




# “Effect of female leadership styles on employee performance: Mediating role of work engagement”

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# EFFECT OF FEMALE LEADERSHIP STYLES ON EMPLOYEE PERFORMANCE: MEDIATING ROLE OF WORK ENGAGEMENT

## Abstract

Leadership style is a key factor shaping employee engagement and performance, which in turn determines organizational success. This study investigated the relationship between leadership style, work engagement, and employee performance in women-owned small and medium-sized enterprises (SMEs) in Vietnam. Over three months (March to May 2024), 1,000 questionnaires were distributed via Google Forms to employees working in women-owned SMEs in Vietnam; 465 responses were received, of which 376 were considered valid for analysis. The workforce was predominantly female, aged 36–45, with a high school education or less, and the highest proportion was those with 3–6 years of work experience. SMART PLS Version 4.0 software was used to test the research hypotheses. The findings showed that transformational leadership had the most positive effect on work engagement and employee performance, followed by transactional and democratic styles. In contrast, the authoritarian and laissez-faire leadership styles had lower impacts on employee engagement and performance than the previous three leadership styles, but in the opposite direction. Notably, work engagement played a mediating role in the relationship between leadership style and employee performance. This study suggests that leaders should adopt a flexible approach to leadership, particularly by leveraging the strengths of transformational, transactional, and democratic styles, while minimizing the use of authoritarian and laissez-faire approaches.

## Keywords

gender, leadership, employees, behavior, output, SME, implications, Smart PLS

## JEL Classification

D23, J53, L26

## INTRODUCTION

The level of competition among businesses is strongly influenced by employee engagement. Highly engaged employees tend to apply their cognitive, physical, and emotional capacities fully to accomplish remarkable goals in their work (Amelia & Mulyono, 2024). This brings benefits to business performance, including increased loyalty and reduced risk of employee turnover. Employee engagement is a key factor for growth and competitive advantage, but not all businesses achieve high levels of engagement (Amelia & Mulyono, 2024). Enhancing employee engagement presents not only a conceptual concern but also a real-world challenge for managers. Leadership style can promote or hinder employee interest and commitment to work, directly affecting organizational productivity and profitability (Zhao & Sheng, 2019; Aboramadan & Dahleez, 2020; Hundie & Habtewold, 2024; Amelia & Mulyono, 2024; Fakhri et al., 2024). Morley (2014) argues that leadership is influenced by culture and can adapt to the socio-cultural context. Leadership is based on three main pillars: people, goals, and influence. Rhode (2017) emphasized that the core task of leadership is to bring together individuals, inspire through vision, and motivate to



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achieve organizational goals. Today, research on female leadership has delved into analyzing their impact on employee engagement, an essential factor in every organization (City et al., 2024).

More and more women are participating in business activities and holding key roles in enterprises (Feng et al., 2023). Female leaders often demonstrate qualities equal to or superior to men in driving business development. A key approach to enhancing employee engagement involves examining leadership roles, with particular attention to the contributions of women in leadership positions (Dunlop & Scheepers, 2023). Women leaders are frequently linked to leadership styles that prioritize collaboration, empathy, open communication, and fostering strong interpersonal connections. These traits, often referred to as “soft skills,” have been shown to foster a culture of engagement, inclusion, and respect within organizations (City et al., 2024). However, not all female leaders use the same style. Their leadership styles reflect how they respond to challenges and changes within their organizations, including both favorable and unfavorable characteristics (Pattali et al., 2024). To achieve their goals in a globally competitive environment, leaders often experiment and utilize various leadership approaches, including transformational, transactional, democratic, autocratic, and laissez-faire styles (Avolio et al., 1999; Aboramadan & Dahleez, 2020; Zhang et al., 2023). Despite their advantages and disadvantages, agile leaders adopt these styles to promote engagement and achieve organizational effectiveness.

Numerous empirical studies have examined how different leadership styles impact employee engagement and performance, but the results remain controversial (Zhao & Sheng, 2019; Hundie & Habtewold, 2024). This difference may stem from workplace culture, management systems, and the multi-factor survey method used. The contingency theory of leadership suggests that no single leadership style is universally effective in all situations but depends on the organizational context (Zhao & Sheng, 2019). The transformational theory of leadership emphasizes that a leader’s behavior must be appropriate to the situation in order to be effective. Different leadership styles come with their own unique advantages and limitations, and a leader’s success depends on the specific context. Most studies focus on three main leadership styles: transformational, transactional, and laissez-faire (Eagly et al., 2003; Hundie & Habtewold, 2024; Pattali et al., 2024), while few studies comprehensively synthesize common styles, including transformational, transactional, democratic, autocratic, and laissez-faire. This highlights the need for more in-depth and comprehensive studies covering the full spectrum of leadership styles, enabling managers to better understand their characteristics and impacts, and ultimately select the most suitable style for their approach.

