



Modeling Sustainable Performance Through Leadership: The Interplay of Engagement and Top Management Support

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ABSTRACT

The main objective of the study is to find the influence of different styles of leadership, specifically servant and spiritual leadership, on sustainable performance of small and medium-sized enterprises (SMEs) in Pakistan by taking employee's engagement as mediator and top management support as a moderator. A total sample size of 503 participants from different SMEs was used to gather data, employing a purposive sampling technique. The results indicate that both servant and spiritual leadership both have a positive and significant impact on sustainable performance. The mediating role of employee's engagement and moderating role of top management support were found to be significant, highlighting their importance in the overall leadership-performance dynamic. This study enhances the literature by offering evidence on the impact of leadership styles on sustainable performance in the context of Pakistani SMEs. It offers practical understandings for leaders and policymakers on how to harness the potential of servant and spiritual leadership to achieve sustainability. By highlighting the importance of moderator and mediator, the study provides a roadmap for enhancing organizational performance through targeted leadership development and supportive management practices.

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1. Introduction

In the area of organizational sciences, leadership could be one of the most investigated topics. The organizations of the present day are operating in much more complicated ways because of the influences from outside (such as globalization, dwindling resources, social networks, multifaceted media, and high technology). Numerous scholars (Avery & Bergsteiner, 2010, 2011; Benn, Edwards, & Williams, 2014; D'amato & Roome, 2009; Hind, Wilson, & Lenssen, 2009) emphasize leadership at the level beyond the micro-profound that works towards the macro leadership solutions which take into account the environmental factors and those that are interested in the organizational longevity. The concept of organizational sustainability has been a topic of discourse among specialists in leadership and management. According to academics, the ability to exercise leadership is necessary for making an organization more sustainable (Wong & Avery, 2009), and this kind of leadership is essential for the development of an organization's capacity to sustain itself (Székely & Knirsch, 2005).

Virakul & 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). Due to the emergence of these difficulties, the United Nations established the concept of common goals referred to as Sustainable Development Goals (SDGs). These Sustainable Development Goals are used to foster global economic prosperity, the elimination of world poverty, the increase in social capital among

different actors, and sustainable management of the earth's physical resources. (Iqbal & Ahmad, 2021).

The negative environmental impacts in Pakistan are also apparent. Afum (2023) emphasizes the utilization of resources in an effective manner and the minimization of waste that is generated by organizations; small and medium enterprises should therefore embrace this standard as a way of preserving the natural world for the sake of future generations. The Small and Medium Enterprises are important to the economy of Pakistan due to their significant contributions. Over 90% of all start-ups are regarded as mid-sized businesses, they provide work for about 80% of the population, as well as making a large contribution to the overall GDP (Batool et al., 2022). Almost all SMEs are in a situation where they do not have adequate knowledge regarding the ideas of sustainability (Chowdhury et al., 2022). Thus, the leadership factor is crucial in the performance of SMEs to foster sustainable performance and this is especially the case with the dynamic environment in Pakistan (W. Zhao & Huang, 2022). 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, Manzurul Arefin, & Hossin, 2020). 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, putting the company's long-term success at risk (Sarfraz et al., 2022). In Pakistani manufacturing industry, there is a deficiency of understanding among employees regarding environmental considerations and the potential for these firms to engage in sustainability efforts. These industries should cultivate a climate that enables employees to devise strategies for reducing energy consumption and engaging in more environmentally sustainable practices (Jamshed et al., 2022).

A leader can cultivate awareness among staff on sustainability concerns. The principal motivation of a servant leader is to serve their followers, and they endeavor to function at an elevated level. Both "to serve" and "to lead" are essential components of servant leadership, and they are required for the success of an organization (Ragnarsson, Kristjánssdóttir, & Gunnarsdóttir, 2018). According to some academics, to be viable in the upcoming digital economic period, organizations must consider both their physical and spiritual purposes (Shin and Hur, 2020). Leaders must establish strategies to ensure continuous employee engagement at all stages of the process in order to achieve sustainability (Hashmi, 2020). Employee engagement acts as a psychological bridge linking leadership to sustainability. According to Kahn (1990), supportive leadership increases employees' emotional and cognitive dedication to their jobs. Employees that are engaged are more inclined to innovate and champion sustainable practices (Robertson & Barling, 2013). Business success depends on the backing of top management. Support from upper management could make leaders feel more at ease within the company (Ali et al., 2021). There is no such study conducted before by taking employees engagement as mediating variable and top management support acting as a moderator. The study addresses the question, does leadership leads to sustainable performance? This study's purpose is to look into how servant and spiritual leadership affect the sustainable performance of Pakistan's manufacturing industry, mediated by employees' engagement and moderated by top management support.

