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WHEN EMPLOYEES KNOW MORE THAN THEIR LEADERS: EXAMINING THE INFLUENCE OF LEADER INTELLECTUAL HUMILITY ON EMPLOYEE VOICE AND LEADERSHIP LEGITIMACY IN AI-ENABLED WORKPLACES

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ABSTRACT

The increasing incorporation of artificial intelligence (AI) into organizational operations is reshaping workplace relationships, knowledge distribution, and established leadership practices. As employees gain access to advanced AI tools and develop technological expertise, they may acquire knowledge that exceeds the technical understanding of their supervisors, challenging conventional perceptions of managerial authority and competence. In this context, this study investigated the influence of leader intellectual humility on employee voice and leadership legitimacy in AI-enabled workplaces. It specifically examined how leaders' recognition of their knowledge limitations, appreciation of employees' expertise, and receptiveness to alternative viewpoints relate to employees' willingness to communicate ideas, raise concerns, and offer constructive recommendations. The study also explored the contribution of intellectual humility to employees' acceptance of leadership authority in situations where subordinates possess greater technological knowledge than their supervisors. Grounded in intellectual humility and social exchange theory, the research adopted a quantitative, cross-sectional approach. Survey data were obtained from 400 employees working in AI-enabled organizations across different sectors in Pakistan and analysed through Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings demonstrated that leader intellectual humility positively and significantly influenced both employee voice and leadership legitimacy. These results indicate that leaders' willingness to recognize employee capabilities and acknowledge their own intellectual limitations is associated with stronger employee participation and greater acceptance of managerial authority. The study extends existing leadership literature by highlighting the relevance of intellectual humility in workplaces characterized by increasingly distributed technological expertise. It also provides practical insights for organizations seeking to develop receptive leadership practices, encourage constructive employee communication, and preserve leadership credibility amid ongoing technological transformation.

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Introduction

The swift adoption of artificial intelligence (AI) in organizational environments has profoundly reshaped the character of work, employee skills, and the conventional leadership dynamics. The use of AI-powered technologies has transformed the way employees learn, work, and address organizational challenges, as well as engage in managerial decision-making. In today's workplace, knowledge and expertise are not necessarily limited to senior management, but instead, employees have direct access to cutting-edge technological tools, specialized information, and AI-powered analytical tools. This means that sometimes workers learn more about specific technologies, processes and AI applications than their immediate supervisors. The distribution of knowledge is changing, which puts into question the traditional view of hierarchy and leadership knowledge. Chalmers et al. (2026) pointed out that AI is changing core aspects of an organization's size, such as knowledge, judgment, coordination, and authority. This is why it is more crucial than ever to rethink strategies for leaders to maintain credibility and legitimacy when their staff has greater technological expertise. Good leadership in AI-driven workplaces is more about embracing lifelong learning, valuing employee skills, and admitting gaps in knowledge than on just seniority or job history.

In this evolving organizational context, leader intellectual humility is a key leadership trait. Intellectual humility is the attitude of a person who admits that he or she does not know everything and is willing to listen to other people's ideas and opinions, as well as to seek out other people's information and expertise. Organizational leaders who are intellectually humble understand that they don't know everything, and they value the skills and contributions of their employees. Owens and Hekman (2012) have outlined three key traits of a humble leader: acknowledging personal weaknesses, valuing others' strengths, and being teachable. Likewise, Owens et al. (2013) found that humility is an important interpersonal trait linked to positive outcomes in the organization, such as employee engagement and team learning. These qualities are especially relevant in workplaces that are enabled by AI, as technological advancements often call into question current knowledge and necessitate ongoing learning. Leaders recognise that staff may be more knowledgeable about the use of AI than they are in developing it, and foster a culture where expertise is respected regardless of rank. Thus, intellectual humility offers a different way of thinking about leadership than the traditional ways which equate leadership with authority based on hierarchy, experience, and knowledge.

