workforce well-being through transformational (TFL) and transactional (TAL) leadership practices. Probable implications include reduced depersonalization and improved personal accomplishment via TFL training (supported by  $r = 0.584$ ,  $p < 0.001$  and  $r = -0.522$ ,  $p < 0.001$ ) and lower emotional exhaustion through TAL reward systems ( $r = -0.462$ ,  $p = 0.001$ ), both of which can be

implemented at the organizational level to reduce the 49% burnout rate (HRSA, 2024) and associated turnover (Lu et al., 2012). Improbable implications, however, include eliminating burnout or resolving systemic issues such as chronic staffing shortages or workload imbalances—hygiene factors in Herzberg’s framework—through leadership alone, as these require policy and resource interventions beyond managerial influence. The study addresses the research problem partially, with limited mediation evidence, and contributes to practice by highlighting leadership’s role as a motivator, warranting further theoretical exploration. In summary, while probable gains in employee morale and reduced cynicism are achievable through targeted leadership development, improbable outcomes, such as reversing national healthcare staffing crises, require systemic reform. This distinction ensures realistic application of the findings in practice.

### **Recommendations for Practice**

The findings of this study offer actionable insights for healthcare organizations seeking to combat declining job satisfaction and burnout through evidence-based leadership development. Given the significant correlations between transformational leadership (TFL) and personal accomplishment ( $r = 0.584$ ,  $p < 0.001$ ) and reduced depersonalization ( $r = -0.522$ ,  $p < 0.001$ ), as well as transactional leadership (TAL)’s role in lowering emotional exhaustion ( $r = -0.462$ ,  $p = 0.001$ ), organizations should prioritize structured, scalable leadership training programs that emphasize supportive and reward-based practices, aligning with Bass and Avolio (1994) and Pasaribu et al. (2022). These programs need to be proactive, not reactive, and integrated into talent pipelines before employees are promoted into supervisory roles.

### ***Establish a Tiered Leadership Development Pipeline***

Known today as the Peter Principle, Dr. Laurence J. Peter and Raymond Hull published a satirical yet profoundly accurate observation about organizational life: “In a hierarchy, every employee tends to rise to his level of incompetence.” (Peter & Hull, 1969). The principle generally explains why so many capable workers excel in one role, earn a promotion, and then struggle in the next. For example, an exceptional bedside nurse who excels in patient care may lack experience in scheduling, performance coaching, or resource advocacy. Promoting such an individual without preparatory training risks replicating the Peter Principle. To avoid the pitfall of the Peter Principle, healthcare institutions can implement a three-tier leadership development framework to prepare employees at every career stage.

The proposed framework consists of three progressive tiers designed to cultivate leadership readiness at distinct career stages. Tier 1 targets emerging leaders, specifically individual contributors with high potential, through a Foundations of Influence program, a six-month cohort-based training initiative that introduces emotional intelligence, giving and receiving feedback, and basic conflict resolution, delivered via monthly two-hour workshops supported by peer coaching triads. This tier builds transformational leadership behaviors such as inspirational motivation and individualized consideration early in a career, preventing depersonalization before it emerges, with success measured by pre and post 360-degree feedback scores targeting improvement in supportive leadership ratings.

Tier 2 focuses on first-line supervisors through a Supervisory Excellence Academy, a nine-month blended learning program covering delegation, performance management, reward system design with a transactional leadership emphasis, and burnout recognition, delivered through biweekly live sessions, online modules, and job shadowing. This tier addresses

transactional leadership's proven impact on reducing emotional exhaustion and equips leaders to implement equitable incentives, with effectiveness tracked by a reduction in team emotional exhaustion scores on the Maslach Burnout Inventory Human Services Survey within twelve months.

Tier 3 prepares mid-to-senior managers via a Strategic Leadership Institute, a twelve-month executive track featuring in-depth study of change management, resource allocation, cross-departmental collaboration, and data-driven decision-making, delivered through quarterly offsites, action learning projects, and executive mentorship. This tier enables leaders to sustain transformational leadership across units, countering the study's low predictive power in job satisfaction by influencing broader organizational systems, with outcomes assessed through an increase in Job Satisfaction Survey subscale scores for Nature of Work and Supervision.

