

Exploring the impact of leadership styles on interpersonal skills and organisational success in construction SMMEs

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Abstract

Purpose – This study investigates the impact of leadership styles on interpersonal skills and organisational success in South African construction small, medium and micro enterprises (SMMEs). Considering the critical role of SMMEs in the economy and their high failure rates, the research determined leadership practices that could enhance the competitiveness of construction SMMEs.

Design/methodology/approach – A structured questionnaire was distributed to a stratified sample of 440 Construction Industry Development Board (CIDB) registered contractors in the Gauteng region. The data were analysed using descriptive and inferential statistics. Linear regression models were employed to evaluate the impact of leadership styles on interpersonal skills and organisational success.

Findings – Democratic, charismatic and transformational leadership styles are significantly associated with effective interpersonal skills. Transformational leadership, is the strongest predictor of organisational success, fostering improved collaboration, motivation and overall performance at both individual and organisational levels.

Research limitations/implications – This study focused on Gauteng SMMEs, limiting generalisability to larger firms or other regions. The cross-sectional design and perceptual data may introduce subjectivity and limit analysis of external factors like economic fluctuations. Future research should use longitudinal studies, multi-regional samples and objective metrics alongside perceptual data.

Practical implications – The study advocates effective leadership styles for SMME owners to engender improved interpersonal skills and organisational success.

Originality/value – A dearth of studies exists on leadership styles' impact on interpersonal skills and organisational success in construction SMMEs. This study addresses this gap, with the primary purpose of enhancing leadership effectiveness in SMMEs.

Keywords Construction SMMEs, Interpersonal skills, Leadership styles, Organisational success, Transformational leadership

Paper type Research article

1. Introduction

The construction industry is a significant driver of economic growth and societal development, contributing to infrastructure expansion, urbanisation and employment generation. Globally,



small, medium and micro enterprises (SMMEs) play a crucial role in various economies by fostering innovation, entrepreneurship and economic development. The impact of SMMEs in construction is evident across different regions (Agyekum *et al.*, 2024). The United States has witnessed significant contributions from construction SMMEs, particularly in infrastructure development, where advanced technologies such as prefabrication, modular construction and sustainable building materials enhance efficiency and reduce costs (Hasan *et al.*, 2024). Across the United Kingdom, these enterprises drive urban regeneration and housing development, strengthening economic growth and revitalising communities (Awwad *et al.*, 2022). Meanwhile, Australia benefits from construction SMMEs addressing housing demands in rapidly expanding metropolitan areas, supporting both economic stability and urban development (Mamun, 2023). South Africa equally relies on these enterprises to fuel local economic growth and job creation, with their contributions extending to infrastructure projects and the provision of affordable housing (Wentzel *et al.*, 2022). However, despite their potential, ineffective leadership styles often hinder SMMEs from fully maximising their role in economic development across different countries (Cai *et al.*, 2022). The failure rate of construction SMMEs in South Africa is approximately 75% within the first three years (Fischer and Sitkin, 2023), which contributes to job losses, economic stagnation, and reduced infrastructure development. This failure has been linked to poor leadership, underscoring the need for effective leadership styles to enhance the sustainability of construction businesses (Mhlongo and Daya, 2023).

Effective leadership is essential in SMMEs, as it facilitates organisational resilience, enhances interpersonal relationships and supports strategic decision-making in a highly dynamic construction industry (Awwad *et al.*, 2022). Leaders who possess strong interpersonal skills are better prepared to manage diverse stakeholders, build productive teams and navigate the complexities of construction projects (Beenen *et al.*, 2021). Given the project-based and highly collaborative nature of construction, leadership styles that promote engagement, adaptability and empowerment are increasingly relevant (Cai *et al.*, 2022). Organisational leaders with strong leadership competence and interpersonal skills can drive productivity and ensure business sustainability (Hubbart, 2024).

While previous research has explored leadership competencies, project management and the dynamics of progressive leadership in the construction industry (Denney *et al.*, 2020; Owusu-Manu *et al.*, 2021), there is a limited understanding of the impact of specific leadership styles on the interpersonal skills of SMME owners and, consequently, their organisations' success. This study seeks to fill this gap by examining seven well-established leadership styles: transactional, transformational, democratic, charismatic, autocratic, laissez-faire and bureaucratic. The study analyses the impact of these leadership styles on interpersonal skills and explores their impact on interpersonal skills and organisational success in South African construction SMMEs.

2. Leadership styles, interpersonal skills and organisational success

Leadership is a critical determinant of organisational success, influencing financial performance, workforce productivity and project outcomes (Rajoria *et al.*, 2022). In the construction industry, particularly among SMMEs, leadership effectiveness is closely linked to project efficiency and business sustainability. Effective leadership is characterised by attributes such as idealised influence, intellectual stimulation, inspirational motivation and individualised consideration (Zen *et al.*, 2023), all of which contribute to long-term organisational growth. Conversely, poor leadership increases costs, reduces productivity and undermines project quality (Zaman *et al.*, 2023). A lack of integrity among leaders remains a key challenge in the South African construction industry (SACI), further exacerbating performance inefficiencies (Amoah and Steyn, 2023).

Interpersonal skills, including communication, conflict resolution and team-building, play a crucial role in leadership effectiveness, enabling leaders to adapt their styles to organisational

needs (Beenen *et al.*, 2021). Leaders with strong interpersonal skills can foster positive work environments, improve team cohesion and enhance employee satisfaction, ultimately contributing to organisational success (Siangchokyoo *et al.*, 2020). Transformational leadership, which leverages these skills, is consistent with Ubuntu leadership principles, a South African philosophy emphasising shared values and collective decision-making (Hilton *et al.*, 2021). Similarly, democratic leadership fosters employee engagement through participatory decision-making, though it can slow implementation processes (Gorgens-Ekermans and Roux, 2021), it enhances creativity and teamwork (Hilton *et al.*, 2021). Charismatic leadership motivates teams through vision and personal engagement, a trait that resonates with leadership models in Sub-Saharan Africa, where social cohesion and trust-building are central to business operations (Matic, 2022).

