

Academic leadership and job performance: the effects of organizational citizenship behavior and informal institutional leadership

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Abstract

Purpose – Grounded on the distributed theory and the social exchange theory, the current study investigates the determinants that positively influence job performance among educators within the realm of higher education in India. It particularly assesses the impact of perceived academic leadership on performance and explores the mediating and moderating effects of organizational citizenship behavior and informal institutional leadership.

Design/methodology/approach – Employing a descriptive research design, this study encompasses a broad cross-section of faculty members from various higher educational institutions across India. Data were gathered from 826 educators using a snowball sampling technique, with questionnaires administered online. Each variable was measured using prevalidated scales.

Findings – The findings from the moderated mediation model indicate a significant indirect relationship between perceived academic leadership and job performance, which is mediated by organizational citizenship behavior. Furthermore, informal institutional leadership demonstrates significant conditional indirect effects, enhancing the link between academic leadership and job performance up to a threshold, beyond which its influence diminishes.

Originality/value – This study pioneers the exploration of academic dynamics beyond mere titles and ranks in the Indian educational sector. It delineates both the direct and indirect roles these dynamics play in enhancing faculty performance, providing a novel insight into the complexities of academic leadership.

Keywords Academic leadership, Informal institutional leadership, Organizational citizenship behavior, Job performance, Academic leadership inventory

Paper type Research paper

1. Introduction

Teacher performance is recognized as a crucial element within the educational sector, significantly influencing both the quality of academic advancement and the teaching environment (Gerashchenko, 2021; Kumar, 2023; Lu and Chen, 2024). It serves as a critical measure of institutional effectiveness and is deeply intertwined with educational outcomes (Berhanu, 2023; Hanif and Pervez, 2004; Yusoff *et al.*, 2014). Job performance is typically defined within the context of the workplace and encapsulates the behaviors that employees exhibit to perform their roles effectively (Muchinsky, 2003). Contemporary literature offers



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various job performance models, with extensive research dedicated to identifying the factors that critically impact job performance (Rich *et al.*, 2010; Latorre *et al.*, 2016). A predominant factor affecting job performance among faculty in higher education institutions (HEIs) is academic leadership, a subject that has been extensively studied for decades (Bolden *et al.*, 2008). While numerous studies have demonstrated the influence of teacher leadership on performance at the school level, highlighting its role in enhancing decision-making and keeping afresh the passion in the teaching profession (Martin and Coleman, 2011; Mousa, 2023; Wenner and Campbell, 2017), research establishing a similar association within the higher education sector remains relatively scarce.

Academic leaders are traditionally identified as those holding formal roles, shaping academic policies and managing educational institutions (Bolden *et al.*, 2008; Hannah and Lester, 2009; Evans *et al.*, 2013; Khan, 2016; Mårtensson and Roxå, 2016; Van Helden *et al.*, 2023). However, the scope of academic leadership often extends beyond formal titles. A small but significant body of research highlights leaders who, without formal authority, catalyze change and remain largely unrecognized (Dinh *et al.*, 2021; Juntrasook *et al.*, 2013; Fields *et al.*, 2019). Such informal leaders, if they positively influence student learning outcomes, the quality of teaching and institutional development, should be recognized for their leadership capabilities. Leadership among teachers often relates to their ability to enhance student experiences, cultivate institutional culture and refine educational practices (York-Barr and Duke, 2004). This form of leadership is not predicated on hierarchical authority but rather focuses on fostering growth within educational communities (Fauzi *et al.*, 2024; Taylor *et al.*, 2011). In this context, faculty members contribute to the institution's progression through a variety of roles, including research, consultancy and the organization of academic events such as conferences and workshops. A comprehensive literature review confirms a consensus: teacher leadership transcends formal designations and traditional classroom roles, encompassing contributions that enhance the welfare of colleagues, institutions and broader communities (Banker and Bhal, 2020; Moller and Katzenmeyer, 1996; Marchiondo *et al.*, 2023). Consequently, this study adopts a broad definition of academic leadership, recognizing all faculty members who influence job performance through teaching, research and other institutional activities as academic leaders, irrespective of their formal managerial roles.

This study investigates the impact of Academic Leadership Inventory (ALI) competencies on faculty's Organizational Citizenship Behavior (OCB) and subsequent job performance across higher education institutions in India. It aims to explore the mediating role of OCB in the relationship between academic leadership and job performance, addressing a significant research gap. Previous studies have scarcely examined the influence of academic leadership through mediators like OCB within the higher education sector (Nadeem, 2024; Mahdinezhad *et al.*, 2013; Jameel and Ahmad, 2020). Additionally, the research examines the role of informal institutional leadership in enhancing job performance through academic leadership. Drawing on distributed leadership theory and the social exchange theory, the study posits that leadership in higher education is not confined to formally designated positions but is a shared phenomenon across various institutional levels (Liu, 2020; Mifsud, 2024). This perspective suggests that effective academic leadership is distributed among multiple individuals, ensuring that no single person solely influences the institution's success. This comprehensive approach aims to develop a job performance model that integrates the effects of academic leadership on OCB, thereby providing new insights into the dynamics of leadership and performance in the higher education sector. This novel perspective offers significant insights for educational stakeholders by demonstrating how both formal and informal leadership practices can strategically enhance faculty engagement and institutional effectiveness.

