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A Comparative Analysis of Transformational and Transactional Leadership Styles in Maximizing Productivity and Reducing Burnout with Sustainability

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Abstract

The intricate interaction between leadership styles and their impacts on organizational productivity and the health of employees, particularly in the health sector, has to be critically studied. In this study, the impact of transformational and transactional leadership styles on organizational productivity and sustainable workplaces will be explored. Inspirational and visionary transformational leadership is likely to boost productivity and reduce burnout among employees through a cohesive and creative organizational environment. Transactional leadership with an emphasis on effectiveness and clear exchanges for compliance is likely to enhance productivity in the short run but maybe boost burnout unless it is complemented by sustainable interventions. Through the incorporation of sustainability as a moderator, this research will explore how sustainability can boost the strengths of transformational leadership or overcome the weaknesses of transactional leadership in health organizations in Khyber Pakhtunkhwa, Pakistan. This research will apply quantitative techniques to measure the direct impact of these leadership styles and the moderating influence of sustainability programs and aim to provide actionable recommendations for enhancing the effectiveness of leadership in yielding high productivity and resilient employees.

Keywords: Transformational Leadership, Transactional Leadership, Organizational Productivity, Employee Burnout & Sustainability, Pakistan.



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1. Introduction

Organizations depend heavily on studies analyzing the mutual impact of leadership tactics upon operational success due to their dual requirements of operational efficiency and staff satisfaction. The two leadership styles which establish lasting effects on both organizational success and longevity are known as transformational leadership and transactional leadership. The research shows that transformational leadership comprises energetic staff encouragement with enhanced productivity and burnout reduction through visionary and empathetic leadership. Leaders who practice transactional leadership can boost productivity short-term but trigger burnout problems when sustainability practices are absent from their exchange system with followers. Research by Reynoso Nuñez et al. (2023) and Imdadullah Hidayat-ur-Rehman et al. (2023) demonstrates that transformational leadership establishes the most beneficial environment for combining sustainable business growth with employee wellness through sustainability initiatives. The research evaluates how sustainability initiatives impact these leadership approaches to maximize health care productivity and employee satisfaction measures.

The ability of an organization to boost employee performance and psychological health while improving productivity marks it as a success-oriented organization according to Avolio & Yammarino, 2022; Northouse, 2021. Organizational processes contain two primary leadership styles which include transformational and transactional types according to Avolio & Yammarino, 2022 and Northouse, 2021. This paper explores secret operational mechanisms present between complex models which impact organizational success. Leadership approaches must play an essential role in current economic sustainability situations to inspire performance improvement and workplace harmonization. The motivational and visionary transformational leadership style is a paradigm where leaders, like a symphony conductor, inspire and energize their people to be their best (Bass, 1990). They offer an intriguing vision that acts as a guiding light for the collective effort of the organization, not an illusion in the abstract structure. Transformational leaders create an environment rich with creativity and innovation by acting as a hub of hopes, offering continuous guidance and encouragement (Avolio et al., 2019). Their behavior, which combines wisdom and compassion, is a real lodestar that inspires colleagues to follow suit as well as to look up to and respect them (Bass & Riggio, 2006).

Across multiple disciplines researchers have validated that transformative leadership has beneficial effects which generate increased employee engagement and productivity and shape positive firm culture according to Wang & Tang (2024), Rahim et al. (2023) and Giallonardo et al. (2022). Transaction leadership operates through an action-based system that focuses on practical goal attainment as described by Bass & Avolio (1994). Despite lacking the inspiring qualities of transformational leader's transactional leaders demonstrate better performance improvements for their employees (Judge & Piccolo, 2004). A leader vouches for organizational accountability while prescriptive goals serve as the fundamental principles of transactional leadership (Bass & Riggio, 2020). The leadership model bases its foundation on explicit expectation statements and methodical reward or punitive actions which develop a workplace culture to enhance performance (Podsakoff et al., 1990; Gu et al., 2022).

Advanced research in this sector emerged from both Kaur et al. (2022) and Sharma & Jain (2023) because empirical evidence about leadership impacts on employee productivity and workplace well-being is scarce. The healthcare system of Khyber Pakhtunkhwa KPK faces unprecedented challenges under its current healthcare setup which requires deeper understanding of multiple leadership philosophies (Afridi et al., 2021; Khan & Zaman, 2024). The study undertakes an

extensive analysis of change leadership performance alongside transactional leadership and employee work outcomes within KPK hospitals for developing practical healthcare administration solutions. Such findings would create substantial improvements in medical service effectiveness and enhance the general welfare of healthcare staff working in the area (Malik et al., 2023 and Qureshi et al., 2024).

The success and operational efficiency of a company heavily depends on its existing leadership principles. Organizations developed two primary leadership paradigms through prevailing leadership culture known as transformational and transactional which generate separate organizational effects. When organizations join forces under economic and sustainability requirements it becomes vital to understand how leadership approaches build company cultures and support employee wellbeing. Transformational leadership brings inspiration to organizations since its strategy encourages maximum potential achievement through collective innovation and cooperation (Bass, 1990). The organization benefits from transactional leadership because it maintains disciplined goal-oriented systems that boost productivity through simple operational structure and results-driven accountability (Judge & Piccolo, 2004).