This tiered approach based on current position ensures that leadership readiness is built intentionally and progressively and not assumed upon promotion. By structuring development across distinct career stages, organizations avoid promoting high-performing individual contributors into supervisory or managerial roles based solely on technical excellence, without verifying their capacity to inspire, manage conflict, or align teams with institutional goals. By requiring tier completion before promotion, organizations institutionalize verified capability, not past performance alone. This aligns with Bass and Avolio (1994), ensuring transformational and transactional leadership effects are sustained, reducing burnout and enhancing satisfaction in high-stress healthcare environments.

### ***Embed Mentorship and Reverse Mentorship into Organizational Culture***

Mentorship has long been recognized as a cornerstone of professional growth in healthcare, yet its structured integration remains inconsistent across institutions. Bass and Avolio

(1994) emphasized that transformational leadership behaviors, such as individualized consideration and intellectual stimulation, are most effectively transmitted through sustained, personal guidance rather than isolated training events. To fully leverage the study's findings on transformational and transactional leadership's differential impacts on burnout and satisfaction, healthcare organizations must formalize both traditional and reverse mentorship as core components of their leadership culture. This dual approach ensures that leadership development is not a one-time intervention but an ongoing, relational process that builds readiness at every level.

Traditional mentorship pairs high-performing clinical staff with seasoned nurse managers or administrators for a determined period (e.g. 12 months). Mentors guide mentees through real-time challenges such as handling shift conflicts and recognizing burnout signs. MLQ pre-assessments can be used to match TFL-strong mentors with high-potential mentees.

Reverse mentorship entails junior staff mentoring senior leaders on digital tools, Gen Z expectations, and post-COVID resilience strategies, which reduces generational gaps in understanding emotional exhaustion triggers and improves transactional leadership reward systems that resonate with younger workers through flexible scheduling as recognition.

### ***Redesign Performance Management to Reinforce TFL and TAL Behaviors***

Current performance management systems in healthcare frequently prioritize measurable outputs, such as reduced patient length of stay or increased case volume, while undervaluing essential leadership processes like team support, psychological safety, and burnout prevention. This misalignment can inadvertently reinforce transactional behaviors focused on short-term metrics at the expense of transformational practices that foster long-term employee well-being and engagement. To address this gap, organizations should modify existing evaluation

frameworks to incorporate balanced leadership Key Performance Indicators (KPIs) as detailed in Table 14, ensuring that managers are held accountable not only for clinical or financial outcomes but also for cultivating supportive, resilient teams capable of sustaining high performance under pressure. These KPIs, align with Pasaribu et al. (2022) by making TAL rewards transparent and behavior-based.

**Table 14**

*KPIs That Reward Process Over Output*

<b>KPI</b>	<b>Measurement</b>	<b>Target</b>
Team Personal Accomplishment (MBI-HSS)	Annual survey	+0.5 mean score
Depersonalization Rate	MBI-HSS subscale	< 2.0 mean
Feedback Frequency	# of documented 1 on 1s	≥ 2/month per direct report
Reward Equity	Variance in bonus distribution	< 10% unjustified gap

***Launch a “Burnout Prevention Task Force” Led by Trained Leaders***

Healthcare organizations should champion cross-functional teams that unite representatives from clinical and non-clinical departments (nursing, pharmacy, laboratory, and others), human resources, and administration, co-chaired by supervisors rigorously trained in transformational leadership, with non-negotiable quarterly action plans to drive systemic change. In Phase 1, execute a comprehensive baseline Maslach Burnout Inventory Human Services Survey audit by unit to quantify current burnout levels and establish a data-driven foundation for intervention. In Phase 2, launch high-impact transformational leadership pilots such as Appreciation Rounds, featuring daily public recognition of team contributions to rebuild morale, foster psychological safety, and reverse depersonalization trends. In Phase 3, aggressively scale

proven interventions across the entire organization and embed them into new employee onboarding, institutionalizing a culture of appreciation and resilience that sustains reductions in emotional exhaustion and elevates job satisfaction long-term, directly countering the 49 percent burnout crisis documented by HRSA (2024).

### ***Integrate Leadership Training into Onboarding and Annual Compliance***

Healthcare organizations should make the Leadership Essentials module a mandatory component of onboarding for all new hires and an annual refresher for existing staff, delivered in a four-hour in-person session that focuses on transformational leadership behaviors such as how to give strength-based feedback and transactional leadership reward examples. Upon completion, participants receive a digital badge that can be added to their email signature, with participation explicitly required for promotion eligibility. This institutionalizes leadership readiness, addressing the study's finding that leadership effects are context-specific and require sustained reinforcement.