2. Theoretical background and hypothesis development

2.1 *The role of academic leadership in shaping job performance*

Job performance is pivotal in determining an organization's success, where highly performing employees enhance strategic goals achievement (June and Mahmood, 2011). In the education sector, the job performance of teachers is critical, as it directly influences the quality and improvement of the educational system (June and Mahmood, 2011; Hanif and Pervez, 2004). Job performance encompasses both observable behaviors related to job tasks and the outcomes of these behaviors (Sonntag and Frese, 2005). Several factors influence job performance, including employee commitment, job satisfaction, self-efficacy and role ambiguity, especially pertinent within Higher Education Institutions (HEIs) (Mahdinezhad *et al.*, 2013). A central element in HEIs is academic leadership, which is conceptualized variously in the literature. Academic leaders are those who influence academic strategies, policies and management and also contribute to knowledge creation and dissemination (Bolden *et al.*, 2008; Hannah and Lester, 2009; Evans *et al.*, 2013; Khan, 2016; Mårtensson and Roxå, 2016).

Distributed leadership, as explained by Spillane (2005), is crucial in understanding academic leadership, particularly in the dynamic context of HEIs. DL posits that leadership roles are shared among various members of an institution, not confined to formally designated leaders. This approach aligns with the New Education Policy 2020 in India, advocating for a shared or collaborative leadership model that extends beyond traditional roles, involving every teacher in both formal and informal capacities (Spillane, 2005). In this model, each teacher assumes multiple roles, thereby influencing and enhancing institutional performance collectively. Given this framework, the research literature has predominantly focused on distributed leadership at the school level, with a paucity of studies applying these principles to HEIs (York-Barr and Duke, 2004; Moller and Katzenmeyer, 1996). This study, therefore, aims to conceptualize academic leadership within HEIs based on the distributed leadership framework, suggesting that academic leadership can significantly impact both individual and organizational performance. Accordingly, it is proposed that:

H1. Academic leadership positively influences job performance.

2.2 *The role of organizational citizenship behavior*

The exploration of educational leadership's impact on job performance should incorporate the influence of other factors tied to both educational leadership and job performance. Job performance is shaped not only by formal job responsibilities but also by less formal behaviors that foster a supportive social and psychological environment, aligning with organizational goals (Kumar, 2023; Lu and Chen, 2024; Rich *et al.*, 2010). These behaviors, termed organizational citizenship behaviors (OCB), are discretionary actions not formally recognized by reward systems but that contribute significantly to organizational efficiency and effectiveness. They emphasize that engaged employees extend beyond their formal roles, voluntarily helping others and contributing advice, which ultimately enhances job performance (Iqbal and Piwowar-Sulej, 2023; Bogler and Somech, 2023).

According to Social Exchange Theory, such leadership behaviors, which go beyond contractual obligations, foster a sense of mutual obligation and trust. This, in turn, encourages faculty to reciprocate with positive behaviors like OCB, which are not formally rewarded but are crucial for organizational success. The dimensions of academic leadership described by the authors – collegial collaboration, tutoring, academic proficiency and community orientation – embody actions that likely inspire reciprocal OCB among faculty. These dimensions not only enhance direct academic outcomes but also contribute to a supportive and cooperative academic environment (Gallos and Bolman, 2021). Thus,

academic leaders who effectively perform these roles are likely to see enhanced OCB among teachers, as per the principles of Social Exchange Theory. Hence, it is hypothesized that:

H2a. Teacher's academic leadership positively influences their organizational citizenship behavior.

Organizational Citizenship Behavior (OCB) is not recognized within formal incentive systems; however, it plays a crucial role in enhancing organizational functionality (Iqbal and Piwowar-Sulej, 2023; Luu, 2024; Podsakoff and MacKenzie, 1997). Understanding the drivers of OCB is essential, as it influences organizational outcomes significantly (Chiang and Hsieh, 2012). Previous research has identified leadership behavior as a key antecedent to OCB (Podsakoff *et al.*, 2009). In Higher Education Institutions (HEIs), leadership extends beyond formal positions to include those who engage deeply in teaching and research activities. Academic leaders shape the educational culture through their approach to knowledge sharing, creating social networks and facilitating change, regardless of their formal role (Mårtensson and Roxå, 2016; Klempin and Karp, 2018).