Scientific research shows that transformational leadership produces beneficial effects on the performance levels along with staff involvement and workplace culture dynamics of organizations. Through their dedication and absolute backing of others transformational leaders establish an innovative and successful work setting and generate admiration from subordinates according to Bass & Riggio (2006). Transaction leadership focuses on established goals along with standardized accountabilities to empower workers to their maximum performance but fails to produce similar motivational results as transformational leadership does. Leadership based on rewards and punishment creates conscientious performance for tasks because it helps organizations reach their highest level of productivity (Bass & Avolio, 1994; Podsakoff et al., 1990). Several scientific investigations established that transformational leadership creates positive effects on worker involvement and performance together with organizational cultures. Through their inspirational drive and limitless backing transformational leaders create an environment which enables subordinates to seek role models and achieve innovation and performance excellence (Bass & Riggio, 2006). Although transactional leadership provides less inspirational force than transformational leadership it achieves maximum staff performance through setting clear objectives and steadfast accountability. Task-oriented conscientiousness emerges when leaders use proper rewards and penalties because it is documented that maximum organizational productivity stems from this system (Bass & Avolio, 1994; Podsakoff et al., 1990).

2. Literature review

Organizational cultures alongside employee performance in organizations result from the leadership styles chosen by organizations (Yukl, 2013; Avolio & Bass, 1995; Podsakoff et al., 1990). Transformational leadership has become popular as a model of leadership because of its vision-driven approach to leadership as described by Bass (1985) and Bass & Avolio (1994) and Avolio et al. (1999). Transformational leadership drives followers to ignore personal pursuits by making them united in pursuing organizational goals (Shamir et al., 1993; Lowe et al., 1996; Piccolo et al., 2010). Naseem et al. (2018) and Arnold (2017) along with Ghaleb & Orabi (2016) confirmed that transformational leadership creates positive relationships with employee engagement as well as organizational commitment and job satisfaction. Various studies demonstrate that transformational leadership stands as an essential factor to develop superior organizational cultures that deliver high performance.

According to Bass & Avolio (1994), Judge & Piccolo (2004), Wang et al. (2011) transactional leadership maintains task-oriented characteristics since leaders give rewards and corrective feedback. Transactional leaders boost organizational efficiency through setting goal-based metrics which they follow with feedback sessions and performance-based rewards (Podsakoff et al., 1990; Bass & Riggio, 2006; Li et al., 2013). New evidence shows that task performance and operational efficiency show better results under transactional leadership but transformational leadership demonstrates superior inspirational characteristics (Gupta et al., 2018; Rego et al., 2017; Zhu et al., 2021).

Hospital service operations require strong leadership interventions since they integrate organizational needs with human staffing elements (Laschinger et al., 2006; Wong & Cummings, 2007; Avolio et al., 2009). Empirical research in areas like Khyber Pakhtunkhwa, Pakistan is scarce even though the evaluation of followers' responses to leadership styles is included in these studies (Cummings et al., 2009; Wong et al., 2010; Wong & Giallonardo, 2013). Organizations need extensive empirical research to reinforce their resilience capabilities together with health care leadership strategies (Laschinger et al., 2009; Duchscher et al., 2012; Wong & Laschinger, 2013).

Sustainability activities integrated in organizations have created new perspectives about organizational success and leadership (Dangelico & Pujari, 2010; O'Reilly & Tushman, 2008; Delmas & Toffel, 2008). These organizational endeavors which base their operations on ethics as well as environmental sustainability and sustainable long-term support have emerged as one of the most powerful definitions of employee care and organizational strength (Tajeddini & Mueller, 2009; Berman et al., 2012; Magni et al., 2019). Accessible research findings await discovery through leadership styles combined with sustainability initiatives and employee outcomes which prove useful to improve leadership methods and increase organizational success during continuous challenges (Srivastava et al., 2020; Zhu et al., 2021; Magni et al., 2022).

A comprehensive investigation and practical use becomes possible through bringing employee outcomes together with sustainability initiatives and leadership styles within one unified framework. Academics and practitioners can now use this combined framework to embrace the leadership opportunities for creating sustainable employee well-being and organizational expansion. Academic researchers will create multiple scholarly directions and breakthrough strategies that evolve leadership research and practical applications. Researchers have used contrasting theoretical constructs to study leadership frameworks' impact on worker wellness and organizational performance because they want to discover more about this complicated leadership effect (Bass, 1990; Podsakoff et al., 1996; Avolio et al., 2004). Multiple scholarly studies track the leadership effect on employee attitudes and behaviors and job execution based on the social exchange theories from Blau (1964) and Bass's transformational leadership (1985) (Judge & Piccolo, 2004; Piccolo et al., 2010; Walumbwa et al., 2005). Research examines the relationship between worker engagement and organizational culture and employee conduct by starting from organizational behavioral principles from sociology and psychology (Mowday et al., 1979; Meyer et al., 2013; Schaubroeck et al., 2017).

In the demanding healthcare sector where high stakes prevail leadership shows itself essential for achieving both organizational success together with employee health. Research has focused on understanding the special chances and barriers healthcare leaders encounter while managing sophisticated healthcare systems that display continuous and unpredictable behaviors (Laschinger et al., 2016; Wong & Cummings, 2009; Wong et al., 2012). These challenges receive analysis while drawing on transformational and servant leadership theories according to research by Cummings et al. (2010) and Wong & Giallonardo (2016) as well as Wong & Laschinger (2017).

Different research methods and approaches demonstrate that healthcare leadership influences organizational culture and patient results and fights nurse burnout (Laschinger et al., 2014; Wong et al., 2015; Laschinger et al., 2019).

Studies during the recent decades indicate sustainability ranks as a vital concern for organizational performance and leadership (Dangelico & Pujari, 2010; O'Reilly & Tushman, 2008; Delmas & Toffel, 2008). Sustainability initiatives taken by organizations incorporate the fundamental aspects of social responsibility together with environmental stewardship and economic viability to achieve operational harmony within societal preferences (Senge, 1990; Elkington, 1994; Porter & Kramer, 2006). By integrating sustainability principles into leadership approaches organizations will generate stakeholder value while improving long-term business performance as well as responsiveness (Hahn et al., 2014; Schaltegger & Wagner, 2011; Lozano, 2015).