Autocratic leadership centralises decision-making but can lead to employee disengagement and reduced innovation (Hilton *et al.*, 2021; Pizzolitto *et al.*, 2023). It may expedite processes but often raises ethical concerns (Ahmed and Simha, 2023). Transactional leadership, structured around rewards and exchanges, can drive short-term financial gains but has limited long-term impact, particularly in dynamic industries such as construction (Pizzolitto *et al.*, 2023). Transactional leadership is based on exchange theories, where leaders provide rewards in response to employee efforts, ensuring productivity through external motivation (Matic, 2022). Transformational leadership fosters trust, autonomy and professional growth by inspiring employees to exceed expectations (Siangchokyoo *et al.*, 2020). Bureaucratic leadership ensures compliance but stifles innovation, which is essential in a sector requiring adaptability (Matic, 2022). Laissez-faire leadership, characterised by minimal supervision, is largely ineffective in African organisational contexts where leaders are expected to play an active role in guiding employees (Udin, 2023). It grants autonomy to team members, which can be beneficial or detrimental depending on the team's capabilities (Udin, 2023).

Organisational success in construction SMMEs is often measured through financial performance, shareholder returns and market sustainability (Rajoria *et al.*, 2022). Leadership styles influence these outcomes by shaping strategic decision-making, workforce motivation and project execution efficiency (Gorgens-Ekermans and Roux, 2021). While transformational, democratic and charismatic leadership styles are associated with enhanced performance, transactional, bureaucratic and laissez-faire approaches often yield inconsistent results (Matic, 2022; Rehman Khan *et al.*, 2022). In many South African construction SMMEs, centralised decision-making under autocratic leadership dominates, limiting strategic flexibility and affecting long-term sustainability (Wu and Peng, 2022).

In other African economies such as Nigeria, leadership tends to be more task-oriented, contrasting with democratic or cooperative approaches (Olasunkanmi *et al.*, 2024; Olayisade and Awolusi, 2021). Leadership in BRICS (Brazil, Russia, India, China and South Africa) nations like China reflects unique cross-cultural dynamics shaped by diverse entrepreneurial ecosystems (Wu and Peng, 2022). Building on established psychometric foundations (Nunnally, 1978), this study recognises the development of validation methodologies. Modern psychometric approaches, emphasising comprehensive construct validity through advanced statistical modelling, remain essential for rigorously assessing instrument reliability and validity (Cao *et al.*, 2019; Taber, 2018). The Ubuntu philosophy, integral to South African SMMEs (Mhlongo and Daya, 2023; Mutshidza *et al.*, 2024), promotes collaboration, ethical leadership and communal responsibility. However, its integration within modern business environments, often dominated by individualistic Western practices, presents unique implementation challenges (Mhlongo and Daya, 2023). Moreover, addressing industry-specific issues is vital for advancing leadership discourse in construction. Value-driven principles that emphasise waste reduction can improve project delivery and efficiency (Adebowale, 2018), while cultivating a robust safety culture, supported by strong leadership commitment, remains critical in the high-risk construction sector (Wu *et al.*, 2024). Leaders who integrate Ubuntu values enhance inclusivity,

strengthen team cohesion and foster long-term commitment within organisations (Nkomo, 2021). However, autocratic leadership often contradicts Ubuntu principles, negatively impacting workplace harmony (Hilton *et al.*, 2021). A balanced approach that combines directive leadership with consultative strategies may be more effective in ensuring both efficiency and cultural alignment in construction SMMEs. While bureaucratic leadership ensures regulatory compliance, it can suppress innovation, which is critical for maintaining competitiveness in the construction industry (Matic, 2022). Additionally, laissez-faire leadership remains unsuitable in many African organisational contexts, as it fails to provide the guidance necessary for effective decision-making (Udin, 2023).

3. Methodology

3.1 Study design and sampling strategy

The research employed a quantitative method to examine the impact of leadership styles on interpersonal skills and organisational success in SMMEs. The study focused on Construction Industry Development Board (CIDB)-registered SMMEs in the Tshwane Metropolitan, Gauteng province, one of South Africa's six largest metropolitan municipalities and the second largest in Gauteng by Gross Domestic Product (GDP). Tshwane contributes approximately 26.8% of Gauteng's GDP and 9.4% of the national GDP (Statistics South Africa, 2022), making it a representative context for assessing leadership effectiveness in construction SMMEs.

From a population of 1,179 CIDB-registered SMMEs (Grades 1 to 7), a stratified sample of 440 contractors was selected. The CIDB grading system classifies contractors from Grade 1 (small-scale projects) to Grade 9 (major national projects), with Grades 1 to 7 categorised as SMMEs. This system ensures contractors are matched with projects based on experience and financial capacity, promoting quality and sustainability in construction (CIDB, 2023).

A stratified sampling technique was used to ensure proportional representation across contractor grades. Rowley (2014) supports this approach for populations divided into distinct groups relevant to research objectives. The Raosoft analytic tool determined the sample size with a 5% margin of error and a 95% confidence interval, corresponding with standard quantitative research practices (Saunders *et al.*, 2019). This sample size is also consistent with similar studies on leadership in SMMEs, ensuring sufficient statistical power to detect meaningful relationships (Mutshidza *et al.*, 2024).

3.2 Survey administration

Data collection involved distributing questionnaires via email and in person over six weeks, with follow-ups to maximise response rates. The structured questionnaire comprised four sections consistent with the study's objectives: demographic information, leadership style metrics, interpersonal skills and organisational success. A closed-ended format ensured clarity and ease of analysis. Of the 440 questionnaires distributed, 161 were returned, with 160 valid, yielding a response rate of 36.59%. To address non-response bias, targeted follow-ups were conducted and demographic comparisons between respondents and non-respondents revealed no significant differences. This response rate corresponds with similar studies on contractors and provides representative insights into the population (Olasunkanmi *et al.*, 2024).

