Inclusive leadership as an approach to development employees extra-role behaviour in higher education institutions: Evidence from Iraq

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ABSTRACT

This study explores the relationship between inclusive leadership (IL) and extra-role behavior (ERB) in the context of higher education, focusing on the University of Anbar in Iraq. Given the growing challenges facing academic institutions including limited resources, increasing student populations, and the demand for innovation there is a pressing need for leadership styles that promote inclusivity, participation, and employee engagement. To address this need, the research problem was articulated through several key questions, notably: "What is the level of practicing the IL style among academic leaders in the investigated organization?" A quantitative research design was employed, and data were collected from a sample of academic leaders (n = 130) and employees (n = 480). A structured questionnaire was developed and validated to measure IL and ERB constructs. Data analysis was conducted using SPSS and AMOS v26, applying appropriate statistical techniques to test the main and sub-hypotheses. Findings indicate a significant positive relationship between inclusive leadership and extra-role behavior. These results affirm IL as a relevant and impactful leadership approach in academic settings. Limitations include its focus on a single institution, suggesting that future research should examine diverse educational and cultural settings to broaden the generalizability of the findings.

Contribution/Originality: This study uniquely examines the impact of inclusive leadership (IL) on extra-role behavior (ERB) in Iraq's higher education, using the University of Anbar as a case. It highlights IL's positive influence through openness, availability, and accessibility, and adds empirical value using SPSS and AMOS. The findings contribute to the Arab-context literature but also support IL's involvement in promoting engagement and innovation in academic settings.

1. INTRODUCTION

The world's organizations, especially academic institutions, are experiencing numerous challenges in increasingly volatile and uncertain marketplaces that threaten their stability, continued existence, and growth (Aboramadan, Dahleez, & Hamad, 2020; Younas, Wang, Javed, & Haque, 2023). These institutions are characterized by their diversity and complexity, but scores and evaluations fail to consider them adequately. They are in a constant

616

state of insufficient resources and funding, which hampers their ability to attract and retain academic talent (Dahleez, Aboramadan, & Abdelfattah, 2023). In addition, an increase in student numbers, increased complexities in generating knowledge, globalization and technological progress all place additional burden (Aboramadan et al., 2020; Dinh, Caliskan, & Zhu, 2021). This is in tandem with the need to improve the quality of education and concerns with adaptability, accountability, and evaluation (Gigliotti, 2017). These dynamics can only be resolved by deviation from the traditional management practices (Aboramadan, Dahleez, & Farao, 2022) and highlight the critical role of leadership in driving institutional outcomes (Dahleez et al., 2023). As a reaction to it, a new leadership model – Inclusive Leadership (IL) – has emerged. This leadership style focuses on recognizing individual differences in the workforce and valuing them, inspiring employees to make positive contributions, and supporting an environment that fosters inclusion. Inclusive leadership considers diversity among employees and becomes individual-centric, aiming to remain relevant in diverse organizational situations (Zhang & Zhao, 2024).

Inclusive leadership encourages workers to share their ideas and opinions; thus, a sense of recognition and appreciation for their performance within the organization is achieved (Li & Zhou, 2023). It also relates to better job design and the participation of employees in decision-making (Jaleel & Sarmad, 2024). Such leaders provide timely support as and when challenges arise and are very dedicated to the needs of the employees (He, He, & Sarfraz, 2021). This strategy improves the commitment of participation to the quality improvement efforts (Hanh Tran & Choi, 2019), enhances job engagement and organizational commitment (Bao, Xiao, Bao, & Noorderhaven, 2022) reduces turnover intentions (Liu, Wu, & Chen, 2023), strengthens openness to change (Gil, Mosegui, Zenezi Moreira, & Eguizabal, 2025) and fosters creativity and innovation (Aboramadan & Dahleez, 2022). Contrary to transformational leadership, which primarily addresses organizational objectives, inclusive leadership also involves recognizing differences among individuals, thereby enhancing success in organizations through people-oriented values (Ackaradejruangsri, Mumi, Rattanapituk, & Pakhunwanich, 2023). It uniquely fosters a sense of belonging, identity, and recognition (Yasin, Jan, Huseynova, & Atif, 2023). Further, it accommodates diversity, inclusion, and disparities in power neglected by other leadership styles, thus fostering an empathetic and balanced workplace, especially for marginalized groups (Ashikali, 2023; Orekoya, 2024). As such, inclusive leadership offers a more holistic, promising, and sustainable model with a consistent impact on team innovation (Ye, Wang, & Guo, 2019).

Although various studies have been conducted on the relationship between different leadership styles and extra-role behavior (ERB) (Caillier, 2016; El-Gazar & Zoromba, 2021; Srivastava & Dhar, 2019; Suk & Eun-Woo, 2023; Zhang & Xie, 2017), there are still very limited areas of research specifically related to the impact that inclusive leadership has on ERB (Aboramadan et al., 2022). In addition, the conceptualization of inclusive leadership remains fluid and is hindered by piecemeal understanding and a lack of generalizability (Ackaradejruangsri et al., 2023; Yasin et al., 2023). At the same time, organizations increasingly expect their employees to move beyond their job descriptions and exhibit discretionary, value-adding behaviors. In this regard, ERB is now seen as an important aspect of organizational development, and stimulating it properly has become a central issue in modern organizational behavior research (Chen, Luo, Zhu, Huang, & Liu, 2020; Younas et al., 2023).