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## 1. LITERATURE REVIEW

Leaders play a vital role in ensuring organizational performance through their power of persuasion, ability to enhance employee motivation, and building strong relationships between employees and the company. A good leader not only guides the team toward the organizational mission and goals but also promotes job satisfaction, improved performance, and employee engagement (Batista-Taran et al., 2009).

Leadership approaches like servant and transformational leadership styles effectively inspire passion, promote knowledge sharing, and enhance organizational citizenship behavior and workplace autonomy (Kadarusman & Bunyamin, 2021).

However, psychological stress can negatively affect empowering leadership and proactive performance (Roberge & Boudrias, 2021). In general, successful leaders use persuasion, authority, and high-quality relationships to achieve common goals and promote sustainable organizational growth.

Transformational leadership emphasizes reshaping employees’ value systems, aspirations, and expectations, inspiring them to share and own the vision of the organization (Hundie & Habtewold, 2024). Transformational leaders articulate the vision in an engaging way and protect employees’ interests, encouraging them to overcome their own interests to achieve organizational goals (Bass & Avolio, 1990). Research has demonstrated that

this leadership style positively impacts employee job satisfaction and performance (Lai et al., 2020; Hundie & Habtewold, 2024), with female leaders rated higher on charisma, a key component of transformational leadership (Groves, 2005). According to Bass (1995), transformational leadership consists of four dimensions:

- ideal influence, expressed through the leader's values, confidence, and moral compass, which shapes collective goals (Antonakis & House, 2013);
- inspirational motivation, through the articulation of a vision to encourage employees to achieve desired goals;
- intellectual stimulation, which encourages innovation and creativity by challenging the status quo; and
- individual consideration, which provides support and attention to each employee (Antonakis & House, 2013). These four elements help leaders engage followers and achieve important results (Lai et al., 2020).

When employees feel recognized and motivated by transformational leadership, they will demonstrate positive attitudes and behaviors and increase their energy and dedication to work (Aboramadan & Dahleez, 2020). This leadership style motivates employees to participate in work and make sacrifices for the benefit of the organization, creating a strong relationship between transformational leadership and work engagement (Aboramadan & Dahleez, 2020).

Transactional leadership focuses on using rewards and punishments to motivate subordinates' job performance. Transactional leaders build a "give and take" relationship by clearly defining the relationship between performance and rewards, and then using it to motivate subordinates to improve performance (Hundie & Habtewold, 2024). This style consists of two main elements: conditional rewards, in which leaders define goals, communicate expectations, and provide rewards when subordinates achieve agreed-upon goals; and management by exception, in which leaders monitor to ensure that no errors occur, but will not intervene if things are going smoothly (Bass & Avolio, 1990).

Transactional leaders, through conditional rewards, often provide recognition, pay increases, or promotions to employees who perform well, thereby promoting participation, loyalty, commitment, and performance (Bass, 1995). Although lacking the power of inspirational appeal, this leadership style can still increase employee engagement (Aboramadan & Dahleez, 2020).

In practical terms, transactional leadership focuses on appealing to the self-interest of subordinates through an exchange relationship. This includes clarifying responsibilities, rewarding goal achievement, and correcting failures when desired outcomes are not achieved (Bass & Avolio, 1990). This approach helps organizations achieve goals and maintain stability by closely managing errors or problems that arise (Avolio & Bass, 1995).

Democratic leadership emphasizes participatory decision-making and open communication, fostering a transparent environment that builds employee trust and encourages engagement with organizational activities (Koeswayo et al., 2024). Democratic leaders promote employee involvement in decision-making while maintaining the authority to make the final decision, giving employees the opportunity to control their own destiny and advancement, and motivating them to work harder (Kelly & MacDonald, 2016). This style focuses on listening to and respecting employees' opinions, thereby not only improving leadership effectiveness but also building a company's reputation as being employee-friendly. Bergmark and Westman (2018) showed that democratic leadership promotes engagement by connecting employees and encouraging them to express their thoughts. Compared to men, women tend to use a more democratic leadership style (Evans, 2010). Adams and Funk (2012) also found that female directors are more benevolent and caring toward employees than male directors, which is consistent with a democratic leadership style. Female leaders often adopt a democratic style, fostering employee involvement in decision-making, which in turn enhances their engagement with work (Amelia & Mulyono, 2024).