### ***Address Laissez-Faire Leadership Through Accountability Systems***

Given laissez-faire leadership's null effects ( $r = 0.084$ ,  $p = 0.524$ ), healthcare organizations should implement leadership minimums by establishing a policy that requires all managers to complete at least three leadership development activities annually, such as training, mentoring, or project leadership. Human Resources should conduct annual compliance reviews, with non-compliance triggering formal performance improvement plans. The rationale is to prevent passive leadership from undermining transformational and transactional leadership gains (Norris et al., 2021).

### *Measure, Report, and Iterate*

Healthcare organizations should establish a Leadership Impact Dashboard as defined in Table 15 to provide real-time, evidence-based visibility into the effectiveness of leadership development initiatives and their impact on burnout, satisfaction, and organizational culture. By systematically tracking transformational leadership behaviors, burnout trends, job satisfaction, and promotion readiness at defined intervals, this dashboard enables proactive decision-making, early detection of leadership gaps, and continuous improvement in high-stress clinical environments. This data infrastructure transforms leadership from an assumed competency into a measurable, accountable asset critical to addressing burnout.

**Table 15**

#### *Leadership Impact Dashboard*

<b>Metric</b>	<b>Source</b>	<b>Frequency</b>
TFL Behaviors	MLQ (short form)	Biannual
Burnout Trends	MBI-HSS	Quarterly
Job Satisfaction	JSS	Annual
Promotion Readiness	360 Feedback	Pre-promotion

By adopting these recommendations, healthcare organizations can transform leadership from a source of burnout into a buffer against it. The evidence is clear: TFL builds meaning, TAL reduces stress, and structured development prevents incompetence. These are not optional enhancements, rather they are organizational imperatives for workforce sustainability.

### **Recommendations for Future Research**

The findings of this study, while revealing meaningful associations between leadership practices, burnout, and job satisfaction, also highlight several methodological and theoretical limitations that warrant further investigation. Future research should prioritize larger, more

diverse samples to validate the effects of transformational and transactional leadership, addressing the current sample size limitation of  $N=145$ . Including ethical leadership as a variable could clarify its role, improving on the current gap. Longitudinal designs are needed to establish causality, overcoming the cross-sectional limitation. Controlling for contextual factors like post-COVID resilience will enhance robustness, with the next logical step being multi-site studies to generalize findings. These recommendations are organized into four key domains: methodological rigor, theoretical expansion, instrument refinement, and practical application.

***Methodological Rigor: Larger, Multi-Site, and Longitudinal Designs***

To address the limited statistical power observed in this study, particularly with marginal results such as the near-significant effect of transformational leadership on emotional exhaustion ( $r = -0.305$ ,  $p = 0.052$ ), future research should employ multi-site, multi-hospital studies with a minimum sample size of  $N=500$  across at least three geographically and demographically distinct trauma centers. This would enable subgroup analyses by role (e.g., nurses vs. physicians), shift type (day vs. night), and hospital funding model (public vs. private).

A priori power analysis using G\*Power should guide sample size determination for detecting medium mediation effects ( $f^2 = 0.15$ ) in multiple regression (PROCESS Model 4), with  $\alpha = 0.05$  and power = 0.90. This ensures adequate sensitivity to detect indirect effects of leadership on job satisfaction through burnout, requiring approximately  $N = 100-138$  depending on the number of predictors and mediators. Moreover, the cross-sectional nature of this study precludes causal inference. Future researchers should adopt longitudinal panel designs with at least three time points (baseline, 6 months, 12 months) to track how leadership behaviors influence burnout and satisfaction trajectories over time. For example, a pre-post intervention study could introduce a transformational leadership training program in one unit and compare

outcomes against a control unit using repeated-measures, ANOVA or latent growth modeling. This would directly test whether TFL's positive impact on personal accomplishment ( $r = 0.584$ ,  $p < 0.001$ ) is sustained or diminished under prolonged stress.

### ***Theoretical Expansion: Integrating Ethical and Servant Leadership***

While transformational and transactional leadership demonstrated differential effects, the absence of ethical leadership as a variable represents a significant gap. Future studies should incorporate the Ethical Leadership Scale (Brown et al., 2005) to examine whether moral integrity moderates the relationship between leadership and depersonalization. For instance, ethical leaders may reduce cynicism more effectively than transformational leaders in high-stakes environments where trust is eroded by resource shortages.