In light of this background, this study aims to address part of this research gap by examining the impact of inclusive leadership on employees' extra-role behaviors at the University of Anbar, one of Iraq's leading academic institutions with extensive local, regional, and international recognition. To broaden the discussion, this study addresses the following research questions:

QR1: Do administrative leaders at the University of Anbar practice inclusive leadership?

QR2: What is the level of employees' extra-role behavior at the University of Anbar?

QR3: What is the nature of the relationship between inclusive leadership (in its dimensions) and employees' extra-role behavior?

In response to these questions, a set of hypotheses was developed and is presented in the following section.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. The Concept of Inclusive Leadership

A review of the scholarly literature defines inclusive leadership as the demonstration of behaviors and communication by leaders that convey appreciation and recognition for employees' contributions to the organization (Yinping Guo, Jin, & Yim, 2022). Inclusive leaders are approachable and accessible, actively listening to the ideas of employees across all managerial levels (Qurrahtulain, Bashir, Hussain, Ahmed, & Nisar, 2022). This leadership style promotes participation among team members and key stakeholders, facilitating a collaborative environment (Clark, 2017). Inclusive leadership also envisions a constructive relationship between leaders and employees who are creative, expressive, and engaged in enhancing collective well-being (Aboramadan et al., 2022). Effective inclusive leaders possess cognitive, emotional, and behavioral competencies that enable them to achieve organizational goals while fostering inclusivity (Alang, Stanton, & Rose, 2022). These leaders cultivate a psychological experience that strengthens employees' sense of connectedness within the workplace (Roberson & Perry, 2022). Moreover, they are characterized by integrity, strong core values, and an unwavering commitment to all stakeholders (Kurian & Nafukho, 2022).

2.1.1. Importance of Inclusive Leadership

Inclusive leadership places significant emphasis on the human capital within organizations, promoting autonomy and providing psychological safety for employees to perform their tasks without fear of punishment or criticism. This behavior fosters a culture of learning from mistakes and reinforces employees' sense of value within the organization (Ye, Wang, & Guo, 2019). It also facilitates the modeling of exemplary behavior, enhancing teamwork, innovation, and overall performance (Ye, Wang, & Li, 2018). Inclusive leadership supports an open and respectful organizational culture where leaders are accessible and continuously provide guidance, thereby enhancing the internal work environment and promoting equality despite individual differences (Ahmed, Zhao, Faraz, & Qin, 2021). Through an environment of tolerance and support, inclusive leadership not only reduces psychological stress but also fosters a sense of optimism and well-being among employees (Shabeer, Nasir, & Rehman, 2020; Ye, Wang, & Li, 2019).

Moreover, inclusive leadership establishes mutual trust and respect, creating social and interpersonal ties between leaders and employees, which also leads to well-being (Choi, Tran, & Kang, 2017). It promotes change-oriented organizational citizenship behaviors by appreciating each person's contribution as well as providing equality in terms of the change process (Younas, Wang, Javed, & Zaffar, 2021). This style of leadership also encourages the practice of delegation of authority, real concern for employee needs as well as reduced rates of turnover (Javed, Abdullah, Zaffar, ul Haque, & Rubab, 2019; Kuknor & Bhattacharya, 2021). Additionally, it enables leaders to predict employee behavior effectively (Randel, Dean, Ehrhart, Chung, & Shore, 2016), promotes interactional perceptions of justice through supportive behaviors, and builds organizational commitment by meeting both internal and external employee requirements (Hanh Tran & Choi, 2019). Inclusive leaders aid in the bridging of differences between employees because of creating avenues for open communication and consulting everyone's ideas that make up a team (Mitchell et al., 2015), offering an effective approach to navigating organizational diversity and complexity (Li, Ni, Gao, & Gu, 2022).

2.1.2. Core Dimensions of Inclusive Leadership

For the literature, there are three pillars of inclusive leadership, namely, foundational dimensions of inclusive leadership: openness, availability, and accessibility.

The very first dimension, openness, is a leader's readiness to communicate new ideas, methods of work, and feedback to achieve organizational goals (Carmeli, Reiter-Palmon, & Ziv, 2010). This entails an appreciation of the differences among individuals within the team, tolerating open expression of errors, supporting various means of undertaking the task, and reacting to failure with understanding rather than criticism (Katsaros, 2022; Ye, Wang, &

618

Guo, 2019). The second dimension of availability indicates leaders' preparedness to support subordinates when they face challenges in their daily work. This involves collaborative problem solving, providing professional advice, and thereby fostering team cohesion and resilience (Wang et al., 2019). Inclusive leadership, in this sense, serves as an accessible external resource that complements organizational capabilities (Javed et al., 2019). The third dimension, which is accessibility, is characterized by leaders' efforts to keep communication channels open with subordinates, enabling discussions on emerging issues and strategic goals. This fosters a collective vision within the organization and provides employees with a clearer understanding of objectives and early actions arising from intentions (Hanh Tran & Choi, 2019). As leaders ensure more inclusive dialogue and provide employees with further input into decision-making, employee engagement and empowerment are greatly increased (Çetinkaya & Yeşilada, 2022; Javed et al., 2019).

