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The mediating role of psychological empowerment in the relationship between transformational leadership and teachers' organizational citizenship behavior in rural public primary schools: Evidence from Morocco

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Abstract

The purpose of this study is to examine the causal relationship between transformational leadership and teachers' organizational citizenship behaviors (OCB), with a particular focus on the mediating role of psychological empowerment. To achieve this, a quantitative research design was employed, using standardized questionnaires to collect data from a sample of 184 teachers working in rural public primary schools in Morocco. The methodological approach enabled the assessment of direct and indirect effects through mediation analysis. The findings reveal a significant positive relationship between transformational leadership and teachers' organizational citizenship behaviors. Additionally, psychological empowerment was found to partially mediate this relationship and also exert a direct influence on organizational citizenship behaviors. These results underscore the essential role of both transformational leadership and psychological empowerment in fostering proactive and engaged behavior among teachers, particularly in under-resourced educational environments. The study concludes that enhancing these factors can contribute to a more collaborative and effective teaching culture. From a practical perspective, educational policymakers and school leaders are encouraged to implement strategies that develop transformational leadership competencies and empower teachers psychologically, as these elements have the potential to significantly boost organizational citizenship behaviors and overall school performance.

Keywords: Organizational citizenship behavior (OCB), Psychological empowerment, Transformational leadership.

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1. Introduction

Education is widely recognized as a national priority. Beyond transmitting knowledge, it shapes character and instills values that reflect high human qualities [1, 2]. It also plays a crucial role in social cohesion, a key driver of economic growth [3]. In this context, teachers play a vital role in cultivating an environment that nurtures learning and fosters students' holistic development.

In response to a rapidly evolving educational landscape, characterized by technological advancements, increased student diversity, and growing expectations, teachers are increasingly required to extend beyond their traditional roles. They are expected to adopt broader pedagogical practices, including the promotion of Organizational Citizenship Behavior. This behavior encompasses voluntary actions such as supporting colleagues, mentoring students, engaging in collaborative initiatives, and contributing to the improvement of the school climate. These behaviors are crucial for enhancing the collective performance of educational teams, fostering institutional cohesion, and ensuring academic success and the well-being of students.

In this regard, transformational leadership has proven to be a key strategic mechanism for promoting organizational citizenship behaviors within educational settings. Characterized by the articulation of a shared vision, intellectual stimulation, and individualized support for teachers, transformational leadership creates a motivating and supportive school environment. Within such an environment, teachers are encouraged to engage in altruistic and voluntary behaviors that extend beyond their formal professional responsibilities [4]. By fostering these behaviors, transformational leadership not only strengthens teachers' commitment but also plays a critical role in the attainment of both educational and societal objectives, further contributing to a positive school climate and the broader goals of social cohesion and economic development.

While prior research has established a positive relationship between transformational leadership and organizational citizenship behaviors, the underlying mechanisms that mediate this relationship remain an area of active exploration. Recent studies [5, 6] suggest that psychological empowerment may serve as a critical mediator. By fostering intrinsic motivation and enhancing employees' confidence in their ability to contribute meaningfully to organizational goals, psychological empowerment helps bridge the gap between leadership behaviors and discretionary actions.

This study aims to advance the understanding of the interplay between transformational leadership, psychological empowerment, and teachers' organizational citizenship behaviors (OCB) by empirically testing a mediation model. Specifically, it examines the extent to which transformational leadership influences teachers' OCB in rural public primary schools and the mediating role of psychological empowerment in shaping these behaviors within such educational institutions. Accordingly, the research is guided by the following question:

To what extent does transformational leadership influence teachers' organizational citizenship behaviors, and how does psychological empowerment serve as a key mediating factor in strengthening these behaviors within educational institutions?

By examining these relationships, the study contributes to both theoretical and practical perspectives, particularly in the context of teachers in rural public primary schools in Morocco. The findings offer valuable insights for academic discourse while providing actionable recommendations for school leaders and policymakers. Specifically, fostering a school culture that prioritizes teacher support and recognition can enhance teachers' organizational citizenship behaviors, encouraging discretionary efforts that contribute to the overall effectiveness of educational institutions. Furthermore, this research advances transformational leadership theory in educational settings by elucidating the mechanisms through which inspirational leadership fosters voluntary, constructive, and citizenship-oriented behaviors beyond formal job requirements.

2. Literature Review

2.1. Transformational Leadership

Transformational Leadership has emerged as a key paradigm in organizational science, first introduced by Burns [7] and expanded by Bass [8]. This leadership style emphasizes leaders' ability to transcend followers' immediate self-interests and inspire lasting behavioral change. It aligns leaders' and followers' motivations and values, fostering mutual engagement, creativity, and organizational transformation [9].

Siregar and Kemalasari [10] describe transformational leadership as an approach that motivates and inspires employees, fostering innovation and team performance. Leaders create a supportive environment that encourages creativity, risk-taking, and continuous improvement Jabbour Al Maalouf, et al. [11]. Alessa [12] further highlights the role of transformational leaders in shaping followers' aspirations through vision, influence, and individualized support, enhancing awareness of challenges and promoting growth, maturity, and commitment to shared goals.[13].

The literature identifies four key components of transformational leadership [14]:

- (a) Idealized Influence: Leaders serve as role models, gaining trust and admiration;
- (b) Inspirational Motivation: Leaders articulate a compelling vision, motivating teams to exceed expectations;
- (c) Intellectual Stimulation: Leaders encourage followers to challenge norms and explore innovative solutions;
- (d) Individualized Consideration: Leaders offer personalized support for the growth of each follower.

These components allow transformational leaders to inspire and align their teams with organizational objectives, fostering strong, sustained engagement that drives organizational success.

2.2. Organizational Citizenship Behavior (OCB)

Organ [15] defined organizational citizenship behavior (OCB) as discretionary behaviors voluntarily undertaken by employees that go beyond the formal requirements of their job roles. These actions are not confined to fulfilling professional obligations but also include proactive contributions to the organization [16].

Organizational citizenship behavior encompasses a proactive approach to addressing challenges, demonstrating social awareness, contributing constructive suggestions, offering assistance willingly, and consistently upholding fairness and integrity in interactions with colleagues [17]. Importantly, these behaviors occur without the expectation of direct compensation [18] and contribute significantly to enhancing organizational performance [19].

Graham [20] identified three foundational dimensions of organizational citizenship behavior: organizational obedience, organizational loyalty, and organizational participation. Expanding on this framework, Podsakoff et al. [21] proposed a five-factor theoretical model to explain organizational citizenship behavior (OCB), comprising:

- 1. Altruism: Voluntary behaviors aimed at helping colleagues facing work-related challenges.
- 2. Conscientiousness: The tendency of employees to exceed expectations in fulfilling their responsibilities.
- 3. Courtesy: Preventive actions designed to avoid interpersonal conflicts.
- 4. Sportsmanship: Demonstration of tolerance and fairness, minimizing excessive complaints.
- 5. Civic Virtue: Active engagement in the organizational community and participation in its operations.

These dimensions offer a comprehensive perspective on Organizational Citizenship Behavior (OCB), underscoring its critical role in fostering cooperation, promoting adherence to rules, and strengthening organizational commitment. Moreover, they contribute to cultivating a cohesive and efficient work environment, which ultimately enhances overall organizational productivity.