Leaders' intellectual humility is especially important when it comes to employee voice. Employee voice is the voluntary sharing of ideas, opinions, concerns and suggestions from employees for the purpose of improving organizational practices and working conditions (Morrison, 2014). Employee voice is an important organisational behaviour as employees often have operational knowledge and practical experience that is not accessible to senior management. But, employees are not always able to articulate their ideas, especially if they feel that they will get a negative response, interpersonal conflict or resistance from their manager. The individual motivations and work environment affect whether or not employees will speak up or stay silent, as described by Morrison (2014). Likewise, Morrison (2023) highlighted that employee voice is a powerful tool for accessing valuable

information, problem identification and improvement in organisations. Employee voice is especially vital in AI-driven workplaces as staff who engage with AI regularly can spot technological challenges, implementation hurdles, inaccuracies, and areas for enhancement that their managers may not see. Leaders who show intellectual humility by listening to employee ideas and opinions, recognizing their technological knowledge, and accepting other suggestions will make employees feel their ideas are valued. Additionally, previous studies have found that leader humility is related to employee voice, specifically in terms of psychological safety and employees' ability to voice their opinions (Li et al., 2019; Owens & Hekman, 2016).

In addition to being a catalyst for employee engagement, leader intellectual humility also has significant implications for leadership legitimacy. Leadership legitimacy is about the employees' belief that their leaders have the right to lead and are accepted, respected and cooperated with. Leadership legitimacy is not the same as formal managerial authority, which is derived from organizational roles and structures, but rather from employees' perceptions of the legitimacy of their leaders' actions, whether they are deemed appropriate, fair, competent, or ethical. Suchman (1995) described legitimacy in terms of pragmatic, moral and cognitive aspects and noted that the perceptions of stakeholders regarding appropriateness and acceptability of an authority are important. Likewise, Tyler (2006) defined legitimacy as a psychological evaluation in which people evaluate an authority as legitimate and willingly comply with its orders instead of only obeying because of its formal authority or potential sanctions. In the workplace of an organization, these views indicate that the acceptance of leadership authority will not only be influenced by the position of the manager but also by the quality of the relationships and the management behaviour. This is especially relevant if staff are more knowledgeable about AI technologies than their managers. Under these conditions, leaders who continually demonstrate themselves as the main source of information could find it hard to keep their credibility. On the other hand, if leaders recognize employees' knowledge, are open to new information, and show openness to learning, they enhance their perceived legitimacy while maintaining their managerial role.

The intellectual humility/legitimacy of leadership linkage is also applicable to the shift in expectations of managerial competence. In the past, workers were commonly linked to good leadership with having more knowledge, better decision-making confidence and the ability to solve workplace issues. But in today's AI-driven world, it's becoming harder and harder to expect that in an AI environment, specialized knowledge is spread out across the organizational levels. A supervisor could have extensive management experience, and an employee might have more knowledge and skills in generative AI, data analysis, automated systems, or AI-informed decision making. This difference is not a sign of less authority in leadership; it is a shift in the way leadership credibility is judged. Intellectual humility enables leaders to retain their positions of power without denying that knowledge is shared and not just held by the leaders at the top of the hierarchy. Owens and Hekman (2012) found that humble leaders foster followers' awareness of their own learning potential and engage them in the learning process of the organization. Thus, in technologically demanding environments, the legitimacy of leadership may be shifting to depend more and more on the capacity

of the leader to know the expertise of others, to allow for learning together, and to make decisions together.

Although there has been an increasing interest in humble leadership, employee voice and the organizational implications of AI, these areas of research are not sufficiently connected. The relationship between leader expressed humility and employee outcomes such as engagement, learning and voice behaviour has been widely studied in existing research (Owens et al., 2013; Owens & Hekman, 2016). Likewise, research on employee voice has confirmed the critical role of supportive leadership and psychologically safe workplaces (Morrison, 2014, 2023). But, less research has focused on the role of leader intellectual humility in contexts where employees have more technological knowledge than their leaders, especially in AI-integrated organizational contexts. Moreover, there has been relatively little research on the issue of leadership legitimacy in the context of diminishing differences between leaders and followers based on traditional knowledge. This presents an important research gap on the part of how intellectual humility can enhance the acceptance of leadership and foster employees' contributions of their specialized technological knowledge.