2.2. The Concept of Extra-Role Behaviour

There is a considerable interest among scholars and practitioners of management and organizational behavior in extra-role behavior (ERB) since the late 20th century due to its critical role in the internal operations and effectiveness of organizations. Despite all the research conducted, an acceptable definition has not been universally established. ERB has been considered part of the "relational revolution" in organizations, whereby workers are eager to extend their roles as employees without promises of immediate returns (George, Levenson, Finegold, & Chattopadhyay, 2010). It entails positive challenges for the process of constant improvement, not direct criticism of the established practices (Mustafa, Ramos, & Man, 2015). ERB is also described as discretionary behavior that exists beyond the formal job description, which promotes positive relationships among colleagues and benefits the organization overall (Mañas Rodríguez, Estreder, Martinez-Tur, Díaz-Fúnez, & Pecino-Medina, 2020). Such behaviors are normally not directly associated with formal reward systems but are associated with improved organizational effectiveness through collaboration and support between peers (Jungst & Janssens, 2020). Furthermore, ERB is the types of self-initiated actions which go beyond the requirement of routine compliance but as a result of intrinsic motivation (Srivastava & Dhar, 2019).

2.2.1. The Importance of Extra-Role Behaviour in Organisations

Studies on ERB confirm its integral role in establishing cooperation among employees in interconnected work settings – a key component of overall organizational performance (Wollan, Sully de Luque, & Grunhagen, 2009). Providing strong social relationship for easy execution of tasks, ERB helps achieve the goals (Van Loon, Vandenabeele, & Leisink, 2017). It also familiarizes employees with informal organizational practices, which contribute to their professional development and enhance the organization's social capital. This, in turn, increases creativity and innovation, enabling employees to generate new ideas and initiatives (Demerouti, Bakker, & Gevers, 2015). Additionally, ERB mitigates employee indifference toward job responsibilities (Chen & Li, 2019), supports employee retention, and reduces turnover (Schmidthuber & Hilgers, 2019). It invites voluntary submission of improvement proposals and development of proactive strategies to deal with potential challenges in the future (Richardson, Kluemper, & Taylor, 2021).

Based on this theoretical basis, this study will focus on examining the role of inclusive leadership (IL) in promoting employee resourcefulness behavior (ERB) among employees at the University of Anbar, Iraq. This relationship is illustrated in Figure 1, and the following hypotheses are proposed.

Inclusive leadership positively influences extra-role behavior.

H_{1a}: Openness positively influences extra-role behavior.

H_{1b}: Availability positively influences extra-role behavior.

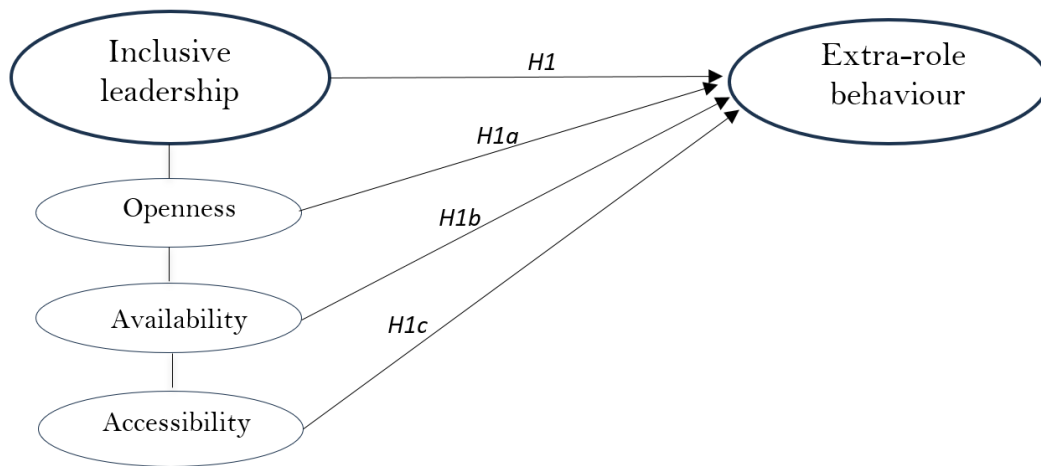*H_{1c}: Accessibility positively influences extra-role behavior.*

Figure 1. The research model

3. MATERIALS AND METHODS

3.1. Research Context and Sampling

This study was conducted at the University of Anbar, one of Iraq's leading academic institutions, with a research population consisting of 156 academic leaders and 2,735 employees. The sample size was determined using Thompson's (2012) formula for finite populations, assuming a confidence level of 95%, a margin of error of 5%, and a population proportion of 0.5 to ensure maximum variability. To improve the likelihood of obtaining a sufficient number of valid responses, questionnaires were distributed to a sample size larger than the calculated minimum.