Additionally, servant leadership should be explored as a complementary framework. Given Herzberg's emphasis on hygiene and motivator factors, servant leaders who prioritize employee well-being (e.g., workload equity, psychological safety) may serve as a bridge between transactional reward systems and transformational inspiration. A multi-trait, multi-method (MTMM) design could compare TFL, TAL, ethical, and servant leadership simultaneously to parse unique versus overlapping variance in burnout reduction.

### ***Instrument Refinement: Adapting JSS for Trauma Contexts***

The variable reliability of Job Satisfaction Survey (JSS) subscales in this study, particularly pay and contingent rewards ( $\alpha < 0.70$  in subgroups), suggests that the instrument may not fully capture satisfaction dynamics in post-pandemic trauma hospitals. Future research should conduct confirmatory factor analysis (CFA) on a larger sample ( $N \geq 300$ ) to test whether the original nine-factor structure holds or if a revised model (e.g., combining pay and benefits) better fits high-stress settings.

Furthermore, item response theory (IRT) analysis could identify poorly discriminating items and guide refinement. For example, questions about “fair pay” may be interpreted differently in unionized vs. non-unionized hospitals. A mixed-methods follow-up with cognitive interviews could explore how healthcare workers define “satisfaction” in trauma contexts, leading to a Trauma-Adapted JSS (TA-JSS) with enhanced content validity.

### ***Contextual Moderators: Post-COVID Resilience and Organizational Culture***

The uncontrolled post-COVID context likely influenced results, particularly the non-significant mediation through burnout. Future studies should include moderator variables such as organizational resilience (measured via the Connor-Davidson Resilience Scale adapted for teams), Safety climate (Hospital Survey on Patient Safety Culture), Staffing ratios (nurse-to-patient, physician coverage) and Union presence.

A hierarchical linear modeling (HLM) approach would allow researchers to partition variance at the individual, unit, and hospital levels. For example, does transformational leadership reduce depersonalization more effectively in high-resilience units than in burnout-prone ones? This would clarify boundary conditions of leadership efficacy.

### ***Experimental and Quasi-Experimental Interventions***

To move beyond correlation and establish causality, researchers should design randomized controlled trials of leadership interventions in which one group receives a twelve-week transformational leadership training program focused on inspirational motivation and individualized consideration, while a control group receives standard management training, with outcomes measured through pre and post assessments of the Maslach Burnout Inventory Human Services Survey and Job Satisfaction Survey in matched pairs of similar units within a single hospital system. Alternatively, a quasi-experimental stepped-wedge design could be employed to

roll out the training sequentially across departments, allowing each unit to serve as its own control over time. Either approach would provide robust causal evidence that transformational leadership training directly improves personal accomplishment and reduces turnover intent.

### ***Sample Diversity and Generalizability***

This study was limited to one level-one trauma hospital. Future research should include other variables such as rural versus urban hospitals, community versus academic medical centers, for-profit versus nonprofit systems, and international comparisons such as the United States versus Canada versus the United Kingdom. A stratified sampling strategy ensuring representation across these dimensions would test whether leadership effects are universal or context-dependent. For example, does transactional leadership's impact on emotional exhaustion ( $r = -0.462, p = 0.001$ ) hold in under-resourced rural settings?

### ***Practical Scalability and Cost-Effectiveness Studies***

While this study focused on statistical significance and effect sizes, future research should adopt an implementation science lens to evaluate real-world outcomes, including cost per leader trained, time to observable behavior change (via MLQ pre/post), and return on investment from reduced turnover using established cost models (Lu et al., 2012). This would determine whether transformational and transactional leadership training delivers sustainable financial and clinical value in diverse healthcare settings. A pragmatic trial in a large health system could compare low-cost (online modules) vs. high-touch (in-person coaching) TFL training to identify scalable models for resource-constrained organizations.

### ***Integration with Technology and AI-Driven Feedback***

Emerging technologies such as artificial intelligence-powered 360-degree feedback platforms and real-time sentiment analysis of employee communications offer unprecedented

opportunities for continuous, data-driven leadership diagnostics in high-stress healthcare environments. These tools can detect subtle shifts in team morale, identify early warning signs of depersonalization or emotional exhaustion, and trigger personalized, just-in-time coaching interventions before burnout escalates. Future studies should rigorously pilot these adaptive systems within clinical units, using pre and post implementation measures of the Maslach Burnout Inventory Human Services Survey and Multifactor Leadership Questionnaire to evaluate whether dynamic, technology-supported leadership support produces superior outcomes in personal accomplishment, depersonalization reduction, and overall job satisfaction compared to traditional static training programs. This research would not only validate the efficacy of real-time feedback loops but also establish scalable models for proactive leadership development, transforming reactive performance reviews into predictive, preventive strategies that sustain workforce resilience and enhance patient care quality over time.