2.3. Psychological Empowerment

Psychological empowerment, a concept that has garnered significant academic attention, is recognized for its multidimensional and dynamic nature. Early interpretations, such as Karsten [22], defined empowerment as the delegation or sharing of power, enabling employees to perform their responsibilities more effectively. Jaffee and Scott [23] expanded on this by describing empowerment as a collaborative dynamic where both managers and employees share responsibility to achieve organizational goals, thereby positioning employees as active agents in organizational progress.

Senge [24] further developed this idea, emphasizing the importance of shared decision-making in empowered organizations. He suggested that when employees and leaders collaborate toward a common vision, their efforts go beyond mere strategic objectives, fostering a sense of purpose, belonging, and cohesion within the organization.

From a motivational perspective, Conger and Kanungo [25] framed empowerment as a process that enhances employees' self-efficacy, intrinsic motivation, and confidence. Psychological empowerment occurs when employees understand the significance of their roles, possess the necessary skills, enjoy autonomy, and feel that their contributions positively impact organizational outcomes [26].

Thomas and Velthouse [27] proposed a framework for psychological empowerment, identifying four key dimensions: Meaning (alignment of work with personal values), Competence (belief in the ability to perform tasks effectively), Self-Determination (autonomy in decision-making), and Impact (perception of influence on organizational outcomes). These dimensions were empirically validated by Spreitzer [28] and further refined in Spreitzer [29] with her work highlighting psychological empowerment as a synergy of intrinsic motivation and positive self-perceptions. Empowered employees take ownership of their roles, contributing actively to their organizations through purpose, confidence, autonomy, and meaningful contributions.

3. Research framework and hypotheses development

The relationship between transformational leadership and organizational citizenship behavior has been widely documented [30, 31]. Transformational leadership is recognized for fostering intrinsic motivation, commitment, and alignment with organizational goals, encouraging employees to exceed formal job expectations [32]. Core transformational leadership dimensions, such as articulating a clear vision and providing individualized support, positively influence discretionary behaviors that drive performance and sustainability [33]. Empirical findings further confirm that transformational leadership enhances organizational citizenship behavior by boosting psychological engagement [34, 35]. Dimensions such as intellectual stimulation and inspirational motivation are key predictors of organizational citizenship behavior [36, 37]. By fostering inclusive, trust-based environments, transformational leaders promote collaboration, initiative, and extra-role behaviors essential to organizational effectiveness [38]. Grounded in this theoretical and empirical foundation, the following hypothesis is proposed:

Hypothesis 1: There is a significant positive relationship between transformational leadership and organizational citizenship behavior among teachers.

The relationship between transformational leadership and psychological empowerment has been widely studied. Bass [39] first highlighted how transformational leadership behaviors enhance employees' psychological empowerment. Subsequent empirical studies, including those by Blase and Blase [40] and Allameh et al. [41], confirmed that transformational leaders significantly contribute to fostering autonomy, competence, and intrinsic motivation among employees. Lan and Chong [42] emphasized the role of intellectual stimulation and individualized consideration, while Cheng and Zhu [43] reaffirmed the central role of transformational leadership in shaping psychological empowerment. Based on this theoretical foundation, a research hypothesis can be formulated.

Hypothesis 2: There is a significant positive relationship between transformational leadership and psychological empowerment

Psychological empowerment has become a key focus in modern research due to its strong influence on employee behavior and organizational performance. Studies show that when employees feel empowered, they find their work more meaningful and are more likely to engage in organizational citizenship behaviors (OCBs). Empowered individuals demonstrate greater confidence and tend to go beyond formal job requirements [44]. Research consistently supports a positive link between psychological empowerment and organizational citizenship behaviors (OCB) [45, 46]. Social exchange theory further explains this connection, suggesting that empowered employees are more likely to exhibit selfless, cooperative behaviors [47]. Empowerment enhances autonomy and competence, fostering voluntary contributions that benefit the organization [48-50]. Based on this, the following hypothesis is proposed.

Hypothesis 3: There is a significant positive relationship between psychological empowerment and organizational citizenship behavior (OCB) among teachers.

Research suggests that psychological empowerment may mediate the relationship between transformational leadership (TL) and organizational citizenship behavior (OCB), as explained through social exchange theory [51]. Transformational leadership (TL) fosters employees' awareness, commitment, and potential, thereby enhancing psychological engagement and motivating them to exceed expectations [52]. Empirical evidence supports this link, with Avolio et al. [53] demonstrating transformational leadership's positive impact on psychological engagement. Empowered employees, driven by autonomy, competence, and meaningfulness, are more inclined to exhibit organizational citizenship behaviors (OCB), including initiative, cooperation, and fostering a supportive climate [54]. Based on these insights, we propose the following hypothesis

Hypothesis 4: There is a mediating effect of psychological empowerment in the relationship between transformational leadership and organizational citizenship behavior among teachers.

Based on the proposed hypotheses, the conceptual framework of this research is structured as follows:

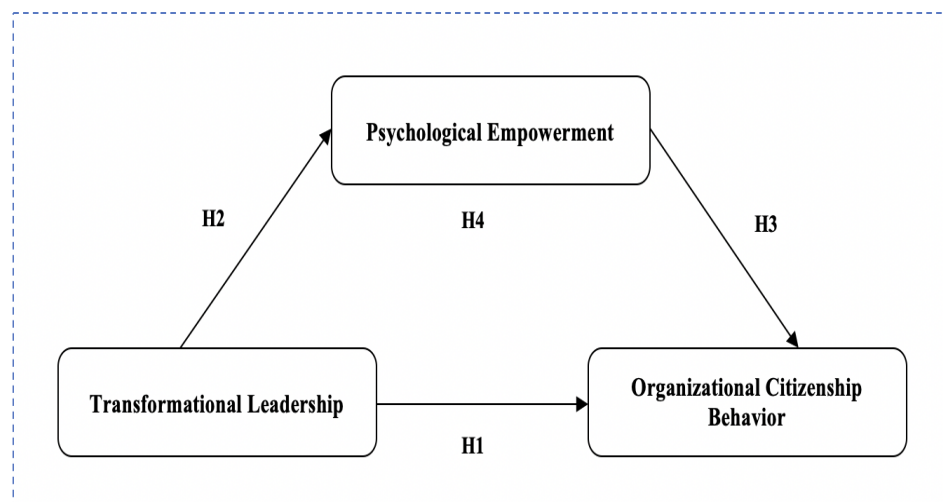


Figure 1.
Conceptual Research Model.

4. Methodology

To address the research question and validate the proposed conceptual model and its hypotheses, a positivist epistemological stance was adopted. This approach is defined by a hypothetico-deductive reasoning process and a quantitative research methodology. Structural equation modeling (SEM) using the PLS 4 approach was utilized to test the hypotheses developed in this study.

Data were collected through an empirical survey targeting 184 Moroccan public-school teachers working in rural areas. This approach enabled the acquisition of precise and direct information related to the variables under investigation, thereby enhancing the reliability of the findings and the robustness of the analyses.

4.1. Measures

Transformational leadership was measured using the Multifactor Leadership Questionnaire (MLQ) developed by Avolio and Bass [55]. This instrument consists of 20 items distributed across four dimensions, capturing various facets of transformational leadership. Respondents evaluated the items using a five-point Likert scale, ranging from “strongly disagree” to “strongly agree”. The scale demonstrated strong reliability, with a Cronbach’s alpha of 0.88.