A stratified random sampling technique was employed to ensure proportional representation of both leaders and employees across various colleges and administrative units. Specifically, 130 questionnaires were distributed to leaders and 480 to employees. A total of 582 responses were received, comprising 120 from leaders and 462 from employees. After excluding 22 incomplete or damaged questionnaires (8 from leaders and 14 from employees), the number of valid questionnaires used for statistical analysis was 112 from leaders and 448 from employees, resulting in a high response rate of 93.3%.

3.2. Instrumentation and Measures

Data collection occurred over a five-month period from January to May 2024, using a structured questionnaire designed in two parts. The first part gathered demographic information, including age, gender, academic qualification, and years of experience. The second part assessed the study variables using validated measurement scales for both inclusive leadership (IL) and extra-role behavior (ERB).

The independent variable, inclusive leadership, was measured using a scale adapted from Shakil, Memon, and Ting (2021), comprising three dimensions: Openness (three items), Availability (three items), and Accessibility (three items), totaling nine items. The dependent variable, extra-role behavior, was measured using eight items adapted from Van Loon et al. (2017) and Eddleston, Kellermanns, and Kidwell (2018), capturing employees' voluntary, discretionary behaviors beyond formal job requirements. All items were rated using a five-point Likert scale ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

A preliminary pilot test was conducted on a sub-sample of 30 respondents from the target population to assess the clarity, relevance, and cultural appropriateness of the questionnaire items. Feedback from the pilot study informed minor linguistic adjustments, ensuring that the instrument was accessible and comprehensible to participants within the Iraqi higher education context.

3.3. Ethical Consideration

This research adhered to the ethical guidelines of the University of Anbar. Approval for the study was granted by the university's research ethics committee prior to data collection.

Participation was voluntary, and all respondents were informed of the study's objectives and procedures. Informed consent was obtained from each participant, and confidentiality was assured.

Respondents were not asked to disclose personal identifiers, and all data were anonymized and securely stored to protect participants' privacy.

4. DATA ANALYSIS AND RESULTS

4.1. Characteristics of the Study Sample

As shown in Table 1, the majority of the leadership respondents fell within the 40–49 age group (83 respondents, 74%), while most employees were also in the same age range (211 respondents, 47%), indicating that both groups have significant professional experience.

Gender distribution showed a predominance of males: 96% of leaders (107) and 79% of employees (355), while females represented only 4% of leaders (5) and 21% of employees (93). This reflects the broader gender representation in Iraqi educational institutions.

Regarding academic qualifications, 90% of leaders (101) and 54% of employees (240) hold a Ph.D., indicating the university's strong emphasis on academic advancement.

Table 1. Characteristics of the study sample.

S.no	Personal traits	Class	Iterations		Percentage %	
			Leaders	Staff	Leaders	Staff
1	Age	< 30	0	16	0	4%
		30 - 40 years old	6	120	5%	27%
		40 − 50 years old	83	211	74%	47%
		≥50	23	101	21%	23%
		Total	112	448	100%	
2	Gender	Male	107	355	96%	79%
		Female	5	93	4%	21%
		Total	112	448	100%	
3	Academic qualification (Certificate)	Preparatory or less	0	3	0	1%
		Diploma	0	5	0	1%
		B.A.	0	80	0	18%
		Master's	11	120	10%	27%
		Ph.D.	101	240	90%	54%
		Total	112	448	100%	

4.2. Structural Validity

4.2.1. Inclusive Leadership (IL)

Figure 2 presents the confirmatory factor analysis (CFA) for inclusive leadership, which includes nine items across three dimensions.