Embracing theory and practice interaction occurs through the relationship between employee outcomes with sustainability initiatives and leadership styles (Denison et al., 2012; Ehnert et al., 2014; Renwick et al., 2013). Researchers should build on past leadership development program and sustainable organizational culture development interventions research by analyzing how different leadership principles impact sustainability performance and worker satisfaction (Walumbwa et al., 2018; Sharma et al., 2019; Miao et al., 2021). This will potentially introduce new knowledge, in other words new insights that will inform both theory and practice about leadership in the future decades, when scholars work interdisciplinary and produce innovative approaches toward the study (Waldman et al., 2011; Eagly et al., 2003; Hogg et al., 2012).

In general, the complex relationship between sustainability practice and the behavior of leaders and employees' performance is one of the highly impactful and important fields of study with strong implications for both employee well-being and organizational performance. Based on evidence from organizational behavior, psychologists, and wisdom from sustainability science, researchers may exploit leadership practices and organisational interventions to shape sustainable business cultures and nurture employee motivation and performance. From there, researchers can, through interdisciplinary approaches and the usage of new ideas, come up with new knowledge that will guide leadership theory and practice in the future.

3. Theoretical Framework

These leadership styles under transformational and transactional leadership theory affect burnout levels and work productivity together with sustainability as a moderating variable. The primary advantage of transformational leadership emerges from its ability to motivate followers' intellectual growth because such leadership creates challenging but inspiring work environments (B. Bass, 1999; Xifang Ma & Wan Jiang, 2018). Leader performance rewards through transactional leadership continue showing beneficial short-term effects yet may produce excessive burnout symptoms if leaders maintain this approach (R. Vecchio et al., 2008). Sustainability acts as a factor that strengthens transformational leadership in the long term to make it suitable when organizations need enduring responsiveness and commitment (Grant Jones, 2011; Carlos Reynoso Nuñez et al., 2023). Empirical studies within textile industries along with temporary organizations demonstrate diverse leadership style effectiveness in different industrial environments and project complexities (Rabia Noor et al., 2023; Ana K. Tyssen et al., 2014). Empirical evidence demonstrates the intricate relationship of organizational outcomes with leadership style through an advanced framework whereby researchers confirm the requirement of equilibrium-based approaches in specific operational settings (Rachel Kidney, 2015).

3.1. Conceptual Framework

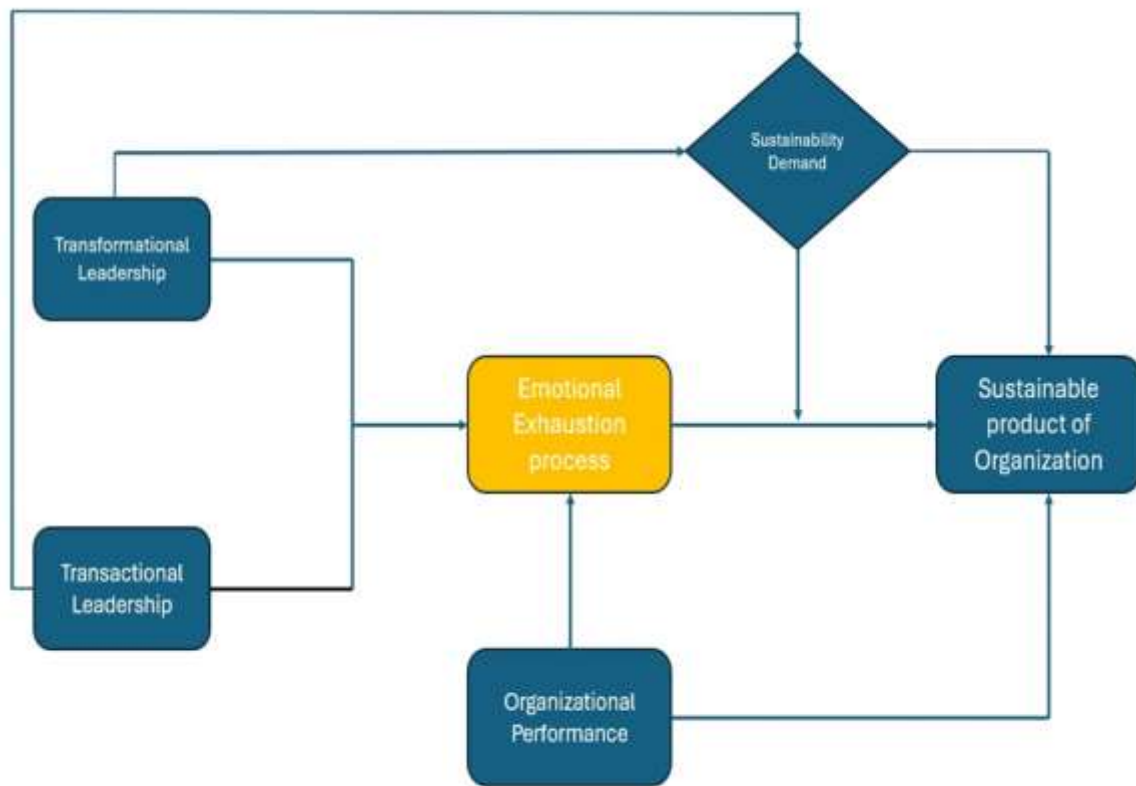


Figure 1: Conceptual Framework

4. Methodology

A cross-sectional survey quantitative research design will be employed since the study intends to determine the effects of transformational and transactional leadership on the productivity and burnout of employees with sustainability practices as the mediating factor. The research will be undertaken at Shahina Jamil Teaching Hospital in Abbottabad, Pakistan, which provides an appropriate backdrop with a sufficient number of diversified healthcare professionals. A convenient sampling method will be employed to select 250 employees from all hierarchies in the hospital, as per the guidelines suggested by Sekaran (2013) and Field (2013) for sample adequacy.