### ***Qualitative and Mixed-Methods Follow-Up***

To complement quantitative findings, phenomenological studies should explore how healthcare workers experience transformational leadership during crises, such as mass casualty events. Semi-structured interviews with high-burnout nurses could reveal micro-behaviors, including public recognition during shift change, that drive personal accomplishment. A sequential explanatory mixed-methods design would use survey results to inform interview guides, deepening theoretical insight.

### ***Policy-Level Research and Advocacy***

Finally, research should extend beyond organizational boundaries to inform healthcare policy. Studies should partner with bodies like the Health Resources and Services Administration (HRSA) to model how leadership training mandates could reduce the national 49% burnout rate

(HRSA, 2024). A policy simulation study using agent-based modeling could estimate system-wide impacts of widespread TFL adoption on workforce retention and patient outcomes.

In conclusion, future research must move from description to prescription, from correlation to causation, and from single-site snapshots to generalizable, scalable solutions. By addressing these gaps, scholars can transform leadership from a variable into a strategic lever for healthcare workforce sustainability.

### **Study Summary**

This study addressed the critical and persistent problem of declining job satisfaction among healthcare employees in the United States, a challenge significantly influenced by leadership practices and mediated by burnout, as evidenced by Cantarelli et al. (2023) and van Diepen et al. (2024). The purpose of this quantitative, non-experimental correlational study was to investigate how leadership practices influence job satisfaction among healthcare employees in the United States, with burnout serving as a critical mediator, and to evaluate whether the Job Satisfaction Survey (JSS) validly measures satisfaction in the context of post-pandemic trauma hospitals. Using a sample of 145 healthcare employees from a level-one trauma hospital, the research employed the Multifactor Leadership Questionnaire (MLQ), Maslach Burnout Inventory Human Services Survey (MBI-HSS), and Job Satisfaction Survey (JSS) to examine relationships across transformational (TFL), transactional (TAL), and laissez-faire (LFL) leadership styles.

The findings revealed distinct patterns of influence. Transformational leadership demonstrated strong positive correlations with personal accomplishment ( $r = 0.584, p < 0.001$ ) and negative correlations with depersonalization ( $r = -0.522, p < 0.001$ ), though its effect on emotional exhaustion approached but did not reach significance ( $r = -0.305, p = 0.052$ ).

Transactional leadership significantly reduced emotional exhaustion ( $r = -0.462$ ,  $p = 0.001$ ) and depersonalization ( $r = -0.355$ ,  $p = 0.019$ ) but showed no meaningful impact on personal accomplishment ( $r = 0.251$ ,  $p = 0.100$ ). Laissez-faire leadership exhibited no significant associations across burnout dimensions (e.g.,  $r = 0.084$ ,  $p = 0.524$ ). On job satisfaction, TFL influenced multiple JSS facets, TAL was limited to Nature of Work, and LFL had null effects (e.g.,  $r = 0.211$ ,  $p = 0.106$  for Communications), with consistently low predictive power ( $R^2 = 0.0042\text{--}0.0109$ ,  $p > 0.05$ ). Mediation analysis via PROCESS Model 4 confirmed no significant indirect effects through burnout (e.g., TFL indirect effect =  $-0.2713$ , CI  $[-1.0794, 0.3867]$ ), suggesting that leadership impacts satisfaction more directly than through burnout reduction in this context.

The discussion interpreted these results within Herzberg's Two-Factor Theory, positioning TFL as a motivator that enhances intrinsic fulfillment and TAL as a hygiene maintainer that alleviates stress. The JSS evaluation revealed adequate overall reliability ( $\alpha = 0.70\text{--}0.91$ ) but flagged lower consistency in Pay and Contingent Rewards subscales in trauma settings, supporting Spector's (1985) caution about contextual variability. Probable implications include reduced cynicism and improved morale through targeted TFL training, while improbable outcomes involve resolving systemic issues like staffing shortages through leadership alone.

