

Leadership Styles and Sustainable Performance: The Mediating Role of Extra Role Behavior and Human Capital in Pakistani SMEs

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Abstract:

This study explores the influence of different styles of leadership, specifically servant leadership and spiritual leadership, on sustainable performance in the setting of small and medium-sized enterprises (SMEs) in Pakistan. Through this research, the researchers want to achieve a thorough grasp of how these leadership styles influence sustainable performance, including human capital and extra-role behavior. A total sample size of 503 participants from different SMEs was used to gather data, employing a purposive sampling technique. Data was analyzed using smart PLS. The findings of the study indicate that both servant and spiritual leadership have a positive and significant impact on sustainable performance. The mediating roles of human capital and extra-role behavior were also found to be significant, highlighting their importance in the overall leadership-performance dynamic. It offers practical understandings for leaders and policymakers on how to harness the potential of servant and spiritual leadership to achieve sustainability. This study contributes to testing effects of leadership styles and mediators on sustainable performance in the context of Pakistani SMEs. There were certain limitations of the study e.g. data was cross sectional and only golden triangle was targeted for data collection, which can be addressed in the future.

Keywords: Extra-Role Behavior, Human Capital, Servant Leadership, Spiritual Leadership, Sustainable Performance

1. Introduction

Within the field of organizational sciences, leadership is likely the subject that receives the greatest attention from researchers. External influences such as globalization, resource scarcity, social media, advanced multimedia platforms, and rapid technological innovation have significantly increased the complexity and interdependence of modern organizations. This interconnectedness extends beyond economic concerns, encompassing broader responsibilities toward society and the environment. The concept of organizational sustainability has been a point of debate

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among professionals in the disciplines of leadership and management. Definitions of "sustainability" differ across various fields (Faber et al., 2005). When discussing sustainability in the context of leadership, ideas revolve around doing business in an ethical, socially conscious and responsibly manner (Székely & Knirsch, 2005).

Countries throughout the world, developed and developing, have suffered numerous consequences because they did not comply with a sustainable agenda in the past. Virakul and Russ-Eft (2020) cite the fact that the effects of globalization, capitalism, and consumerism have benefited a large number of nations worldwide over the last three decades. Among the challenges brought on by these variables are climate change, pollution, the exhaustion of natural assets, insufficient supply of energy, monetary crises, and disputes over geography (Darvishmotevali & Altinay, 2022). In response to these concerns, the UN established a framework of plans, goals, and metrics referred to as the goals for sustainable development (SDGs). These goals for sustainable development are used to achieve global poverty elimination, broad economic progress, social trust building among all stakeholders, and environmental protection (Iqbal & Ahmad, 2021).

According to the Global Economic and Social Survey Report published by the United Nations, there are challenges associated with striking a balance between the sustainability's three cornerstones, which are social, economic, and environmental concern. According to the findings of this survey research, developing countries such as Pakistan should take into consideration sustainability in a rational manner (Hosain et al., 2020). Sustainable development has appeared as one among the most difficult problems on a global scale. Many stakeholders, including as the public, government, and nonprofit organizations, are exerting pressure on businesses to operate in a manner that is environmentally responsible in an environment that is exceedingly complex (Peters, 2019).

One of the biggest contributions to the nation's total GDP is the manufacturing sector. The World Bank's set of development indicators states that the manufacturing sector contributed 13.23% of Pakistan's GDP (Bank, 2022). This industry directly contributes to significant environmental issues by depleting natural resources and contaminating air, water, and land. The manufacturing sector is a significant generator of trash, jeopardizing the firm's sustainability (Sarfraz et al., 2022). Numerous small and medium-sized organizations' proprietors and administrators encounter difficulties in maintaining their operations. Sixty-six percent of SMEs fail within two years of operation, while 49.6% fail within five years. Certain owners and managers of SME's did not possess the essential

leadership capabilities to safeguard the company's sustainability beyond the following five years (Peters, 2019).

Employees in Pakistan's industrial sector are less knowledgeable about environmental issues and how their sectors might contribute to sustainability. These sectors need to foster an atmosphere that inspires workers to think of ways to lessen their impact on the environment through actions like cutting back on energy use and going green (Jamshed et al., 2022). The utilization of effective leadership and an integrative approach is most suitable for ensuring corporate sustainability and assessing its relevance in the manufacturing sector in Pakistan (Zenger et al., 2009).

Leaders significantly enhance human capital by creating a growth-focused environment, investing in continuous learning, fostering open communication, providing clear career paths, rewarding achievements, promoting work-life balance, and championing diversity and inclusion (Abu-Rumman, 2021). Our research enhances the existing literature by adding human capital as a mediator; which is also suggested by (Liu et al., 2023). In the field of human psychology, human behavior is influenced by their surrounding environment. When people follow a leader and see how helpful they are, it makes them aim to contribute positively to the boss and the company as a way of giving back. One option to reciprocate is for employees to exhibit the extra role behavior. This assertion is backed by the argument put out by (Aboramadan et al., 2022), who posits that effective leadership support holds a significant position in fostering the growth of extra-role behaviors.