2. Literature Review

2.1. Theoretical Literature

The research is founded on the upper echelon theory and the social exchange theory as its theoretical framework. Upper-echelon theory posits that the beliefs that organizational executives hold about the external environment in which their organization operates influence the choices that they make and this in turn influences performance. (Iqbal & Ahmad, 2021; Liao & Zhang, 2020). According to the social exchange 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 (S.L) 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 S.L affected workers' task performance and OBC through trust mediation. The findings showed that individual performance is significantly impacted by servant leadership. Siddiquei et al. (2021b) concluded that environment-specific S.L 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, Khan, & Adnan, 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 (Sp.L) 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 purpose of Sp.L 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 (Tri & 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 (Piwovar-Sulej & Iqbal, 2022). Based on the above literature, the researcher formulated the hypothesis

H2: Spiritual leadership has significant impact in sustainable performance.

2.2.3. The mediating role of employees' engagement:

Employees' engagement was first conceptualized by (Kahn, 1990). EE refers to workers who are entirely committed to their jobs in terms of their emotions, behavior, and health and the tasks entrusted to them (Tricahyadinata et al., 2020). A study led by Ling et al. (2017) exhibited a substantial correlation between servant leadership and employees' engagement and their OCB. All of these factors are part of the system of engagement that, when optimally enhanced, could have a favorable effect on an organization. Likewise, Eva et al. (2019) showed the positive impact of servant leadership on employees' engagement and job satisfaction which are known to mediate sustainable performance. Liden et al. (2008) identified that servant leadership improved the psychological empowerment and organizational commitment of employees, which are aspects of employee engagement. Some studies reported by Rego et al. (2008) show that Sp.L does have a positive effect on the level of employee engagement and the level of organizational commitment. Likewise, Fry et al. (2017) showed that Sp.L empowered the positive relationship between engagement which enhances productivity and organizational commitment, and sustainable performance. Previous studies revealed a beneficial and substantial impact of servant, supportive, and transformational leadership on employee engagement, which subsequently results in higher satisfaction levels, reduced turnover, and increased organizational citizenship behavior (Alafeshat & Tanova, 2019; Ariani, 2014; Kavanagh, 2021). A specific form of detrimental leadership known as toxic leadership adversely affects employee engagement, subsequently leading to an increase in turnover intention (Naeem & Khurram, 2020).

H3: Employee engagement mediates the relationship between servant leadership and sustainable performance.

H4: Employee engagement mediates the relationship between spiritual leadership and sustainable performance.

2.2.4. Moderating role of top management support

Management support refers to all the measures that one can adopt especially in the line of organizational management with an intention of enhancing employee performance, achievement of organizational objectives and promotion (Lee, Park, & Baker, 2018). A study of Lee, Park and Baker (2018) examines the influence of HRD programs that focus on commitment to the organization, considering the mediating influence of satisfaction and the

moderating effect of top management support across 159 Korean companies. The findings demonstrated that top management support influenced the relationship between HRD initiatives and employee attitudes. Top management support has been demonstrated to moderate the relationship between project leadership and both organizational performance and project success (Fareed & Su, 2022; Khan, Long, & Iqbal, 2014; Obeidat, Al Bakri, & Elbanna, 2020). A study by Ali et al. (2021) examined the effect of humble leadership on project success, considering the mediating role of team building and the moderating influence of management support. Data were collected from 337 individuals employed in the information technology sector in Pakistan. The findings indicated that management support served as a moderating variable. The researcher formulated the hypotheses;

Figure. 1 Theoretical Framework

Table 1: Gaps Recommendation

3. Methodology

intentionally target employees and managers who are directly engaged with leadership practices, human capital development, and organizational sustainability. Data was analyzed using 503 questionnaires.

3.3. Measurement and Analysis

Servant leadership was measured by eight items using (Kaltiainen & Hakanen, 2022) scale. Spiritual leadership was measured by using the scale developed by (Fry, Vitucci, & Cedillo, 2005). Employees engagement was measured by nine items using the scale of (Schaufeli & Bakker, 2004). For management support data was obtained from (Prieto-Pastor & Martin-Perez, 2015) scale. Sustainable performance was measured using eleven items of (Nara et al., 2021).