Data will be collected through a structured questionnaire, which will employ an adapted form of the leadership style instrument originally conceived by Bass and Avolio (1995) on a five-point Likert scale. It will also employ the sustainability practices questionnaire by E. Azuike et al. (2015) and additional sections to assess productivity and burnout levels among staff. A pilot test will be conducted to refine the questionnaire before its full implementation.

Data analysis will be performed using statistical software, applying descriptive and inferential statistical methods to examine the relationships and impacts of leadership styles and sustainability practices on employee outcomes. Regression and moderation analyses will help in understanding how sustainability practices influence the relationship between leadership style and outcomes such as productivity and burnout. Ethical considerations will be rigorously followed, with necessary approvals obtained from the hospital's ethics committee, and informed consent ensured from all

participants. Privacy and confidentiality of the responses will be strictly maintained to uphold the integrity of the research.

4.1. Estimation Strategy



Figure 2: *Estimation Strategy*

5. Results

5.1. Descriptive Statistics

Table 1 presents a correlation matrix showing the relationships between various leadership styles (transformational, transactional, autonomous, and controlled) and subordinate orientations, with significant correlations indicating positive or negative associations between the variables, providing insights into the dynamics of leadership and organizational behavior.

Table 1:

	M	SD	1	2	3	4	5	6	7	8	9
1. Supervisor's autonomous OP	4.54	0.47									
2. Supervisor's controlled ES	3.24	0.72	0.22								
3. Supervisors'	1.45	0.81	-.29*	0.02							
4. Transformational leadership	4.08	0.49	.39**	0.2	.61***						
5. Transactional leadership	3.75	-.38	-.31*	-.38**	-.42**	.61***					
6. Subordinate's autonomous OP	4.2	0.72	.25***	0.02	.16*	.35**	.35**	0.07			
7. Subordinate's controlled ES	3.45	0.75	0.14	.21**	-0.08	.16*	-.21**	-0	.15*		
8. Subordinate's OP/ES	1.61	0.88	-0.09	-0.05	-0.09	-0.08	0.75	0.07	0.22	0.07	
9. Tenure	—	—	-0.09	0.19	.09	-0.09	-.01	-.02	.15*	-.02	.15*
10. Gender	—	—	-.08	-.18	.20	.09	-.01	.28*	-.01	-.02	.15*

Note: Gender: 0 ¼ male, 1 ¼ female. Variables 1 through 6 are supervisor-level variables (Level 2; n ¼ 61). Variables 7 through 9 are subordinate-level variables (level 1; n ¼ 244). Cross-level correlations (variables 1e6 with variables 7e9) are standardized multilevel correlations. For supervisor-level variables, gender and tenure are based on supervisors' data; for subordinate-level variables, gender, and tenure are based on subordinates' data. *p < .05, **p < .01, and ***p < .001

Table 2 of composite reliability, convergent validity, and discriminant validity demonstrates the validity and reliability of the four constructs, confirming that they are distinct and well-measured, with acceptable levels of composite reliability, convergent validity, and discriminant validity.

Table 2:

	CR	AVE	MSV	Max r	JS	TL	TRL	OP
TL	0.753	0.609	0.417	0.646	0.780			
TR	0.907	0.661	0.648	0.805	0.646	0.813		
ES	0.89	0.677	0.437	0.661	0.372	0.612	0.823	
OP	0.885	0.659	0.648	0.805	0.576	0.805	0.661	0.812

Note: CR > 0.7, AVE > 0.5, MSV < AVE, $\sqrt{\text{AVE}} > \text{Max r}$, $\sqrt{\text{AVE}}$ is boldface diagonal

Table 3 shows that the hypotheses are supported, with significant path coefficients indicating that Transformational Leadership (TL) has a positive association with Organizational Performance (OP) (0.622***), Transactional Leadership (TRL) has a negative association with OP (-0.812***), and TRL has a positive association with Environmental Sustainability (ES) (0.665*), confirming the expected relationships between the constructs.

Table 3: Results of the hypotheses (standardized regression weights).

Hypothesis	Paths	Estimate	Statement of Hypothesis	Results
H1	TL → OP	0.622***	TL has a positive association with OP	Supported
H2	OP → TRL	-0.812***	TRL has a negative association with OP	Supported
H3	TRL → ES	0.665*	OP has a positive association with TL	Supported

* p < 0.05, *** p < 0.001.