The autocratic leadership style is characterized by centralized control and limited employee participation in decisions. Autocratic leaders often exer-

cise absolute, unchallenged power and focus on tightly controlling subordinates through directives and company rules (Farh et al., 2008). Zhao and Sheng (2019) discovered that although this style can lead to efficient decision-making processes, it also limits employee discussion, contribution, and participation. In addition, Zhang et al. (2011) also showed that authoritarian leaders disregard the opinions of subordinates, use information to maintain power distance, and have strict requirements for employees, reprimanding them if they do not meet the standards. This not only affects the psychology of employees but also leads to resistance and insecurity. When subordinates are ignored or criticized, their social needs are unmet, reducing their motivation and enthusiasm for work.

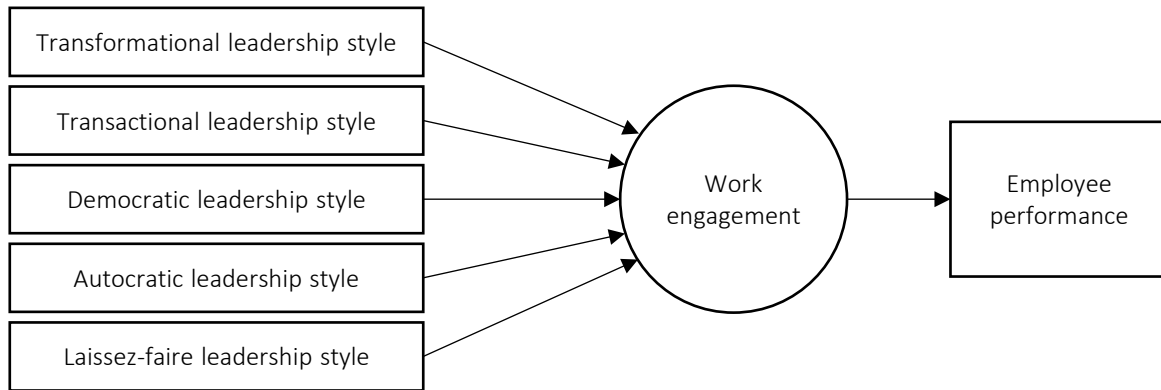
Autocratic leaders focus too much on performance and control over employees, thereby reducing their initiative and sense of responsibility. This behavior also maintains emotional distance and lacks sincere communication, inspiration, and long-term vision (Farh et al., 2008). Social exchange theory views the leader-employee relationship in this style as primarily grounded in short-term benefit exchanges. Therefore, employees only complete their basic work, which reduces their level of commitment and attachment to the organization.

Laissez-faire leadership is characterized by minimal supervision, with leaders allowing subordinates full authority to make decisions and solve problems. In this approach, the leader primarily provides the necessary resources and encourages self-direction and creativity but does not set specific goals or interfere in daily work (Khan et al., 2015). Although this style creates a free-flowing work environment and can promote individual initiative and participation through autonomy, it can also lead to a lack of direction, reduced commitment, and accountability within the organization (Mohammad Younes et al., 2019). Lack of direct supervision and guidance can undermine organizational performance and negatively impact the company's reputation because stakeholders perceive it as a sign of irresponsibility (Mohammad Younes et al., 2019; Zhang et al., 2023). It can also be a sign that the leader is not confident in his or her leadership abilities, so he or she does not set goals for the group and minimizes interac-

tions within the group (Kelly & MacDonald, 2016). When employees view their leaders as irresponsible or potentially incompetent, they are less likely to feel motivated to work under their guidance for an extended period.