The Recommendations for Practice section provided a comprehensive, tiered leadership development framework spanning emerging leaders to senior managers, with specific programs, delivery methods, and success metrics. It emphasized mentorship, reverse mentorship, revised performance management with leadership KPIs, and unit-level burnout prevention task forces. Implementation strategies included phased pilots in high-risk units, C-suite sponsorship, and integration into onboarding and compliance training. These recommendations offer healthcare

organizations a scalable roadmap to institutionalize TFL and TAL behaviors, directly addressing the 49% burnout rate reported by HRSA (2024) and associated turnover costs (Lu et al., 2012).

The Recommendations for Future Research section outlined an agenda to overcome current limitations. It called for multi-site, longitudinal studies with  $N \geq 500$ , experimental interventions, and hierarchical linear modeling to parse individual, unit, and organizational effects. Instrument refinement via CFA and IRT was proposed to develop a Trauma-Adapted JSS. Theoretical expansion included ethical and servant leadership, while contextual moderators such as resilience, safety climate, and staffing ratios were prioritized. Practical scalability, cost-effectiveness, and policy-level simulations were also recommended to bridge research and real-world impact.

Despite these contributions, the study was constrained by a modest sample size ( $N=145$ ), variable TAL reliability ( $\alpha = 0.672$ ), missing data, and uncontrolled post-COVID factors. The single-site design limits generalizability, and the cross-sectional approach precludes causality. These limitations, while acknowledged, do not undermine the core findings but rather illuminate pathways for more rigorous inquiry.

In conclusion, this research affirms that leadership is not a panacea but a powerful lever for mitigating burnout and enhancing satisfaction in healthcare. Transformational and transactional practices offer probable, achievable gains in employee well-being when supported by structured development. However, broader systemic challenges demand coordinated policy and resource interventions. The results are clear: invest in leaders before they lead, measure what matters, and refine tools for the context in which they are used. By doing so, healthcare organizations can foster resilient workforces capable of delivering compassionate, high-quality

care even amid ongoing crises. This study lays a foundation for both immediate action and sustained scholarly advancement in organizational behavior and healthcare leadership.

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## Appendix A

### National University IRB Approval Letter

Firefox

<https://outlook.office.com/mail/inbox/id/AAQkAGU5YTQwMDI2L...> Outlook

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IRB-FY24-25-950 - Modification: Modification (Verification of Exemption)

---

From do-not-reply@cayuse.com <do-not-reply@cayuse.com>

Date Tue 7/29/2025 9:41 AM

To Donald Barnwell <D.Barnwell3596@o365.ncu.edu>; syleecia.thompson@ncu.edu  
<syleecia.thompson@ncu.edu>



9388 Lightwave Ave.  
San Diego, CA 92123  
[irb@nu.edu](mailto:irb@nu.edu)

#### Notice of Exemption

July 29, 2025

To: Donald Barnwell

**Project Title:** Assessing the Influence of Leadership Practices on Healthcare Job Satisfaction: A Quantitative, Non-Experimental Correlational Study

**NU IRB Number:** IRB-FY24-25-950

**Modification Determination:** Exempt from further review 45 CFR 46.101

**Status:** Active - Research activities may begin as of July 29, 2025

Dear Donald Barnwell:

The study referenced above has been reviewed by the National University IRB. The IRB has determined the proposed modification to your research is exempt from further review under 45 CFR 46.101, which means you will not need to renew your study and may begin your study effective immediately. However, if you find the need to change your study in any way, you will need to submit a modification to the IRB prior to implementing the changes. This will allow the IRB to determine whether or not the study still meets exemption criteria.

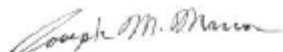
Please review your Post Approval Responsibilities here: [Approved Documents Guidelines](#)

Profile

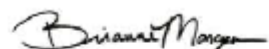
<https://outlook.office.com/mail/fabric/4/AAQicAGU5YFQwMDZL...>

For any questions regarding your protocol, please reach out to the IRB at [irb@nu.edu](mailto:irb@nu.edu).

Sincerely,



Dr. Joseph Marro, IRB Chair



Dr. Brianna Mongeon, Director, HIRPP & IRB



Jenessa Eberhardt, Associate Director, HIRPP & IRB

## Appendix B

### University Medical Center of Southern Nevada IRB Approval Letter

Hello Don,

Based on our discussion and the attached proposal, UMC is not engaged in human subjects research and therefore this proposal does not require UMC IRB review and approval.

Should you need anything further, please contact me directly.