As shown in Table 2, all standardized loadings exceeded 0.40, aligning with the criteria established by Hair Jr, da Silva Gabriel, and Patel (2014), confirming the structural validity of the construct.
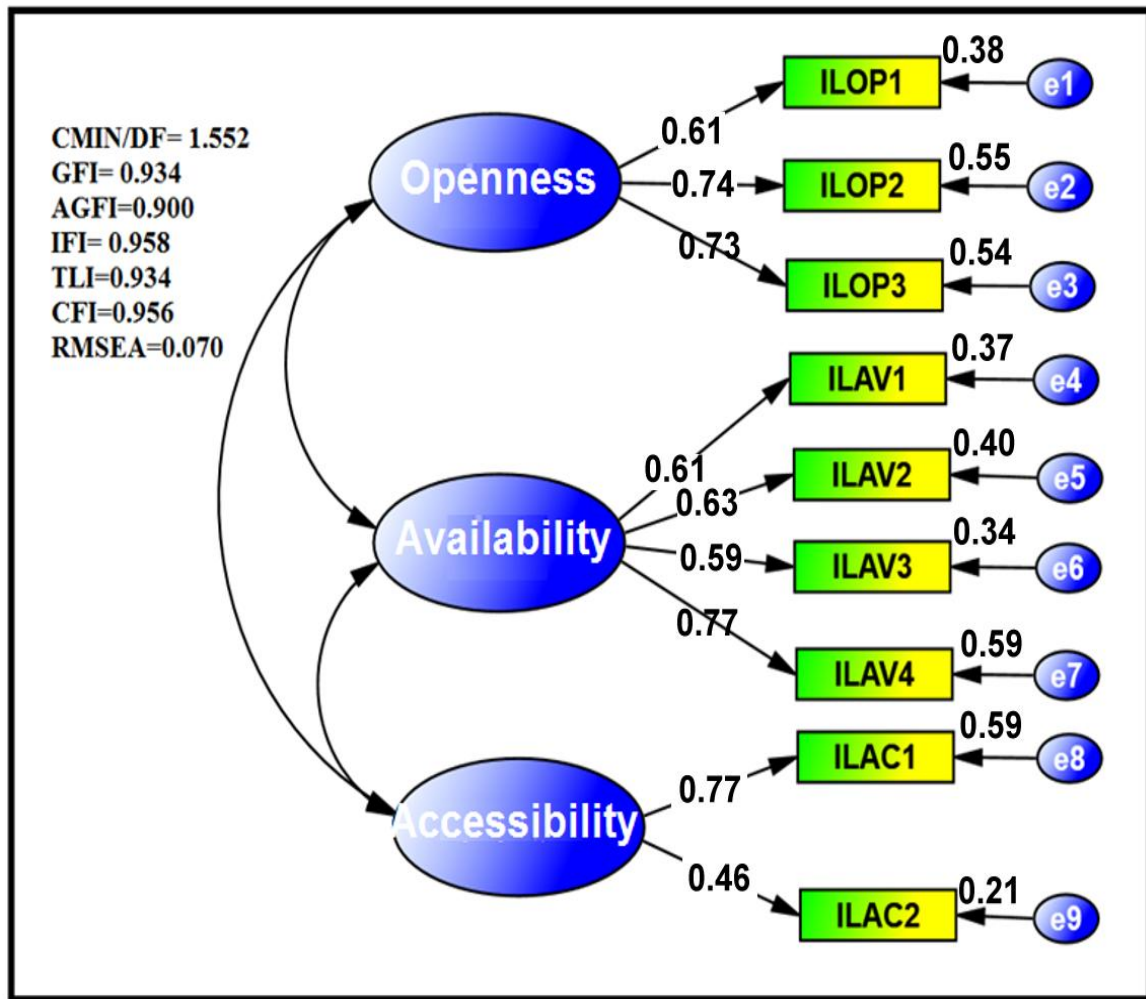
Figure 2. Structural model of the inclusive leadership variable.

Table 2. Standard estimates of the inclusive leadership variable.

Paths			Estimates
ILOP	>----	ILOP1	0.61
ILOP	>----	ILOP2	0.74
ILOP	>----	ILOP3	0.73
ILAV	>----	ILAV1	0.61
ILAV	>----	ILAV2	0.63
ILAV	>----	ILAV3	0.59
ILAV	>----	ILAV4	0.77
ILAC	>----	ILAC1	0.77
ILAC	>----	ILAC2	0.46

4.2.2 Extra-Role Behaviour (EXRB)

Figure 3 shows the CFA for extra-role behaviour, consisting of eight items. All standardized estimates exceeded 0.40, as shown in Table 3, validating the measurement model per (Hair Jr et al., 2014).
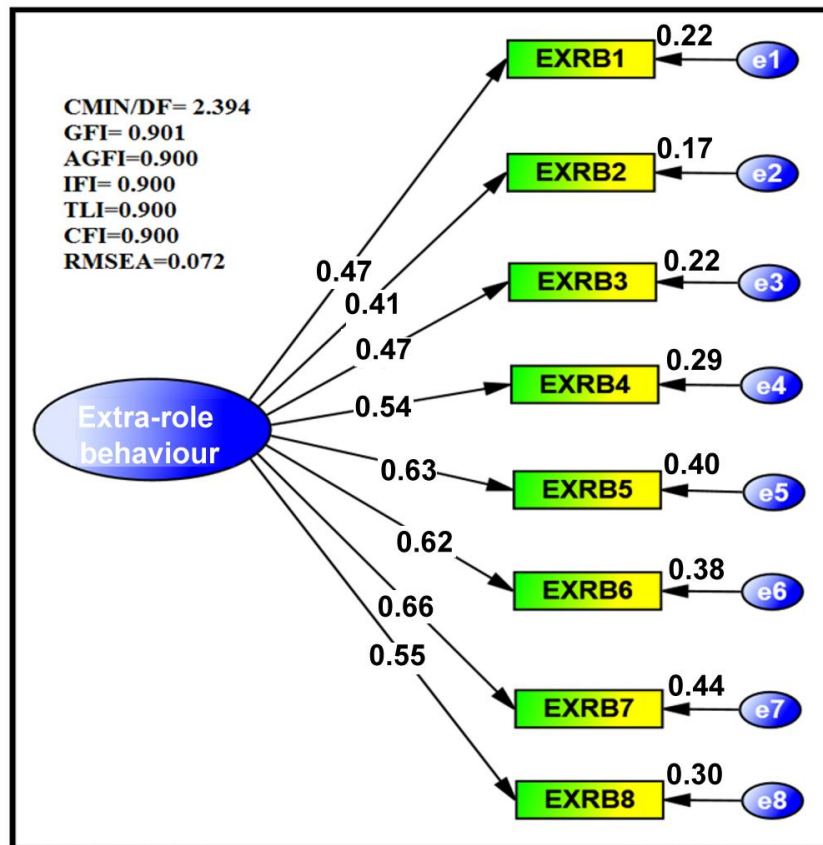
Figure 3. Structural model of the extra-role behavior variable.