In the contemporary educational sector, a premium is placed on service-oriented behaviors, akin to OCB. Teachers are often expected to perform extra-role behaviors, such as assisting students and colleagues, which directly correlates with their dedication and job performance (Ma *et al.*, 2010; Chiang and Hsieh, 2012). When educators perceive meaningfulness in their work, they feel empowered to make decisions that positively impact the organization and their job performance (Niehoff *et al.*, 2001). Distributed leadership theory reinforces this view by suggesting that leadership is a collective activity spread across various organizational members, enhancing job performance through shared responsibilities and collaborative efforts. This theory underscores the significance of OCB in educational settings, where teachers often share leadership roles and influence beyond their formal positions. Based on this integrated framework, the following hypothesis is proposed:

H2b. Organizational citizenship behavior positively influences teachers' job performance.

2.3 Mediating role of organizational citizenship behavior

Given the reciprocal dynamics established by Social Exchange Theory, it is crucial to explore the impact of academic leadership on job performance, particularly considering the mediating role of organizational citizenship behavior (Podsakoff *et al.*, 2000; de Geus *et al.*, 2020; Luu, 2024). Social Exchange Theory suggests that teachers, through their leadership roles, engage in OCB as a form of reciprocation for the support and empowerment they receive from academic leaders. The leadership competencies and behaviors defined in the Academic Leadership Inventory (ALI) are likely to foster a willingness among teachers to demonstrate OCB, driven by the social exchanges that these competencies encourage.

Furthermore, OCB is expected to significantly enhance job performance, as these behaviors contribute to a positive, cooperative work environment that aligns with organizational goals (Liao *et al.*, 2022; Novitasari *et al.*, 2020). Thus, the influence of academic leadership on job performance is proposed to be indirectly augmented through OCB, emphasizing a cyclical exchange where both academic leaders and teachers benefit mutually. This interdependence highlights the essence of Social Exchange Theory, where positive exchanges lead to enhanced job performance as a form of reciprocated value. Accordingly, it is hypothesized that:

H3. Teachers' organizational citizenship behavior mediates the relationship between their academic leadership and performance.

2.4 Moderating the role of informal leadership

Recent years have seen a burgeoning interest in the dynamics of informal leadership (IL) alongside formal leadership within the complex organizational structures of higher education institutions (HEIs) (Shaughnessy *et al.*, 2017; Van De Mieroop *et al.*, 2020). As HEIs evolve, facing varied leadership challenges, the distinction between formal and informal structures has become increasingly significant. Informal structures, which foster interpersonal relationships among organizational members, are pivotal in shaping both individual and organizational performance (Nadeem, 2024; Mahdinezhad *et al.*, 2013). With the shift from bureaucratic coordination to more fluid and indirect mechanisms of leadership, roles within HEIs have transformed significantly. Leaders are increasingly expected to enforce university-wide decisions, appreciate administrative roles and transition from operational to strategic focuses (Adams-Robinson, 2021; Kováts, 2018). Informal leadership emerges as a critical force in this context, characterized by the capacity to influence others beyond formal authority and provide motivation within the organizational framework (Liu *et al.*, 2024; Shaughnessy *et al.*, 2017).

Distributed Leadership Theory, which posits that leadership is a collective activity distributed across various members of an organization, supports the concept of informal leadership (Liu, 2020; Mifsud, 2024). This theory helps explain how informal leaders can impact job performance by facilitating shared decision-making and enhancing the engagement of teachers in their roles, thereby influencing policy and the broader organizational landscape. Assuming the role of informal leadership as a moderator within the framework of Distributed Leadership, this study proposes that informal institutional leadership could significantly enhance the impact of academic leadership (AL) on organizational citizenship behavior (OCB) and subsequently, on job performance. Informal leadership could strengthen the connections within this relationship, enhancing the effectiveness of AL through the indirect effects mediated by OCB. Accordingly, it is hypothesized that:

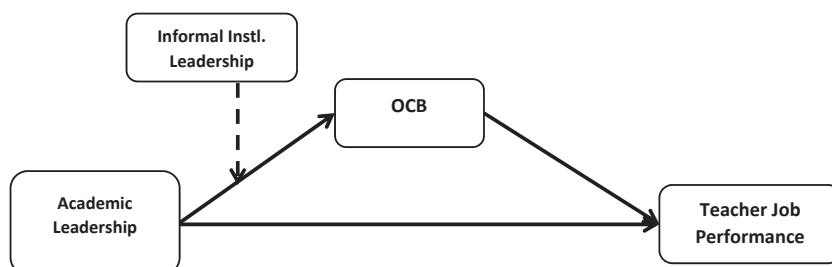
H4. The higher the informal institutional leadership, the stronger the influence of academic leadership on OCB via the indirect effect of job performance.

Conceptual framework of the study is presented in Figure 1.