Work engagement reflects the level of motivation and positive connection an individual has with their job (Bakker et al., 2008). It is characterized as a state of positive motivation and fulfillment, indicative of overall work-related well-being. Engaged employees usually display a strong bond with their work, characterized by high energy, dedication, and intense focus on their tasks (Schaufeli et al., 2002). This concept encompasses three core dimensions: vitality (elevated energy and mental resilience), dedication (a sense of purpose, pride, and inspiration), and absorption (intense focus and immersion in work) (Schaufeli et al., 2002). According to Kahn (1990), engagement is also expressed through emotional, cognitive, and physical commitment, while Demirtas et al. (2017) emphasize that it represents a state of being active, dedicated, and self-fulfilling. Engaged employees also focus on social connection, openness to coworkers, and a high level of task focus (Kahn, 1990), which in turn improves job performance, reduces turnover, increases organizational commitment, reduces burnout, and improves mental health (Schaufeli et al., 2002).

Performance refers to the blend of quality and quantity in the outcomes employees produce while fulfilling their assigned duties (Al Mehrzi & Singh, 2016). It encompasses the completion of tasks, the achievement of objectives, and adherence to organizational standards. According to Yang et al. (2016), performance covers completed and pending activities, whereas Anitha (2014) described it as a structured approach to achieve desired results within the workplace. As a fundamental factor in a company's long-term success, performance involves both regulated behaviors and the proactive efforts of employees in meeting their contractual responsibilities. Employee performance is divided into task performance (actions to complete tasks according to job descriptions) and performance behavior, including positive and negative workplace behaviors (Nevianto et al., 2021). Hadi and Lorkojouri (2013) argue that performance appraisals can boost motivation, encourage innovation,



**Figure 1.** Conceptual model

and help employees achieve goals more effectively. Performance is also divided into in-role (actions to perform assigned tasks) and extra-role (individual initiative beyond job requirements) (Fakhri et al., 2024). In a competitive context, excellence and uniqueness in employee performance are strategic advantages that help organizations stand out.

Employee performance needs to be improved to enhance the competitiveness of enterprises. Therefore, this study is designed to analyze the influence of leadership styles on employee performance in women-owned SMEs in Vietnam mediated by work engagement. Consequently, the research model is proposed as Figure 1, and the hypotheses are formulated as follows:

From the above research model, the study suggests the following hypotheses:

- H1: Transformational leadership style has a positive effect on employees' work engagement.*
- H2: Transactional leadership style has a positive effect on employees' work engagement.*
- H3: Democratic leadership style has a positive effect on employees' work engagement.*
- H4: Autocratic leadership has a negative effect on employees' work engagement.*
- H5: Laissez-faire leadership style has a negative effect on employees' work engagement.*
- H6: Work engagement has a positive effect on employee performance.*

*H6a: Work engagement mediates the relationship between transformational leadership style and employee performance.*

*H6b: Work engagement mediates the relationship between transactional leadership style and employee performance.*

*H6c: Work engagement mediates the relationship between democratic leadership style and employee performance.*

*H6d: Work engagement mediates the relationship between autocratic leadership style and employee performance.*

*H6e: Work engagement mediates the relationship between laissez-faire leadership style and employee performance.*

## 2. METHOD

Surveys were distributed through Google Forms to employees of small and medium-sized enterprises in Vietnam that are owned by women (the list was obtained from the General Statistics Office and had been agreed upon by the company leaders). The selected enterprises met the following criteria: (1) CEO of enterprise is female, (2) the number of official employees in enterprises operating in the fields of agriculture, forestry, fishery, industry and construction must not exceed 200 people; and (3) enterprises operating in the field of trade must not exceed 100 people. The study utilized a random sampling method to select its participants. A total of 1,000 surveys were sent to employees in wom-

en-owned small and medium-sized enterprises via Google Forms between March and May 2024; 465 questionnaires were completed and returned. However, 89 of these questionnaires were determined to be invalid. Therefore, the remaining 376 questionnaires were used for data analysis.

Table 1 presents an overview of the demographic characteristics of the study respondents, including gender, age, education level, and years of working at the enterprise.