Organizational Citizenship Behavior was evaluated using a 16-item scale developed by Lee et al. [56]. This scale differentiates between two dimensions: individual-focused behaviors (OCBI) and organization-focused behaviors (OCBO). The scale demonstrated acceptable reliability, with a Cronbach’s alpha of 0.79.

Psychological empowerment was assessed using the 12-item psychological empowerment scale developed by Spreitzer [28]. It comprises three items for each of the four dimensions: meaning, competence, self-determination, and impact. The instrument has been utilized in previous empowerment research [27, 57]. This study has found that Cronbach’s α for this scale varies from 0.74 to 0.83, which is consistent with earlier research [58].

4.2. Demographic Analysis

Table 1 provides a demographic analysis of the teacher sample, which includes 184 teachers from rural Moroccan public primary schools. The analysis covers four key aspects: (a) gender, (b) age, (c) education level, and (d) tenure.

The majority of participants were men (65.76%), while women represented 34.24% of the sample. In terms of age distribution, most teachers were between 30 and 39 years old (34.78%), followed closely by those aged 40 to 49 (32.07%). A smaller proportion (12.5%) were under 30, whereas 20.65% were over 50.

Regarding educational qualifications, 46.74% of respondents held a baccalaureate degree, 31.52% had completed a bachelor’s degree, 13.04% had earned a master’s, and 8.7% held a doctoral degree.

Concerning tenure, the largest group (33.70%) had more than 15 years of experience, while 27.72% had 10-14 years, and 25% had between 5 and 9 years. The smallest proportion (13.59%) consisted of teachers with less than five years of experience.

A detailed summary of the respondents' demographic characteristics is provided in Table 1.

Table 1.
Participating Teachers' Demographic Characteristics.

Demographics	Classification	Frequency	Percentage (%)
Gender	Male	121	65.76
	Female	63	34.24
Age	20-29	23	12.5
	30-39	64	34.78
	40-49	59	32.07
	More than 50 years	38	20.65
Educational level	Baccalaureate	86	46.74
	Bachelor's degree	58	31.52
	Master's degree	24	13.04
	doctorate	16	8.7
Tenure	<5 ans	25	13,59
	5-9 ans	46	25,00
	10-14 ans	51	27,72
	>15 ans	62	33,70

5. Results and Discussion

This study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 4, following the dual approach of evaluating the measurement model (outer model) and the structural model (inner model) [59]. The measurement model, based on reflective indicators, was assessed for construct validity and reliability using factor loadings, average variance extracted (AVE), and composite reliability (CR).

5.1. Measurement Model

The outer model was tested through an evaluation of convergent validity, discriminant validity, and construct reliability. This phase ensures that the indicators accurately and consistently measure their respective latent constructs.

5.1.1. Convergent Validity

Convergent validity was assessed through outer loadings of indicators, which represent the correlation between each indicator and its underlying construct. Following the recommendation of Chin [60], outer loadings exceeding 0.707 confirm adequate shared variance between indicators and their latent constructs, minimizing measurement error [61]. In this study, all items demonstrated loadings above 0.707, confirming robust convergent validity.

5.1.2. Construct Reliability

To further assess convergent validity, Average Variance Extracted (AVE) was computed for each construct. According to Hair et al. [62], an AVE value greater than 0.50 indicates that the construct accounts for more than half of the variance in its indicators. The AVE values for Transformational Leadership, Psychological Empowerment, and Organizational Citizenship Behavior all exceeded this threshold, confirming adequate convergent validity.

Moreover, the composite reliability values for all constructs were above 0.60, and Cronbach's alpha values surpassed the minimum recommended threshold of 0.707 [63], indicating strong internal consistency. These results support the conclusion that all constructs in the model exhibit satisfactory reliability and validity.

A summary of the AVE, CR, and Cronbach's alpha values for each construct is provided in Table 2.

Table 2.

Outer Model Evaluation based on Loading, Cronbach's Alpha, Average Variance Extracted (AVE) and Composite Reliability (CR)

Construct	Items	Loading (> 0.707)	Cronbach's Alpha (> 0.7)	Composite Reliability (CR) (> 0.7)	Average Variance Extracted (AVE) (> 0.5)
Organizational Citizenship Behaviors (OCB)	OCB 4	0.850	0.928	0.940	0.634
	OCB 5	0.892			
	OCB 6	0.807			
	OCB 9	0.773			
	OCB 10	0.741			
	OCB 11	0.858			
	OCB 12	0.717			
	OCB 13	0.765			
	OCB 14	0.743			
Psychological Empowerment	Psy-Emp 3	0.732	0.863	0.908	0.632
	Psy-Emp 6	0.752			
	Psy-Emp 7	0.781			
	Psy-Emp 8	0.854			
	Psy-Emp 9	0.848			
Transformational Leadership	Tra-Lea 2	0.787	0.922	0.936	0.677
	Tra-Lea 3	0.822			
	Tra-Lea 4	0.856			
	Tra-Lea 5	0.769			
	Tra-Lea 18	0.843			
	Tra-Lea 19	0.880			
	Tra-Lea 20	0.797			

5.1.3. Discriminant Validity Test

To ensure that each latent variable represents a distinct concept, a discriminant validity test was conducted. Discriminant validity is established when the square root of the Average Variance Extracted (AVE) for each exogenous construct (diagonal values) exceeds its correlations with other constructs (off-diagonal values). This criterion indicates that each construct shares more variance with its indicators than with other constructs, thereby confirming adequate discriminant validity [64].

Regarding this study, the findings confirm that the research model meets the discriminant validity requirement, as evidenced by the results presented in Table 3. This supports the conclusion that the constructs within the model are sufficiently distinct from one another.

Table 3.

Testing Discriminant Validity based on the Fornell-Larcker Approach

Constructs	Organizational Citizenship Behavior	Psychological Empowerment	Transformational Leadership
Organizational Citizenship Behavior	0.796		
Psychological Empowerment	0.770	0.795	
Transformational Leadership	0.778	0.746	0.823

5.2. Structural Model

Testing the structural model (inner model) is the next step in the PLS-SEM analysis, and it is demonstrated in this study using R-square, Q-square, and hypothesis testing.

5.2.1. Determination Coefficient Test (R^2)

The coefficient of determination (R^2) was employed to evaluate the explanatory power of the model. The findings indicate that transformational leadership explains 71.5% of the variance in psychological empowerment ($R^2 = 0.715$), while transformational leadership combined with psychological empowerment accounts for 82.8% of the variance in organizational citizenship behavior ($R^2 = 0.828$). These values exceed the recommended threshold of 0.50, as suggested by Hair et al. [65], confirming that the model demonstrates moderate to strong explanatory power and effectively captures the dynamics among the studied constructs.

Table 4.
coefficient of determination (R²)

Endogenous Variable	Value R-square	Meaning
Organizational citizenship behavior	0.828	Strong
Psychological Empowerment	0.715	Strong

5.2.2. Q² Predictive Relevance

The goodness of fit for the PLS model is assessed through the Q-squared predictive relevance (Q²) value, which indicates the model's ability to explain the variance in the data and the quality of its parameter estimations. The evaluation of model fit relies on the predictive relevance values (Q²), which reflect how well the model predicts the endogenous variables.

