

CONCEPTUAL

Pathways to Sustainable Performance: Psychological Safety and Organizational Learning in the Context of Sustainable Leadership

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ABSTRACT

PURPOSE: Today, scholars and practitioners increasingly recognise sustainable leadership as a powerful way to address sustainability challenges. This study examines how sustainable leadership (SL) influences sustainable performance (SP) by exploring the mediating roles of organisational learning (OL) and psychological safety (PS).

DESIGN/METHODOLOGY/APPROACH: Questionnaire surveys were used to collect data from 315 employees working in different industries in Oman. Structural equation modelling (SEM-PLS) was used to analyse the data.

FINDINGS: The results revealed a positive relationship between SL and both OL and PS. Furthermore, OL and PS are positively related to SP. Finally, OL and PS positively mediated the relationship between SL and SP.

IMPLICATIONS: Developing leaders who prioritise sustainability, promote OL, and foster PS can significantly enhance employees' commitment to sustainability goals. These actions enable organisations to build resilience and achieve long-term economic, social, and environmental benefits.

ORIGINALITY: This study emphasises the significance of SL in promoting sustainability through OL and PS in emerging economies, such as Oman.

KEYWORDS: *Sustainable Leadership; Organisational Learning; Psychological Safety; Sustainable Performance; Oman; SDG 8; SDG 12.*

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INTRODUCTION

Many situations require organisations to monitor their environments for both local and global challenges, such as global warming, cultural differences, political instability, technological advancements, economic globalisation, and disruptions caused by migration (Gazi *et al.*, 2024; Khan *et al.*, 2023; Rehman Khan and Yu, 2021). In the context of severe climate change, sustainability has become a critical issue for both business organisations and society (Gazi *et al.*, 2024; Iqbal and Ahmad, 2021). Environmental sustainability and economic growth continue to be significant challenges facing Gulf Cooperation Council (GCC) countries in the Middle East region (Abdeldayem and Aldulaimi, 2024). As GCC countries' strive to succeed in a rapidly changing economy (Abdel-Gadir and Mohammed, 2024), rising energy demand and rapid urbanisation pose significant sustainability challenges (Al Sawafi *et al.*, 2025). Two main obstacles hindering GCC member nations' pursuit of economic growth are greenhouse gas emissions and the need for the sustainable use of natural resources (Al-Maadid *et al.*, 2025).

Sustainable development requires balancing social, economic, and environmental goals to enhance organisational performance. Since sustainability involves activities with uncertain future outcomes, taking risks can enhance sustainable performance (Saif *et al.*, 2025). Employees' beliefs about their organisation influence its overall approach, guide decisions on resource allocation, and affect its overall performance (Park *et al.*, 2025). PS enables employees to express disagreements constructively, facilitating immediate conflict resolution within the organisation. Leadership plays a key role in shaping how employees perceive and experience their workplace environment (Moin *et al.*, 2021).

Edmondson and Lei (2014) argue that PS is mainly created through effective leadership. When organisations create a psychologically safe work environment (Sjöblom *et al.*, 2022), employees can share their ideas freely without fear of judgement. Effective leadership recognises the complex interconnections among individuals, the business environment, the global ecosystem, and shifting societal needs. Considering social values enables organisations to make informed decisions that support long-term success, protect the environment, and enhance human well-being. SL drives sustainable performance by applying best practices, setting clear objectives, and strategically engaging with stakeholders to achieve environmental goals.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Natural Resource-Based View (NRBV) Theory

The present study employs the Natural Resource-Based View (NRBV) to connect SL with OL, and applies dynamic capacity theory to link OL with sustainable performance. The NRBV highlights that resources are unique, rare, and sustainable (Collis and Montgomery, 1995). Organisational resources can be categorised into three primary types: financial, human, and knowledge-based capital. Organisations regard leaders as valuable human investments because they are special, highly valued, difficult to replace, and in short supply (Harris *et al.*, 2022). Resources enable firms to develop flexible capabilities that help them adapt to changing market needs (Zollo and Winter, 2002). OL is also viewed as an energetic capability, as it enables organisations to adapt to changing market demands continually. Therefore, this study argues that employing SL as a resource can help an organisation become more capable of learning and adapting dynamically (Acosta-Prado and Tafur-Mendoza, 2024). Through learning, firms enhance knowledge development and its application, leading to improved performance (Zgrzywa-Ziemak *et al.*, 2025). According to Iqbal and Ahmad (2021), SLs foster a psychologically safe workplace characterised by open communication and the sharing of information among employees.