**Table 1.** Demographics of the research sample

Attributes	Information	Frequency	Percentage (%)
Gender	Male	158	42.02
	Female	218	57.98
Age	Under 25	48	12.77
	From 25 to 35	127	33.78
	From 36 to 45	138	36.70
	Over 45	63	16.76
Education level	High school level and lower	195	51.86
	College/Bachelor's degree	123	32.71
	Postgraduate	58	15.43
Seniority	Under 3 years	95	25.27
	From 3 to 6 years	146	38.83
	From 6 to 10 years	105	27.93
	Over 10 years	30	7.98

The number of female employees participating in the survey accounted for a higher proportion (57.98%), which is consistent with the fact that female-owned enterprises often hire more female than male employees. The number of employees aged 36 to 45 accounted for the highest proportion (36.70%), followed by the group of employees aged 25 to 35 (accounting for 33.78%), the rest were employees over 45 years old (accounting for 16.76%) and under 25 years old (accounting for 12.77%). In terms of education level, the majority of employees in female-led businesses have low

qualifications, specifically high school level and lower, accounting for more than half (51.86%), college/Bachelor's degree accounting for 32.71%, and postgraduate accounting for only 15.43%. In terms of seniority, the number of employees with working time from 3 to 6 years accounts for the highest proportion (38.83%), followed by those with working time from 6 to 10 years, accounting for 27.93%. 25.27% of people have working time under 3 years, and only 7.98% have working time over 10 years. Overall, the survey participants have sufficient seniority to fully perceive and understand the directors' leadership styles at their respective organizations.

The scales used in this study were (selectively) adopted from previous studies as they have been confirmed to be suitable for use in various contexts. The scales for assessing transformational leadership and transactional leadership were adopted from Avolio et al. (1999). Democratic leadership and autocratic leadership were assessed using the scale system proposed by Kelly and MacDonald (2016). Laissez-faire leadership was measured using the scale based on the studies of Kelly and MacDonald (2016) and Jin and Men (2023). Work engagement was measured using the scale adopted from Rich et al. (2010). Employee performance was assessed using the scale adopted from Riyanto et al. (2021). All these factors were rated on a five-point Likert scale.

The paper employed SmartPLS 4 to conduct structural equation modeling using the partial least squares method (PLS-SEM) rather than the covariance-based method (CB-SEM). PLS-SEM offers several benefits, such as its applicability to exploratory research, its predictive focus, and its ability to manage non-normal data and small sample sizes effectively. Consequently, SmartPLS is utilized in this study to examine the proposed hypothe-

**Table 2.** Measurement scales

No.	Constructs	Items	References
1	Transformational leadership style	4	Avolio et al. (1999)
2	Transactional leadership style	4	Avolio et al. (1999)
3	Democratic leadership style	3	Kelly and MacDonald (2016)
4	Autocratic leadership style	3	Kelly and MacDonald (2016)
5	Laissez-faire leadership style	3	Kelly and MacDonald (2016); Jin and Men (2023)
6	Work engagement	4	Rich et al. (2010)
7	Employee performance	4	Riyanto et al. (2021)

ses. Adopting a two-step analytical approach, the study evaluates both the measurement and the structural models (Anderson & Gerbing, 1988).

### 3. RESULTS

Cronbach's alpha (CA) and composite reliability (CR) are used to evaluate internal consistency, where values exceeding 0.7 signify acceptable reliability (Leung, 2015). As shown in Table 3, both CA and CR meet the reliability criteria. Moreover, the average variance extracted (AVE) must be above 0.5, and each indicator should have a loading value higher than 0.7 (Hair et al., 2010). Based on these results, all constructs demonstrate convergent validity. In addition, the results in Table 3 show that all VIF values were less than 5, so there was no multicollinearity between the research data (Hair et al., 2010).

Discriminant validity was determined following the approach proposed by Fornell and Larcker (1981). The measurement model effectively captures both convergent and discriminant validity. Table 4 presents the results based on the Fornell-Larcker criterion, which evaluates discriminant validity and confirms the uniqueness of each construct, an essential factor for accurately interpreting their interrelationships. This criterion is widely used for its simplicity and reliability in verifying the distinctiveness of constructs within a structural equation model (Henseler et al., 2015). Additionally, Table 5 displays the heterotrait-monotrait (HTMT) ratios, further assessing discriminant validity among the constructs. Each cell shows the HTMT ratio between two constructs, indicating how clearly they differ. An HTMT ratio below 0.85 confirms discriminant validity, suggesting that the constructs capture separate underlying concepts (Henseler et al., 2015).