A 5-point Likert scale was employed, ranging from 1 (strongly disagree) to 5 (strongly agree). The following mean score (MS) ranges guided interpretation: strongly disagree (≥ 1.00 – ≤ 1.80), disagree (≥ 1.81 – ≤ 2.60), neutral (≥ 2.61 – ≤ 3.40), agree (≥ 3.41 – ≤ 4.20) and strongly agree (≥ 4.21 – ≤ 5.00) (Adebowale, 2018). A mean score of 3.5 was the cut-off for significant agreement, consistent with existing literature (Cao *et al.*, 2019). Scores above 3.5 indicated agreement or strong agreement, while those below 3.5 reflected disagreement or neutrality, denoting a lack of significant positive response.

3.3 Data analysis

Data were analysed using *The Statistical Package for Social Sciences (SPSS)* version 27.0, selected for its robust capabilities in descriptive and inferential statistical analyses. Linear regression assessed the predictive relationships between leadership styles, interpersonal skills and organisational success, with assumptions of normality, linearity and homoscedasticity tested and met. The analysis included unstandardised and standardised Beta coefficients, *t*-values and significance levels to quantify the relative influence of leadership styles. Beta coefficients indicate the strength and direction of each predictor's effect, where positive values denote a direct relationship and negative values indicate an inverse one. As shown in [Tables 5, 6 and 7](#), the regression model for leadership styles and organisational success was statistically significant overall ($p < 0.001$), as confirmed by the ANOVA. Only leadership styles with *p*-values less than 0.05, specifically transformational and bureaucratic leadership, were considered statistically meaningful predictors, enhancing the interpretive robustness of the findings.

Descriptive statistics summarised respondent data, while inferential statistics explored key relationships. The questionnaire was piloted with a statistician and an SMME owner to ensure content and face validity and was tested with a small sample of target respondents to refine clarity, simplify terminology and improve logical flow. [Rowley \(2014\)](#) emphasises that piloting a questionnaire provides insights into whether the questions are clear and the overall instrument is easy to complete, thereby enhancing its reliability and effectiveness. Data cleaning and error checking ensured quality and accuracy. Reliability was assessed using Cronbach's alpha, with a threshold of 0.70 for internal consistency ([Nunnally, 1978](#)). The study demonstrated satisfactory internal consistency, with Cronbach's alpha values ranging from 0.795 to 0.916.

4. Results

4.1 Demographical data of respondents

Respondents had diverse educational and professional backgrounds, with most holding a Diploma/Certificate (28%) or Bachelor's degree (26%). Experience ranged from under 3 years (15%) to over 11 years (27.6%) and CIDB grades 1–7, with Grade 3 being most represented (21%). Professional registrations included Engineers (16.9%), Project Managers (11.3%) and Quantity Surveyors (5%), while 35% held none.

4.2 Leadership styles of SMME owners

The data provide a quantitative foundation for understanding leadership preferences and their implications on organisational dynamics. Each leadership style's statistical indicators highlight its perceived efficacy and placement in theoretical constructs. [Table 1](#) shows the ranking of the various leadership styles among the SMME owners in the SACI.

4.3 Charismatic leadership

Charismatic leadership, ranked highest with an MS of 4.23, underscores its importance among the investigated leadership styles. This leadership style is characterised by attributes such as direct communication, leading by example and demonstrating responsibility, which collectively reinforces its appeal and effectiveness. The measure "*I prefer communicating with colleagues one-on-one or in group settings*" achieved a mean of 4.29, signifying strong agreement with the principles of charismatic leadership. Similarly, "*I lead by example*" shares an identical mean score (4.29). However, the lower standard deviation (0.587) for leading by example compared to placing great value on employees (0.656) suggests a higher level of consensus among respondents regarding the former. The consistency in responses further highlights the relational and motivational emphasis within charismatic leadership. Other measures, such as placing great value on employees, also exhibit high mean scores,

Table 1. Leadership styles

Leadership styles	Eigenvalue	Cronbach's alpha	Standard deviation	Mean	Rank
<i>Charismatic leadership</i>			0.519	4.23 ^a	1
I prefer communicating with colleagues one-on-one or group setting	0.39	0.889	0.521	4.29	
I lead by example	0.26		0.587	4.29	
I behave in a responsible manner	3.02		0.622	4.20	
I place great value on each employee	0.33		0.656	4.15	
<i>Democratic leadership</i>		0.916	0.623	4.03 ^a	2
I always encourage creativity and innovation	0.51		0.635	4.21	
I maintain constant communication	0.25		0.605	4.21	
I always ask my subordinates for ideas	0.31		0.731	4.02	
I gather feedback from employees before making any decision	0.14		0.803	3.85	
I involve employees in organisational decisions	3.80		0.803	3.85	
<i>Transformational leadership</i>		0.868	0.529	3.99 ^a	3
I like to consider long-term objectives	0.78		0.552	4.40	
An important part of my leadership is that of a teacher	4.07		0.542	4.32	
I help employees to self-develop	0.40		0.728	3.93	
When we have a job to do, I do my part with the rest of the team	1.30		0.780	3.88	
I spend significant time giving hope to my employees	0.26		0.784	3.86	
I spend adequate time in arousing expectations among my employees	0.11		0.775	3.76	
I spend notable time stirring up aspiration among my employees	0.77		0.750	3.76	
<i>Transactional leadership</i>		0.795	0.594	3.83 ^a	4
I emphasize discipline when one of my subordinates violates the rules	0.37		0.768	4.04	
My employees obey my directives and instructions	2.78		0.751	4.04	
I set mutually acceptable standards to govern others	0.73		0.799	3.88	
I motivate employees through payments and rewards	0.79		0.805	3.68	
I organise activities for my employees	0.33		0.875	3.54	
<i>Bureaucratic leadership</i>		0.796	0.667	3.81 ^a	5
I conform to the rules of the organisation at all time	0.46		0.678	3.89	
I impose strict and systematic discipline on the employees	2.15		0.810	3.79	
Employees should obey my instructions and authority at all times	0.39		0.873	3.71	
<i>Laissez-faire leadership</i>		0.834	0.662	3.58 ^a	6
I allow my employees to do as they please	2.68		0.885	3.23	
I give my staff members autonomy and total flexibility to make decisions	0.81		0.851	3.37	
I provide my employees with the necessary resources and let them work	0.37		0.759	3.91	
I ensure my employees should work on their understanding of the given task	0.15		0.739	3.79	
<i>Autocratic leadership</i>		0.829	0.713	2.49 ^a	7
I monitor all organisational activities to ensure the team achieves its objective	0.35		1.025	3.18	
I am the only one who is allowed to initiate methods and procedures	1.12		0.892	2.65	
I persuade others to do as I want	0.33		0.944	2.46	
I stand by what I believe is right	0.26		0.930	2.20	
I ask for no or little input from my employees	0.62		0.823	1.91	