To fill this research gap, the present study explored how intellectual humility of leaders affects employee voice and leadership legitimacy in the context of AI-enabled workplaces. In particular, it examined the relationship between leaders' self-awareness of their own intellectual shortcomings, appreciation of the expertise of their employees, and openness to other people's perspectives and the degree to which employees are willing to share positive ideas, and their sense of the legitimacy of the leadership position. The study combined the concepts of intellectual humility, employee voice, and leadership legitimacy to provide a theoretical framework of leadership dynamics in workplaces where there is a growing distribution of technological knowledge. This research addresses the context in which the employees have more knowledge than their leaders, and thus offers a unique perspective on the evolving relationship between knowledge, authority and effectiveness of leadership. The study adds to the leadership and organizational behaviour literature by highlighting the significance of intellectual humility as a leadership trait in the context of AI. The results also have practical implications for organizational leaders who want to motivate their employees to participate, acknowledge distributed expertise, and keep their leadership legitimacy in workplaces that are becoming more and more dominated by AI.

Literature Review

Leader Intellectual Humility in AI-Enabled Workplaces

In today's world of knowledge, expertise, and decision making that are constantly shifting and changing, intellectual humility has become a key trait of good leadership. It means a person's capacity to acknowledge their own limitations in knowledge, to be open to other perspectives, and to value the contributions of others in terms of their intellectuality. Intellectual humility is a leadership approach that goes beyond the traditional one, which focuses on authority, confidence and personal skills, and includes the ability to admit ignorance and learn from the employees. Owens

and Hekman (2012) have identified three key behaviours of humble leadership as: acknowledging personal limitations, appreciating others' strengths, and showing a desire to learn. Likewise, Owens et al. (2013) described expressed humility as an interpersonal behavior that involves leaders' recognition of their own weaknesses, of employees' strengths, and openness to feedback.

One context in which intellectual humility is especially important in organizations is when workers have specialized knowledge that is more extensive than their supervisors' knowledge. As AI becomes more common, traditional organizational knowledge structures have evolved to allow employees to access sophisticated analytical tools, automated decision-making systems, and generative AI applications. According to Chalmers et al. (2026), AI is transforming the skills and knowledge of organizations, their decisions, coordination, and authority. Thus, managerial knowledge is no longer necessarily kept at the top of the organization. Staff who are directly involved with AI technologies might acquire expertise in the application of technology, its constraints, and implementation issues. Under such conditions, intellectual humility enables leaders to see employees' expertise without the sense of a difference in knowledge that could be seen as a threat to the leader's authority. The results of the meta-analysis undertaken by Humble leadership and its results (2023) also showed positive connections between humble leadership and key employee results, such as psychological empowerment, engagement, trust, and voice. Thus, intellectual humility is a crucial leadership trait in AI-driven workplaces, facilitating knowledge discovery, learning through collaboration, and embracing employee contributions. It also offers a framework to grasp the ways in which leaders exert their influence in the face of higher levels of technological expertise among employees.

Employee voice and Leader Intellectual Humility

Employee voice is when employees express their ideas, concerns, suggestions and constructive opinions voluntarily to enhance the functioning of the organization. According to Morrison (2014), employee voice is an organizational behaviour that is crucial in the communication of information that can help in the learning and improvement of the organization. Likewise, Morrison (2023) noted that employee voice can offer organisations insights into operational issues, working practices and the opportunities for change. Practical knowledge about organizational processes is often held by employees due to their first-hand experience with the organization's processes. But employees' attitudes toward sharing knowledge are greatly influenced by their beliefs about management support, relationships with others, and potential outcomes of speaking out. The role of leader intellectual humility offers a valuable explanation for the role of employee voice as humble leaders are open to new information and recognize that employees might have valuable information. Owens et al. (2013) linked expressed humility of the leader to team and employee outcomes such as recognition of employee contributions and openness to learning. If leaders recognize that they are not infallible, but that other ideas are welcome, employees feel accepted. This acknowledgment helps to eliminate barriers between employees and promote positive ideas and suggestions.