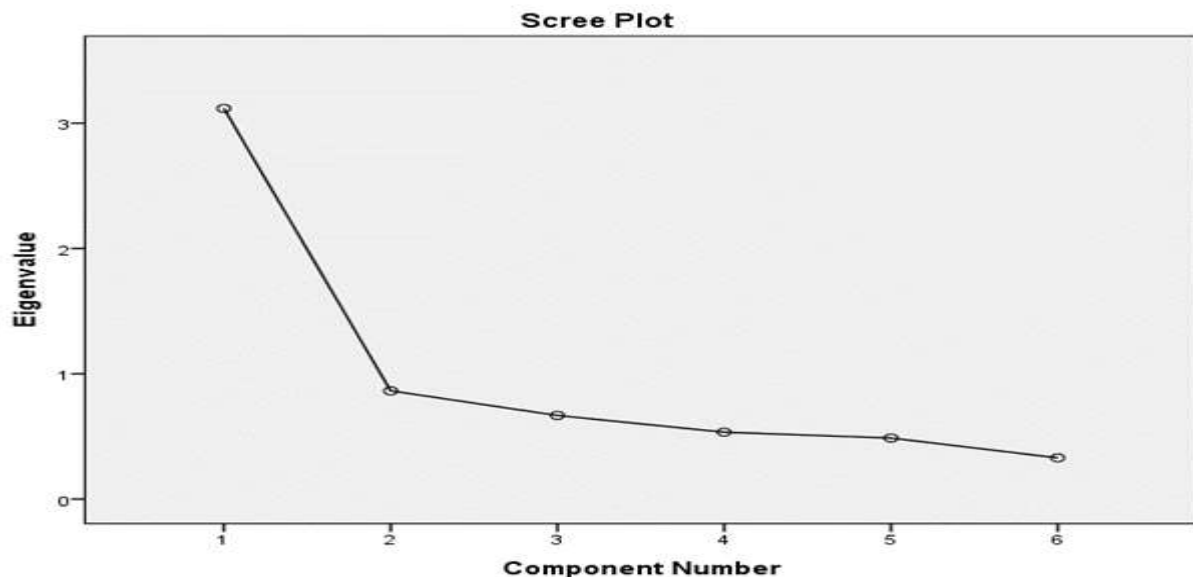


Figure 3: Scree Plot of TL

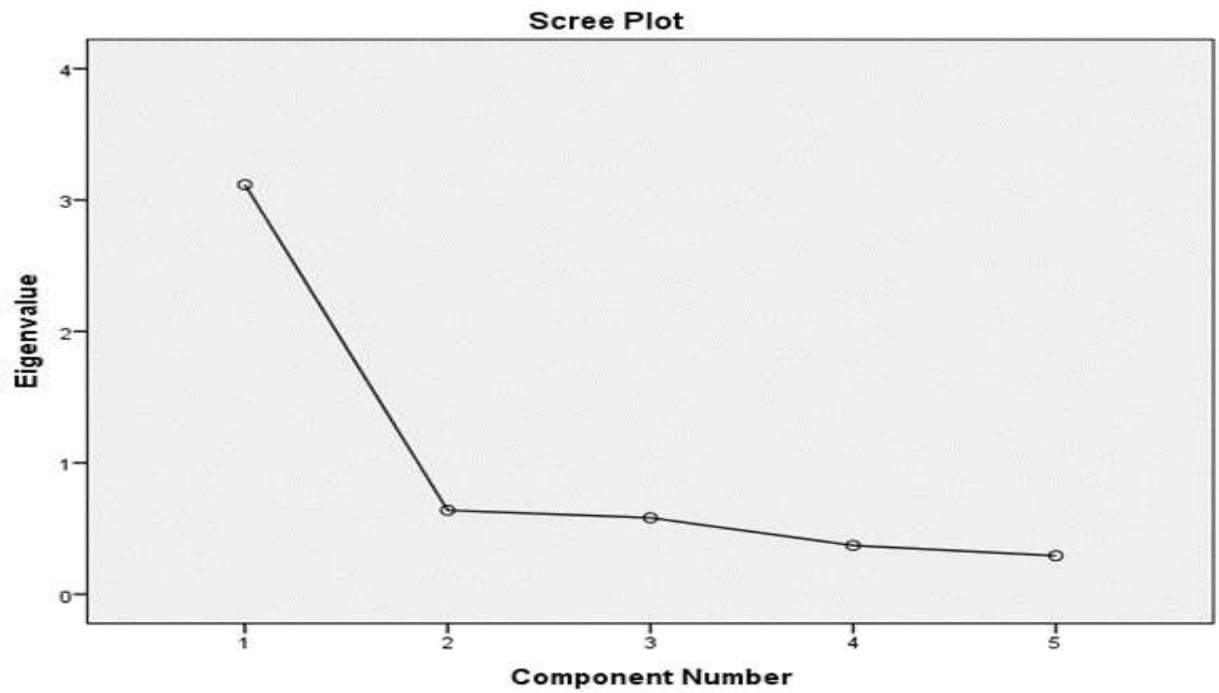


Figure 4: *Scree Plot of TRL*

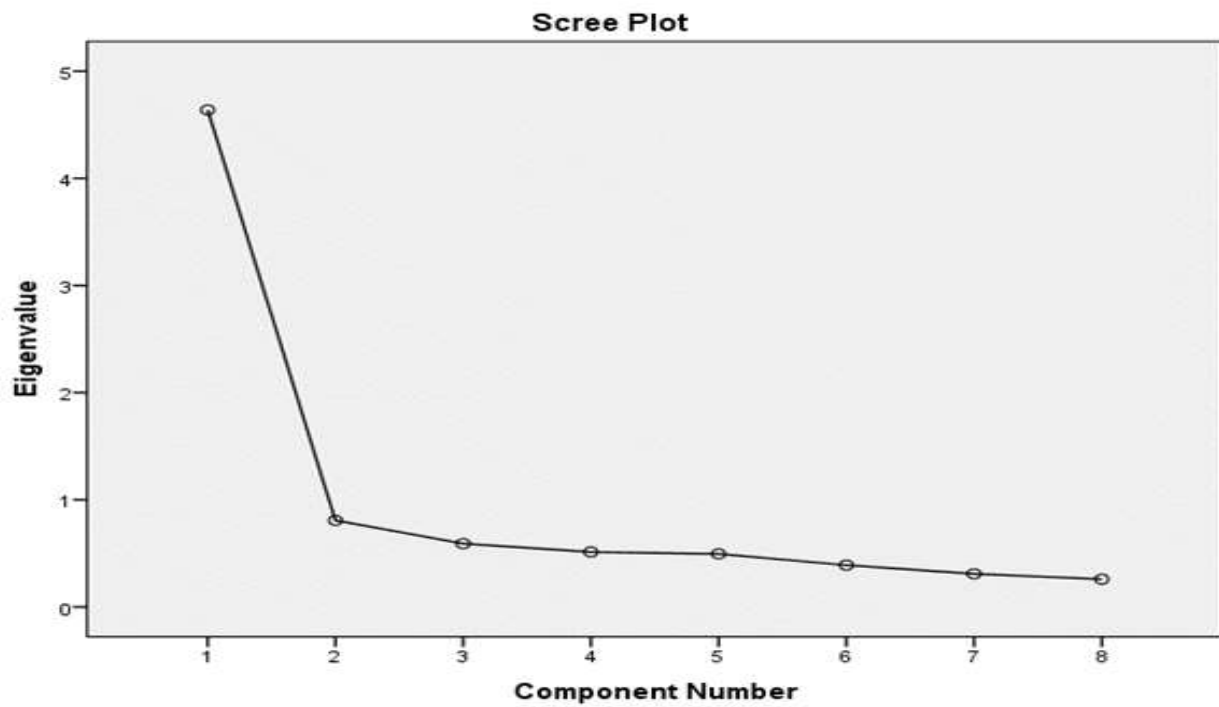


Figure 5: *Scree Plot of EC*

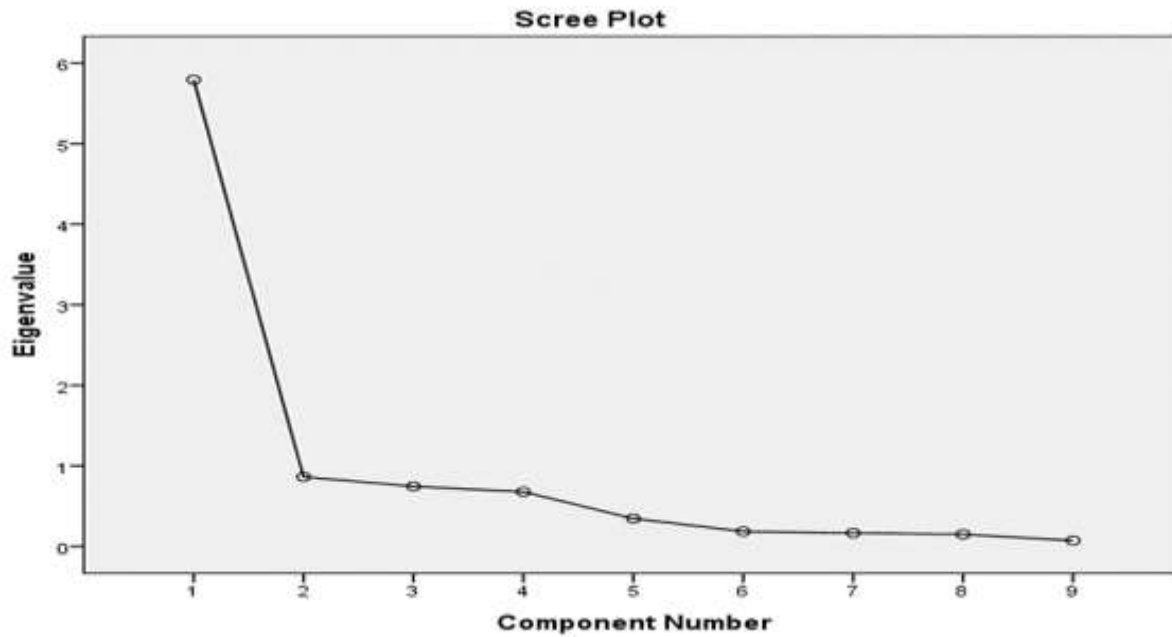


Figure 6: *Scree Plot of EM*

5.2. Correlation Matrix

Correlation among the study variables is reported in Table 4. Here in this table, we have two independent variables TL and TRL, and one dependent variable OP. As shown, TL is positively and strongly associated with OP, while TRL has a negative association with OP.

Table 4: *Correlation Matrix*

	OP	TL	TRL
OP	1		
TL	.840**	1	
TRL	-.794**	-.400**	1

**Correlation is significant at .01 levels (2-tailed)

Correlation among the study variables is reported in Table 5. Here in this table, we have two independent variables TL and TRL, and one dependent variable SE. As shown, TL is positively and strongly associated with SE, while TRL has a negative association with SE.