Sustainable Leadership and Organisation Learning

Xie (2019) argues that leadership has a strong influence on change processes and employee behaviour. Do and Mai (2020) found that inclusive leadership, behavioural integrity, and leader trust foster learning, reduce errors, and encourage participation in value-driven initiatives. SL can influence OL by creating and communicating a clear vision, speaking honestly and inspiring, and effectively integrating new hires (Dominguez-Escrig and Mallen-Broch, 2023). Organisations need to foster a positive learning environment and establish transparent boundaries to enhance knowledge (Seddighi and Mathew, 2020). Continuous learning and constant practice enable organisations to refine their processes and enhance their overall sustainable performance (Iqbal and Ahmad, 2021). Furthermore, by identifying and capitalising on external opportunities and obtaining high-quality insights from other businesses, organisations can leverage OL to enhance their management practices (Ahsan and Khawaja, 2024). Gomes *et al.* (2022) argue that OL enhances an organisation's ability to recognise opportunities for sustainable environmental alignment and to pursue

profitable new ventures. OL is vital for sustaining effective actions and achieving long-term success (Washington-Ottombre, 2024). Moreover, it is vital for sustainable development that leadership shapes employees' green attitudes and behaviours within an organisation (Sajjad *et al.*, 2024).

According to the NRBV theory, an organisation's capacity to perform better over the long term depends on its utilisation of environmentally friendly resources (Hart, 1995). SL drives strong green management performance by establishing long-term goals, prioritising sustainability, and encouraging green initiatives. OL is strongly predicted by transformational leadership, knowledge sharing, and the foundation of sustained competitive advantage in a fast-paced business environment (Park *et al.*, 2025; Zgrzywa-Ziemak *et al.*, 2025), and relies on workforce development, open communication, supportive culture, practical training, and a shared vision (Seddighi and Mathew, 2020). OL focuses on creating, sharing, integrating, interpreting, and applying practical knowledge (Mai *et al.*, 2022). Furthermore, knowledge dissemination requires a supportive environment where employees can freely share information and ideas (Zada *et al.*, 2024), thereby enhancing their skills and experience within the organisation.

HI: *Sustainable leadership has a positive impact on organisational learning.*

Sustainable Leadership and Psychological Safety

Sustainable leadership has emerged as a crucial driver for building resilient and responsible organisations in today's complex business environment (Iqbal *et al.*, 2020). Beyond achieving economic outcomes, SLs prioritise long-term value creation by balancing the interests of people, planet, and profit. They cultivate a culture of trust, collaboration, and ethical decision-making, which are crucial for fostering a supportive workplace environment (Park *et al.*, 2025). Employees' PS is significantly influenced by their perception of leadership behaviours (Asad *et al.*, 2021). SLs are characterised by a change-oriented approach, systems thinking, credibility, patience, effective communication skills, enthusiasm, persuasiveness, and commitment to mentoring and personal development (Senem *et al.*, 2024). Sustainable leaders foster a psychologically safe environment where employees feel confident to share ideas and take risks without fear of criticism or negative consequences. Previous research has shown that the social responsibility aspect of SL has a significant impact on employees' PS. When leaders act with openness, integrity, and inclusivity, showing

genuine concern for others, they create an environment where employees feel secure, valued, and inspired to contribute to the organisation's sustainable success. SL and PS foster innovation, encourage learning, and drive long-term organisational success.