Empirical evidence also backs the link between leader humility and employee voice. Zou and Chen (2022) explored the psychological processes between humility and employee voice as expressed by leaders. They found that employee voice was positively mediated by psychological safety and self-

efficacy as a result of leader humility. The psychological safety was a measure of how confident employees were that expressing their opinions would not result in negative interpersonal consequences, while self-efficacy was a measure of how confident employees were that they could communicate constructive suggestions. Achmadi et al. (2022) also found a positive correlation between leader humility and employee voice, suggesting that a positive work environment is crucial. Recently, the European Management Journal has published research that shows that leader humility is positively related to employee voice (2025) by the employees' intention to share knowledge. In an AI-driven work environment, the partnership is especially significant since workers often spot issues, opportunities, and constraints with technology that their managers don't. For instance, workers that use generative AI applications regularly might identify inaccuracies, risks from automation, or ways to enhance organizational processes. Leaders recognise these differences in technological skills and employees feel more confident in sharing their observations. On the other hand, those leaders who do not accept the knowledge of their employees or feel that other ideas are a threat to their own authority may not foster positive communication. Therefore, intellectual humility offers a valuable behavioural base to support employee voice in technologically advanced organizational settings.

Leader Intellectual Humility and Leadership Legitimacy

Leadership legitimacy is the perception of employees that their leaders have a proper authority and are legitimate, worthy of acceptance, respect and voluntary cooperation. It is not just about managerial roles as it is about what employees experience, interact with and perceive in the managerial behaviour. According to Suchman (1995), legitimacy is a generalized perception that an entity's activities are socially appropriate in a system of values, beliefs and expectations. Likewise, Tyler (2006) emphasized that legitimacy makes people feel that the authority is legitimate and not just because of the external pressure or formal authority. In organizations, the legitimacy of leadership depends on employees' perceptions of the managerial competence, fairness, integrity and interpersonal behaviour. Traditional leadership systems tend to link managerial legitimacy with their knowledge, experience, and decision-making power. But AI in the workplace calls this into question as workers could know more about certain technological aspects than their bosses. Thus, legitimacy of leadership has become more dependent on the capacity to acknowledge dispersed knowledge and embody a willingness to learn from sources other than one's own expertise.

Intellectual humility is an important way to understand how leaders are able to remain legitimate in these shifting conditions. Acknowledging and valuing employees' expertise, leaders show confidence but do not rely solely on hierarchical authority. Owens and Hekman (2012) described humble leaders as those who acknowledge their limitations, value the strengths of their followers and show a teachability. These behaviours foster relationships with other people and demonstrate respect for the contributions of employees. Likewise, Owens et al. (2013) found that humility is related to positive organizational outcomes via the positive interaction between leaders and employees. In an AI-powered workplace, recognizing employees' technological expertise doesn't necessarily take away the authority of management. Rather, it reflects the awareness of leaders of

the evolving nature of organizational knowledge and the ability to differentiate between leadership and technical excellence. Leaders that take decisions based on informed consultation, but not just on positional power, can be seen as more legitimate by employees. Thus, intellectual humility is an important behavioural underpinning of leadership acceptance in a context where differences in knowledge and expertise are diminished.

Employee Voice and Leadership Legitimacy in AI-Enabled Workplaces

Employee voice and legitimacy of leadership are two interrelated aspects of the organizational relationships in the modern era. Employee voice is about employees' openness to sharing knowledge and positive ideas, while leadership legitimacy is about employees' acceptance of managerial authority. Leaders who foster employee engagement convey that employees' knowledge and ideas are of value to the organization. These interactions reinforce staff's sense of openness, respect and recognition of relevant knowledge in managerial decision making. Morrison (2014) highlighted that employee voice helps to improve the effectiveness of the organisation by providing information which managers might not have considered. In AI-driven workplaces, where staff members often engage directly with the technological systems and acquire hands-on knowledge in their daily tasks, this perspective is especially significant. By listening to these employees and recognizing their contributions, leaders are showing responsiveness to the organization's knowledge, not just hierarchical decision making.