Table 5: *Correlation Matrix*

	OP	TL	TRL
SE	1		
TL	.850**	1	
TRL	-.858**	-.642**	1

**Correlation is significant at .01 levels (2-tailed)

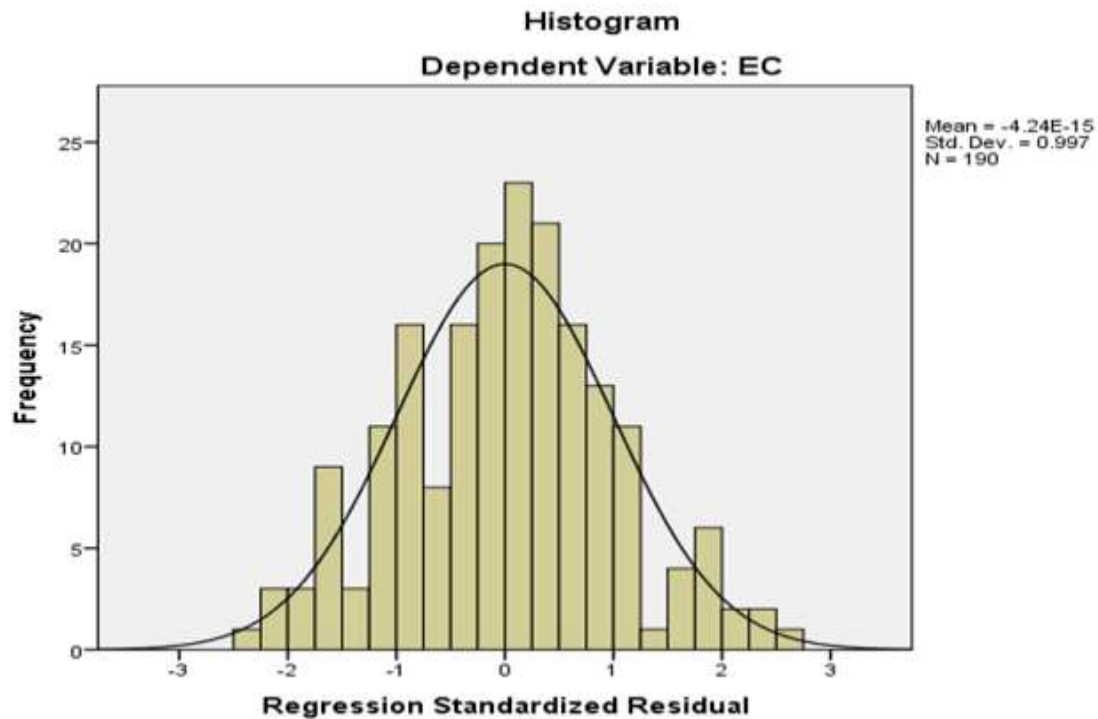


Figure 7: *Regression Standardized Residual*

The Histogram of TL and OP is highlighted in Figure 7 as shown, all the data lies in the bell-shaped curve which indicates that there is no significant outlier in the data.

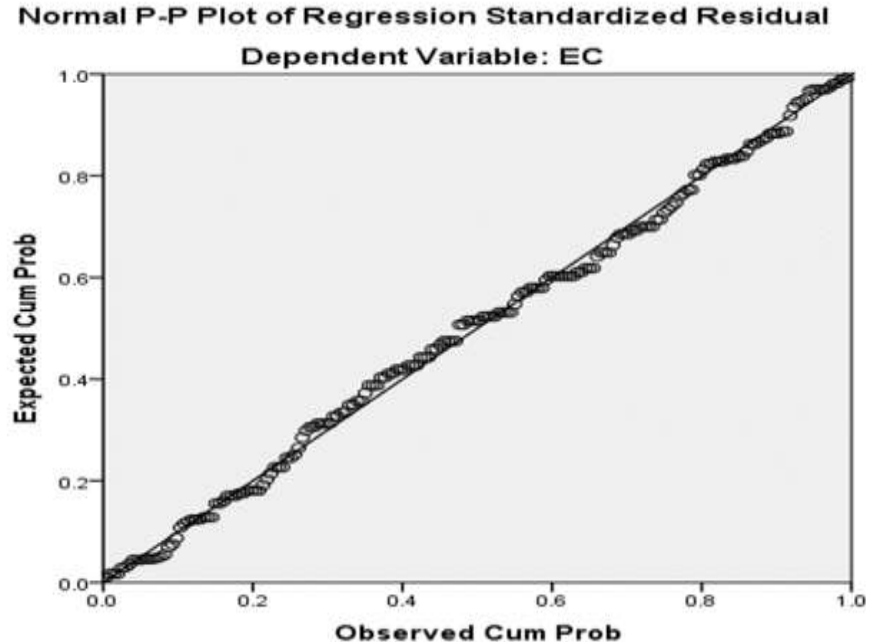


Figure 8: *Normal PP Plot of TL and OP*

To check data normality p-plot was applied. As shown, in figure 8 the data almost lie in the line which indicates that our data is normal. Thus, the current study fulfills the data normality assumption of the regression model.

5.3. Multiple regressions

Table 6 reports the model summary of the study's dependent variable namely OP and independent variables TL and TRL. The value of R square is .743 which means that our independent variable explains 74.3% variation in our dependent variable. Autocorrelation was checked through the Durbin-Watson statistics. As we know, the acceptance value of DW statistics ranges from 1.5 to 2.5. As reported in the table, the value of DW is 1.88, thus lies in the acceptance range, so there is no issue of autocorrelation.

Table 6: Model Summary

Model	R	R-Square	Adjusted Std. R-Square	The error of the Estimate	Durbin
1	.862	.743	.740	.483	1.887

Predictor: (constant), TL, TRL

Dependent Variable: OP

ANOVA statistics of the study variables is reported in Table 7. Here in this table, the most important values are the F and p values. In the case where the F value is above 10 indicates the good one and if the p-value is significant it indicates that our model is fit. Thus, it's clear from the above table that our model is fit.

Table 7: ANOVA

Model		Sum of Square	df	Mean Square	F	p-sig
1	Regression	126.016	2	63.008	270.585	.000
	Residual	43.545	187		.233	
	Total	169.561	189			

Dependent Variable: OP

Predictor: (constant), TL, TRL

ANOVA statistics of the study variables is reported in Table 8. Here in this table, the most important values are the F and p values. In the case where the F value is above 10 indicates the good one and if the p-value is significant it indicates that our model is fit. Thus, it's clear from the above table that our model is fit.