This study's purpose is to look into how servant and spiritual leadership affect the sustainable performance of Pakistan's manufacturing industry, mediated by human capital and extra-role behavior.

Literature Review

2.1 Theoretical Literature

The study will employ the social exchange theory. According to this theory, leader's first form exchange contracts with their subordinates through offering benefits and receiving compensation in return in form of positive subordinates' behaviors (Darvishmotevali & Altinay, 2022).

2.2 Empirical Literature:

2.2.1 Servant Leadership and Sustainable Performance

The idea of servant leadership was first presented by Greenleaf (2002). This leadership style is founded on the principle that leaders must prioritize a desire to assist, providing leadership with the objective of addressing the needs of the group (Alafeshat & Tanova, 2019). Saleem et al., (2020) carried out research to determine

how servant leadership affected workers' task performance and OBC through trust mediation. The findings showed that individual performance is significantly impacted by servant leadership. Siddiquei et al., (2021a) concluded that environment-specific servant leadership significantly influences employees' environmental performance. Servant leadership demonstrated to exert a substantial and beneficial influence on the working of an organization (Alafeshat & Aboud, 2019; Hashim et al., 2019). Drawing from the aforementioned literature, the researcher came up with the hypothesis.

H1: Servant leadership has significant impact in sustainable performance.

2.2.2 Spiritual Leadership and Sustainable Performance

Spiritual leaders' top priority is inspiring employees to adopt the organization's vision and values through support, recognition, and promoting a feeling of inclusion in the place of work (Oh & Wang, 2020). The goal of spiritual leadership is to balance and unite leaders, employees, and organizations. In order to satisfy this requirement, spiritual leadership must establish a point at which the interests and requirements of individuals are in harmony with those of the organization (Sinarti & Sopiah, 2023). The association between sustainable performance and spiritual leadership is a missing link, despite the abundance of research on the spiritual leadership's effects on employee and organizational results (Piwowar-Sulej & Iqbal, 2022).

H2: Spiritual leadership has significant impact on sustainable performance.

2.2.3 Mediating Role of Extra Role Behavior

Extra role behavior is characterized as the discretionary, indirect actions of personnel that are not explicitly acknowledged by official system of compensation, and this collectively enhances the operational effectiveness of the business (Organ, 1988). In order to determine the influence that spiritual leadership has on the outcomes of personnel through the mediation of extra role behavior, a study involving 102 workers of Islamic banks in Malang was undertaken. The findings demonstrated that additional role behavior mediated the association between dependent and independent variables (Idawati & Mahadun, 2022; Supriyanto et al., 2020). Additionally, studies have shown that extra role behavior acts as a mediator between religious beliefs, transformational leadership, job happiness, and the performance of teachers (Novitasari et al., 2020). The impact of transformational leadership (TL) and structural empowerment on employee performance were investigated, along with the ways in which satisfaction, OCB, and trust function as mediators of these effects. The collection of data involved administering a questionnaire to a sample of 68 respondents. The findings indicated that both

independent variables significantly influence performance, mediated by satisfaction, OCB, and trust (Novitasari et al., 2020). Additionally, extra role behavior influenced the association between TL and intention to quit. TL significantly alleviates job-related stress. Reduced stress enhances overall satisfaction. Satisfaction enhances extra role behavior, subsequently reducing turnover intention (Manoppo, 2020).

H3: *Extra role behavior mediates the relationship between servant leadership and sustainable performance.*

H4: *Extra role behavior mediates the relationship between spiritual leadership and sustainable performance.*

2.2.4 Mediating Role of Human Capital

Human capital (HC) is a concept that includes the totality of information, skills, and expertise that individual's hold, which plays a crucial role in attaining competitive advantages. HC refers to the expertise, abilities, and commitment demonstrated by the employees within an organization (Alrowwad et al., 2020). The concept of human capital encompasses an individual's education, experience, and inherent abilities. It serves as the core of knowledge creation and a source of competitive edge, necessitating that leaders effectively manage and foster new knowledge through their teams (Pasamar et al., 2019). A research showed that human capital acts as a bridge between knowledge management and the performance of a company (Rezaei et al., 2021). Intellectual capital was found to be a major mediator between leadership competency and competitiveness (Mubarik & Bontis, 2022). Research indicates that moral value of any organization, along with human and social capital, plays a mediating role in the connection between CSR and ethical leadership exhibited by the head of the company (Ullah et al., 2022). A separate study demonstrated that knowledge management, mediated by social and intellectual capital, has a favorable and large indirect effect on innovation (Salehi et al., 2022).

H5: *Human capital mediates the relationship between servant leadership and sustainable performance.*

H6: *Human capital mediates the relationship between spiritual leadership and sustainable performance*

2.3 Operational Definitions

2.3.1 Servant Leadership

This type of leadership is characterized by exhibiting socially acceptable behavior through actions and interpersonal interactions, while promoting similar

conduct among followers via reciprocal engagement, encouragement, and collaborative decision-making (Zada et al., 2022).