H2: *Sustainable leadership has a significant influence on employees' psychological safety.*

Organisational Learning and Sustainable Performance

Managers encourage employees to participate in continuous learning initiatives to address organisational eco-friendly challenges (Mai *et al.*, 2022). Furthermore, leadership practices are a key indicator of an employee's belief in an organisation's commitment to sustainability (Zgrzywa-Ziemak *et al.*, 2025). SL fosters a learning environment that enhances firms' sustainable performance (Dominguez-Escrig and Mallen-Broch, 2023; Iqbal and Ahmad, 2021). Leadership support strengthens OL and empowers employees to seize opportunities for sustainable development (Xie, 2019). This support involves fostering teamwork, inspiring and energising employees, and guiding them through the change process (Gomes *et al.*, 2022). Enhancing OL through employee training leads to improved sustainable organisational performance (Ahsan and Khawaja, 2024).

To meet the evolving competitive conditions and long-term challenges, organisations must possess dynamic capabilities in a highly dynamic market environment (Chen and Lin, 2023). Learning organisations enable businesses to continuously and effectively adapt to rapid market changes. OL offers flexibility in strategic planning and execution, enabling organisations to stay ahead of market trends, customer demands, and competitors (Zada *et al.*, 2024). Over time, developing effective work practices, attitudes, and strategies within an organisation can serve as a roadmap for maintaining consistently high performance levels. Moreover, OL influences a company's tendency to engage in regular environmental activities and enhances its ability to explore new market opportunities.

H3: *Organisational learning has a positive impact on sustainable performance.*

Psychological Safety and Sustainable Performance

Psychological safety has become a critical factor in modern organisational research, emphasising the need for workplaces where employees feel secure to voice their ideas, take risks, and challenge the status quo without fear of negative consequences (Sjöblom *et al.*, 2022). Such an environment fosters collaboration, creativity, and

continuous improvement, essential elements for a firm's long-term success (Kim *et al.*, 2021). Previous research has shown a link between employees' perceived PS and their creative thinking, as well as the sustainable performance of firms (Liu *et al.*, 2023).

Sustainable performance extends beyond short-term financial results, focusing on an organisation's ability to maintain economic, social, and environmental value over the long term. When leaders create a psychologically safe environment, employees are more likely to engage in innovative problem-solving and contribute to practices that support sustainable growth (Dongrey and Rokade, 2021). Therefore, PS and sustainable performance foster a supportive environment that benefits both the organisation and society through open communication and trust. Previous studies have also highlighted the importance of psychological meaningfulness and availability in promoting employee engagement at work (Vakira *et al.*, 2023). Conversely, a lack of PS results in significant social and economic losses for employees and organisations (Iqbal *et al.*, 2020).

H4: *Physiological safety has a positive impact on firms' sustainable performance.*

The Mediating Role of Organisational Learning and Psychological Safety

SL actively pursues new business opportunities to meet the constantly evolving demands of the market. They also foster employee participation in learning programmes, thereby strengthening OL and enhancing business performance (Zada *et al.*, 2024). Similarly, SL practices are reliable indicators of an organisation's commitment to sustainable development. SL behaviours, such as offering technical assistance during management transitions, motivating others, encouraging teamwork, and inspiring colleagues, are crucial in boosting OL (Washington-Ottombre, 2024). Such behaviours empower employees to explore and seize new opportunities to enhance organisational sustainability (Mai *et al.*, 2022). When leaders demonstrate compassion and support learning, it enables organisations to grow and achieve better, more sustainable outcomes. SL utilises training and development programmes as powerful tools to enhance OL; in turn, this improves both employee and organisational performance (Dominguez-Escrig and Mallen-Broch, 2023).

SL fosters openness, fairness, and collaboration, creating a psychologically safe environment where employees feel free to share innovative ideas and take risks (Asad *et al.*, 2021). Such a psychologically safe environment fosters learning and innovation, which are essential for achieving sustainable performance (Sulasmi and Tanjung,

2020). Moreover, PS facilitates SL that transforms behaviours to deliver long-term social, environmental, and economic outcomes (Iqbal *et al.*, 2020). When SL creates a psychologically safe environment, employees are more willing to experiment, learn from mistakes, and collaborate, which fosters innovation and continuous improvement (Sjöblom *et al.*, 2022). When employees feel safe, they are more likely to raise their voices to propose solutions, share innovative ideas, and assess risks early; engaging more deeply in the learning process (e.g., green knowledge sharing and pro-environmental behaviours) (Park *et al.*, 2025). The theoretical framework is shown in Figure 1.