Based on Table 4, the calculation of the equation to determine Q-square predictive relevance is as follows:

$$Q^2 = 1 - (1 - R12) (1 - R22)$$

$$Q^2 = 1 - (1 - 0.828) (1 - 0.715)$$

$$Q^2 = 0.951$$

The analysis yielded a predictive relevance (Q²) value of 0.951, indicating that the model possesses strong predictive power. This result suggests that 95.1% of the variance is explained by the model, demonstrating its robustness and effectiveness in capturing key aspects of the phenomenon under investigation. The remaining 4.9% may be attributed to unmeasured factors or measurement error. These findings confirm the model's reliability and its suitability for interpreting the structural relationships proposed in this study.

5.2.3. Hypothesis Testing

To assess the significance of the structural path coefficients in the PLS model, this study utilized the bootstrap resampling method with 5,000 iterations. This robust technique enabled the calculation of t-values and bias-corrected confidence intervals at the 95% confidence level, aligning with established methodological standards. The approach ensured a reliable evaluation of the research hypotheses by accurately determining the strength and direction of relationships among latent variables. As shown in Table 5, Hypotheses were deemed significant if the p-value was ≤ 0.05 , consistent with the criteria outlined by Ofori-Amanfo et al. [66].

5.2.3.1. Testing of Direct Hypotheses

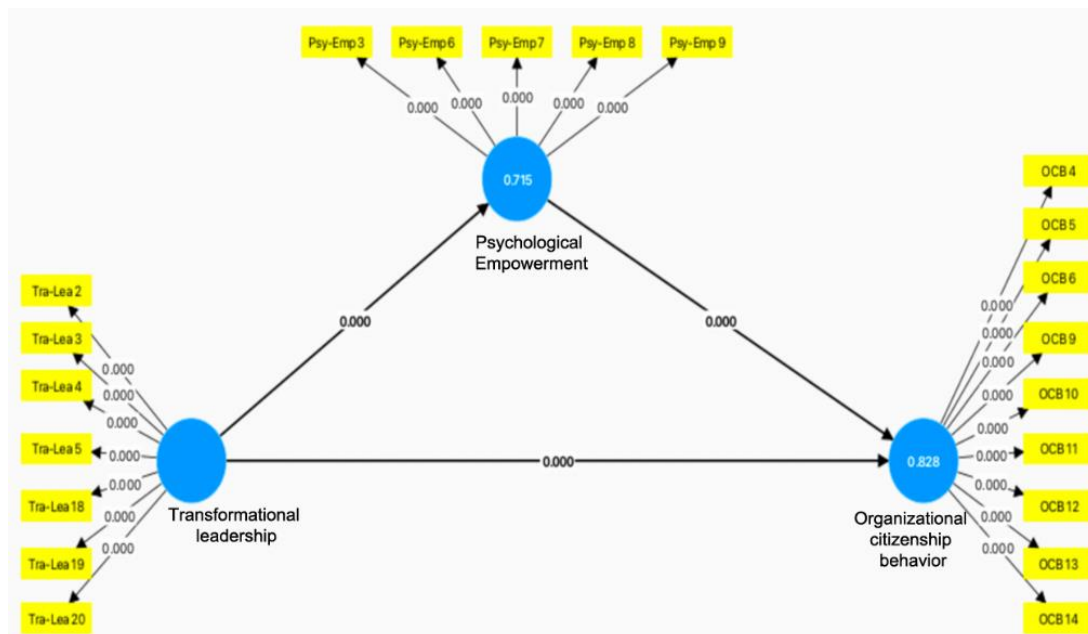


Figure 2.
Full structural model with the mediator.

Hypothesis 1: Transformational Leadership and Organizational Citizenship Behavior

The path coefficients in the model (Fig. 2) show that transformational leadership has a significant and positive impact on Organizational Citizenship Behavior ($\beta_1 = 0.500$; $p < 0.05$). This finding supports Hypothesis H1 and is consistent with previous studies that highlight the important role of transformational leaders in encouraging voluntary, discretionary, and proactive behaviors [67, 68].

Transformational leaders, by sharing a vision, fostering intellectual growth, and addressing individual

needs, influence teachers' behaviors, prompting them to engage beyond their prescribed roles. This finding aligns with research showing that transformational leadership positively impacts organizational citizenship behavior such as Koh et al. [69], who found a stronger positive influence within the educational sector in Singapore. It suggests that transformational leadership fosters positive emotional states among teachers, motivating them to act proactively and responsibly [70, 71]. This evidence reinforces the idea that effective leadership goes beyond transactional exchanges, promoting a collaborative, value-driven culture in organizations. In this context, teachers are empowered to contribute meaningfully to organizational goals, driving sustainable success.

However, the findings contrast with studies suggesting that transformational leadership does not significantly affect organizational citizenship behavior. For example, Pratama and Putri [72] found that the characteristics of transformational leadership did not foster organizational citizenship behavior in employees of the Regional Secretariat Office of Semarang City. Similarly, Calen et al. [73] found no direct effect of transformational leadership on organizational citizenship behavior in a study of 390 Micro, Small, and Medium Enterprises (MSMEs).

Hypothesis 2: Transformational Leadership and Psychological Empowerment

Transformational leadership has been shown to exert a significant and positive influence on psychological empowerment ($\beta_2=0.846$; $p<0.05$). The coefficient (β_2) substantiates the validity of Hypothesis H2, highlighting the crucial role of leadership in shaping teachers' psychological states. Thus, any manager capable of fostering self-confidence, strengthening collective vision, expanding professional perspectives, serving as a cognitive model for teachers, addressing issues with innovative approaches, and stimulating their engagement in strategic thinking will contribute to enhancing their sense of competence, meaning, autonomy, and effectiveness.

This finding aligns with the theoretical framework proposed by Quinn and Spreitzer [74], which emphasizes that transformational leaders, through their ability to inspire confidence, foster autonomy, and create a sense of purpose, are likely to enhance psychological empowerment. This empowered state enables teachers to take initiative, innovate, and engage more deeply with their work.

Moreover, our results align with the existing leadership literature, which highlights the direct impact of transformational leadership on psychological empowerment [52, 75]. Saira et al. [5] also identified a positive relationship between transformational leadership and empowerment, suggesting that employees led by transformational leaders feel psychologically more empowered, as these leaders inspire them to fully utilize their potential.

Hypothesis 3: Psychological Empowerment and Organizational Citizenship Behavior

Psychological empowerment has been shown to have a significant impact on organizational citizenship behavior ($\beta_3=0.462$; $p<0.05$). Psychologically empowered teachers are more likely to demonstrate higher levels of organizational citizenship behavior, as they engage more deeply in their tasks and go beyond their formal responsibilities. This finding aligns with the empirical study conducted by Abdulrab et al. [67], which established a positive association between psychological empowerment and organizational citizenship behavior. This relationship is supported by psychological empowerment theory, which suggests that self-empowered employees are more engaged in their work and exceed performance expectations [44].

Existing research further reinforces this association. For instance, Kosar [76] reports that empowered employees adopt a proactive approach to their work, frequently surpassing formal role expectations and demonstrating a strong commitment to organizational objectives. Similarly, Aksel et al. [77] found that teachers' psychological empowerment significantly enhances their organizational citizenship behavior, a conclusion consistent with other findings in the literature [78, 79].