2.3.2 Spiritual Leadership

It is an art that consists of motivating other people to work together towards the accomplishment of shared goals. It involves inspiration to form a vision and mission and the cultivation of a culture with values that have an impact on those around you (Putra et al., 2022).

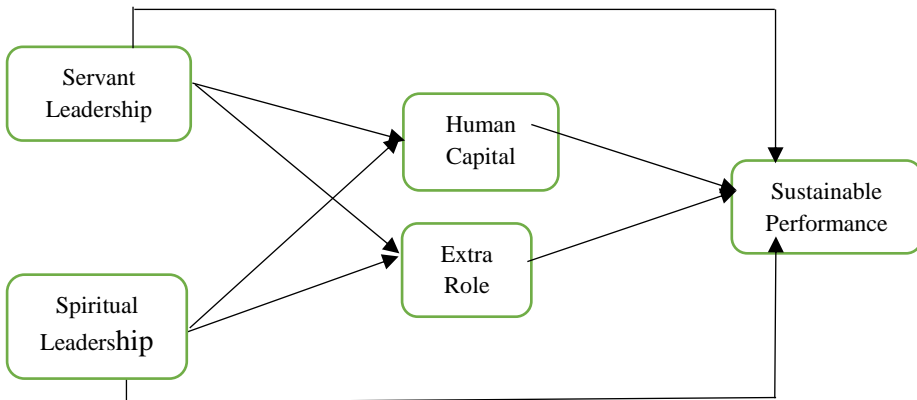
2.3.3 Human Capital

It refers to talents, information, and experiences that leave the company after work, such as creativity, innovation, learning, motivation, adaptability, and loyalty (Ullah et al., 2022).

2.3.4 Extra Role Behavior

It is characterized as the discretionary, indirect actions of personnel that are not explicitly approved by the official compensation system, and this collectively enhances the operational effectiveness of the business (Organ, 1988)

Figure 2: *Theoretical Framework*



Methodology

3.1 Research Design

The data was gathered only once, making it a cross-sectional study. Many research designs are used for research. The current study is non-experimental research and causal in nature as it is being conducted in natural setting and aims at finding the influence of leadership styles on sustainable performance.

3.2 Participants and Procedures

The goal of the current research is to examine the impact that different leadership styles have on the sustainable performance of the Golden Triangle. All levels of managers working in small and medium-sized enterprises (SMEs) were surveyed in order to obtain the data. To acquire the data, a technique known as purposive sampling was utilized. Data was analyzed using 503 questionnaires.

Data was gathered through both physical and online dissemination of the questionnaire to enhance respondent accessibility. A Google link was generated and distributed to the responders for online data collection: <https://forms.gle/JWUMLpTdVH44so439>

3.3 Measurement and Analysis

Servant leadership was measured by eight items using (Kaltiainen & Hakanen, 2022) instrument. Spiritual leadership was measured using eleven items of (Fry et al., 2005). The measurement of human capital was conducted by five items using the study of (Subramaniam & Youndt, 2005). Extra role behavior was measured by three items using the scale of (Balfour & Wechsler, 1996). Sustainable performance was measured using eleven items of (Nara et al., 2021).

3.4 Data collection and analysis procedures

Data was gathered from top, middle and low-level managers working in SMEs of golden triangle. The research was conducted in Sialkot, Gujranwala and Gujrat as these cities are famous for their industries. Questionnaire were physically distributed and picked. WhatsApp groups and official email addresses were also used to collect data online in Google forms. The participants' replies were evaluated using a five-point Likert scale. Smart PLS was used to conduct CFA, assess instrument reliability and validity, and evaluate the proposed hypotheses.