H5: Organisational learning positively mediates the relationship between sustainable leadership and sustainable performance.

H6: Psychological safety positively mediates the relationship between sustainable leadership and sustainable performance.

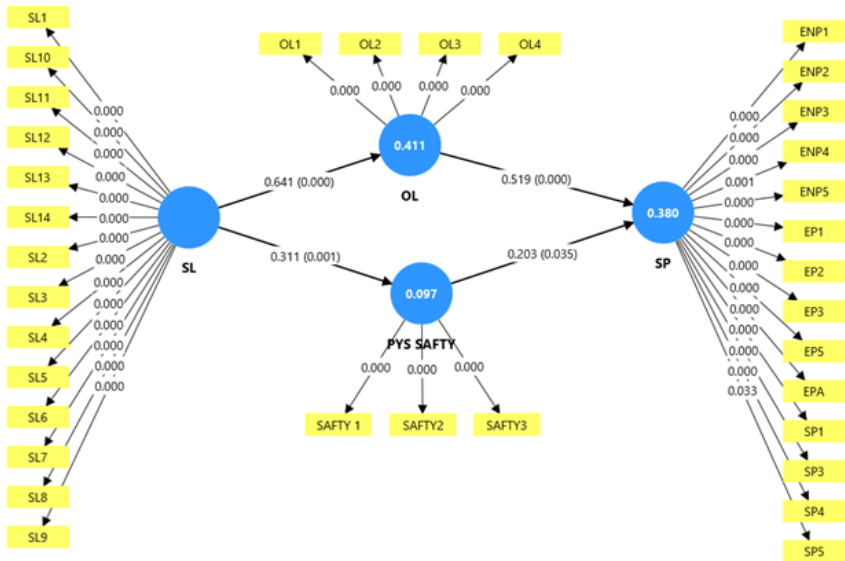


Figure 1: Proposed Theoretical Framework

Source: Constructed by authors

METHODS

Procedure and Respondents

We collected data from employees working across various industries in Oman between June and November 2024. Convenient sampling was employed for data collection. We contacted HR managers to discuss the research objectives and obtained their approval and support, then the HR managers randomly selected employees from different departments and provided their names, email addresses, and contact details. They asked these employees to participate in an online questionnaire survey, which was distributed via Google Forms: participants were given clear and detailed instructions on how to complete and submit the questionnaire. We assured all respondents that their identities would remain confidential and anonymous. We initially developed the questionnaire in English and then translated it back into Arabic with the help of two bilingual experts fluent in both languages, following Brislin's (1993) guidelines. We sent the questionnaire link to 600 employees to assess sustainable leadership, organisational learning, psychological safety, sustainable performance, and demographic information. We received 315 complete questionnaires, resulting in an overall response rate of 52.5%. This sample size exceeds the minimum required for 80% statistical power at a 0.05% significance level ($p < 0.01$) (Hair *et al.*, 2014). The respondents' demographic analysis revealed that 60.5% of the respondents were male, and 39.5% were female, and 35% of the respondents were between 30 and 40 years old, and 27% were between 41 and 50 years old. In addition, 44.5% of the respondents had been engaged with their organisations for 5 to 10 years. Finally, 44% of the respondents held university degrees, and 56% held college diplomas.

Scale Measures

We used a 15-item scale to measure sustainable leadership, adopted from Iqbal and Ahmad (2021). The reliability of this scale was 0.92. We used a 15-item scale to measure sustainable performance, adapted from Iqbal *et al.* (2021). The reliability of this scale was 0.85. We used a 4-item scale to measure organisational learning, adapted from Iqbal and Ahmad (2021). The reliability of this scale was 0.73. We used a 5-item scale to measure psychological safety, adapted from Carmeli *et al.* (2010). The reliability of this scale was 0.71.