3.4. Data collection and analysis procedures

Data was collected from management personnels working in SMEs of golden triangle. The research was conducted in Sialkot, Gujranwala and Gujrat as these cities are famous for highest number of SME's. Questionnaire were physically distributed and picked up in order to increase the response rate. WhatsApp groups and official email addresses were also used to collect data online in Google forms. Five-point likert scale was used to evaluate participants' replies. Smart PLS was used to analyze data.

3.5. Operational Definitions

3.5.1. Servant Leadership

S.L 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).

3.5.2. Spiritual Leadership

Sp.L 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, Widyani, & Widnyana, 2022).

3.5.3. Employees' Engagement

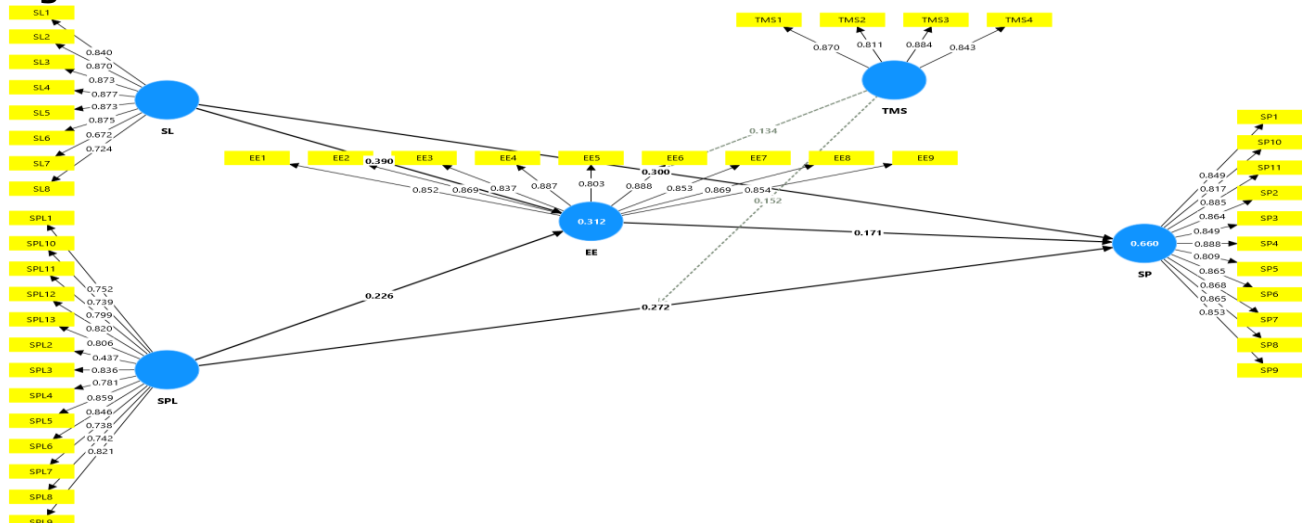
Employee engagement refers to those who are fully emotionally, behaviorally, and physically invested in their roles and the tasks entrusted to them (Tricahyadinata et al., 2020).

3.5.4. Top Management Support

"Management support" encompasses the actions undertaken by a manager to enhance employee productivity, facilitate goal achievement, and promote career development (Lee, Park, & Baker, 2018).

4. Analysis

Figure 3: Measurement model



4.1. Measurement Model

Table 1: Result of measurement model

Latent Variables	Items Retained	Outer Loading	Cronbach Alpha	CR	AVE	Discriminant Validity
1. Servant leadership	SL1,SL2,SL3,SL4,SL5, SL6,SL7,SL8	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, <i>SPL2</i> , 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
5. Employees' Engagement	E.E1, E.E2, E.E3, E.E4, E.E5, E.E6, E.E7, E.E8, E.E9	0.852, 0.869, 0.837, 0.887, 0.803, 0.888, 0.852, 0.869, 0.854	0.955	0.956	0.735	Yes
6. Top management support	TMS1, TMS2, TMS3, TMS4	0.869, 0.811, 0.884, 0.843	0.879	0.919	0.726	Yes
7. 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

Table 2: Heterotrait-Monotrait validity analysis

	EE	SL	SP	SPL	TMS	TMS x SL	TMS x SPL
EE							
SL	0.549						
SP	0.616	0.700					
SPL	0.486	0.654	0.702				
TMS	0.238	0.171	0.205	0.210			
TMS x SL	0.401	0.175	0.458	0.415	0.090		
TMS x SPL	0.362	0.501	0.526	0.375	0.113	0.413	

4.2. Structural Model

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

4.2.1. Step-1 Multicollinearity analysis

Multicollinearity is the first step of analysis of structural model. Results revealed 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: Multicollinearity analysis of inner model