4. Analysis

4.1 Measurement Model

Figure 2: *Measuring Model*

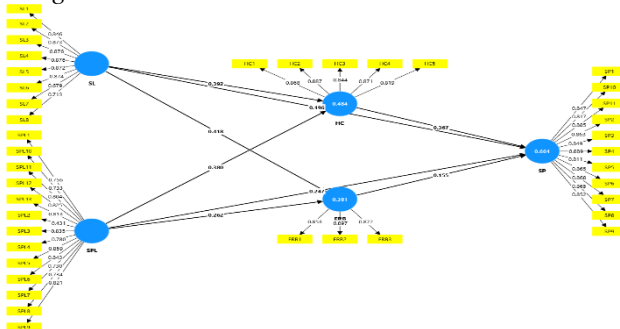


Table 1. Result of Measurement Model

Latent. Variables	Items. Retained	Outer. Loading	Cronbach. Alpha	CR	AVE	Discriminant. Validity
1. Servant leadership	S.L1, S.L2, S.L3, S.L4, S.L5, S.L6, S.L7, S.L8	0.843, 0.873, 0.876, 0.878, 0.872, 0.873, 0.676, 0.715	0.934	0.938	0.688	Yes
2. Spiritual leadership	SPL1, SPL2, SPL3, SPL4, SPL5, SPL6, SPL7, SPL8, SPL9, SPL10, SPL11, SPL12, SPL13	0.754, 0.431, 0.836, 0.780, 0.859, 0.844, 0.732, 0.736, 0.821, 0.735, 0.803, 0.824, 0.813	0.942	0.952	0.599	Yes
3. Human capital	HC1, HC2, HC3, HC4, HC5	0.868, 0.887, 0.844, 0.871, 0.819	0.910	0.912	0.736	Yes
4. Extra role behaviour	ERB1, ERB2, ERB3	0.858, 0.897, 0.872	0.846	0.850	0.764	Yes
5. Sustainable performance	SP1, SP2, SP3, SP4, SP5, SP6, SP7, SP8, SP9, SP10, and SP11	0.848, 0.863, 0.850, 0.889, 0.811, 0.865, 0.868, 0.865, 0.852, 0.816, 0.885	0.963	0.964	0.733	Yes

The findings were derived from Smart-PLS. The questionnaire satisfies the essential criteria for validity and reliability, with the minimum acceptable values for CR, AVE, and Outer Loading being 0.70, 0.50, and 0.60, respectively.

Table 2: Heterotrait-Monotrait Validity Analysis (HTMT)

	ERB	HC	SL	SP	SPL
ERB					
HC	0.662				
SL	0.649	0.678			
SP	0.675	0.784	0.700		
SPL	0.573	0.655	0.654	0.702	

The table indicates that no value exceeds 0.9, signifying that all variables are unrelated, hence confirming the discriminant validity of the instrument.

4.2 Structural Model

After measurement analysis, structural model is analyzed which is as follow.

Step-1 Multicollinearity Analysis

Multicollinearity is the first step of analysis of structural model. The findings showed that there is no issue collinearity in the data as all values of VIF is less than 5 as per the threshold of (Hair Jr, Howard, & Nitzl, 2020). Table 3 shows the results.

Table 3: Multicollinearity Analysis of Inner Model

	VIF
ERB -> SP	1.737
HC -> SP	2.094
SL -> HC	1.000
SL -> SP	2.090
SPL -> ERB	1.000
SPL -> SP	1.958

Step-2 Evaluate Size and Significance of Path Coefficients

The estimated value of standardized regression coefficient (β) depict the relationship among the independent variable and dependent variable on the condition that estimated p-score is statistically significant for standardized regression coefficient (β) (J.F. Hair, Black, Babin, & Anderson, 2019).

Figure 3: Structural Model

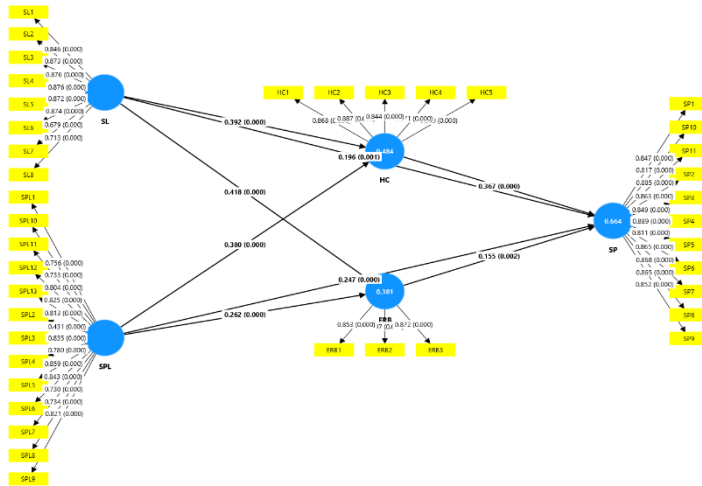


Table 4: Examination of Relevance and Significance of Structural Paths

Hypothesis	Relationships	Original sample	Sample mean	Standard deviation	T. statistics	P. values	Decision
1	SL -> SP	0.196	0.198	0.061	3.242	0.001	Accepted
2	SPL -> SP	0.247	0.239	0.059	4.180	0.000	Accepted
3	SL -> ERB -> SP	0.065	0.065	0.024	2.743	0.006	Accepted
4	SPL -> ERB -> SP	0.041	0.041	0.017	2.368	0.018	Accepted
5	SL -> HC -> SP	0.144	0.144	0.033	4.331	0.000	Accepted
6	SPL -> HC -> SP	0.140	0.142	0.045	3.127	0.002	Accepted

The result indicates that servant and spiritual leaderships have a significant positive relationship with sustainable performance. On the basis of these results, hypothesis H₁ and H₂ are accepted. Extra role behavior and human capital also played the role of mediating variables between dependent and independent variables. So, H₃, H₄, H₅, and H₆ are also accepted.

Step-3 Examination of Coefficient of Determination (R²)

R² values analyze the volume of variance enlightened by each endogenous variable, and it is also called a measure of explanatory power of model (Joseph F Hair, Risher, Sarstedt, & Ringle, 2019; Shmueli & Koppius, 2011).