ANALYTICAL STRATEGY

Confirmatory Factor Analysis (CFA)

We performed a confirmatory factor analysis (CFA). First, we removed items with factor loadings less than 0.40 (Hair *et al.*, 2014). We assessed the discriminant and convergent validity of the constructs through composite reliability and the average variance extracted. As shown in Table 1, the composite reliability values exceeded 0.70, and the average variance extracted (AVE) values exceeded 0.50. Together, these results indicate that the constructs demonstrate good convergent validity. We also evaluate construct discriminant validity through the Heterotrait-Monotrait (HTMT) ratio (Henseler *et al.*, 2015). According to the HTMT criteria, all estimates should be below 1.0; this confirms that the constructions are distinct from one another and supports their discriminant validity. The HTMT ratios are presented in Table 2.

Table 1: Confirmatory factor analysis

Variables	Composite Reliability (CR)	Average variance extracted (AVE)	Factor loadings
Sustainable leadership	0.93	0.52	(0.61-0.77)
Organisational learning	0.83	0.55	(0.68-0.83)
Psychological Safety	0.80	0.68	(0.74-0.78)
Sustainable performance	0.85	0.54	(0.58-0.81)

Source: Author's own work

Table 2: Assessment of discriminant validity using HTMT

Variables	OL	PS	SL	SP
Organisational learning (OL)	--			
Psychological safety (PS)	0.488	--		
Sustainable leadership (SL)	0.773	0.361	--	
Sustainable performance (SP)	0.654	0.454	0.633	--

Source: Author's own work

RESULTS AND FINDINGS

Figure 2 shows the results of the SEM path analysis. The findings reveal that sustainable leadership is positively related ($\beta = 0.641$, $p < 0.000$) to organisational learning and psychological safety ($\beta = 0.311$, $p < 0.001$), thereby supporting hypotheses H1 and H2. Furthermore, the results indicate that organisational learning ($\beta = 0.519$, $p < 0.000$) and psychological safety ($\beta = 0.203$, $p < 0.05$) are positively associated with sustainable performance, thus supporting hypotheses H3 and H4. We conducted a bootstrapping analysis on 1,000 bootstrapping samples with a 95% bias-corrected confidence interval (CI) to evaluate the mediating roles of organisational learning and psychological safety. The results presented in Table 3 indicate that organisational learning ($\beta = 0.27$, $p < 0.001$) and psychological safety ($\beta = 0.15$, $p < 0.05$) have a positive mediating effect on the association between sustainable leadership and sustainable performance, supporting hypotheses H5 and H6.

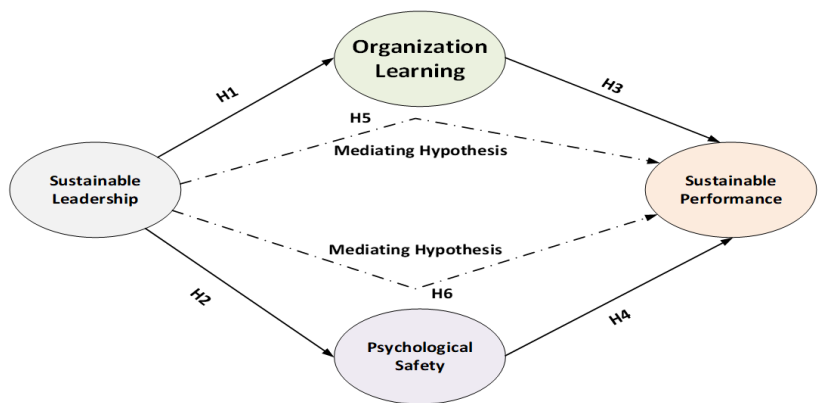


Figure 2: Results from the SEM path model

Source: Constructed by authors

Table 3: Assessment of discriminant validity using HTMT

Path	Mediation Effect					
	Std. Coefficient	S.E.	t-value	LL 95% CI	UL 95% CI	Result
SL → OL → SP	0.27	0.071	3.11**	0.037	0.291	Supported
SL → PS → SP	0.15	0.058	2.27*	0.049	0.208	Supported