Table 5.
Hypothesis Testing of Structural Model in Partial Least Squares

Hypotheses	Relationship Effect	Original sample	Sample mean (M)	Standard deviation (STDEV)	T-statistics	P-values	Decision
H 1	Transformational leadership → Organizational citizen behavior	0.500	0.504	0.074	6.780	0.000	Supported
H 2	Transformational leadership → psychological Empowerment	0.846	0.850	0.022	39.339	0.000	Supported
H 3	Psychological Empowerment → organizational citizenship behavior	0.447	0.445	0.076	5.888	0.000	Supported

5.2.3.2. Mediation Analysis

Hypothesis 4: There is a mediating effect of psychological empowerment in the relationship between transformational leadership and organizational citizenship behavior among teachers.

Subsequently, the mediation test is essential for evaluating the mediating role of psychological empowerment in the relationship between transformational leadership and organizational citizenship behavior. This mediation analysis was conducted using a specific statistical method based on the three-step approach [80, 81], which includes:

The first step in analyzing mediating relationships involves evaluating the direct effect of the independent construct on the dependent construct in the absence of a mediator. If this direct effect is statistically significant, it becomes relevant to examine the significance of indirect relationships to explore potential mediation mechanisms. Conversely, if no significant direct effect is observed, the existence of a mediating effect cannot be confirmed.

As illustrated in Figure 3, in the absence of a mediator, transformational leadership exerts a positive and significant impact on organizational citizenship behavior, with an estimated increase of 87.9%. This result suggests a positive relationship between these two variables, where an increase in transformational leadership tends to significantly enhance organizational citizenship behavior.

To progress to the subsequent step of analysis, it is essential to establish a statistically significant direct effect of the endogenous construct on the exogenous construct.

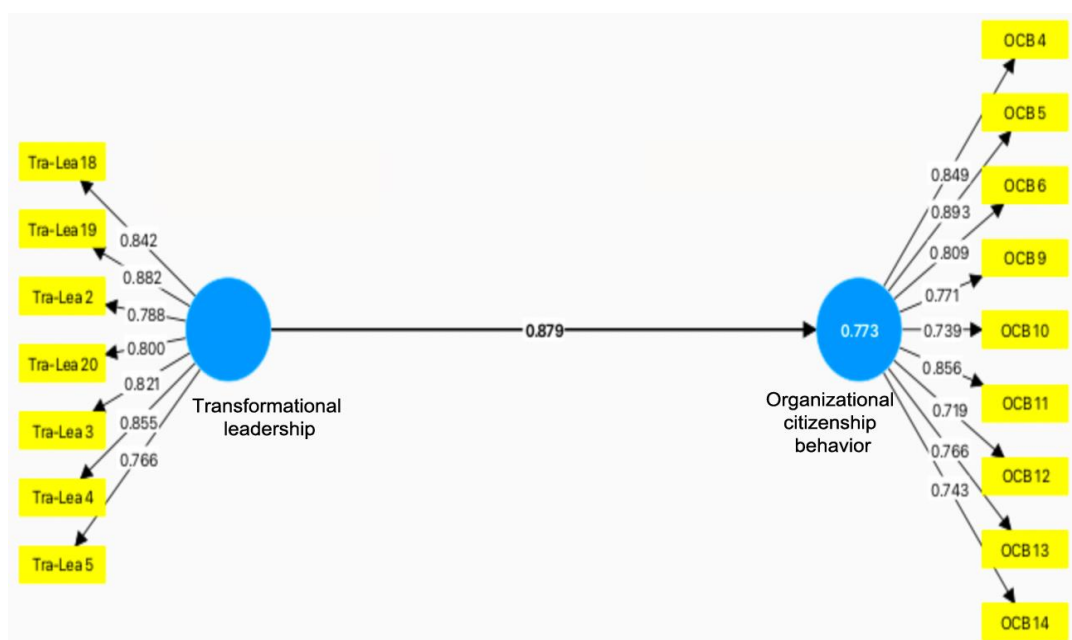


Figure 3.
Structural model without the mediator.

The second step of the analysis involves assessing the strength of indirect and total effects, provided that the direct effect has been confirmed as statistically significant. This step aims to estimate the magnitude of the mediating effect using the VAF (Variance Accounted For) ratio, which is defined as the ratio of the indirect effect to the total effect [82]. The strength of the indirect effect is calculated by multiplying the mediator path coefficients in the structural model. In this study, this calculation, i.e., $(0.846 * 0.447)$, yields a result of 0.378, indicating a high intensity of the mediating effect. The results, detailed in Table 6, corroborate this observation.

Additionally, it is essential to calculate the total effect, as recommended by Albers [83] and Hair et al. [82]. The overall impact of transformational leadership on organizational citizenship behavior was assessed and validated based on software-generated results, as shown in Table 7.

The VAF ratio is then calculated by dividing the indirect effect by the total effect, following the methodology proposed by Hair et al. [82]. In the context of this study, the VAF ratio is calculated as follows:

$$\text{Indirect Effect} / \text{Total Effect} = 0.378 / 0.879 = 0.43.$$

This result suggests the presence of mediation, which will be further analyzed in the next step.

Table 6.
Indirect Effect of Transformational Leadership on Organizational Citizenship Behavior.

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Transformational Leadership -> Organizational Citizenship Behavior	0.378	0.378	0.061	6.175	0.000

Table 7.
Total Effects (of Transformational Leadership on Organizational Citizenship Behavior).

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Psychological Empowerment -> Organizational Citizenship Behavior	0.447	0.445	0.076	5.888	0.000
Transformational Leadership -> Organizational Citizenship Behavior	0.878	0.881	0.018	49.528	0.000
Transformational Leadership -> Psychological Empowerment	0.846	0.850	0.022	39.339	0.000

The third step entails identifying the type of mediation, which can be categorized as full, partial, or non-existent. In accordance with the guidelines proposed by Hair et al. [82], the results presented in Table 8 indicate that psychological empowerment partially mediates the relationship between transformational leadership and organizational citizenship behavior, as hypothesized in H4. Consequently, the statistical evidence confirms the validity of hypothesis H4 by demonstrating the presence of a mediating effect.

This structured three-step approach for testing mediation effects between latent constructs is widely acknowledged and adopted by contemporary scholars in the field of PLS-SEM [80, 84]. This methodological framework ensures a rigorous and systematic evaluation of mediation effects, thereby enhancing the robustness and reliability of the analysis.

Table 8.
Assessment of Mediation Extent.

Particulars	Specifications		
Vaf value	$0 < \text{VAF} < 0.2$	$0.2 \leq \text{VAF} < 0.8$	$\text{VAF} > 0.8$
Recommendations	No mediation	Partial Mediation	Full Mediation
Present study VAF		√	

Source: Assessment of mediation through VAF value. Adapted from A primer on partial least squares structural equation modeling (PLS-SEM) (p. 224), by Hair et al. [82], Sage Publications.

The final analysis reveals a Variance Accounted For (VAF) value of 0.43, indicating that psychological empowerment partially mediates the relationship between transformational leadership and organizational citizenship behavior among teachers. This conclusion is based on the observation that the effect of transformational leadership on organizational citizenship behavior remains statistically significant even after accounting for psychological empowerment, suggesting that while transformational leadership directly influences organizational citizenship behavior, a portion of this effect is mediated through psychological empowerment.

These findings align with previous research, including Abdulrab et al. [52], which identified psychological empowerment as a partial mediator in the TL-OCB relationship. Their study underscores the role of transformational leadership in creating an environment where employees feel valued and autonomous, prompting discretionary behaviors that benefit the organization. Saira et al. [5] also confirmed that psychological empowerment partially mediates this connection, further supporting its importance in fostering positive organizational behaviors. Additionally, Lee et al. [56] demonstrated that psychological empowerment mediates transformational leadership's influence on organizational citizenship behavior in a coaching context, reinforcing its role in promoting proactive organizational behaviors.