Table 5: Examination of Coefficient of Determination R-square

	R-square	R-square adjusted
ERB	0.382	0.379
HC	0.484	0.482
SP	0.715	0.710

The R-square values highlight the strong practical significance of the proposed model. Leadership styles explained 38% of the variance in extra-role behavior, indicating a moderate yet meaningful contribution of servant and spiritual leadership in motivating employees to go beyond formal duties. Similarly, nearly 48% of the variance in human capital was accounted for, reflecting the critical role of leadership in fostering knowledge, skills, and employee potential. Most importantly, the model explained over 71% of the variance in sustainable performance, which is exceptionally high in behavioral research and demonstrates that leadership, when channeled through human capital and extra-role behavior, constitutes a powerful driver of organizational sustainability. These findings emphasize that investing in value-driven leadership styles is not merely symbolic but a practical necessity for organizations striving for long-term success.

Step-4 Examination of Predictive Accuracy

The next and fourth step to evaluate the structural model is to analyze q^2 . The rule of thumb for values of q^2 greater than 0, 0.25, and 0.50 depicts small, moderate, and large predictive accuracy/relevance of the PLS path model. (Joseph f hair et al., 2019).

Table 6: Examination of Predictive Accuracy Q-square

	Q²predict
ERB	0.268
HC	0.390
SP	0.547

The Q²predict values provide strong evidence of the model's predictive relevance. Extra-role behavior yielded a value of 0.268, indicating moderate predictive accuracy, which confirms that servant and spiritual leadership can be reasonably relied upon to forecast discretionary employee behaviors. Human capital achieved a Q²predict of 0.390, signifying large predictive power and highlighting leadership as a consistent driver of workforce knowledge and skills development. Most notably, sustainable performance displayed a Q²predict of 0.547, an exceptionally strong result in behavioral research, underscoring that leadership, mediated through human capital and extra-role behavior, can reliably predict long-

term organizational sustainability. Taken together, these findings affirm that the proposed framework not only explains but also meaningfully predicts critical organizational outcomes, thereby strengthening its practical value for both scholars and practitioners.

5: Conclusion and Discussion

5.1 Discussion

The aim of the research was to investigate the impact of leadership styles on sustainable performance with the mediation of extra role behavior and human capital among SMEs of Pakistan. The hypotheses are accepted as per the findings. The results support H_1 and H_2 , which shows link that is both significant and favorable between servant, spiritual leadership and sustainable performance. Various empirical findings have also gone ahead and supported the relationship between servant leadership, spiritual leadership and positive organizational outcomes. The results are also supported by (Hashim et al., 2019; A. Iqbal et al., 2020; Ledesma-Zalsos, 2015; Lusiani et al., 2020; Ogunsola et al., 2020; Siddiquei et al., & Mir, 2021b; Taylor & Pearse, 2013). The results also support H_3 and H_4 , which state that extra role behavior mediates the relationship between servant leadership and spiritual leadership respectively. There are many studies where extra role behavior act as a mediator between leadership styles and organizational/employee level outcome (Ayu Putu Widani Sugianingrat et al., 2019; Hermawati & Mas, 2017; Idawati & Mahadun, 2022; Manoppo, 2020; Novitasari et al., 2020; Qalati et al., 2022; Ribeiro et al., 2018; Sunatar, 2022). The results also support H_5 and H_6 , which state that HC is a mediator. Previously, human capital has also been studies as a mediator between leadership styles and different organizational outcomes (Jabbouri & Zahari, 2017; Pasamar et al., 2019; Subramony et al., 2018; Zhu et al., 2006).

5.2: Practical Implications

Based on the conclusions of this research, the following practical implications can be derived for business leaders, human resources, policymakers, and academic researchers. Incorporating the principles of servant and spiritual leadership in the leadership development of organizations is of value. Since both types of leadership mentioned above help to achieve sustainable performance, organizations should invest more in practicing empathy, ethical dilemma resolution, and employees' welfare. This research helps to comprehend that sustainability of top performance is possible only if the organizational culture base is founded on a set of clear values. Leaders must encourage appropriate values like integrity and understanding. This study shows that the use of servant and spiritual models can be a cost-efficient

strategy that promotes engagement, ethical standards, and future-oriented outcomes. The government and Chambers of Commerce can assist these causes by offering knowledge and tools to the SMEs and encouraging the application of the above-mentioned characteristics for leadership and sustainability while providing incentives to organizations that adhere to these values. This proves that the practices of leadership should go hand in hand with performance. Hence, servant and spiritual leadership can improve performance by identifying ways to support communities, source materials ethically, and be more environmentally friendly.