Thank you,  
Ron

**Ronald Roemer**  
Director Clinical Research and Compliance  
Clinical Trials Office and Institutional Review Board

University Medical Center of Southern Nevada  
1800 W. Charleston Blvd.  
Las Vegas, NV 89102  
(702) 207-8345

Compassion • Accountability • Integrity • Respect

---

**From:** Don Barnwell <Don.Barnwell@umcsn.com>  
**Sent:** Monday, July 28, 2025 3:35 PM  
**To:** Ronald Roemer <Ronald.Roemer@umcsn.com>  
**Subject:** FW: Re: Fw: IRB-FY24-25-950 - Initial: Conditional Approval

Good afternoon Ronald,

Thanks for talking with me this morning.

I have attached my Dissertation Proposal that has been accepted by my school, National University, as well as the Conditional Approval from the school's IRB.

If you could give me a letter saying that UMC IRB is not required, I could submit that and be finished with the IRB process.

Thank you sir, I appreciate your help.

**Don Barnwell, MBA**  
Executive Director  
Information Technology

University Medical Center of Southern Nevada  
1800 W Charleston Blvd  
Las Vegas, NV 89102  
(T): 702-383-7840  
(C): 702-587-6735

---

**From:** [do-not-reply@cayuse.com](mailto:do-not-reply@cayuse.com) <[do-not-reply@cayuse.com](mailto:do-not-reply@cayuse.com)>  
**Sent:** Friday, July 25, 2025 11:15 AM

## Appendix C

### Copy of MLQ 5X-Short Instrument and Permission to Use

**Multifactor Leadership Questionnaire™**  
**Form 5X-Short Instrument**  
**Leader Form, Rater Form, & Scoring Guide**

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#### **Sample Items:**

As a leader ....

- I talk optimistically about the future.
- I spend time teaching and coaching.
- I avoid making decisions.

The person I am rating....

- Talks optimistically about the future.
- Spends time teaching and coaching.
- Avoids making decisions

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Sincerely,

Robert Most  
Mind Garden, Inc.  
[www.mindgarden.com](http://www.mindgarden.com)

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## Appendix D

### Copy of MBI Instrument and Permission to Use

# Maslach Burnout Inventory™

## MBI Forms and Scoring Keys:

**Human Services - MBI-HSS**

**Medical Personnel - MBI-HSS (MP)**

**Educators - MBI-ES**

**General - MBI-GS**

**Students - MBI-GS (S)**

## License to Administer

By Christina Maslach, Susan E. Jackson, Michael P. Leiter,  
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**Citation of the instrument must include the applicable copyright statement listed below.**

**Sample Items:**

**MBI - Human Services Survey - MBI-HSS:**

I feel emotionally drained from my work.  
I have accomplished many worthwhile things in this job.  
I don't really care what happens to some recipients.

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**MBI - Human Services Survey for Medical Personnel - MBI-HSS (MP):**

I feel emotionally drained from my work.  
I have accomplished many worthwhile things in this job.  
I don't really care what happens to some patients.

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**MBI - Educators Survey - MBI-ES:**

I feel emotionally drained from my work.  
I have accomplished many worthwhile things in this job.  
I don't really care what happens to some students.

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Cont'd on next page

For use by Donald Barnwell only. Received from Mind Garden, Inc. on January 11, 2025

**MBI - General Survey - MBI-GS:**

I feel emotionally drained from my work.  
In my opinion, I am good at my job.  
I doubt the significance of my work.

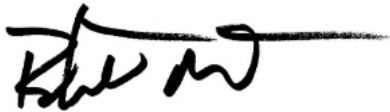
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**MBI - General Survey for Students - MBI-GS (S):**

I feel emotionally drained by my studies.  
In my opinion, I am a good student.  
I doubt the significance of my studies.

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Sincerely,

A handwritten signature in black ink, appearing to read "Robert Most", with a long horizontal line extending to the right.

Robert Most  
Mind Garden, Inc.  
[www.mindgarden.com](http://www.mindgarden.com)

## Appendix E

### Copy of JSS Instrument and Permission to Use

**Citation:**

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the job satisfaction survey. <https://doi.org/10.1007/BF00929796>

**Instrument Type:**

Rating Scale

**Test Format:**

This 36-item measure utilizes a 6-point scale (Disagree very much to Agree very much)

**Permissions:**

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A condition for free use of these assessments is that you share results. The results I need include:

1. Means per subscale and total score
2. Sample size
3. Brief description of sample, e.g., 220 hospital nurses. I don't need to know the organization name if it is sensitive.
4. Name of country where collected, and if outside of the U.S., the language used. I am especially interested in nonAmerican samples.
5. Standard deviations per subscale and total score (optional)
6. Coefficient alpha per subscale and total score (optional)

Results can be shared by providing an e-copy of a published or unpublished research report (e.g., a conference paper, dissertation, journal article, thesis, etc.) where one or more of these assessments are used.