All hypotheses tested in this study were validated, with the results meeting the statistical requirements, as evidenced by T-statistics exceeding critical values ($T\text{-statistic} > T\text{-table}$). These findings contribute to a better understanding of how transformational leadership influences organizational citizenship behavior through psychological empowerment, with implications for enhancing organizational commitment and managing professional stress and absenteeism in the workplace.

6. Conclusion

This study underscores the crucial role of transformational leadership in fostering organizational citizenship behaviors among teachers in rural public primary schools, with psychological empowerment serving as a key mediating factor. Transformational leaders in these schools inspire teachers through visionary influence, intellectual stimulation, and individualized support, creating an environment where they feel valued, motivated, and engaged beyond their formal responsibilities. However, this influence is most effective when teachers experience psychological empowerment, which enhances their sense of meaning, competence, autonomy, and impact in their work.

The findings demonstrate that transformational leadership not only directly enhances organizational citizenship behaviors but also strengthens psychological empowerment, fostering a culture of engagement, collaboration, and continuous improvement within rural educational institutions. More importantly, psychological empowerment serves as a bridge between transformational leadership and teachers' organizational citizenship behaviors. In rural public primary schools, where resources may be limited and challenges more pronounced, empowered teachers play a crucial role in supporting colleagues, mentoring students, and actively contributing to institutional development. These results align with empowerment theories, emphasizing the importance of school leadership in cultivating autonomy, confidence, and purpose, ultimately driving educational success in rural settings.

From a practical perspective, these findings highlight the importance of investing in leadership development that emphasizes transformational qualities and empowerment, particularly in the context of rural Moroccan public primary schools. By incorporating empowerment theories into leadership training, school administrators can foster a supportive environment that enhances teachers' motivation, confidence, and engagement. This, in turn, can strengthen organizational citizenship behavior and contribute to the overall success of educational institutions.

Future research could build on these insights by examining the long-term dynamics of these relationships within rural school settings and identifying potential moderators, such as school culture or individual teacher characteristics, to better understand variations across different educational contexts. Expanding this line of inquiry to diverse educational systems and cultural environments would further validate the applicability and relevance of these findings.

References

- [1] M. W. Berkowitz, "Implementing and assessing evidence-based character education," *Journal of Education*, vol. 202, no. 2, pp. 191–197, 2022.
- [2] R. Sumiharsono, N. Nasaruddin, M. Safrudin, and S. Ramadhan, "Research trends on character education based on scopus database from 2018 to 2023: A bibliometric analysis," *Islamic Education: Journal of Islamic Education*, vol. 12, no. 02, 2023.
- [3] L. Fransen, R. Prodi, E. Reviglio, F. Cerniglia, F. Saraceno, and A. Watt, "Education, human capital, and social cohesion," *The Great Reset*, p. 139, 2021.
- [4] B. J. Avolio and F. J. Yammarino, *Transformational and charismatic leadership: The road ahead*. Bingley, UK: Emerald Group Publishing, 2013.
- [5] S. Saira, S. Mansoor, and M. Ali, "Transformational leadership and employee outcomes: The mediating role of psychological empowerment," *Leadership & Organization Development Journal*, vol. 42, no. 1, pp. 130-143, 2021.
- [6] I. A. Ibrahim, A. H. El-Monshed, M. Altheeb, and M. G. El-Sehrawy, "Transformational leadership, psychological empowerment, and organizational citizenship behaviors among nursing workforce: A single mediation analysis," *Journal of Nursing Management*, vol. 2024, no. 1, p. 9919371, 2024.
- [7] J. M. Burns, *Leadership*. New York: Harper & Row, 1978.