3. Research methodology

3.1 Overview of sample and procedures

The current study was conducted among a sample of faculty members employed in the higher education sector in India. India has one of the largest higher education sectors in the



Source(s): Authors' own creation

Figure 1.
Proposed conceptual
framework

world, with over 39,931 and 993 colleges and universities, respectively (IBEF, 2021), and has around 37.4 m students enrolled in higher education during the financial year 2019, and the Gross Enrollment Ratio is 26.3% in FY19 (IBEF, 2021). Furthermore, the contemporary New Education Policy, 2020 focuses on broadening and enriching educators' competence in both teaching and administrative roles. To gather data, a broader level stratified random sampling procedure was done to select faculty working in Central Universities, State Universities and colleges affiliated to various universities across different parts of India. A total of 1,000 faculty were contacted through emails, requesting their consent for participation.

Of the 875 faculty member responses received, 826 were complete and usable responses. Stratified random sampling was used to ensure a balanced representation from three main types of institutions: Central Universities, State Universities and Affiliated Colleges. Specifically, of the 826 respondents, 274 were from Central Universities, 278 from State Universities and 274 from Affiliated Colleges. This stratification was intended to capture diverse perspectives across different governance frameworks within the Indian higher education system. Of the total, 462 (56%) were female and 364 were male participants (44%). About 96 (11.5%) of them were aged less than 30, 385 (45.9%) were aged 31 years–40 years, 231 (27.6%) of them were aged in the range 41–50 years and 113 were aged above 50 years. About 162 (19.6%) of the participants were from the humanities domain, 242 (29.3%) were from management, 200 (24.2%) were from engineering and the remaining 225 (27.2%) were from the science domain. Of the total number of faculty, 356 of the respondents handled only academic roles and 470 of them were involved in both academic and leadership roles. 183 participants were from institutions with less than 1,000 students, 260 were from institutions that had students in between 1,000 and 5,000 and the remaining teachers were from institutions that had more than 5,000 students.

3.2 Measures

To measure the construct “Academic Leadership,” following the widely authenticated framework outlined by Hinkin (1998) and Churchill (1979) for the development of a psychometrically comprehensive survey instrument, the researchers developed a 27-item scale. The empirical development and validation of the ALI involved four steps: (1) item generation, (2) questionnaire administration, (3) dimension identification and data reduction (exploratory factor analysis) and finally, (4) scale evaluation. The measurement of validity and reliability was done following the guidelines provided by Hair *et al.* (2010).

Based on the conceptualization of the construct “Academic Leadership,” 38 items were generated through an extensive review of the literature (Ramsden *et al.*, 2007; Xu, 2011; Dani and Mhunpiew, 2019) and subsequent in-depth interviews with five experts from academia and institutional heads. To ensure content and face validity, the list of 38 generated items was then reviewed and refined by a group of 20 faculty who had more than 10 years of teaching and administrative experience in the higher education sector in India. Based on the feedback obtained, we removed and revised the wording of some items that were perceived to be ambiguous or redundant. At the end of this process, 27 items remained, which were considered to be representative of the construct of “AL.” The items were organized under the themes “Collegial Collaboration,” “Tutoring,” “Academic Proficiency” and “Community Orientation”. Following the guidelines that “the new items be scaled using 5-point Likert scales” (Hinkin, 1998, p. 110), all the items were anchored at five points (1 = strongly disagree to 5 = strongly agree), and the participants expressed their level of agreement with each item. A pretest of the shortened and refined instrument with 33 items was done among 200 teachers who worked in different parts of India and were selected through convenience sampling. After eliminating items with less loading and administration over 826 sample

respondents, the final 27 item instrument provided an acceptable fit to the data ($\chi^2 = 714.901$; $df = 2.979$; chi-squared/degrees of freedom (χ^2/df) = 2.979; P value = 0.000; goodness-of-fit index (GFI) = 0.928; normed fit index (NFI) = 0.949; Tucker–Lewis index (TLI) = 0.960; comparative fit index (CFI) = 0.965 and root mean square error of approximation (RMSEA) = 0.049). The scale exhibited adequate reliability (Cronbach’s alpha = 0.970).

Informal institutional leadership was measured using the five-item scale adopted from [Shaughnessy et al. \(2017\)](#), and sample items included “Leaders’ social status is based on trust and respect” and “Leaders share social resources within teams,” and the scale had adequate reliability (Cronbach’s alpha = 0.925). Organizational citizenship behavior was measured using the six-item scale adopted from [Organ et al. \(2006\)](#) and [Marinova et al. \(2010\)](#), and sample items included “I help other employees who have a lot of responsibilities and “I respect the rights and privileges of other employees” and the scale had adequate reliability (Cronbach’s alpha = 0.925). The teacher’s job performance was measured using the eight-item scale adapted from [Yuen et al. \(2018\)](#) and [Ali-Hassan et al. \(2015\)](#). Sample items included “I achieve goals set for my professional development” and “I always fulfill all responsibilities required by my job,” and the scale had adequate reliability (Cronbach’s alpha = 0.869).