**Table 3.** Factor loadings,  $\alpha$ , C.R, AVE, and VIF for multicollinearity

Dimensions and Related Variables	Load.	$\alpha$	C.R (rho_a)	C.R (rho_c)	AVE	VIF
<b>Transformational leadership style</b>		<b>0.843</b>	<b>0.843</b>	<b>0.895</b>	<b>0.681</b>	
TRF1	0.826					1.963
TRF2	0.786					1.607
TRF3	0.874					2.451
TRF4	0.813					1.832
<b>Transactional leadership style</b>		<b>0.797</b>	<b>0.803</b>	<b>0.868</b>	<b>0.622</b>	
TRS1	0.715					1.398
TRS2	0.795					1.708
TRS3	0.815					1.706
TRS4	0.825					1.814
<b>Democratic leadership style</b>		<b>0.701</b>	<b>0.709</b>	<b>0.833</b>	<b>0.624</b>	
DEM1	0.803					1.421
DEM2	0.766					1.420
DEM3	0.800					1.293
<b>Autocratic leadership style</b>		<b>0.872</b>	<b>0.880</b>	<b>0.921</b>	<b>0.795</b>	
AUC1	0.894					2.264
AUC2	0.881					2.384
AUC3	0.899					2.302
<b>Laissez-faire leadership style</b>		<b>0.786</b>	<b>0.805</b>	<b>0.875</b>	<b>0.700</b>	
LAF1	0.831					1.656
LAF2	0.790					1.537
LAF3	0.887					1.864
<b>Work engagement</b>		<b>0.830</b>	<b>0.834</b>	<b>0.887</b>	<b>0.663</b>	
WE1	0.757					1.563
WE2	0.841					2.001
WE3	0.832					1.938
WE4	0.825					1.842
<b>Employee performance</b>		<b>0.819</b>	<b>0.825</b>	<b>0.881</b>	<b>0.649</b>	
EP1	0.785					1.701
EP2	0.846					2.013
EP3	0.819					1.801
EP4	0.769					1.635

**Table 4.** Discriminant validity: Fornell–Larcker criterion

	AUC	DEM	EP	LAF	TRF	TRS	WE
AUC	0.892						
DEM	-0.427	0.790					
EP	-0.624	0.515	0.805				
LAF	0.543	-0.407	-0.578	0.837			
TRF	-0.479	0.404	0.660	-0.465	0.825		
TRS	-0.524	0.439	0.604	-0.547	0.534	0.789	
WE	-0.593	0.541	0.684	-0.547	0.643	0.617	0.814

Note: AUC = autocratic leadership style; DEM = democratic leadership style; EP = employee performance; LAF = laissez-faire leadership style; TRF = transformational leadership style; TRS = transactional leadership style; WE = work engagement.

**Table 5.** Discriminant validity: Heterotrait-monotrait ratio (HTMT)

	AUC	DEM	EP	LAF	TRF	TRS	WE
AUC							
DEM	0.531						
EP	0.735	0.666					
LAF	0.648	0.536	0.718				
TRF	0.553	0.521	0.793	0.558			
TRS	0.621	0.593	0.747	0.686	0.655		
WE	0.693	0.696	0.824	0.670	0.768	0.757	

Note: AUC = autocratic leadership style; DEM = democratic leadership style; EP = employee performance; LAF = laissez-faire leadership style; TRF = transformational leadership style; TRS = transactional leadership style; WE = work engagement.

Table 6 shows that the adjusted *R*<sup>2</sup> of the work engagement variable was 0.601. Thus, the influencing factors in the model explained 60.1% of the variation in work engagement, while 39.9% was from systematic errors and other factors outside the model. The adjusted *R*<sup>2</sup> of the employee performance variable is 0.467. The influencing factors

in the model explained 46.7% of the variation in employee performance, while 53.3% was from systematic errors and other factors outside the model.

**Table 6.** *R*<sup>2</sup> and adjusted *R*<sup>2</sup> values

	<i>R</i> -square	<i>R</i> -square adjusted
EP	0.468	0.467
WE	0.607	0.601

Note: EP = employee performance; WE = work engagement.

The results of hypotheses testing are presented in Table 7 and Figure 2. The impact coefficient and *t* value are also used to test the hypotheses. Transformational leadership ( $\beta = 0.312, t = 7.682$ ), transactional leadership ( $\beta = 0.204, t = 4.973$ ), democratic leadership ( $\beta = 0.200, t = 4.911$ ), autocratic leadership ( $\beta = -0.195, t = 4.967$ ), and laissez-faire leadership ( $\beta = -0.103, t = 2.283$ ) all influence work engagement, though in varying ways. While transformational, transactional, and democratic leadership styles positively affect work engagement, autocratic and laissez-faire styles have a negative impact. Transformational leadership had the strongest influence, followed by transactional leadership, democratic leadership, autocratic leadership, and finally laissez-faire leadership. Additionally, Table 7 indicates that work engagement ( $\beta = 0.684, t = 20.694$ ) positively affects employee performance. Work engagement acts as a mediator in the relationship between various leadership styles (transformational, transactional, democratic, autocratic, and laissez-faire) and employee performance. All hypotheses were accepted at the 95% significance level.