5.3 Theoretical Implications

The results present numerous theoretical contributions that enrich the literature and shed further light on how leadership affects organizational performance. The study offers theoretical support for connecting leadership styles to sustainable performance directly. This linkage proffers a new viewpoint on how leadership could be used strategically in this context to enhance sustainability and therefore expand the theoretical understanding of leadership efficiency. The study also re-emphasizes the mediating position of human capital, and extra-role behavior, in the leadership style and resultant sustainable performance. Guided by Social Exchange Theory (Blau, 1964), this study proposes that servant and spiritual leadership both enhance sustainable performance by fostering reciprocal employee responses, but they operate through the mediators in distinct ways. Servant leadership primarily strengthens human capital by investing in followers' growth, skill development, and empowerment, thereby enhancing employees' tangible capabilities. In contrast, spiritual leadership contributes more indirectly to human capital by nurturing psychological resources such as meaning, hope, and commitment, which may not always translate into technical competencies. Conversely, both leadership styles converge in shaping extra-role behavior, albeit through different mechanisms. Servant leaders encourage such discretionary behaviors by demonstrating humility, stewardship, and genuine care, which employees reciprocate interpersonally. Spiritual leaders, however, foster extra-role behavior by instilling a shared sense of calling and membership, prompting employees to act beyond their roles as an expression of collective spiritual purpose. Together, these insights reveal that servant and spiritual leadership, though conceptually aligned in their people-centered ethos, mobilize different pathways of reciprocity to sustain organizational performance.

5.4 Managerial Implications

In emerging economy contexts such as Pakistan's Golden Triangle, where SMEs operate under severe financial and structural constraints, servant and spiritual leadership provide resource-sensitive yet culturally resonant mechanisms to achieve sustainable performance. Rather than depending on costly training investments, leaders can build human capital through peer mentoring, job rotation, and informal skill-sharing practices, while encouraging extra-role behaviors via low-cost recognition rooted in local cultural traditions, such as public acknowledgment or religious blessings. Spiritual leadership further aligns with Islamic values of justice, service, and stewardship, reframing sustainability as both a strategic priority and a moral obligation. By leveraging the family-like structures common in South Asian SMEs, leaders can foster loyalty and discretionary effort, while servant-oriented managers can extend collaboration across SME networks to share training and sustainability resources. These context-specific practices demonstrate how leadership in resource-limited, collectivist environments can generate unique pathways to sustainable performance, offering insights that enrich global debates on leadership and sustainability beyond developed economies.

5.5. Limitations and Future Direction

Regarding the future, there are a few constraints that ought to be taken into consideration. One of the main limitations of this study is that it was carried out in the context of Pakistani SME's. The study is cross-sectional. The data gathered through survey questionnaires which gave respondents' perceptions of the leadership style, human capital management, extra-role behavior, and sustainable performance are colored by social desirability bias. Future studies should involve different organization types, sizes, and industries. More longitudinal research could be very useful in identifying how servant and spiritual leadership grows and how it impacts organizational sustainability. Future studies can also explore the impact of other leadership styles, for example, transformational, transactional, or authentic leadership, and their effects on sustainable performance. There could be other mediating and moderating factors that research may wish to examine in the future. For instance, research about the impact of organizational climate, CSR activities, and management-stakeholder relations may help explain the specifics of how leadership shapes sustainability.

References

- Aboramadan, M., Dahleez, K. A., & Farao, C. (2022). Inclusive leadership and extra-role behaviors in higher education: does organizational learning mediate the relationship? *International Journal of Educational Management*, 36(4), 397–418.
- Abu-Rumman, A. (2021). Transformational leadership and human capital within the disruptive business environment of academia. *World Journal on Educational Technology: Current Issues*, 13(2), 178–187.
- Alafeshat, R., & Aboud, F. (2019). Servant leadership impact on organizational performance: The mediating role of employee engagement. *International Journal of Human Resource Studies*, 9(3), 85–100.
- Alafeshat, R., & Tanova, C. (2019). Servant leadership style and high-performance work system practices: Pathway to a sustainable Jordanian airline industry. *Sustainability*, 11(22), 6191.
- Alrowwad, A. a., Abualoush, S. H., & Masa'deh, R. e. (2020). Innovation and intellectual capital as intermediary variables among transformational leadership, transactional leadership, and organizational performance. *Journal of Management Development*, 39(2), 196–222.
- Ayu Putu Widani Sugianingrat, I., Rini Widyawati, S., Alexandra de Jesus da Costa, C., Ximenes, M., Dos Reis Piedade, S., & Gede Sarmawa, W. (2019). The employee engagement and OCB as mediating on employee performance. *International Journal of Productivity and Performance Management*, 68(2), 319–339.
- Balfour, D. L., & Wechsler, B. (1996). Organizational commitment: Antecedents and outcomes in public organizations. *Public Productivity & Management Review*, 256–277.
- Bank, W. (2022). The World Bank Data. <https://databank.worldbank.org>
- Darvishmotevali, M., & Altinay, L. (2022). Green HRM, environmental awareness and green behaviors: The moderating role of servant leadership. *Tourism Management*, 88, 104401.
- Faber, N., Jorna, R., & Van Engelen, J. (2005). The sustainability of "sustainability" A study into the conceptual foundations of the notion of "sustainability". *Journal of Environmental Assessment Policy and Management*, 7(01), 1–33.