In terms of legitimacy, employees will be more likely to accept leadership authority when they see managerial behaviour as appropriate, respectful and responsive to the situation of the organization (Suchman, 1995; Tyler, 2006; Jackson et al., 2012). Intellectual humility aids this process by helping leaders to take employee knowledge into account when making decisions and talking about things within their organization. In addition, employee voice is a chance for leaders to show that they are open to criticism, different views and constructive disagreement. Thus, employee voice is an important behavioural aspect of leadership relationships in which knowledge is shared between the different levels of the organization. But the connection between voice and legitimacy of leadership is not necessarily straightforward. Leaders' lack of response or their failure to show respect for employees' ideas can cause employees to lose confidence in the authority of the managers. Likewise, if the actions of leaders are seen as insincere, they can show intellectual humility and not foster meaningful participation. Zou and Chen (2022) pointed out that leader humility and employee voice have a positive indirect relationship, but this relationship is reduced by perceived manipulative intentions. This discovery suggests that humility is still relevant in building positive relationships within the organization, not just in terms of humble behavior.

Theoretical integration and research gap.

The relationship between leader intellectual humility, employee voice and leadership legitimacy based on intellectual humility literature, social exchange theory and legitimacy theory. Social exchange theory suggests that relationships in the workplace are formed as a result of reciprocal interactions between people, where they feel good about themselves when they are treated well and

act in a positive manner (Blau, 2017). If leaders recognise employees' knowledge, value their input and are ready to learn, employees might respond with increased engagement, positive dialogue and a willingness to accept managerial leadership. In this sense, intellectual humility is a leadership behaviour that conveys respect and recognition, and motivates employees to share their knowledge in organizational activities. Legitimacy theory also accounts for the fact that employees' acceptance of leadership is related to their perceptions of the appropriate authority and managerial behavior (Suchman, 1995; Tyler, 2006). In an AI-driven work environment, traditional job titles might not be enough to build credibility for leadership if workers are more technologically savvy. The extent to which leaders are willing to admit their lack of knowledge and value their employees' contributions is increasingly important in the exercise of legitimate authority. While there have been studies on humble leadership and employee voice (Owens et al., 2013; Zou & Chen, 2022), there has been relatively little research on the topic of leadership legitimacy in the context of AI-driven workplaces. Likewise, discussions about AI and organizational transformation in the present focus on the evolving nature of expertise and authority (Chalmers et al., 2026), without a strong enough connection to the behavioural aspects of intellectual humility in these relationships. The current study aims to fill this gap by exploring the relationship between leader intellectual humility with two organizational outcomes that are important: employee voice and leadership legitimacy. It is unique in that it explores the leadership process when the employees may have more technical expertise than their leaders.

Research Methodology

The study used a quantitative, explanatory, and cross-sectional research design to study the effect of leader intellectual humility on employee voice and the legitimacy of employee leadership in AI-enabled workplaces. The data was gathered from the employees of the AI enabled organizations in Pakistan, especially Lahore, Islamabad and Karachi. The study included the banking, information technology, telecommunications, higher education, and professional services industries, where artificial intelligence was used in the course of the job.The study included the banking, information technology, telecommunications, higher education, and professional services sectors, where AI applications were used in the course of work. The quantitative survey approach was suitable for the relationships between organizational and behavioural constructs (Creswell & Creswell, 2017). The sample population comprised employees in organisations that actively used AI supported technologies. Purposive sampling was used to identify the respondents who have the relevant professional experience. The participants had to have a direct reporting relationship with a supervisor and have experience with AI applications in their work. The number of valid responses for the analysis was set at 400. About 500 questionnaires were deemed to be distributed to allow for missing data and possible omissions. However, the sample size was not only based on the traditional rule of 10 times but also on the contemporary PLS-SEM recommendation (Kock and Hadaya, 2018) which is the inverse square root method. Additionally, the previous studies have shown the applicability of PLS-SEM in the investigation of organizational relationships with multiple latent constructs (Hair & Alamer, 2022).