As all the constructs were self-reported, several checks were done to examine common method bias. Apart from the procedural recommendations ([Podsakoff et al., 2003](#)), we conducted Harman’s test for examining common method bias. When all the measurement items were loaded onto a single factor, it was found that the total variance explained by the single factor alone was 18.66%, thus providing no indications of common method bias. Furthermore, confirmatory factor analysis of the proposed four-factor model was done, and it was found that the four-factor model had better fit indices than lower-order level models, thus providing further evidence for the absence of common method bias (Fit indices for the four-factor model: $\chi^2 = 714.901$; $df = 2.979$; $\chi^2/df = 2.979$; P value = 0.000; GFI = 0.928; NFI = 0.949; TLI = 0.960; CFI = 0.965 and RMSEA = 0.049).

4. Results

4.1 Descriptive statistics and reliability analysis of scales

[Table 1](#) provides the mean and standard deviation of variables under the focus of this study, and it was found that respondents scored moderately on all constructs. Preliminary checks for normal distribution were done, and all variables have acceptable values of skewness and kurtosis (± 1.5) ([Hair et al., 2010](#)). Variance inflation factor (VIF) statistics were also calculated to examine for multicollinearity and were found to be within the acceptable limit ([Hair et al., 2010](#)). All variables under the focus of the study had significant positive correlations with each other ([Table 1](#)).

	Mean	S.D.	CR	AVE	OCB	AL	IL	JP
Organizational citizenship behavior (OCB)	4.32	0.65	0.924	0.710	<i>0.843</i>			
Academic leadership (AL)	4.10	0.59	0.888	0.667	0.543	<i>0.816</i>		
Informal leadership (IL)	3.95	0.78	0.926	0.757	0.422	0.394	<i>0.870</i>	
Job performance (JP)	4.31	0.59	0.874	0.582	0.589	0.630	0.367	<i>0.763</i>

Note(s): The values on the diagonal (in italics) represent the sq. the root of average variance extracted (AVE) for each factor, while the variables below the diagonal represent the correlations between each pair of factors

Source(s): Authors’ own creation

Table 1.
Descriptive statistics
and inter-construct
correlations

4.2 Measurement model analysis

Confirmatory factor analysis using IBM AMOS 21.0 was done to validate the factor structure of variables under the focus of this study (Hair et al., 2010). Kline's (2005) recommendations were used to evaluate the model's goodness of fit ($\chi^2/df < 3$, TLI > 0.90, CFI > 0.90, RMSEA < 0.10 and standardized root mean square residual (SRMR) < 0.09). All measurement items had loadings greater than 0.70 and the hypothesized four-factor measurement model had a satisfactory fit ($\chi^2 = 2015.310$; $p < 0.001$; $\chi^2/df = 3.115$; SRMR = 0.035, TLI = 0.948, CFI = 0.952 and RMSEA = 0.05). The average variance extracted for each construct was above 0.50, ensuring convergent validity (Fornell and Larcker, 1981). Table 1 provides the square roots of the average variance extracted values for each construct along the diagonal (Hair et al., 2010), confirming discriminant validity. Overall, there is satisfactory support for the model, which permits us to advance with hypothesis testing.

4.3 Test of mediation and moderated mediation hypotheses

The proposed hypotheses were tested using a path analysis procedure via IBM SPSS PROCESS macro (Hayes et al., 2017; Zhao et al., 2010), using the bootstrapping procedure at a 95% confidence interval. We used model 7 to test the hypothesized simple mediation hypothesis and moderated mediation relationships. Results from the mediation model indicated that teachers' academic leadership was positively associated with job performance ($\beta = 0.3966$; SE = 0.03; $t = 12.64$; $p < 0.05$; LLCI = 0.3350 and ULCI = 0.4581) and OCB was also positively associated with their job performance ($\beta = 0.296$; SE = 0.02; $t = 10.41$; $p < 0.05$; LLCI = 0.2402 and ULCI = 0.3519). Also, teachers' academic leadership positively influenced their OCB ($\beta = 0.7462$; SE = 0.07; $t = 9.61$; $p < 0.05$; LLCI = 0.5938 and ULCI = 0.8985). Thus H1, H2a, and H2b were found to be supported. Results also revealed that teachers' OCB mediates the relationship between their academic leadership and job performance. ($\beta = 0.1651$; SE = 0.03; LLCI = 0.1069 and ULCI = 0.2293), thus supporting H3 that there is a significant indirect relationship between teachers' academic leadership and job performance, mediated through their OCB. Table 2 reports the results of interaction effects between teachers' academic leadership, informal institutional leadership style prevailing in the organization, and OCB. The interaction of teacher's academic leadership with IL style in the organization was significant in predicting their OCB ($\beta = -0.0980$; SE = 0.02; $t = -4.4485$; $p < -0.05$; LLCI = -0.1412 and ULCI = -0.054).