Note(s): ^aOverall mean score of the leadership styles, calculated as the average of its constituent variable mean, where 5 = strongly agree; 4 = agree; 3 = neutral; 2 = disagree; 1 = strongly disagree. The higher the mean score, the more important the variable

Source(s): Authors' field data (2024)

4.4 Democratic leadership

The second overall ranked leadership was that of “*democratic leadership*” (MS = 4.03), reflecting its significance in promoting inclusivity and collaboration. Measures such as encouraging creativity and innovation, maintaining communication and gathering feedback highlight this style’s participative approach. The measure “*I always encourage creativity and innovation*” achieves a notable mean of 4.21, reinforcing the leader’s role in fostering a conducive environment for idea generation. However, measures like “*I gather feedback from employees before making any decision*” and “*I involve employees in organisational decisions,*” with a shared mean of 3.85, indicating a slightly lower emphasis on direct employee involvement in decision-making processes.

4.5 Transformational leadership

The third overall ranked leadership style was that of “*transformational leadership*” (mean score = 3.99). The seven associated variables of this scale had mean scores ranging from “*I like to consider long-term objectives: what could* (mean score = 4.40)” to “*I spend notable time to stir up aspiration among my employees* (mean score = 3.76)”. The standard deviations also ranged from 0.542 to 0.784, suggesting higher levels of consensus among the respondents. The highest mean within this category, 4.40, is attributed to the measure “*I like to consider long-term objectives,*” reflecting leaders’ strategic orientation. Other measures, such as acting as a teacher and fostering self-development among employees, further emphasise the transformational leader’s role in enabling personal and organisational growth. Nevertheless, measures like stirring up aspirations and arousing expectations present slightly lower means (3.76), suggesting varying levels of emphasis on motivational practices.

4.6 Transactional leadership

Transactional leadership occupies the fourth position with a mean score of 3.83. This style’s emphasis on discipline, directive adherence and motivation through rewards is evident in its measures. For instance, “*I emphasise discipline when one of my subordinates violates the rules*” and “*My employees obey my directives and instructions*” both achieved a mean of 4.04, underscoring the directive and rule-oriented nature of this style. Conversely, measures such as organising activities and motivating through payments and rewards exhibit comparatively lower means, at 3.54 and 3.68, respectively, indicating potential limitations in sustaining employee engagement solely through transactional mechanisms.

4.7 Bureaucratic leadership

Bureaucratic leadership, ranked fifth with an MS of 3.81, is characterised by adherence to organisational rules and systematic discipline. The measure “*I conform to the rules of the organisation at all times*” achieves a mean of 3.89, reflecting the leader’s commitment to structure and authority. However, measures like imposing strict discipline and ensuring obedience present slightly lower scores, suggesting variability in the application of bureaucratic principles.

4.8 Laissez-faire leadership

Laissez-faire leadership, with a mean of 3.58, reveals its lower preference among SMME owners. This style’s reliance on employee autonomy and flexibility is evident in measures like “*I provide my employees with necessary resources and let them work*” (mean of 3.91). However, measures like allowing employees to act independently and providing autonomy

score lower (means of 3.23 and 3.37, respectively), highlighting potential challenges in balancing freedom with oversight.

4.9 Autocratic leadership

Autocratic leadership, with the lowest mean of 2.49, reflects its limited acceptance. Measures such as “*I monitor all organisational activities to ensure the team achieves its objective*” (mean of 3.18) and “*I am the only one who is allowed to initiate methods and procedures*” (mean of 2.65) emphasise the top-down approach inherent in this style. The measure “*I ask for no or little input from my employees,*” with a mean of 1.91, further underscores its restrictive nature, which may hinder collaborative and innovative practices.

The Cronbach’s Alpha coefficient values, ranging from 0.795 to 0.916, confirm the reliability of the scales across all leadership styles, as values above 0.7 indicate acceptable internal consistency (Taber, 2018). The findings indicate that while charismatic and democratic leadership styles are highly favoured for their relational and participative qualities, transformational leadership offers strategic advantages. In contrast, transactional, bureaucratic, laissez-faire and autocratic styles demonstrate varying degrees of applicability, often limited by their inherent focus or rigidity. This analysis underscores the intricate leadership preferences among SMME owners and highlights areas for potential improvement in fostering a balanced and effective leadership approach.

4.10 Interpersonal skills of SMME owners

The analysis of interpersonal skills among SMME owners evaluates their self-assessed capabilities, providing insights into their relative importance and perceived effectiveness. Eigenvalue analysis highlights “*I am an active listener*” as a dominant component (Eigenvalue = 4.80), underscoring its centrality in the interpersonal skillset of SMME owners. By contrast, lower Eigenvalues for “*I treat people fairly at all times*” (0.13) and “*My flexibility allows me to adapt to change easily*” (0.17) indicate a comparatively lesser role. Mean scores (MSs) ranging from 3.86 to 4.36 suggest a strong self-perception of interpersonal abilities. The highest-ranked skill, “*I am a team player*” ($M = 4.36$, $SD = 0.576$), emphasises collaboration, critical for project success in construction. “*I am an active listener*” ($M = 4.28$, $SD = 0.585$) ranks second, reinforcing its importance in effective communication and relationship-building. “*I am a reliable leader*” ($M = 4.26$, $SD = 0.629$) follows, reflecting confidence in leadership and accountability.