Source: Prepared by the researcher based on the AMOS.V.26 program.

Table 3. Standard estimates of the extra-role behavior variable.

Paths			Standard rating
EXRB	>----	EXRB1	0.47
EXRB	>----	EXRB2	0.41
EXRB	>----	EXRB3	0.47
EXRB	>----	EXRB4	0.54
EXRB	>----	EXRB5	0.63
EXRB	>----	EXRB6	0.62
EXRB	>----	EXRB7	0.66
EXRB	>----	EXRB8	0.55

4.3. Instrument Reliability

The results revealed that the independent variable (comprehensive leadership), with all dimensions, reached the stability coefficient values (Cronbach's Alpha = 0.852). The coefficient values were 0.893, 0.889, and 0.915 for openness, availability, and accessibility, respectively.

The results also showed that the dependent variable (extra-role behavior) had a consistent stability (0.917). These results indicate that all axes, based on Hair, Page, and Brunsveld (2020), had a value greater than the acceptable percentage (70%).

The results offered in Table 4 also demonstrate that the construct reliability coefficients of the study measurement tool range between 0.835 and 0.959, which is higher than 0.70. The criteria set by Hair, Black, Babin, and Anderson (2019) are consequently fulfilled. Moreover, the measurement tool was marked with high construct reliability.

Table 4. Stability parameters of the measuring instrument.

Variable	Dimensions	Paragraphs	Cronbach's alpha	Composite reliability
Inclusive leadership	Openness	3	0.893	0.958
	Availability	4	0.887 0.852	0.937
	Accessibility	2	0.915	0.959
Extra-role behavior	One-dimensional	8	0.917	0.835

4.4. Descriptive Statistics

4.4.1. The Independent Variable: Inclusive Leadership

Table 5 summarizes descriptive statistics for all items. Possession of inclusive leadership dimensions across different arithmetic means (3.36, 3.31, 3.42), with standard deviations (0.672, 0.709, 0.704), coefficients of variation (20%, 21%, 21%), and relative interest ranging from 66% for the availability dimension to 68% for the accessibility dimension. This indicates that all the standard deviations of the relevant phenomena are consistent with the sample's responses on the items.

Given the aforementioned, the inclusive leadership variable showed a general arithmetic mean of 3.36 and an S.D. equal to 0.602, with a relatively low CV of 18% and a high relative carefully of 67%. This suggests moderate agreement across responses.

4.4.2. Dependent Variable: Extra-Role Behavior

The variable of extra-role behavior showed different arithmetic means ranging from 2.83 to 3.5, with standard deviations between 0.71 and 0.745. The coefficient of variation was relatively low CV of 13%, and the range of the phenomenon was between 57% and 70%. It can be assumed that all the standard deviations of the phenomenon are consistent with the sample's responses regarding extra-role behavior.

In light of the above, the variable of extra-role behavior showed a general arithmetic mean of 3.36, an S.D. of 0.451, and a high relative interest of 67%. These values indicate that ERB at the university is moderate, as demonstrated by completing tasks and duties beyond general job requirements.

Table 5. The results of the statistical description of the study variables.

Paragraphs	SMA	Standard deviation (S.D.)	Coefficient of variation (CV)	Relative importance
ILOP1	3.43	0.846	25%	69%
ILOP2	3.35	0.835	25%	67%
ILOP3	3.29	0.767	23%	66%
Openness	3.36	0.672	20%	67%
ILAV1	3.26	0.956	29%	65%
ILAV2	3.35	0.824	25%	67%
ILAV3	3.32	0.851	26%	66%
ILAV4	3.3	0.966	29%	66%
Availability	3.31	0.709	21%	66%
ILAC1	3.38	0.761	23%	68%
ILAC2	3.46	0.793	23%	69%
Accessibility	3.42	0.704	21%	68%
Inclusive leadership	3.36	0.602	18%	67%
EXRB1	3.45	0.745	22%	69%
EXRB2	3.4	0.716	21%	68%
EXRB3	3.33	0.74	22%	67%
EXRB4	3.45	0.745	22%	69%
EXRB5	3.44	0.745	22%	69%
EXRB6	3.5	0.71	20%	70%
EXRB7	2.83	0.734	26%	57%
EXRB8	3.5	0.71	20%	70%
Extra-role behaviour	3.36	0.451	13%	67%

4.5. Correlation Analysis

To test the correlation between IL and its dimensions and ERB, the researchers used the Pearson correlation coefficient, as shown in Table 6. The results of the relationship table between inclusive leadership and its dimensions, on one hand, and extra-role behavior, on the other, showed a strong correlation (0.681). This indicates the importance of academic leaders practicing this style and the resulting increase in employees' ERB at the university. The results also indicated that there is a correlation between the dimensions of inclusive leadership and extra-role behavior, ranging from 0.600 for the dimension of openness, 0.592 for the dimension of availability, to 0.579 for the dimension of accessibility.

Table 6. Pearson correlation matrix.