Further, to test the hypothesis with regard to moderated mediation, we examined the conditional indirect effects of teachers' academic leadership on their job performance, mediated through OCB, at three levels of the informal institutional leadership style prevailing in the organization: the mean, one standard deviation above and one standard deviation below the mean. The results are summarized in Table 3. The conditional indirect

Variables	β	SE	t	p	LLCI	ULCI
Academic leadership (AL)	0.7462	0.0776	9.6147	0.0000	0.5938	0.8985
Informal leadership (IL)	0.6158	0.0901	6.8323	0.0000	0.4389	0.7928
AL \times IL	-0.0980	0.0220	-4.4485	0.0000	-0.1412	-0.0547
F			19.7892	***		
R^2 change			0.0151	***		

Table 2.
Results of moderation analysis

Note(s): Outcome variable: Organizational citizenship behavior (OCB)

*** $p < 0.001$ and ** $p < 0.05$

Source(s): Authors' own creation

effects of teachers' academic leadership on job performance were found to be significant at all levels of the moderator (IL style) and hence, H4 was supported. The index of moderated mediation was found to be significant ($b = -0.0290$, $BootSE = 0.013$, $BootLLCI = -0.0537$ and $BootULCI = -0.0011$). The interaction is graphically displayed in Figure 2, and it shows that experiencing high levels of informal institutional leadership style was associated with increased organizational citizenship behavior and job performance.

To further examine the variations in the focal constructs in the study (Academic Leadership; Organizational Citizenship Behaviour; Informal Institutional Leadership and Job Performance), we conducted independent samples *t*-test (gender (female/male)) and One-way ANOVA (Age of the teachers and Institutional Type (Central Universities, State Universities and Affiliated Colleges)), Job position (academic roles alone/both academic and leadership roles) and Stream of work (Humanities/Management/Engineering/Science).

Informal leadership (IL)	Conditional indirect effect	Boot_SE	Boot_LLCI	Boot_ULCI
-1 SD (2.8054)	0.1395***	0.0276	0.0871	0.1946
Mean (3.8074)	0.1105***	0.0218	0.0731	0.1574
+1 SD (4.8094)	0.0814***	0.0233	0.0446	0.1348

Note(s): *** $p < 0.001$
Source(s): Authors' own creation

Table 3.
Conditional indirect effects of informal institutional leadership style

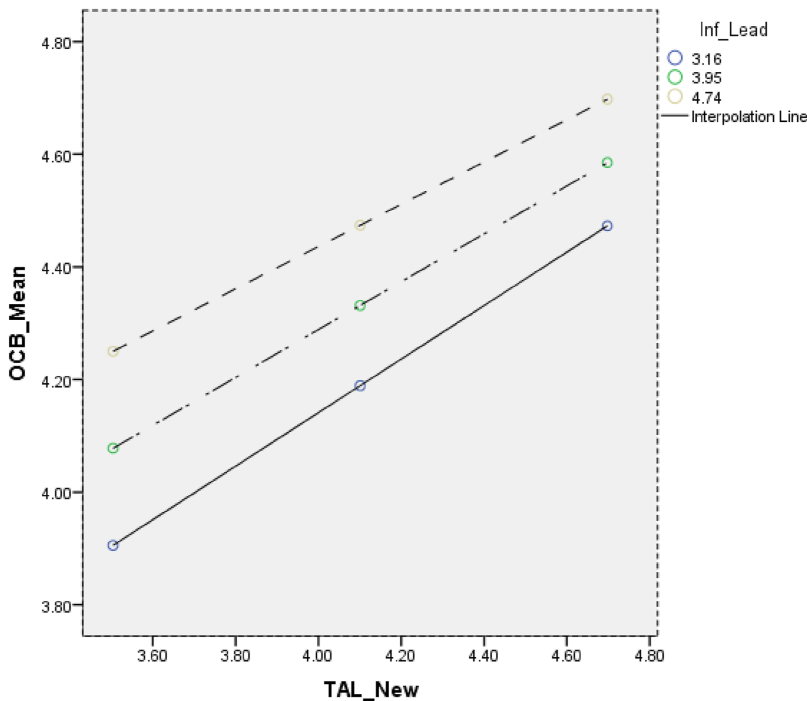


Figure 2.
Interaction effects of informal institutional leadership style

Source(s): Authors' own creation

Results are reported in Table 4 and several insights could be inferred. Gender of the educators showed statistically significant results only with respect to organizational citizenship behavior (OCB), with females reporting more citizenship behavior (mean score = 4.38) as compared to males (mean score = 4.26). Educators aged less than 30 years exhibited the highest organizational citizenship behavior (mean score = 4.53) and job performance (mean score = 4.47). Job performance did not reveal any statistically significant difference across different institutional affiliations.