Skills such as “*I easily motivate and influence others*” ($M = 4.19$, $SD = 0.609$) and “*I can entrust responsibilities to colleagues*” ($M = 4.16$, $SD = 0.708$) show strong agreement, while the lowest MSs are observed for adaptability ($M = 3.86$, $SD = 0.831$) and fairness ($M = 4.01$, $SD = 0.718$). Greater variability in responses to adaptability ($SD = 0.831$) suggests differing contextual demands or experiences, whereas lower SDs for teamwork (0.576) and active listening (0.585) indicate strong consensus in these areas. Findings highlight teamwork, listening and leadership as core interpersonal strengths among SMME owners, corresponding with the collaborative and communicative demands of the construction sector. However, the relatively lower emphasis on adaptability and fairness suggests areas for improvement. Targeted training programs could enhance flexibility and equitable interactions, fostering trust and innovation. Strengthening these areas would complement existing competencies, supporting the sustainable growth and success of SMMEs.

4.11 Regression of leadership styles and interpersonal skills

This section tests the hypotheses using regression analysis to examine the relationship between leadership styles and interpersonal skills. The results of the tested model are summarised in Table 2, which presents the model’s R and coefficient of determination (R^2) values. Given the presence of multiple predictors, the data reveal an R -value of 0.550, indicating a moderate

Table 2. Model summary for leadership styles and interpersonal skills

Model summary				
Model	R	R square	Adjusted R square	Std. Error of the estimate
1	0.550 ^a	0.302	0.270	0.568
Note(s): BL Ave = Bureaucratic leadership average, DL Ave = Democratic leadership average, TL Ave = Transactional leadership average, LFL Ave = Laissez-faire leadership average, AL Ave = Autocratic leadership average, CL Ave = Charismatic leadership average, TFL Ave = Transformational leadership average, IS Ave = Interpersonal skills average				
^a Predictors: (Constant), BL Ave, DL Ave, TL Ave, LFL Ave, AL Ave, CL Ave, TFL Ave				
^b Dependent Variable: IS Ave				
Source(s): Authors' field data (2024)				

relationship between interpersonal skills and the leadership styles of charismatic, democratic, transformational, transactional, bureaucratic, laissez-faire and autocratic. The coefficient of determination value of 0.302 suggests that these predictors account for 30.2% of the variation in interpersonal skills among SMME respondents. Although this model explains a significant portion of the variation, other factors may also contribute to the observed fluctuations in interpersonal skills.

Table 3 presents the findings from the analysis of variance (ANOVA). The significant *F* value of 9.408, with a *p*-value less than 0.001, indicates that there is less than a 1% chance that the observed *F*-ratio would occur if there were no actual effects. This result suggests that the regression model provides a substantially better prediction of interpersonal skills compared to using the mean value alone. While ANOVA confirms that the model significantly predicts the outcome variable, it does not specify the individual contributions of each component within the model. Nonetheless, the results support the reliability of the predictors used in the analysis. Table 3 presents the ANOVA results.

Table 4 presents the model parameters and their significance. At a significance level of *p* < 0.05, democratic (DL Ave, *p* = 0.035), charismatic (CL Ave, *p* = 0.011), transformational (TFL Ave, *p* = 0.012) and bureaucratic (BL Ave, *p* = 0.004) leadership styles are identified as significant predictors of interpersonal skills (IS Ave). This finding is consistent with Jankelova and Joniaková (2021), who expressed that the transformational leadership style is a particularly significant predictor of interpersonal skills.

The standard regression analysis, summarised in Table 3, shows that leadership styles explain 30.2% of the variation in interpersonal skills, indicating a moderate relationship.

Table 3. ANOVA for leadership styles and interpersonal skills

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig
1	Regression	21.219	7	3.031	9.408	<0.001 ^b
	Residual	48.975	152	0.322		
	Total	70.194	159			
Note(s): ^a Dependent variable: IS Ave (interpersonal skills average), ^b Predictors: (Constant), BL Ave, DL Ave, TL Ave, LFL Ave, AL Ave, CL Ave, TFL Ave, <i>df</i> = degrees of freedom, Significance at <i>p</i> < 0.05, ^a Dependent variable: IS Ave, ^b Predictors: (Constant), BL Ave, DL Ave, TL Ave, LFL Ave, AL Ave, CL Ave, TFL Ave						
Source(s): Authors' field data (2024)						

Table 4. Coefficients for leadership styles and interpersonal skills

Coefficients ^a		Unstandardised coefficients		Standardised coefficient	<i>t</i>	Sig
Model		B	Std. Error	Beta		
1	(Constant)	1.017	0.536		1.898	0.060
	TL Ave	−0.004	0.073	−0.005	−0.060	0.952
	TFL Ave	0.194	0.076	0.210	2.555	0.012
	DL Ave	0.173	0.081	0.179	2.122	0.035
	AL Ave	−0.040	0.058	−0.053	−0.688	0.493
	LFL Ave	0.009	0.071	0.010	0.134	0.894
	CL Ave	0.248	0.096	0.206	2.578	0.011
	BL Ave	0.197	0.067	0.213	2.937	0.004

Note(s): ^aDependent variable: IS Ave = Interpersonal skills average,

b = Bureaucratic leadership, DL = Democratic leadership, TL = Transactional leadership, LFL = Laissez-faire leadership, AL = Autocratic leadership, CL = Charismatic leadership, TFL = Transformational leadership, *t* = *t*-statistic,

Significance at $p < 0.05$, ^aDependent variable: IS Ave

Source(s): Authors' field data (2024)

Table 5. Model summary for leadership styles and organisational success

Model summary				
Model	<i>R</i>	<i>R</i> square	Adjusted <i>R</i> square	Std. Error of the estimate
1	0.471 ^a	0.222	0.186	0.568

Note(s): ^aPredictors: (Constant), BL Ave = Bureaucratic leadership average, DL Ave = Democratic leadership average, TL Ave = Transactional leadership average, LFL Ave = Laissez-faire leadership average, AL Ave = Autocratic leadership average, CL Ave = Charismatic leadership average, TFL Ave = Transformational leadership average,