- Fry, L. W., Vitucci, S., & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement, and establishing a baseline. *The leadership quarterly*, 16(5), 835–862.
- Greenleaf, R. K. (2002). Servant leadership: A journey into the nature of legitimate power and greatness. *Paulist press*, 270-335p.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis. <http://www.cengage.co.uk>. ISBN: 978-4737-5654-0
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2–24.
- Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of business research*, 109, 101–110.
- Hashim, M., Khan, M. A., & Adnan, S. (2019). Servant leadership and enhancement of organizational performance. *Global Social Sciences Review*, 4(1), 117–122.
- Hermawati, A., & Mas, N. (2017). Mediation effect of quality of worklife, job involvement, and organizational citizenship behavior in relationship between transglobal leadership to employee performance. *International Journal of Law and Management*, 59(6), 1143–1158.
- Hosain, S., Manzurul Arefin, A. H. M., & Hossin, M. (2020). The role of human resource information system on operational efficiency: evidence from MNCs operating in Bangladesh. *Asian Journal of Economics, Business and Accounting*, 18(2), 29–47.
- Idawati, K., & Mahadun, H. (2022). The Role Of Spiritual Leadership in Improving Job Commitment, Organizational Citizenship Behavior and Employee Performance. *Jurnal Aplikasi Manajemen*, 20(3), 578–593.
- Iqbal, A., Latif, K. F., & Ahmad, M. S. (2020). Servant leadership and employee innovative behaviour: exploring psychological pathways. *Leadership & organization development Journal*, 41(6), 813–827.
- Iqbal, Q., & Ahmad, N. H. (2021). Sustainable development: The colors of sustainable leadership in learning organization. *Sustainable Development*, 29(1), 108–119.
- Jabbouri, N. I., & Zahari, I. (2017). An Empirical Study of Human-Capital as a Mediator on the Relationship between Strategic Leadership Styles and Sustainable Competitive Advantage in Iraqi Private Universities. *International Journal of Science and Research*, 6(5), 344–352.

- Jamshed, K., Shah, S. H. A., Majeed, Z., Al-Ghazali, B., & Jamshaid, S. (2022). Role of Green Leadership and Green Training on the Green Process Innovation: Mediation of Green Managerial Innovation. *Journal of Xidian University*, 16(2), 66–72.
- Kaltainen, J., & Hakanen, J. (2022). Fostering task and adaptive performance through employee well-being: The role of servant leadership. *BRQ Business Research Quarterly*, 25(1), 28–43.
- Ledesma-Zalsos, B. E. (2015). A causal model of spiritual leadership, spiritual well-being and employee engagement: leverage to organizational performance. *Liceo Journal of Higher Education Research*, 11(1).
- Liu, R., Yue, Z., Ijaz, A., Lutfi, A., & Mao, J. (2023). Sustainable Business Performance: Examining the Role of Green HRM Practices, Green Innovation and Responsible Leadership through the Lens of Pro-Environmental Behavior. *Sustainability*, 15(9), 7317.
- Lusiani, M., Abidin, Z., Fitriainingsih, D., Yusnita, E., Adiwinata, D., Rachmaniah, D., . . . Purwanto, A. (2020). Effect of servant, digital and green leadership toward business performance: evidence from Indonesian manufacturing. *Systematic Reviews in Pharmacy*, 11.
- Manoppo, V. P. (2020). Transformational leadership as a factor that decreases turnover intention: a mediation of work stress and organizational citizenship behavior. *The TQM journal*, 32(6), 1395–1412.
- Mubarik, M. S., & Bontis, N. (2022). Intellectual capital, leadership and competitive advantage: a study of the Malaysian electrical and electronics industry. *International Journal of Learning and Intellectual Capital*, 19(6), 562–583.
- Nara, E. O. B., da Costa, M. B., Baierle, I. C., Schaefer, J. L., Benitez, G. B., do Santos, L. M. A. L., & Benitez, L. B. (2021). Expected impact of industry 4.0 technologies on sustainable development: A study in the context of Brazil's plastic industry. *Sustainable Production and Consumption*, 25, 102–122.
- Novitasari, D., Asbari, M., Wijayanti, L. M., Hyun, C. C., & Farhan, M. (2020). The role of religiosity, leadership style, job satisfaction and organizational citizenship behavior mediation on woman teachers' performance. *Solid State Technology*, 63(6), 2953–2967.
- Ogunsola, K. O., Sarif, S. M., & Fonatine, R. A. (2020). Islamic Performance Instrument (IPI): An Alternative Servant Leadership (SL) tool for