Notes 1: * $p < 0.05$ and ** $p < 0.01$

Source: Constructed by author

RESULTS DISCUSSION

Based on the NRBV theory and dynamic capabilities, a model was proposed, and a series of hypotheses were developed and validated to examine the relationship between SL, OL, PS, and SP. The results of this study revealed that OL and PS fully mediate the link between SL and sustainable performance. This study highlights the importance of SL in influencing top management and operational leaders to adopt sustainable practices to address sustainability issues actively. These results align with previous studies (Dominguez-Escrig and Mallen-Broch, 2023; Iqbal and Ahmad, 2021; Zada *et al.*, 2024) that demonstrate that SL drives sustainable performance, fosters knowledge creation, and promotes the development of a learning organisation. Iqbal *et al.* (2020) also discovered that SLs enhance the learning climate by sharing knowledge, facilitating communication, and accepting mistakes.

Furthermore, Mai *et al.* (2022) revealed how SL fosters deeper learning and problem-solving skills among the workforce. For instance, Iqbal *et al.* (2020) found that PS is a crucial element of OL, significantly enhancing sustainable performance. SL serves as a competitive resource that strengthens OL and drives sustainable performance (Kim *et al.*, 2021; Park *et al.*, 2025).

Theoretical Implications

This research paper provides several theoretical implications. First, it is essential to focus on providing sustainability leadership across the organisation, rather than limiting it to the formulation of sustainable goals. Organisations can enhance their sustainability by envisioning sustainability-based visions and development goals, identifying and fostering long-term sustainability-oriented engagement commitments, and engaging with stakeholders (Zada *et al.*, 2024). SL can focus more on developing organisational and societal capacity; this involves changing the hearts and minds of employees and preparing them for sustainable change to achieve sustainable development goals (Burawat, 2019). This need is particularly relevant in Asian countries, where collectivist cultures, high power distance, and lower scores on the ethical-moral subscale make SL even more critical (Abdeldayem and Aldulaimi, 2024). Organisations can address cross-cultural differences at individual, group, and organisational levels by adopting SL practices.

Second, leadership for sustainability is crucial in fostering OL. Management can recognise that adopting SL practices enables the organisation to implement sustainability initiatives effectively (Chowdhury, 2025). Given an understanding of sustainability issues, it is rational to expect that their inclusion in the organisation

can foster a positive learning environment. Similarly, SL creates confidence among employees, thereby enhancing individual green performance (Usman *et al.*, 2025).

Third, SL extends sustainable operations through upgrades of general structural or organisational performance (Zhang *et al.*, 2025). This suggests that by fostering knowledge creation, sharing, and integration, organisations can translate SL practices into meaningful learning processes that drive progress towards sustainable development goals and enhanced performance (Zada *et al.*, 2024). Sustainable leaders can strengthen the learning environment by promoting idea-sharing and maintaining an open-door policy (Sulasmi and Tanjung, 2020).

Fourth, SL encourages employees to raise their voices, share ideas, and take risks by fostering a culture of trust and openness (Iqbal *et al.*, 2020). This study reinforces that fostering PS not only nurtures leadership behaviours that drive sustainable outcomes but also bridges leadership intent with long-term economic, social, and environmental benefits (Ansong *et al.*, 2025).

Practical Implications

This study offers valuable practical implications for organisations to improve their sustainable performance. First, this study emphasises the importance of cultivating an effective concept of SL within organisations. Managers can prepare the new generation of leaders by designing and implementing comprehensive training programmes to develop SL skills. Second, because sustainable leaders provide ideas, information, and permission to take risks, the involvement of top management is crucial for sustainability. Managers should build positive relationships with employees and create a psychologically safe environment where employees can share innovative ideas freely and openly. Third, organisational leadership should provide clear guidance, particularly regarding roles, responsibilities, and expectations within the organisation, to enhance PS. SLs should motivate employees to adopt sustainable practices by understanding environmental challenges and aligning them with employees' needs. By fostering a psychologically safe and supportive workplace, they inspire transformation, build confidence, and encourage employees to take ownership of shared sustainability goals.

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Shahd Mohamed is a researcher and business management graduate with a distinguished academic record, being the first in six years to graduate with a perfect 4.0 CGPA from Sohar University. She has served as Assistant Commissioner at Sudan's Ministry of Social

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