^bDependent variable: SO Ave = Organisational success average, ^aPredictors: (Constant), BL Ave, DL Ave, TL Ave, LFL Ave, AL Ave, CL Ave, TFL Ave

^bDependent Variable: SO (Organisational Success) Ave

Source(s): Authors' field data (2024)

Table 6. ANOVA for leadership styles and organisational success

ANOVA ^a						
Model		Sum of squares	df	Mean square	F	Sig
1	Regression	13.978	7	1.997	6.207	<0.001 ^b
	Residual	48.897	152	0.322		
	Total	62.875	159			

Note(s): ^aDependent variable: SO Ave = Organisational success average,

^bPredictors: (Constant), BL Ave = Bureaucratic leadership average, DL Ave = Democratic leadership average, TL Ave = Transactional leadership average, LFL Ave = Laissez-faire leadership average, AL Ave = Autocratic leadership average, CL Ave = Charismatic leadership average, TFL Ave = Transformational leadership average,

df = degrees of freedom, ^aDependent Variable: SO Ave, ^bPredictors: (Constant), BL Ave, DL Ave, TL Ave, LFL Ave, AL Ave, CL Ave, TFL Ave

Source(s): Authors' field data (2024)

Table 7. Coefficients for leadership styles and organisational success

Coefficients ^a		Unstandardised coefficients		Standardised coefficient		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.800	0.535		3.363	0.001
	TL Ave	0.090	0.073	0.103	1.231	0.220
	TFL Ave	0.268	0.076	0.306	3.528	0.001
	DL Ave	0.004	0.081	0.004	0.047	0.962
	AL Ave	−0.016	0.058	−0.022	−0.270	0.788
	LFL Ave	−0.009	0.071	−0.010	−0.127	0.899
	CL Ave	0.043	0.096	0.038	0.447	0.655
	BL Ave	0.163	0.067	0.186	2.429	0.016

Note(s): ^aDependent variable: SO Ave = Organizational success average, b = Bureaucratic leadership, DL = Democratic leadership, TL = Transactional leadership, LFL = Laissez-faire leadership, AL = Autocratic leadership, CL = Charismatic leadership, TFL = Transformational leadership, t = t-statistic,

Significance at $p < 0.05$, ^aDependent variable: SO Ave

Source(s): Authors' field data (2024)

ANOVA results in [Table 3](#) confirm that the regression model significantly improves predictions compared to the mean value alone, with a p -value less than 0.001. [Table 4](#) further reveals that democratic, charismatic, transformational and bureaucratic leadership styles are significant predictors of interpersonal skills. This implies that there is a significant causal relationship between leadership styles and interpersonal skills.

4.12 Organisational success in SMMEs

The analysis of organisational success, based on Eigenvalue, MSs and rank, follows Kaiser's criterion for component retention. Eigenvalue analysis identifies "*the organisation achieved growth and sustainability*" as the sole measure exceeding 1 (Eigenvalue = 4.40), indicating its significant contribution to overall variance. In contrast, measures such as "*we were able to adapt to the change in technology*" have much lower Eigenvalues (0.17), leading to the retention of only the primary component, reinforcing its central role in organisational success.

MSs indicate strong agreement on maintaining good client and employee relationships ($M = 4.11$) and increased income and profit ($M = 4.04$), ranking these aspects highest. Measures related to organisational growth, performance and job creation fall into the "agree" category, with MSs ranging from 3.84 to 3.97, suggesting they are valued but less emphasised. While organisational success is perceived positively, particularly in relationship management and financial performance, adaptability to technological changes receives comparatively lower emphasis despite a positive rating.

4.13 Regression of leadership style and organisational success

This section focuses on testing the hypotheses related to the relationship between leadership styles (independent variable) and organisational success (dependent variable) using regression analysis. The model's summary, provided in [Table 5](#), includes the R and coefficient of determination values. The analysis reveals an R -value of 0.471, indicating the strength of the relationship between organisational success and the various leadership styles, including charismatic, democratic, transformational, transactional, bureaucratic, laissez-faire and autocratic. The coefficient of determination value of 0.222 suggests that these predictors explain 22.2% of the variation in organisational success among SMME respondents.

While other factors may influence this variation, the model accounts for a significant portion of the observed fluctuation. The significance level for the correlation is $p < 0.05$ (2-tailed).

Table 6 presents the results of the ANOVA for these data. The significance value (Sig.) is less than 0.001, with an F -ratio of 6.207, which is significant at $p < 0.05$. This indicates a less than 1% probability that the observed F -ratio would be as large by chance if there were no effects. Thus, the regression model significantly improves the prediction of organisational success compared to using the mean value alone. While the ANOVA confirms that the model predicts the outcome variable effectively, it does not specify the contribution of each component. Table 3 provides additional details on the relationship between the variables.

Table 7 outlines the model parameters and their significance. At a significance level of $p < 0.05$, both bureaucratic (BL Ave, $p = 0.016$) and transformational (TFL Ave, $p = 0.001$) leadership styles are identified as significant predictors of organisational success. While Liphadzi (2015) identified a moderately significant positive correlation between transactional leadership and organisational success, this study confirms a strong positive association between organisational success and transformational leadership. In contrast, democratic leadership shows minimal correlation with organisational success, and autocratic leadership does not exhibit a significant relationship with it. Lo *et al.* (2010) reported that bureaucratic leadership often negatively affects employee performance and commitment. This study corresponds with previous findings that transformational leadership positively influences organisational success, although the effects of transactional leadership were observed to be somewhat stronger.

The significant coefficient of determination value of 0.222 suggests that leadership styles explain 22.2% of the variance in organisational success, indicating a substantial causal relationship. The ANOVA results with an F -value of 6.207 ($p < 0.001$) confirm that the regression model significantly improves the prediction of organisational success compared to using the mean value alone. Specific leadership styles, such as bureaucratic and transformational, were identified as significant predictors of organisational success.