- Sustainable Development Goals (SDGs). *IJIBE (International Journal of Islamic Business Ethics)*, 5(1), 1–20.
- Oh, J., & Wang, J. (2020). Spiritual leadership: Current status and agenda for future research and practice. *Journal of Management, Spirituality & Religion*, 17(3), 223–248.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. <https://doi.org/10.2307/2393071>
- Pasamar, S., Diaz-Fernandez, M., & de La Rosa-Navarro, M. D. (2019). Human capital: the link between leadership and organizational learning. *European Journal of Management and Business Economics*, 28(1), 25–51.
- Peters, Y. (2019). *Exploring Leadership Skills for the Sustainability of Small and Medium-Sized Enterprises*. Walden University,
- Piwowar-Sulej, K., & Iqbal, Q. (2022). Leadership styles and sustainable performance: A systematic literature review. *Journal of Cleaner Production*, 134600.
- Putra, G. B. L., Widayani, A. A. D., & Widnyana, I. W. (2022). The Effect of Spiritual Leadership and Organizational Culture on Employee Performance with Organization Citizenship Behaviors (OCB) As Intervening Variabble. *Ajhssr. Com*,(07), 264–272.
- Qalati, S. A., Zafar, Z., Fan, M., Limón, M. L. S., & Khaskheli, M. B. (2022). Employee performance under transformational leadership and organizational citizenship behavior: A mediated model. *Heliyon*, 8(11).
- Rezaei, F., Khalilzadeh, M., & Soleimani, P. (2021). Factors affecting knowledge management and its effect on organizational performance: Mediating the role of human capital. *Advances in Human-Computer Interaction*, 2021, 1–16.
- Ribeiro, N., Duarte, A. P., & Filipe, R. (2018). How authentic leadership promotes individual performance: mediating role of organizational citizenship behavior and creativity. *International Journal of Productivity and Performance Management*, 67(9), 1585–1607.
- Saleem, F., Zhang, Y. Z., Gopinath, C., & Adeel, A. (2020). Impact of servant leadership on performance: The mediating role of affective and cognitive trust. *Sage Open*, 10(1), 2158244019900562.
- Salehi, M., Fahimi, M. A., Zimon, G., & Homayoun, S. (2022). The effect of knowledge management on intellectual capital, social capital, and firm innovation. *Journal of Facilities Management*, 20(5), 732–748.

- Sarfraz, M., Ivascu, L., Abdullah, M. I., Ozturk, I., & Tariq, J. (2022). Exploring a pathway to sustainable performance in manufacturing firms: The interplay between innovation capabilities, green process, product innovations and digital leadership. *Sustainability*, 14(10), 5945.
- Shmueli, G., & Koppius, O. R. (2011). Predictive analytics in information systems research. *MIS Quarterly*, 553–572.
- Siddiquei, A., Asmi, F., Asadullah, M. A., & Mir, F. (2021a). Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: a case of China. *International Journal of Manpower*.
- Siddiquei, A., Asmi, F., Asadullah, M. A., & Mir, F. (2021b). Environmental-specific servant leadership as a strategic tool to accomplish environmental performance: A case of China. *International Journal of Manpower*, 42(7), 1161–1182.
- Sinarti, T., & Sopiah, S. (2023). Why Spiritual Leadership is Such an Important Component of the Company: Scoping Overview. *EKSYAR : Jurnal Ekonomi Syari'ah & Bisnis Islam*, 10, 17–29. doi:10.54956/eksyar.v10i1.407
- Subramaniam, M., & Youndt, M. A. (2005). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management journal*, 48(3), 450–463.
- Subramony, M., Segers, J., Chadwick, C., & Shyamsunder, A. (2018). Leadership development practice bundles and organizational performance: The mediating role of human capital and social capital. *Journal of Business Research*, 83, 120–129.
- Sunatar, B. (2022). Effect of leadership style and employee competence on employee performance through organizational citizenship behavior. *Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)*, 5(2), 572–590.
- Supriyanto, A., Ekowati, V., & Maghfuroh, U. (2020). Do organizational citizenship behavior and work satisfaction mediate the relationship between spiritual leadership and employee performance? *Management Science Letters*, 10(5), 1107–1114.
- Székely, F., & Knirsch, M. (2005). Responsible leadership and corporate social responsibility:: Metrics for sustainable performance. *European Management Journal*, 23(6), 628–647.
- Taylor, S., & Pearce, N. (2013). Creating sustainable organizations through servant leadership. *Leadership and Organizational Change*, 215.

- Ullah, I., Hameed, R. M., Kayani, N. Z., & Fazal, Y. (2022). CEO ethical leadership and corporate social responsibility: Examining the mediating role of organizational ethical culture and intellectual capital. *Journal of Management & Organization*, 28(1), 99–119.
- Virakul, B., & Russ-Eft, D. F. (2020). A model for business responses to global challenges and sustainable development. *Social Responsibility Journal*, 16(2), 199–224.
- Zada, S., Khan, J., Saeed, I., Jun, Z. Y., Vega-Muñoz, A., & Contreras-Barraza, N. (2022). Servant leadership behavior at workplace and knowledge hoarding: a moderation mediation examination. *Frontiers in psychology*, 13, 888761.
- Zenger, J., Folkman, J., & Edinger, S. K. (2009). How extraordinary leaders double profits. *Chief Learning Officer*, 8(7), 30–56.
- Zhu, W., Chew, I. K., & Spangler, W. D. (2006). Corrigendum to “CEO transformational leadership and organizational outcomes: The mediating role of human-capital-enhancing human resource management”[The Leadership Quarterly 16 (2005) 39-52]. *The Leadership Quarterly*, 17(3), 316.