- [8] B. M. Bass, *Leadership and performance beyond expectations*. New York, NY: A Division of Macmillan, Inc., 1985.
- [9] A. Manu, *The philosophy of disruption*. In *The philosophy of disruption*. Bingley, UK: Emerald Publishing Limited, 2022.
- [10] D. D. Siregar and Y. A. Kemalassari, "Bibliometric analysis: Individual competencies of transformational leadership," *Journal of Management and Business Review*, vol. 20, no. 3, pp. 299-310, 2023.
- [11] N. Jabbour Al Maalouf, S. El Achi, and M. Balouza, "Transformational leadership, innovation, and performance of SMEs in Europe," *Cogent Business & Management*, vol. 12, no. 1, p. 2473683, 2025.
- [12] S. G. Alessa, "The dimensions of transformational leadership and its organizational effects in public universities in Saudi Arabia: A systematic review," *Frontiers in Psychology*, Systematic Review vol. Volume 12 - 2021, 2021-November-10 2021. <https://doi.org/10.3389/fpsyg.2021.682092>
- [13] D. Ekowati, A. Abbas, A. Anwar, F. Suhariadi, and M. Fahlevi, "Engagement and flexibility: An empirical discussion about consultative leadership intent for productivity from Pakistan," *Cogent Business & Management*, vol. 10, no. 1, p. 2196041, 2023. <https://doi.org/10.1080/23311975.2023.2196041>
- [14] D. A. Aga, N. Noorderhaven, and B. Vallejo, "Transformational leadership and project success: The mediating role of team-building," *International Journal of Project Management*, vol. 34, no. 5, pp. 806-818, 2016.
- [15] D. W. Organ, *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books, 1998.
- [16] D. W. Organ, "The motivational basis of organizational citizenship behavior," *Research in Organizational Behavior*, vol. 12, no. 1, pp. 43-72, 1990.
- [17] R. Sarfraz, K. Rathore, K. Ali, M. A. Khan, and S. S. Zubair, "How level 5 leadership escalates organizational citizenship behaviour in telecom sector of Pakistan? Exploring mediatory role of organizational dissent," *PLOS ONE*, vol. 17, no. 10, p. e0276622, 2022. <https://doi.org/10.1371/journal.pone.0276622>
- [18] A. Qurtubi, "The effects of transformational leadership and organizational citizenship behavior (ocb) on islamic school teachers' satisfaction," *Journal of Positive School Psychology*, vol. 6, no. 7, pp. 2744-2753, 2022.
- [19] M. Soelton, "How did it happen: Organizational commitment and work-life balance affect organizational citizenship behavior," *Journal of Management Dynamics*, vol. 14, no. 1, pp. 149-164, 2023.
- [20] J. W. Graham, "An essay on organizational citizenship behavior," *Employee Responsibilities and Rights Journal*, vol. 4, no. 4, pp. 249-270, 1991.
- [21] P. M. Podsakoff, S. B. MacKenzie, J. B. Paine, and D. G. Bachrach, "Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research," *Journal of Management*, vol. 26, no. 3, pp. 513-563, 2000. <https://doi.org/10.1177/014920630002600307>
- [22] M. F. Karsten, *Management and gender*. New York: Praeger, 1994.
- [23] D. Jaffee and C. D. Scott, "Building a committed workplace: An empowered organization as a competitive advantage," *The New Paradigm in Business: Emerging Strategies for Leadership and Organizational Change*, pp. 139-148, 1993.
- [24] P. M. Senge, *The fifth discipline: The art and practice of the learning organization*. London, UK: Random House, 1990.
- [25] J. A. Conger and R. N. Kanungo, "The empowerment process: Integrating theory and practice," *The Academy of Management Review*, vol. 13, no. 3, pp. 471-482, 1988. <https://doi.org/10.2307/258093>
- [26] S. K. Singh and A. P. Singh, "Interplay of organizational justice, psychological empowerment, organizational citizenship behavior, and job satisfaction in the context of circular economy," *Management Decision*, vol. 57, no. 4, pp. 937-952, 2019.
- [27] K. W. Thomas and B. A. Velthouse, "Cognitive elements of empowerment: An interpretive model of intrinsic task motivation," *Academy of Management Review*, vol. 15, no. 4, pp. 666-681, 1990. <https://doi.org/10.5465/amr.1990.4310926>
- [28] G. M. Spreitzer, "Psychological empowerment in the workplace: Dimensions, measurement, and validation," *Academy of Management Journal*, vol. 38, no. 5, pp. 1442-1465, 1995.
- [29] G. M. Spreitzer, "Social structural characteristics of psychological empowerment," *Academy of Management Journal*, vol. 39, no. 2, pp. 483-504, 1996.
- [30] A. K. Djaelani, A. Sanusi, and B. Triatmanto, "Spiritual leadership, job satisfaction, and its effect on organizational commitment and organizational citizenship behavior," *Management Science Letters*, vol. 11, no. 3, pp. 3907-3914, 2021.
- [31] S. Tunio, N. Unar, and R. Jabeen, "To analyze transformational leadership and ocb an effect on organizational commitment: higher education teaching faculty of Pakistan," *International Research Journal of Management and Social Sciences*, vol. 3, no. 2, pp. 125-134, 2022.
- [32] F. Hermawan *et al.*, "The role of transformational leadership, job satisfaction and organizational commitment on organizational citizenship behavior (OCB) of SMEs employees in the digital era," *Journal of Infrastructure, Policy and Development*, vol. 8, no. 7, p. 5194, 2024.
- [33] P. Khaola, *Leading and managing people at the nexus of citizenship and innovative work behaviours*. London, UK: Sage Publications, 2025.
- [34] A. Sarwar, M. Mumtaz, and S. Ikram, "Improving organizational citizenship behavior through transformational leadership: Mediating role of trust in leader," *Asian Journal of Business Management*, vol. 7, no. 2, pp. 28-36, 2015. <https://doi.org/10.19026/ajbm.7.5166>
- [35] M. Ismaelzadeh, M. Anjomshoa, and M. K. Fard, "Effect of transformational leadership on organizational citizenship behavior in physical education teachers in Mashhad," *Global Journal of Scientific Researches*, vol. 4, no. 5, pp. 86-90, 2016.
- [36] N. Majeed, T. Ramayah, N. Mustamil, M. Nazri, and S. Jamshed, "Transformational leadership and organizational citizenship behavior: Modeling emotional intelligence as mediator," *Management & Marketing*, vol. 12, no. 4, pp. 571-590, 2017.
- [37] A. R. Cofie, *Relationships between transformational leadership and organizational citizenship behavior in Ghanaian organizations*. Walden University, Minneapolis, MN: Doctoral dissertation, 2018.
- [38] H. Campbell Pickford and G. Joy, *Organisational citizenship behaviours: Definitions and dimensions (saïd business school working paper No. 31)*. University of Oxford, Oxford, UK: Saïd Business School, 2016.
- [39] B. M. Bass, "Does the transactional-transformational leadership paradigm transcend organizational and national boundaries?," *American Psychologist*, vol. 52, no. 2, p. 130, 1987.
- [40] J. Blase and J. Blase, "The micropolitical orientation of facilitative school principals and its effects on teachers' sense of empowerment," *Journal of Educational Administration*, vol. 35, no. 2, pp. 138-164, 1997.

- [41] S. M. Allameh, M. Heydari, and S. M. R. Davoodi, "Studying the relationship between transformational leadership and psychological empowerment of teachers in Abade Township," *Procedia-Social and Behavioral Sciences*, vol. 31, pp. 224-230, 2012.
- [42] X. M. Lan and W. Y. Chong, "The mediating role of psychological empowerment between transformational leadership and employee work attitudes," *Procedia-Social and Behavioral Sciences*, vol. 172, pp. 184-191, 2015.
- [43] Z. Cheng and C. Zhu, "Leadership styles of meso-level educational leaders perceived by academic members: An exploratory study among chinese universities," *Research in Educational Administration and Leadership*, vol. 8, no. 4, pp. 762-794, 2023.
- [44] G. M. Spreitzer, "Taking stock: A review of more than twenty years of research on empowerment at work," *Handbook of Organizational Behavior*, vol. 1, pp. 54-72, 2008.
- [45] R. Kosar and S. M. M. R. Naqvi, "Psychological empowerment and employee behaviors employee engagement as mediator and leader-member exchange as moderator," *Economic and Social Development: Book of Proceedings*, p. 485, 2016.
- [46] E. O. Ugwoke *et al.*, "Joint mediation of psychological empowerment and work-life balance between transformational leadership and in-role performance of accounting personnel: 360-degree feedback," *Journal of Management & Organization*, pp. 1-20, 2023.
- [47] F. Liu and M. Qi, "Enhancing organizational citizenship behaviors for the environment: Integrating social identity and social exchange perspectives," *Psychology Research and Behavior Management*, pp. 1901-1914, 2022.
- [48] M. Llorente-Alonso, C. García-Ael, and G. Topa, "A meta-analysis of psychological empowerment: Antecedents, organizational outcomes, and moderating variables," *Current Psychology*, vol. 43, no. 2, pp. 1759-1784, 2024.
- [49] J. Wen, S. S. Huang, and S. Teo, "Effect of empowering leadership on work engagement via psychological empowerment: Moderation of cultural orientation," *Journal of Hospitality and Tourism Management*, vol. 54, pp. 88-97, 2023.
- [50] O. P. Pacheco and D. Coello-Montecel, "Does psychological empowerment mediate the relationship between digital competencies and job performance?," *Computers in Human Behavior*, vol. 140, p. 107575, 2023. <https://doi.org/10.1016/j.chb.2022.107575>
- [51] P. Blau, *Exchange and power in social life*. New York: Routledge, 2017.
- [52] M. Abdulrab, K. A. T. Alwaleedi, Y. H. Al-Mamary, A. R. Zumrah, A. N. Al-Tahitah, and A.-B. A. Al-Mekhlafi, "Beyond leadership: How transformational leaders foster organizational citizenship and engagement through psychological empowerment," *Journal of Chinese Human Resources Management*, vol. 16, no. 1, pp. 119-145, 2025.
- [53] B. J. Avolio, W. Zhu, W. Koh, and P. Bhatia, "Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance," *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, vol. 25, no. 8, pp. 951-968, 2004. <https://doi.org/10.1002/job.283>
- [54] C.-F. Chiang and T.-S. Hsieh, "The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior," *International Journal of Hospitality Management*, vol. 31, no. 1, pp. 180-190, 2012.
- [55] B. J. Avolio and B. M. Bass, "Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership," *The Leadership Quarterly*, vol. 6, no. 2, pp. 199-218, 1995. [https://doi.org/10.1016/1048-9843\(95\)90035-7](https://doi.org/10.1016/1048-9843(95)90035-7)
- [56] Y. Lee, S.-H. Kim, and K. Joon-Ho, "Coach leadership effect on elite handball players' psychological empowerment and organizational citizenship behavior," *International Journal of Sports Science & Coaching*, vol. 8, no. 2, pp. 327-342, 2013. <https://doi.org/10.1260/1747-9541.8.2.327>
- [57] M. A. Zimmerman, "Taking aim on empowerment research: On the distinction between individual and psychological conceptions," *American Journal of community psychology*, vol. 18, no. 1, pp. 169-177, 1990. <https://doi.org/10.1007/BF00922695>
- [58] M. Panda, R. K. Pradhan, and A. Kar, *Promoting organisational citizenship behavior through human resource empowerment: Empirical evidence from Indian service industries. In Emerging challenges in HR VUCA perspective* IIM Raipur, India: Emerald Publishing Limited, 2016.
- [59] I. Ghazali and H. Latan, *Partial least squares: Concepts, techniques and applications using the smartPLS 3.0 program for empirical research*, 4th ed. ed. Semarang, Indonesia: UNDIP Publishing Agency, 2015.
- [60] W. W. Chin, "Commentary: Issues and opinion on structural equation modeling. Mis quarterly," *Management Information Systems Research Center*, vol. 22, no. 1, pp. 7-16, 1998.
- [61] E. G. Carmines and R. A. Zeller, *Reliability and validity assessment*. Beverly Hills, CA: Sage Publications, 1979.
- [62] J. F. Hair, J. J. Risher, M. Sarstedt, and C. M. Ringle, "When to use and how to report the results of PLS-SEM," *European Business Review*, vol. 31, no. 1, pp. 2-24, 2019. <https://doi.org/10.1108/EBR-11-2018-0203>
- [63] J. C. Nunnally and I. H. Bernstein, *Psychometric theory* 3rd ed. ed. New York: McGraw-Hill, 1994.
- [64] I. Ghazali, *Structural equation modeling: Alternative method with partial least square (PLS)*. Semarang, Indonesia: Diponegoro University Publishing Agency, 2014.
- [65] J. F. Hair, C. M. Ringle, and M. Sarstedt, "PLS-SEM: Indeed a silver bullet," *Journal of Marketing Theory and Practice*, vol. 19, no. 2, pp. 139-152, 2011. <https://doi.org/10.2753/MTP1069-6679190202>
- [66] J. Ofori-Amanfo, S. W. Akonsi, and G. K.-Q. Agyapong, "The impact of organisational capabilities on the performance of small-and medium-sized enterprises (SMEs)," *European Business Review*, vol. 34, no. 5, pp. 642-665, 2022.
- [67] M. Abdulrab, A. R. Zumrah, M. A. Alwaheeb, Y. H. S. Al-Mamary, and A. Al-Tahitah, "The impact of transformational leadership and psychological empowerment on organizational citizenship behaviors: A PLS-SEM approach," *Journal of Critical Reviews*, vol. 7, no. 9, pp. 908-917, 2020.
- [68] A. Purwanto, J. T. Purba, I. Bernarto, and R. Sijabat, "Investigating the role digital transformation and human resource management on the performance of the universities," *International Journal of Data and Network Science*, vol. 7, no. 4, 2023. <https://doi.org/10.5267/j.ijdns.2023.6.011>
- [69] W. L. Koh, R. M. Steers, and J. R. Terborg, "The effects of transformational leadership on teacher attitudes and student performance in Singapore," *Journal of Organizational Behavior*, vol. 16, no. 4, pp. 319-333, 1995.
- [70] E. Karadağ, *Leadership and organizational outcomes: Meta-analysis of empirical studies*. Cham, Switzerland: Springer, 2015.