**Table 7.** Research hypotheses testing

Hypothesis	Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	Result
H1	TRF → WE	0.312	0.311	0.041	7.682	0.000	Accepted
H2	TRS → WE	0.204	0.206	0.041	4.973	0.000	Accepted
H3	DEM → WE	0.200	0.201	0.041	4.911	0.000	Accepted
H4	AUC → WE	-0.195	-0.193	0.039	4.967	0.000	Accepted
H5	LAF → WE	-0.103	-0.103	0.045	2.283	0.022	Accepted
H6	WE → EP	0.684	0.684	0.033	20.694	0.000	Accepted
H6a	TRF → WE → EP	0.213	0.213	0.031	6.867	0.000	Accepted
H6b	TRS → WE → EP	0.140	0.141	0.028	4.925	0.000	Accepted
H6c	DEM → WE → EP	0.137	0.138	0.028	4.854	0.000	Accepted
H6d	AUC → WE → EP	-0.134	-0.132	0.029	4.621	0.000	Accepted
H6e	LAF → WE → EP	-0.070	-0.070	0.031	2.285	0.022	Accepted

Note: AUC = autocratic leadership style; DEM = democratic leadership style; EP = employee performance; LAF = laissez-faire leadership style; TRF = transformational leadership style; TRS = transactional leadership style; WE = work engagement.



is often appropriate in environments that require clear discipline and performance. Female leaders, with their acumen in communication and ability to balance work requirements with employees' personal needs, can create a workspace where employees feel respected, clearly directed, and motivated. This directly increases employees' work engagement because they clearly understand their roles and feel fairness and support from their superiors. Secondly, work engagement is an important mediator leading to higher work performance. When employees feel attached to their work, they tend to put in more effort, be more creative, and work with a high sense of responsibility. Their performance, in turn, is indirectly improved by the promotion of the transactional leadership style of female leaders. Finally, the indirect effect on employee performance emphasizes that transactional leadership is not only about enforcing rules or rewarding and punishing, but also the ability to build trusting relationships and promote intrinsic motivation. In particular, in the context of female leaders often being highly appreciated for their ability to lead with empathy and focus on human factors, the transactional style combined with these characteristics becomes even more effective.

This study also demonstrated that the better the democratic leadership style is applied, the higher the work engagement and the better the employee performance. Leaders who adopt this style encourage team members to share their input in decisions while retaining the final decision-making authority, creating a sense of ownership and collaboration. This approach motivates employees to perform to their full potential through empowerment rather than just financial incentives, increasing satisfaction and organizational commitment (Khan et al., 2015). This result is similar to the research findings of Bergmark and Westman (2018) and Iqbal et al. (2015). Specifically, Bergmark and Westman (2018) highlighted the role of this style in promoting open communication and engagement, while Iqbal et al. (2015) confirmed its superiority over other leadership styles in promoting positive outcomes. Female leaders who practice democratic leadership often emphasize ethical values, effective communication, and active listening, which improves employee satisfaction, reduces workload, and strengthens the company's reputation.

The results showed that autocratic leadership, characterized by centralized control and limited employee participation, negatively affected work engagement and employee performance. This result is consistent with Khan et al. (2015) and Kelly and MacDonald (2016). This leadership style restricts creativity, autonomy, and decision-making participation, leading to dissatisfaction, alienation, and a decline in team engagement. Employees often feel undervalued, which reduces motivation and productivity, ultimately hindering the organization's sustainable development.

Although the autocratic leadership style can streamline decision-making processes, the emphasis on authority and task-focused communication limits team discussion and participation. Leaders expect compliance without inquiry, which may achieve short-term goals but harm morale and engagement in the long term. Additionally, a leader's dominant attitude and disregard for employee input can damage an organization's reputation, foster a disengaged workforce, and reduce overall performance.