Variables	ILOP	ILAV	ILAC	INLE	EMVB
ILOP	1				
ILAV	0.761**	1			
ILAC	0.528**	0.593**	1		
INLE	0.876**	0.906**	0.818**	1	
EMVB	0.600**	0.592**	0.579**	0.681**	1

Note: **. Correlation is significant at the 0.01 level (2-tailed).
Sig. (2-tailed) = 0.000, N=112.

4.6. Hypothesis Testing

H₁: The second main hypothesis: Inclusive leadership positively affects extra-role behavior.

The indicators of the structural analysis (Figure 4, Table 7) of inclusive leadership, with its dimensions combined with extra-role behavior, showed a significant effect. Accordingly, an increase of one standard deviation leads to an increase in the behavior of the additional role by the same amount. Therefore, the contribution of inclusive leadership, with an interpretation of 0.714 from the square of the variance in extra-role behavior, reduces the error amount to 0.052.
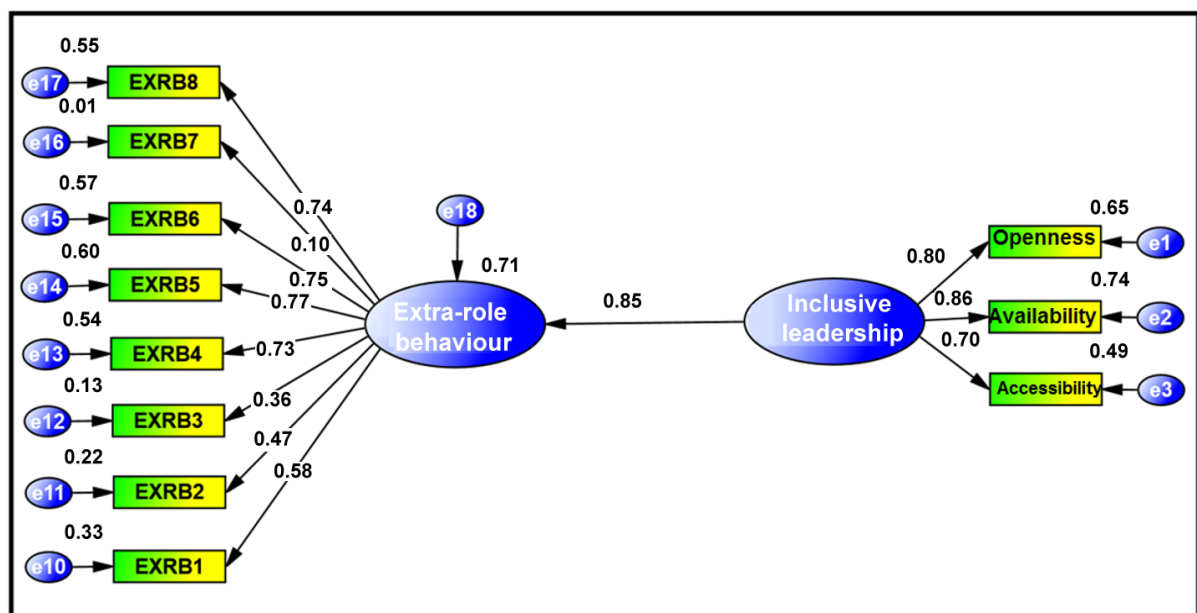

Figure 4. Structural model of the impact of IL on FRB.

Table 7. Hypotheses testing.

Hypothesis	Path			Value	S.E.	C.R.	(R²)	Sig.	Result
H1	Inclusive leadership	→	Extra-role behaviour	0.845	0.052	16.25	0.714	***	Accepted

Note: ***: Significant at 1% levels.

4.6.1. Sub-Hypotheses Testing

H_{1a}: *The first sub-hypothesis: Openness positively affects extra-role behavior.*

The indicators of the structural analysis (Figure 5, Table 8) of inclusive leadership in extra-role behaviour showed a significant effect. That is to say, an increase of one standard deviation leads to a proportional increase. In other words, the contribution of openness, with an interpretation of 0.296 from the square of the variance in extra-role behaviour, reduces the error amount to 0.072.

H_{1b}: *The second sub-hypothesis: Availability positively affects extra-role behavior.*

The indicators of the structural analysis of the dimensions of IL in the ERB showed a significant effect. It suggests that an improvement in the amount of one standard weight leads to an improvement in extra-role behavior by the same amount. This means that the contribution of availability, with an interpretation of 0.180 from the square of the variance in extra-role behavior, reduces the error amount to 0.072.

H_{1b}: *The third sub-hypothesis: Accessibility positively affects extra-role behaviour.*

The indicators of the structural analysis of inclusive leadership in extra-role behavior showed a significant effect. An increase of one standard deviation leads to an improvement in extra-role behavior by the same amount. As a result, the contribution of accessibility, with an interpretation of 0.316 from the square of the variance in extra-role behavior, reduces the error amount to 0.056.

All sub-hypotheses were supported, demonstrating that each dimension of inclusive leadership significantly contributes to extra-role behavior.