While the model demonstrates a statistically significant relationship, the coefficient of determination value of 22.2% indicates that the tested leadership styles explain approximately 22.2% of the variance in organisational success. This suggests that a substantial portion of the variance remains unexplained by the variables included in this study. The relatively low explanatory power is typical in complex social and organisational research, where numerous unmeasured variables can influence outcomes. These unmeasured variables could include broader economic fluctuations, industry-specific regulations, technological advancements, competitive pressures and the individual characteristics of employees or project complexities, all of which contribute to the multifaceted nature of organisational success in the construction SMME context.

5. Discussion

The study examines the influence of leadership styles on interpersonal skills and organisational success in construction SMMEs. South African SMME owners largely perceive themselves as exhibiting charismatic leadership qualities that enhance employee motivation, team cohesion and business resilience (Maktar *et al.*, 2024a). They also favour democratic, transformational, transactional, bureaucratic and laissez-faire styles, while autocratic leadership is least preferred, reflecting a shift towards participative, employee-focused models (Hilton *et al.*, 2021). This suggests that leadership in SACI is evolving towards inclusivity and shared decision-making. As Matic (2022) notes, effective leadership often combines multiple approaches. The prevalence of charismatic and democratic styles therefore underscores a commitment to employee involvement and inspirational practices, with implications for leadership development aimed at improving performance. Within this context, key interpersonal skills include teamwork, active listening and reliability. Team-oriented leadership fosters collaboration, problem-solving and better decision-making (Agyekum *et al.*, 2024), while active listening promotes supportive work environments

(Denney *et al.*, 2020) and reliability strengthens trust in leadership (Hubbart, 2024). However, the relatively low emphasis on adaptability highlights a development gap. In South Africa's rapidly changing construction sector, where regulatory shifts and unforeseen challenges are frequent, adaptability is essential yet under prioritised, potentially limiting SMME owners' capacity to respond effectively. Regression analysis confirms this interplay, showing that leadership styles explain 30.2% of the variance in interpersonal skills, indicating substantial but not exclusive influence. Democratic, charismatic, transformational and bureaucratic leadership significantly predict interpersonal effectiveness (Jankelova and Joniaková, 2021). Democratic leadership corresponds well with SACI's collaborative environments, while charismatic and transformational styles inspire and motivate teams (Rehman Khan *et al.*, 2022). Bureaucratic leadership, though useful for clarifying roles and structures, can restrict flexibility and innovation both critical for adaptability highlighting the need to balance structure with responsiveness.

Organisational success is similarly shaped by leadership styles and is most strongly linked to client and employee relationships and financial growth, being consistent with SACI's long-term sustainability focus (Gorgens-Ekermans and Roux, 2021). Leadership styles account for 22.2% of the variance in organisational success, with transformational leadership emerging as the strongest predictor (Liphadzi, 2015), while democratic and autocratic styles show minimal impact. This limited influence suggests that while participative decision-making encourages engagement, it may be less effective in hierarchical industries and autocratic approaches lack the flexibility needed for stakeholder engagement. As a result, there is a growing need to strengthen adaptability, particularly in response to technological change and to balance traditional success metrics with innovation to maintain competitiveness. Regional comparisons provide further insight into these dynamics. For example, in Ghana, democratic, transformational and situational leadership dominate construction, mirroring SACI trends (Owusu-Manu *et al.*, 2021), whereas in Kenya, strategic leadership practices produce mixed outcomes, with some negatively affecting management culture and human resource development (Okeyo, 2023). Conversely, Nigerian SMMEs rely more on autocratic, laissez-faire and bureaucratic leadership (Olayisade and Awolusi, 2021), contrasting with South Africa's preference for participative models. These variations illustrate how cultural and economic factors shape leadership preferences and outcomes across African contexts. Comparing African leadership patterns with developed-economy practices further highlights critical differences. In the United Kingdom, collaborative and innovation-driven leadership enhances efficiency and technological advancement in small and medium-sized enterprises, particularly through Building Information Modelling adoption (Awwad *et al.*, 2022). In the United States, leadership in small businesses is closely associated with strategic growth, resilience and entrepreneurial innovation, often reflecting transformational and adaptive leadership models (Hasan *et al.*, 2024). These patterns reflect the influence of advanced regulatory frameworks and competitive markets in developed economies, where leadership practices are typically aligned with continuous improvement, innovation and long-term sustainability. In contrast, many African construction SMMEs adopt more transactional or autocratic approaches (Olasunkanmi *et al.*, 2024), often driven by the need for immediate project delivery and shaped by less-formalised institutional environments.

Placing African leadership dynamics alongside developed-economy practices highlights the contextual factors shaping leadership effectiveness across socio-economic environments. Developing countries, including South Africa, can selectively integrate the strengths of developed-economy leadership models into existing approaches such as the Ubuntu philosophy to enhance adaptability, innovation and sustainability. However, this integration must remain contextually relevant, reflecting socio-cultural realities to ensure the resulting model is productive rather than misaligned with local cultural and institutional climates. The study demonstrates that democratic, charismatic and transformational leadership strongly influence interpersonal skills among SMME owners in SACI, with transformational leadership emerging as the strongest predictor of organisational success. Conversely,

bureaucratic, democratic and autocratic leadership styles show limited impact on success, reinforcing the need to balance structure with adaptability and innovation in the dynamic construction environment. Cultural factors, particularly Ubuntu, continue to shape SMME leadership practices in South Africa. Ubuntu emphasises communalism, interdependence, compassion, dignity, fairness, reciprocity, inclusivity and shared destiny (Nkomo, 2021). The alignment of democratic, charismatic and transformational leadership with Ubuntu values highlights their communal and inclusive nature. However, the role of bureaucratic leadership in interpersonal skill development and the limited impact of democratic leadership on organisational success reveal tensions with Ubuntu's principles. Furthermore, the low prioritisation of adaptability suggests that SMME owners may need to incorporate greater Ubuntu-based flexibility into their leadership approaches to fully realise the philosophy's holistic, people-centred values.