	VIF
EE -> SP	1.679
SL -> EE	1.634
SL -> SP	2.302
SPL -> EE	1.634
SPL -> SP	1.986
TMS -> SP	1.154
TMS x SL -> SP	1.583
TMS x SPL -> SP	1.593

Step-2 evaluate size and significance of path coefficients

Figure 4: Structural model

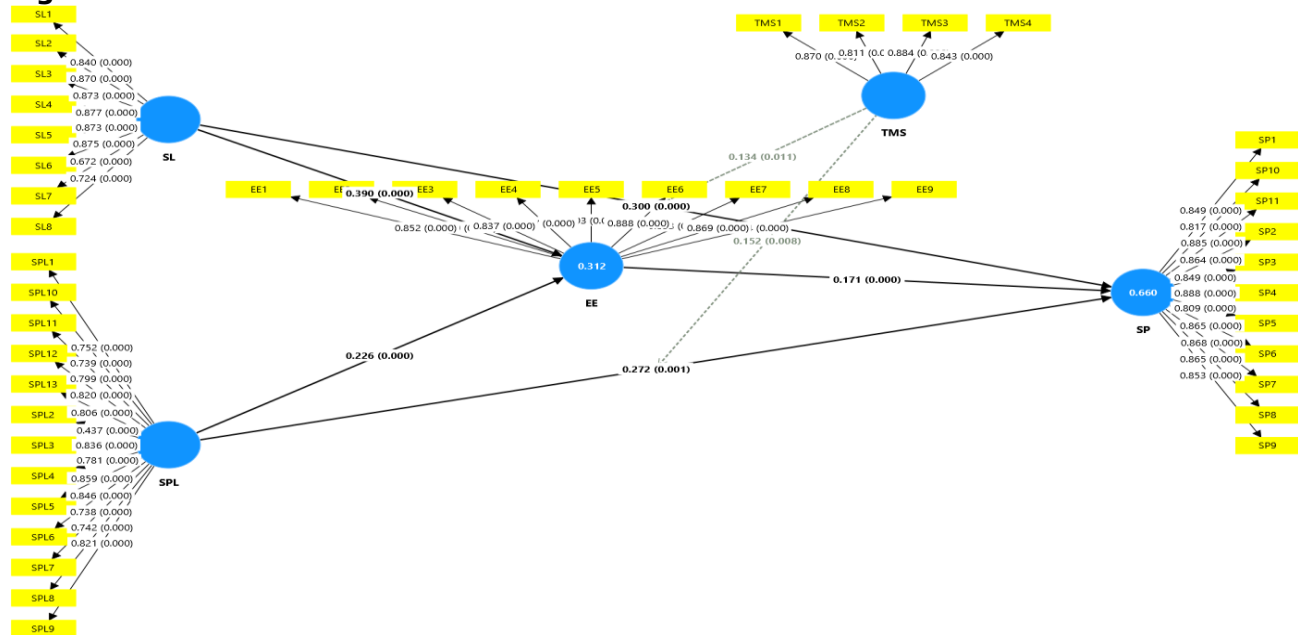


Table 4: Examination of significance of structural paths

Hypot	Relationships	Original sample (O)	Sample mean (M)	Standard deviation	T statistics	P values	Decision
1	SL -> SP	0.300	0.312	0.072	4.146	0.000	Accepted
2	SPL -> SP	0.272	0.265	0.078	3.464	0.001	Accepted
3	SL -> EE -> SP	0.067	0.070	0.025	2.695	0.007	Accepted
4	SPL -> EE -> SP	0.039	0.040	0.014	2.771	0.006	Accepted
5	TMS x SL -> SP	0.134	0.129	0.053	2.533	0.011	Accepted
6	TMS x SPL -> SP	0.152	0.143	0.057	2.655	0.008	Accepted

Step-3 examination of coefficient of determination (R²)

Table 5: Examination of coefficient of determination R²

	R-square	R-square adjusted
EE	0.312	0.309
SP	0.660	0.656

The model describes 31.2% of the variance in employee engagement, indicating that the independent variables explain a meaningful proportion of variation in this construct. The model also accounts for merely 66% of the variance in Sustainable Performance. This is a high level of explanatory power. This suggests that independent variables are reasonably good predictors of these constructs.

Step-4 examination of predictive accuracy

Table 6: Examination of predictive accuracy Q^2

	Q^2_{predict}
EE	0.300
SP	0.615

Q^2 values greater than 0, 0.25, and 0.50 represent small, moderate, and larger predictive accuracy of PLS path model (Hair et al., 2019). Table 6 demonstrate the Q^2 scores of endogenous variables i.e. employee's engagement, and sustainable performance. The Q^2 value for employees' engagement, and sustainable performance is 0.297, and 0.615 respectively which are above the threshold value i.e. greater than zero.