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PLEASE CIRCLE THE ONE NUMBER FOR EACH QUESTION THAT COMES CLOSEST TO REFLECTING YOUR OPINION ABOUT IT.		Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
1	I feel I am being paid a fair amount for the work I do.	1	2	3	4	5	6
2	There is really too little chance for promotion on my job.	1	2	3	4	5	6
3	My supervisor is quite competent in doing his/her job.	1	2	3	4	5	6
4	I am not satisfied with the benefits I receive.	1	2	3	4	5	6
5	When I do a good job, I receive the recognition for it that I should receive.	1	2	3	4	5	6
6	Many of our rules and procedures make doing a good job difficult.	1	2	3	4	5	6
7	I like the people I work with.	1	2	3	4	5	6
8	I sometimes feel my job is meaningless.	1	2	3	4	5	6
9	Communications seem good within this organization.	1	2	3	4	5	6
10	Raises are too few and far between.	1	2	3	4	5	6
11	Those who do well on the job stand a fair chance of being promoted.	1	2	3	4	5	6
12	My supervisor is unfair to me.	1	2	3	4	5	6
13	The benefits we receive are as good as most other organizations offer.	1	2	3	4	5	6
14	I do not feel that the work I do is appreciated.	1	2	3	4	5	6
15	My efforts to do a good job are seldom blocked by red tape.	1	2	3	4	5	6

16	I find I have to work harder at my job because of the incompetence of people I work with.	1	2	3	4	5	6
17	I like doing the things I do at work.	1	2	3	4	5	6
18	The goals of this organization are not clear to me.	1	2	3	4	5	6
19	I feel unappreciated by the organization when I think about what they pay me.	1	2	3	4	5	6
20	People get ahead as fast here as they do in other places.	1	2	3	4	5	6
21	My supervisor shows too little interest in the feelings of subordinates.	1	2	3	4	5	6
22	The benefit package we have is equitable.	1	2	3	4	5	6
23	There are few rewards for those who work here.	1	2	3	4	5	6
24	I have too much to do at work.	1	2	3	4	5	6
25	I enjoy my coworkers.	1	2	3	4	5	6
26	I often feel that I do not know what is going on with the organization.	1	2	3	4	5	6
27	I feel a sense of pride in doing my job.	1	2	3	4	5	6
28	I feel satisfied with my chances for salary increases.	1	2	3	4	5	6
29	There are benefits we do not have which we should have.	1	2	3	4	5	6
30	I like my supervisor.	1	2	3	4	5	6
31	I have too much paperwork.	1	2	3	4	5	6
32	I don't feel my efforts are rewarded the way they should be.	1	2	3	4	5	6
33	I am satisfied with my chances for promotion.	1	2	3	4	5	6
34	There is too much bickering and fighting at work.	1	2	3	4	5	6
35	My job is enjoyable.	1	2	3	4	5	6
36	Work assignments are not fully explained.	1	2	3	4	5	6

## Appendix F

### G\*Power Analysis

**t tests** – Correlation: Point biserial model

**Analysis:** A priori: Compute required sample size

<b>Input:</b>	Tail(s)	=	Two
	Effect size $ \rho $	=	.3
	$\alpha$ err prob	=	0.05
	Power (1- $\beta$ err prob)	=	0.95
<b>Output:</b>	Noncentrality parameter $\delta$	=	3.6404323
	Critical t	=	1.9780988
	Df	=	132
	Total sample size	=	134
	Actual power	=	0.9509217

## Appendix G

### CITI Certificate of Completion



Completion Date 02-Sep-2024  
Expiration Date 02-Sep-2027  
Record ID 64802613

This is to certify that:

**Donald Barnwell**

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

**Researchers - Social and Behavioral Focus**  
(Curriculum Group)  
**Researchers - Social and Behavioral Focus**  
(Course Learner Group)  
**1 - Basic Course**  
(Stage)

Under requirements set by:

**National University**



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