The laissez-faire leadership style of female leaders, while offering flexibility, can negatively impact employee engagement due to a lack of direction and support. Without clear guidance, employees may feel abandoned or unmotivated, reducing teamwork and creating a disconnect between leaders and staff. Over time, this weakens engagement, hinders collaboration, and negatively affects work performance, particularly in organizations requiring high consistency, where team potential may be underutilized. This study aligns with findings by Jin and Men (2023) and Zhang et al. (2023), which highlight the negative effects of laissez-faire leadership on engagement and performance. However, contrasting evidence from Hundie and Habtewold (2024) suggests positive impacts, as this style can foster autonomy and self-determination. While reduced supervision may alleviate feelings of control, excessive detachment can lower commitment and hinder task execution. Female leaders are advised to apply laissez-faire leadership flexibly, as its overuse risks undermining employee engagement and performance in this study's context.

As anticipated, there is a strong positive correlation between work engagement and employee performance in organizations led by women. This

indicates that employees who mentally align with their roles and fully invest themselves in their work (demonstrating dedication and an emotional bond) tend to be more innovative and willingly exert extra effort to complete their tasks. Female leaders often adopt transformational and democratic leadership styles, which focus on building a harmonious, supportive, and inspiring work environment. These approaches not only promote intrinsic motivation but also enhance a sense of belonging, which makes employees more committed to the organization. This result is similar to Ryan and Deci (2000) and Bakker and Xanthopoulou (2013). When employees feel respected, empowered, and have opportunities to grow, they are more committed to the organization's goals, which in turn improves job performance. Furthermore, female leaders prioritize well-being and work-family balance, which minimizes role conflicts and enables employees to maximize their potential. Thus, in businesses with female leaders, employee engagement is not only an important factor but also a key driver for promoting organizational performance.

This study also reveals that work engagement can mediate the effect of female entrepreneurial leadership styles and employee performance. This result supports Lai et al. (2020) and Chen et al. (2020). Transformational, transactional, and democratic leadership styles all positively impact

this engagement. Transformational leadership, as emphasized by Bass and Avolio (2000), inspires and promotes creativity by providing vision and encouraging innovative ideas, while transactional leadership focuses on transparency of goals and rewards, creating a stable working environment (Avolio et al., 1999). Democratic leadership, according to Goleman (2000), builds a culture of cooperation and empowerment, helping employees feel involved and attached to the organization. These styles not only improve motivation but also promote psychological and behavioral harmony among employees, thereby improving work performance (Zhang et al., 2011).

In contrast, autocratic and laissez-faire leadership styles have negative effects. Autocratic leadership, with its tight control, reduces employee motivation and initiative, while laissez-faire leadership lacks direction and support, leading to feelings of alienation and insecurity at work. Work engagement, as described by Schaufeli et al. (2006), is not only a state of commitment but also an important link between leadership style and performance. In particular, female leaders often apply democratic and transformational styles, creating a highly cooperative and supportive environment, promoting engagement (Eagly et al., 2003). Therefore, applying positive leadership styles and avoiding negative ones will optimize organizational performance and commitment.

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## CONCLUSION

The purpose of this study was to examine the relationship between female leadership styles and work engagement and its implications for employee performance. The results highlighted the influence of leadership styles in enhancing or decreasing work engagement, directly affecting employee performance. Specifically, the transformational leadership style had the strongest positive impact, followed by transactional and democratic leadership styles. These styles promote motivation, morale, and consensus within the organization, thereby improving overall performance. In contrast, autocratic and laissez-faire leadership styles had negative impacts, reducing engagement and performance. Work engagement was found to mediate the relationship between leadership styles and employee performance. The findings are consistent with the theoretical framework in the leadership literature that advocates inclusive and transformational approaches. The significant differences in employee engagement observed in organizations led by female leaders further support the direction of the impact of these leadership styles. Employees in organizations led by transformational, transactional, and democratic leaders demonstrate higher levels of engagement, characterized by enthusiasm, commitment, and a strong sense of purpose. In contrast, employees in businesses led by autocratic and laissez-faire leaders are less engaged and more likely to feel stressed or lack direction, leading to unstable performance and low satisfaction.

These findings highlight the importance of adopting appropriate leadership styles to optimize employee engagement and performance. At the same time, the study opens new directions for designing leadership development programs that prioritize building transformational, transactional, and democratic skills while minimizing the negative factors from autocratic or laissez-faire styles.

## AUTHOR CONTRIBUTIONS

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