Based on the preceding, it is noted that the contribution of the inclusive leadership dimensions, combined in the interpretation of 0.467, accounts for the variation in the behavior of the additional role, while the remaining value is outside the study's limits.
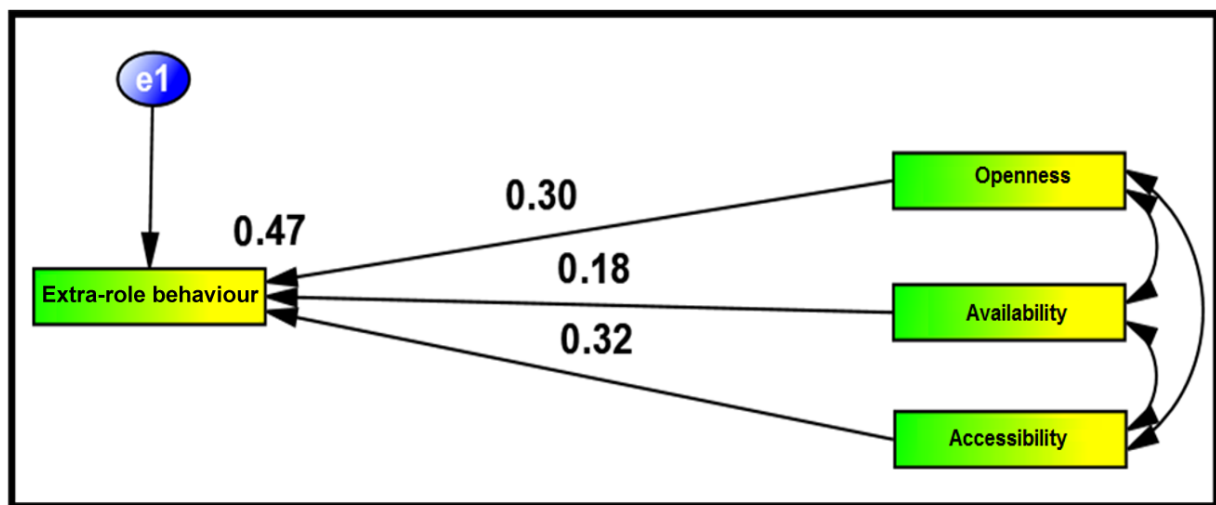

Figure 5. Structural model for testing sub-hypotheses.

Table 8. The results of evaluating the structural model of the sub-hypotheses.

Hypothesis	Paths			Value	S.E.	C.R.	(R²)	Sig.	Result
H1a	Openness	→	Extra-role behaviour	0.296	0.072	4.111		***	Accepted
H1b	Availability	→		0.180	0.072	2.500	0.467	***	Accepted
H1c	Accessibility	→		0.316	0.056	5.643		***	Accepted

Note: ***Significant at 1% levels.

5. DISCUSSION

This study investigated the relationship between inclusive leadership (IL) and extra-role behavior (ERB) within a higher education context, specifically at the University of Anbar in Iraq. Few studies have explored this direct

relationship, making this research a valuable contribution to the emerging literature. The model was developed based on a comprehensive literature review, aiming to build a solid foundation for future research on inclusive leadership a modern leadership style applicable across various organizational types and contexts. Similarly, ERB is recognized as a vital factor in organizational development and administrative progress.

The results indicate a positive relationship between IL and ERB compared to previous studies (Aboramadan et al., 2022; Strijker, 2021). When leaders model fairness, consistent support, and objective assistance for employees facing difficulties, they create an impression of reciprocity that fosters proactive behaviors such as ERB (Hussain, Olaywi, Amanah, & Fadhil, 2024; Shaheed, Alabdily, & Amanah, 2023; Sürücü, Maslakçı, & Şeşen, 2023). In addition, the results support a direct positive effect of inclusive leadership on extra-role behavior, which aligns with previous studies (Aboramadan et al., 2022; Bannay, Hadi, & Amanah, 2020; Strijker, 2021).

Introducing open dialogues, sharing ideas, and transparent communication with leaders and employees reinforce the bond between the two parties. Such a dynamic increases employees' commitment and readiness to participate in ERB, thereby contributing to the development and adoption of innovative and constructive ideas (Fadhil, Shaheed, Jarallah, & Amanah, 2023; Yungui Guo, Zhu, & Zhang, 2022).

6. CONCLUSIONS

This study highlights inclusive leadership as a key factor in encouraging extra-role behavior among employees and teaching staff. Providing an environment conducive to dialogue, encouraging novel ideas, and workforce suggestions enhances service delivery, addresses issues, and meets employees' needs. Practices such as open-door policies and direct engagement significantly improve ERB, enabling employees to perform their work efficiently and professionally. The results indicate a moderate level of inclusive leadership in terms of openness, availability, and accessibility, suggesting ongoing efforts are necessary to create a conducive environment for employee involvement and effectiveness by university leadership. Additionally, ERB among employees received a moderate rating, reflecting their abilities and willingness to go beyond formal responsibilities in seeking guidance and support. The analysis established a significant and positive relationship between inclusive leadership and ERB, implying that greater focus on implementing inclusive leadership practices can further strengthen extra-role behaviors within the University of Anbar. The study recommends further research on IL and ERB across different educational institutions and sectors to validate these findings and expand understanding. It also calls for greater attention within Iraqi and Arab organizational contexts to adopt and apply inclusive leadership an approach that remains underutilized despite its evident positive impact.

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