Academic leadership style was exhibited the most by teachers in state universities (mean score = 4.23), followed by Central universities (mean score = 4.19), whereas teachers in affiliated colleges exhibited the least academic leadership style (mean score = 2.10). Organizational citizenship behavior was highest among teachers working in state universities ((mean score = 4.42), followed by central universities (mean score = 4.30) and affiliated colleges (mean score = 3.35)). Informal leadership style was exhibited the most by teachers working in state universities ((mean score = 4.01), followed by central universities (mean score = 3.97) and affiliated colleges (mean score = 3.20)).

5. Discussion

The current study offers substantial insights into the direct and indirect impacts of academic leadership on teacher performance within higher education, revealing both mediational and moderational effects that have broad theoretical and practical implications. The findings confirm the positive direct influence of academic leadership (AL) on both teachers' performance and their engagement in organizational citizenship behavior (OCB), underscoring performance as a multifaceted concept. Notably, performance in educational settings often encompasses various dimensions, including student achievements and the overall effectiveness of the institution (Adams-Robinson, 2021; Berhanu, 2023; Sonnentag and Frese, 2005). Empirical evidence from this study aligns with previous research, such as the meta-analysis by Jianping Shen *et al.* (2020), which demonstrated a significant correlation between various dimensions of teacher leadership and student achievements. Here, academic leadership similarly boosts teacher performance in higher education institutions (HEIs), highlighting the crucial role of a teacher's proficiency in fulfilling job requirements.

The mediation analysis elucidates the indirect effect of AL on performance through OCB while also emphasizing the significant moderating role of informal institutional leadership on this relationship. Intriguingly, the analysis indicates that the positive impact of informal leadership on performance diminishes beyond a certain threshold, suggesting that informal leadership must be judiciously leveraged to optimize staff performance. These findings robustly support the principles of Distributed Leadership Theory (Spillane, 2005), which advocates for viewing leadership as a collective effort involving multiple leaders, both formal and informal, rather than the sole responsibility of the institution's head. This study

	Gender	Age	Institutional type	Job position	Stream
AL	0.166	0.081	0.000**	0.167	0.003**
OCB	0.007**	0.001**	0.000**	0.007**	0.027**
III	0.468	0.198	0.000**	0.467	0.018**
JP	0.328	0.002**	0.251	0.327	0.056

Table 4.
Variations in
constructs across
different
demographics

Note(s): Values denote *p*-value; ** *p* < 0.05

AL: Academic leadership; OCB: Organizational citizenship behavior; III: Informal institutional leadership and JP: Job performance

Source(s): Authors' own creation

validates the effectiveness of distributed leadership, showing that the combined influence of individual academic leadership and informal institutional leadership substantially enhances teacher performance.

Additionally, the results underscore the importance of the distribution mechanisms of leadership within an institution. James Spillane, a key proponent of Distributed Leadership Theory, emphasized that the critical aspect of leadership lies not just in its distribution but in how it is effectively executed to inspire extra-role behaviors such as OCB (Liu, 2020; Mifsud, 2024). This study illustrates that when leadership is appropriately distributed, it inspires staff to engage in OCB, which are voluntary, extra-role behaviors that significantly contribute to organizational goals. Overall, the study highlights the need for a cooperative and integrated approach among all members of educational institutions, fostering both formal and informal interactions that are characterized by professionalism, trust and mutual respect. Such an environment not only enhances job performance but also strengthens the social and psychological aspects of the workplace, aligning with the tenets of both Distributed Leadership Theory and Social Exchange Theory (Iqbal and Piwowar-Sulej, 2023; Bogler and Somech, 2023).

6. Implications for theory and practice

The findings from this study carry significant theoretical and practical implications for the management of the higher education sector. By implementing a moderated mediation model, the study enriches the academic discourse on academic leadership, addressing a notable scarcity of empirical research within higher education institutions (HEIs). This model elucidates a complex network of relationships among leadership, extra-role behavior and teacher performance, facilitated by organizational leadership. Such empirical insights respond to calls from prior research for robust evidence that can guide both policymakers and practitioners in understanding the impact of teacher leadership (Revina *et al.*, 2023; York-Barr and Duke, 2004).

Theoretically, this study contributes to the existing body of knowledge by detailing how informal institutional leadership (IIL) can amplify the effects of academic leadership on organizational citizenship behaviors (OCB) and subsequently on job performance. This aligns with Distributed Leadership Theory, which posits that leadership efficacy is maximized when it is shared among various members of the organization, not centralized in a few formal positions. Moreover, integrating Social Exchange Theory, the findings underscore the reciprocal benefits of fostering leadership behaviors that exceed formal role expectations, enhancing the overall institutional performance (Xu, 2011; Dani and Mhunpiew, 2019).