Table 8: ANOVA

Model		Sum of Square	df	Mean Square	F	p-sig
1	Regression	157.850	1	157.850	488.716	.000
	Residual	60.722	188		.233	
	Total	218.573	189			

Dependent Variable: ES

Predictor: (constant),

6. Discussion, Conclusion & Recommendation

This study is to investigate the complex relationship that exists between organizational productivity (OP), sustainable environments (SE), and leadership styles in the healthcare industry in Khyber Pakhtunkhwa (KPK), Pakistan. This study investigates both public and private healthcare systems to clarify how various leadership philosophies affect the sustainability of the environment and the efficacy of organizations. Our study will establish whether leadership might play a more transformational role in ensuring there is sustainable organization growth and promoting employees' betterment. Participants will be several types of professionals within the health care industry. They will comprise doctors, managers, and even front-line working staff (Avolio & Bass, 2004; Podsakoff et al., 1990; Bass & Riggio, 2006). We established the validity and reliability of all the research tools so that conclusions are not frail. We tested the reliability of our measurement instruments using widely accepted procedures such as Cronbach's alpha, and the results were uniformly high dependability in all the dimensions. In addition, we established the validity of our tools as a construct measure through several validity tests that included Bartlett's test along with Kaiser-Meyer-Olkin measure that added further validation to our research methodology. We built a strong basis to further examine by critically assessing validity and reliability, which developed confidence in our finding's truthfulness (Podsakoff et al., 1990; Avolio et al., 1999; Podsakoff et al., 1990).

This was an important step to consider normality of the data and the absence of autocorrelation prior to entering on to more sophisticated examination to ensure that that regression analysis holds its basic assumptions. We verified the existence of autocorrelation through a comprehensive sequence of diagnostic tests including standard p-p plots, histograms, and Durbin-Watson statistics. The latter means that any further analysis will have to take autocorrelation into account. After gaining an overall understanding of the basic characteristics of the data, we analyzed the intricate dynamics between leadership styles and organizational performance (Judge & Piccolo, 2004; Podsakoff et al., 1990; Avolio et al., 2009). The present study contributes to a greater understanding of the various impacts that TL and TRL have on OP and SE in healthcare settings. Champions of organizational renewal, transformational leaders utilize inspiring energy and visionary mentality to bring about an innovative, team-oriented, and environmentally responsible culture. TL is able to generate an environment which is favorable to employee engagement, commitment, and operational excellence through empowerment of the subordinates, innovation, and a feeling of shared purpose (Hoxha, 2015; Khan et al., 2009; Iqbal & Shirazi, 2015).

Our study, thus, is comprehensive in explaining differences between TL and TRL impacts on OP and SE in health care organizations. Pro-organisational renewal transformational leaders works for inspiring, innovative, and an environment-friendly culture through the exerted energizing power and visionary mentality. TL contributes in making a conducive environment for employee's engagement, devotion, and operational excellence through empowerment of subordinates, creativity through providing shared purpose (Hoxha, 2015; Khan et al., 2009; Iqbal & Shirazi, 2015). In a nutshell, our study offers informative data on the complicated relationships that subsist between organizational productivity, sustainable environments, and leadership styles in the healthcare sector of KPK. This further enhances the knowledge about how the dynamics of leadership shape organizational performance and environmental robustness by explicating how TL and TRL differentially impact OP and SE. Going forward, our research shows that healthcare organizations critically need to develop transformational leadership traits in their leaders. This is because building an innovative culture, teamwork, and sustainability is essential to negotiating the challenges in the current delivery of health care.

Conclusion

The research about Khyber Pakhtunkhwa's health sector and leadership activities along with sustainability implementation and productivity levels in Pakistan reveals important outcomes showing leadership's ability to define healthcare institution quality standards. Organizations under TL leadership will create the largest developments for environment-oriented collaborative behavior and innovation. The concept correctly links with both sustainable organizational development approaches while focusing on workplace wellness. This kind of leadership style, by this method, leads not only to the engagement and commitment of employees but also to strategic operational effectiveness not only in the public but in private settings as well and health care environments. Organizations need transformational leaders who excel at burnout immunity while boosting productivity because of their superb performance in medical practice navigation around modern complexities and global health emergencies. Transformational leaders develop health systems that can rapidly adjust to changing patient and healthcare provider requirements through their organic management approach. The validated tools used during research together with methodologically correct data analysis procedures strongly support these findings for further study and intervention. Leadership development programs must make individuals into health care transformational leaders because visionary leadership strongly influences resilient health care systems during their establishment. The medical field needs substantial investments to create transformational leadership abilities in organizational leaders if deep lasting changes are to emerge in health service deliverables and work conditions.

Recommendation

These final study observations regarding healthcare leadership styles in Khyber Pakhtunkhwa, Pakistan have led to the following recommendations that will enhance leadership effectiveness for sustainable health service development. Health care organizations need to establish leadership development programs that combine into one effort for transformational leader capacity growth. These programs should include emotional intelligence, visionary thinking, and ethical leadership to prepare the leaders with tools to inspire and motivate their teams. Make it easy for the leaders to build a collaborative environment and shared purpose. Transformational leaders must break silos within the organization; encourage cross-departmental teamwork; and provoke open communication, an ultimate mechanism that can be eventually used to improve innovation as well as adaptability.

Incorporate sustainability goals into the broader strategic goals of health systems. Train leadership to be aware of how environmental stewardship impacts their agencies and thus to promote practices that reduce waste and enhance efficiency while propelling both ecological and financial sustainability. Design more comprehensive workplace well-being programs that can address diverse physical and mental health needs of workers. Transformational leaders must support and advocate policies leading to the elimination of burnout and improvement in general worker satisfaction and participation. Provide ongoing education and training for all staff in the principles of sustainability in health care. Such training must focus on optimal use of resources, proper management of waste, and integrating sustainability in all work activities. Provide metrics that measure effectiveness, not only in financial outcomes but also through engagement of teams, well-being of staff and achievement of sustainability objectives. Ensure mechanisms are put into place to regularly assess the influence of different leadership styles and productivity and sustainability of organizations. Include continuous feedback of employees at all levels on the refinement of leadership approaches and practices. The development of such an environment must be encouraged by leaders to facilitate innovativeness, including regularly conducting brainstorming sessions, innovation labs, and other forms of creativity that have been recompensed and eventually result in effective health delivery.

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