5. Conclusion and Discussion

5.1. Discussion

The objective of the study was to investigate the impact of leadership styles on sustainable performance with the mediation of employee engagement and moderation of top management support among SMEs of Pakistan. The results support H_1 and H_2 , which shows significant and positive relationship between servant, spiritual leadership and sustainable performance. Various empirical findings have also gone ahead and supported the relationship between S.L, Sp.L, and positive organizational outcomes. The results are also supported by (Hashim, Khan, & Adnan, 2019; Iqbal, Latif, & Ahmad, 2020; Ledesma-Zalsos, 2015; Lusiani et al., 2020; Ogunsola, Sarif, & Fonatine, 2020; Siddiquei et al., 2021a; Taylor & Pearse, 2013). According to hypotheses H_3 and H_4 , employee engagement mediates the relationship between servant leadership, spiritual leadership and sustainable performance. Same results were found in previous studies where engagement leads to performance (Afram, Manresa, & Mas Machuca, 2022; Evelyn & Hazel, 2015; Mohammed, 2015; Park et al., 2022). According to hypotheses H_5 and H_6 , top management support moderates the relationship between servant leadership, spiritual leadership and sustainable performance. In previous studies, top management support has been used as a moderator between many dependent and independent variables (Erdogan & Enders, 2007; Fareed et al., 2023; Iqbal et al., 2015; Pattali et al., 2024; Zada et al., 2024), but there is no study to find the moderating impact of top management support between leadership styles and sustainable performance.

5.2. Practical Implications

Findings of this study also hold several practical implications for organizations, particularly within the SME manufacturing sector of Pakistan. First, they suggest that adopting servant and spiritual leadership practices can help leaders inspire trust, care, and shared purpose, hence augmenting employee engagement and fostering enduring sustainable leadership. It is consequently important for managers to make investments in development programs which emphasize empathy, ethical behavior, and value-driven decision-making. Second, the mediating role of employee engagement indicates that sustainability initiatives will be more effective when employees feel psychologically invested in their work. Organizations can strengthen this engagement through recognition systems, meaningful job design, and opportunities for personal growth. Third, the study underscores the significance of support from senior management, showing that leadership behaviors alone cannot guarantee sustainability outcomes unless reinforced by senior executives. This underscores the need for clear strategic backing, resource allocation, and policy support from top management to align sustainability goals with organizational practices. Finally, for SMEs operating in resource-constrained environments, these insights are especially critical as they highlight low-cost, leadership-driven strategies—such as servant and spiritual leadership—that can simultaneously enhance employee commitment and organizational sustainability.

5.3. Theoretical Implications

This study offers several important theoretical implications. First, it extends Social Exchange Theory by demonstrating how servant and spiritual leadership cultivate reciprocal relationships that encourage personnel to immerse themselves more profoundly in their tasks. Employee engagement thus emerges as a psychological mechanism through which leadership behaviors are translated into sustainable leadership outcomes. Second, the study advances the leadership literature by examining value-based leadership styles—servant and spiritual leadership—together, highlighting their unique potential to promote long-term sustainability

beyond the traditional transactional or transformational paradigms. Moreover, drawing on the Upper Echelon Theory, the study shows that top management support acts as a boundary condition, amplifying the positive effects of leadership on engagement and sustainability. This finding suggests that leadership behaviors alone are insufficient unless strategically endorsed and supported at higher organizational levels. Finally, the study adds to the expanding body of sustainable leadership theory, by empirically demonstrating that sustainability is not solely a strategic imperative but is also embedded in employee behaviors and strengthened by top management support, thereby enriching both leadership and sustainability scholarship.

5.4. Limitations and future direction

There are certain limitations of the study. One of the main limitations of the present study is that this study was carried out in Pakistani SMEs, so the generalization of the research findings to other geographical locations and organizational contexts may be a bit of a challenge. The study is cross-sectional. The data collected through survey questionnaires which gave respondents' perceptions of the leadership style, employee engagement, and sustainable organizational performance are colored by social desirability bias. Future studies should involve different organization types, and sizes to increase the external validity of the results. More longitudinal research could be very useful in future. Organizational culture, economic crisis, legislation, and the state of the market might also influence the leadership's effect on sustainable performance. the subject of further research can be other leadership styles, for example, transformational, transactional, or authentic leadership. 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.

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