6. Implications

6.1 Theoretical implications

This study advances leadership and organisational behaviour theories by situating transformational, bureaucratic and democratic leadership within the frameworks of incremental and entity mindsets, particularly in the context of South African construction SMMEs. Incremental theory posits that individuals and organisations can evolve through learning and adaptation, while entity theory views these capabilities as relatively fixed. The findings align strongly with incremental theory. Transformational leadership, characterised by adaptability, vision and continuous learning, emerges as a significant predictor of organisational success. This supports the idea that organisations embracing developmental mindsets are more likely to foster innovation, collaboration and resilience. For instance, Wu *et al.* (2024) found that supervisor leadership fosters safety behaviours through an incremental mindset. This study builds on such work by demonstrating that transformational leadership also enhances interpersonal skills and broader business performance, extending the relevance of incremental theory to the developing construction sector.

By contrast, bureaucratic leadership reflects features of entity theory. While it provides clarity and structure, its limited association with organisational success suggests that rigidity constrains adaptability an essential trait in the dynamic SACI. This is consistent with Maktar *et al.* (2024b), who argue that hierarchical structures impede technological integration by creating decision-making bottlenecks. Our results add that, although bureaucratic leadership fosters compliance, it lacks the dynamism needed for long-term success in SMMEs. Similarly, the limited impact of democratic leadership on organisational outcomes suggests that participation alone is insufficient without agility and decisiveness. To bridge these gaps, Ubuntu leadership principles offer a culturally grounded framework that balances structure with adaptability. Ubuntu emphasises communal well-being, shared purpose and collective decision-making values that align with the interpersonal demands of South African SMMEs. Its people-centred approach provides a middle ground between rigid bureaucracy and overly egalitarian models, offering a culturally resonant alternative that addresses the socio-organisational challenges identified in this study. These theoretical contributions underscore the importance of aligning leadership styles with both contextual realities and organisational goals to improve outcomes in emerging markets.

6.2 Managerial implications

The study provides actionable insights for construction project managers, SMME owners, policymakers and educators, particularly in developing leadership competencies, enhancing interpersonal effectiveness and strengthening organisational performance in the SACI. First, the value of charismatic, democratic and transformational leadership in fostering interpersonal skills is evident. SMME owners should implement training programmes that promote participatory decision-making, inspirational leadership and active employee engagement.

Practical strategies such as mentorship, leadership workshops and structured onboarding can help embed collaborative and transparent practices. Co-located workspaces and small-group initiatives can further support teamwork and communication among construction professionals. Second, interpersonal competencies like active listening and teamwork are central to effective leadership. To reinforce these, organisations should institutionalise formal feedback systems, regular team meetings and open dialogue mechanisms that build trust and reliability. Inter-organisational working groups, as proposed by [Lehtinen and Aaltonen \(2020\)](#), can facilitate collaboration across hierarchical and organisational boundaries.

Third, adaptability is an underutilised leadership trait in the SACI. Structured flexibility should be embedded in leadership development by using tools such as scenario-based training, responsive performance evaluations and innovation-focused incentives. These practices prepare leaders for a sector marked by uncertainty and rapid change. Fourth, transformational leadership's emphasis on long-term vision and motivation is vital for sustained success. Organisations should cultivate a "best for project" culture in which leadership strategies align with overarching business goals. This may include adaptive goal-setting systems and reward mechanisms that prioritise innovation, stakeholder engagement and sustainability.

Finally, while bureaucratic leadership contributes to role clarity, over-reliance on rigid structures may suppress creativity and responsiveness. A hybrid approach is advisable, combining formal structures with participatory forums, rotating leadership responsibilities and flexible communication policies. Such a balance ensures both compliance and adaptability are achieved. Beyond firm-level strategies, the study has implications for public policy and education. Government agencies should support leadership development in the construction sector through targeted funding, grants or incentives that promote adaptive and transformational practices among SMMEs. Educational institutions should embed Ubuntu-based leadership concepts and transformational models into construction management and business curricula. These inclusions would prepare future professionals to lead with cultural competence, ethical grounding and adaptive thinking. Case studies from this research can serve as practical teaching tools in academic and vocational programmes. By implementing these recommendations, construction SMME leaders and stakeholders can enhance leadership effectiveness, build interpersonal capacity and promote organisational resilience across the industry.

7. Conclusion, limitation and future direction

This study investigates the relationship between leadership styles, interpersonal skills and organisational success in South African construction SMMEs. A review of existing literature identified seven leadership typologies commonly employed in construction: charismatic, democratic, transformational, transactional, bureaucratic, laissez-faire and autocratic. Leadership effectiveness varies with contextual factors such as organisational structure, workforce composition and industry demands. Empirical findings indicate transformational leadership is the most effective in fostering both interpersonal skills and organisational success, reinforcing its critical role in driving performance and growth. Democratic and charismatic leadership significantly enhance interpersonal skills, suggesting their strategic integration into leadership practices. Conversely, autocratic leadership is least favoured, reflecting a shift towards participative and employee-centric models that prioritise adaptability, collaboration and innovation in addressing the construction sector's dynamic challenges.

This study has three main limitations. First, its focus on SMMEs within Gauteng limits the generalisability of findings to larger firms or other regions. The cross-sectional design restricts causal inferences on the long-term impact of leadership styles, while a 36.59% response rate risks non-response bias. Therefore, future research should conduct multi-regional and longitudinal studies, incorporating mixed methods approaches to capture the evolution of leadership effectiveness over time, especially in response to market dynamics and technological change. Second, while the study highlights leadership styles and their outcomes, it does not fully account for external factors such as economic fluctuations,

regulatory changes or project complexities that may influence leadership effectiveness. Future studies should incorporate economic indicators and regulatory data, and use qualitative designs or case studies to explore how these external conditions shape leadership outcomes. Third and finally, reliance on self-reported data introduces subjectivity and potential bias. Future research should combine perceptual data with objective performance metrics, such as project completion rates, financial performance and employee turnover. Further investigation is needed into the interplay between leadership styles, organisational culture and industry-specific factors, exploring how organisational culture moderates' leadership outcomes and how technological and regulatory shifts affect leadership effectiveness. Integrating diverse data sources will provide a more comprehensive, context-specific understanding of leadership dynamics in construction SMMEs.

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