The insights from this study provide a foundation for educational leaders to devise more effective leadership policies and strategies aimed at boosting organizational performance and sustainability (Srinivasavarathan and Rajendran, 2023). It underscores the necessity of nurturing academic leadership capabilities among faculty and illustrates the critical role of informal leadership in enhancing teacher performance. Educational institutions are advised to cultivate an organizational environment that promotes optimal levels of informal leadership, which, in turn, catalyzes higher levels of OCB and job performance among teachers (Liu, 2020; Mifsud, 2024). An important practical implication of this research is that it equips institutional leaders with evidence-based strategies that encourage extra-role behaviors, crucial for organizational success. Furthermore, the Academic Leadership Inventory developed through this study is validated as a reliable tool with strong psychometric properties, suitable for assessing academic leadership in a global context and particularly within the Indian higher education framework.

The finding that female educators report significantly higher levels of Organizational Citizenship Behavior (OCB) than their male counterparts suggests that gender-sensitive policies and practices might be essential in fostering an inclusive academic environment. This insight implies that institutions might benefit from initiatives that encourage and recognize the unique contributions of female faculty, potentially leading to enhanced organizational performance and morale (Khan, 2016; Mårtensson and Roxå, 2016). Furthermore, the observation that educators aged less than 30 years exhibit the highest levels of both OCB and job performance indicates a vibrant potential among younger faculty members. This demographic appears particularly engaged and effective, pointing to the necessity for universities to attract and retain younger talent by providing opportunities for growth and leadership (Iqbal and Piwowar-Sulej, 2023; Bogler and Somech, 2023).

The variations in academic leadership and OCB among faculty from different types of institutions – state universities, central universities and affiliated colleges-highlight the influence of institutional context on academic behaviors (Marchiondo *et al.*, 2023). The pronounced academic leadership and OCB exhibited by faculty in state universities suggest that these institutions may have cultures or policies that particularly support such behaviors (Van Helden *et al.*, 2023). Conversely, the relatively lower scores among faculty from affiliated colleges suggest potential areas for development in fostering leadership qualities and citizenship behaviors. The significant display of informal leadership by educators in state and central universities compared to those in affiliated colleges underscores the importance of cultivating leadership across all levels and roles within academic institutions (Liu, 2020; Mifsud, 2024). This could be achieved through professional development programs and creating pathways for leadership that are accessible to all faculty members, regardless of their formal positions. These findings collectively emphasize the need for tailored approaches in leadership development, faculty support and institutional policy-making that consider the diverse profiles and contexts of higher education faculty (Fauzi *et al.*, 2024; Nadeem, 2024). Such strategies are crucial for enhancing not only individual performance but also the overall effectiveness and competitiveness of educational institutions.

7. Limitations and further scope of the study

The study, while providing significant insights, has certain limitations that also present avenues for further exploration. Conducted among a diverse cross-section of faculty in higher education institutions, the research employed a cross-sectional design. For a more comprehensive understanding of the dynamic relationships among academic leadership, organizational citizenship behavior (OCB) and job performance, future studies could benefit from adopting a longitudinal approach. This method would allow for the observation of how these relationships evolve over time and potentially reveal causal dynamics more clearly.

Additionally, the current study focused on specific variables influencing teacher performance; however, there are undoubtedly other factors that could impact performance that were not examined. Future research should consider incorporating additional variables such as personal motivation, institutional culture and external educational policies, which may also play significant roles in shaping academic leadership and teacher performance. Another limitation of the study is the lack of differentiation based on the employment status or experience levels of the teachers. The interactions between academic leadership and job performance may vary significantly across different career stages and contractual conditions. Therefore, subsequent research could explore how these factors moderate the relationships studied, providing a more segmented understanding of the impacts of leadership.

Future investigations could extend this research to different industries to assess the generalizability of the effects of informal institutional leadership. Exploring these relationships in varied organizational contexts, such as corporate, healthcare or public administration sectors, could enrich the understanding of how informal leadership functions across different professional landscapes. By addressing these limitations and expanding the scope of research, future studies can enhance the robustness of the findings and provide more detailed recommendations for both academic institutions and other organizational settings.

8. Conclusion

This study addresses a significant gap in higher education literature by empirically showcasing the influence of academic leadership (AL) on teacher performance in India. Using a national-level sample, it highlights both the direct positive effects of AL and the nuanced conditional indirect effects of informal institutional leadership on teacher performance. These findings provide pioneering insights into the dynamics between leadership styles and educational outcomes, offering valuable guidance for institutional leaders and academic policymakers. The study illustrates how leadership profoundly affects both teacher and institutional performance, supporting the development of effective educational policies and strategies. Furthermore, it lays a foundation for future research, suggesting that these investigations could be extended to other contexts or sectors to further explore and validate the role of academic leadership in various professional environments.

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