- [71] A. Galati, L. Miret-Pastor, D. Siggia, M. Crescimanno, and M. Fiore, "Determinants affecting consumers' attention to fish eco-labels in purchase decisions: A cross-country study," *British Food Journal*, vol. 124, no. 10, pp. 2993-3013, 2022.
- [72] L. A. Pratama and V. W. Putri, "The effect of transformational leadership on organizational citizenship behavior (Ocb) through organizational commitment and trust in leaders as mediation," *Management Analysis Journal*, vol. 8, no. 4, pp. 434-443, 2019.
- [73] C. Calen, S. A. Tarigan, R. Rosita, S. Susanto, and E. Alimin, "The role of transformational leadership, leader member exchange, digital transformation on organizational citizenship behaviour and work innovation capabilities in during Covid-19 pandemic," *JPPI Journal of Indonesian Educational Research*, vol. 7, no. 2, pp. 203-216, 2021.
- [74] R. E. Quinn and G. M. Spreitzer, "The road to empowerment: Seven questions every leader should consider," *Organizational Dynamics*, vol. 26, no. 2, pp. 37-49, 1997.
- [75] R. K. Pradhan, M. Panda, and L. K. Jena, "Transformational leadership and psychological empowerment: The mediating effect of organizational culture in Indian retail industry," *Journal of Enterprise Information Management*, vol. 30, no. 1, pp. 82-95, 2017.
- [76] R. Kosar, "The impact of psychological empowerment on organizational citizenship behavior and knowledge sharing behavior: The mediating role of employee engagement and moderating role of leader-member exchange," *Jinnah Business Review*, vol. 5, no. 2, pp. 1-12, 2017.
- [77] I. Aksel, C. Serinkan, M. Kiziloglu, and B. Aksoy, "Assessment of teachers' perceptions of organizational citizenship behaviors and psychological empowerment: An empirical analysis in Turkey," *Procedia-Social and Behavioral Sciences*, vol. 89, pp. 69-73, 2013.
- [78] H. Nezakati, O. Asgari, F. Karimi, and V. Kohzadi, "Fostering organizational citizenship behavior (OCB) through human resources empowerment (HRE)," *World Journal of Management*, vol. 2, no. 3, pp. 47-64, 2010.
- [79] A. Saleem, Q. A. Nisar, and A. Imran, "Organization citizenship behaviour, psychological empowerment and demographic characteristics: Teachers' perspective," *International Journal of Advanced and Applied Sciences*, vol. 4, no. 7, pp. 129-135, 2017.
- [80] T. Mahfud, M. B. Triyono, P. Sudira, and Y. Mulyani, "The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: the mediating role of psychological capital," *European Research on Management and Business Economics*, vol. 26, no. 1, pp. 33-39, 2020.
- [81] V. Choudhary and G. Saini, "Effect of job satisfaction on moonlighting intentions: Mediating effect of organizational commitment," *European Research on Management and Business Economics*, vol. 27, no. 1, p. 100137, 2021.
- [82] J. F. Hair, C. M. Ringle, and M. Sarstedt, "Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance," *Long Range Planning*, vol. 46, no. 1, pp. 1-12, 2013. <https://doi.org/10.1016/j.lrp.2013.01.001>
- [83] S. Albers, "PLS and success factor studies in marketing," in *Handbook of Partial Least Squares: Concepts, Methods and Applications*, V. Esposito Vinzi, W. W. Chin, J. Henseler, and H. Wang Eds. Berlin, Heidelberg: Springer Berlin Heidelberg, 2010, pp. 409-425. https://doi.org/10.1007/978-3-540-32827-8_19
- [84] C. Nitzl, J. L. Roldan, and G. Cepeda, "Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models," *Industrial Management & Data Systems*, vol. 116, no. 9, pp. 1849-1864, 2016. <https://doi.org/10.1108/IMDS-07-2015-0302>