The data were gathered using a structured questionnaire that included items measuring the three constructs of the research, as well as demographic questions. The items in the measurement were evaluated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The nine items scale developed by Owens et al. (2013) was used to assess Leader Intellectual Humility (LIH). The scale measures three aspects: recognizing personal limitations, recognizing employees' strengths and contributions, and being open to learning. Some examples of sample items are: "My leader actively seeks feedback, even if it is critical" and "My leader acknowledges when I have more knowledge and skills than him/her. The Van Dyne and LePine (1998) six item instrument was used to measure Employee Voice (EV). The scale measures how willing employees are to provide positive ideas, input and recommendations about organizational practices. One of the representative items is "I create and make recommendations on issues which impact the organization. Leadership Legitimacy (LL) was translated into employees' perceptions of managerial authority, acceptance and appropriateness. It was based on conceptual ideas from Suchman (1995) on legitimacy and Tyler (2006) on psychological legitimacy. The items for the measure were created and refined through the expert evaluation and pilot testing of the items before final administration of the measure, as these sources provided theoretical foundations and not a ready-made employee-level leadership legitimacy scale. The collected data were analysed by using the Partial Least Squares Structural Equation Modelling (PLS-SEM) technique in SmartPLS 4. The Cronbach's alpha, composite reliability (CR), average variance extracted (AVE), and the heterotrait–monotrait ratio (HTMT) were used to assess the measurement model. After that, the structural model was assessed using collinearity assessment, path coefficients, coefficient of determination (R2) and effect size (f2). The statistical significance of the hypothesized relationships (Hair et al., 2019; Hair & Alamer, 2022) was explored through the use of bootstrapping with 5,000 resamples. The participants were free to join and the respondents were made aware of the academic nature of the study. Confidentiality and anonymity were respected and data collected was only used for academic research purposes.

Results and Discussion

Demographic Profile of Respondents

Table 1 shows the demographic characteristics of the respondents. A total of 400 respondents (224 males, 176 females) were selected for the sample. As far as age is concerned, the highest number of respondents were in the age group 31-40 (42%), followed by 20-30 (28%), 41-50 (22%) and above 50 (8%). The distribution shows that the majority of the participants were in the active professional age groups. From the educational qualification point of view, 54% of the respondents had a master's degree, 32% had a bachelor's degree, and 14% had an MPhil or PhD qualification. As far as professional experience was concerned, 33% had 6-10 years of experience, 30% had 3-5 years of experience, 21% had less than 3 years of experience, and 16% had more than 10 years of experience. The sectorial distribution revealed that 26% of the respondents worked in the IT/software, 22% in banking, 20% in higher education, 16% in telecommunications, and 16% in professional services sector. The different sectors offered insights from workers in a range of different organizational settings where AI-enabled technologies are becoming more relevant to work.

Table 1. Demographic Profile of Respondents (N = 400)

Demographic variable	Category	Frequency	Percentage
Gender	Male	224	56.0%
	Female	176	44.0%
Age	20–30 years	112	28.0%
	31–40 years	168	42.0%
	41–50 years	88	22.0%
	Above 50 years	32	8.0%
Education	Bachelor's	128	32.0%
	Master's	216	54.0%
	MPhil/PhD	56	14.0%
Experience	Below 3 years	84	21.0%
	3–5 years	120	30.0%
	6–10 years	132	33.0%
	Above 10 years	64	16.0%
Sector	Banking	88	22.0%
	IT/software	104	26.0%
	Telecommunications	64	16.0%
	Higher education	80	20.0%
	Professional services	64	16.0%

Measurement Model Assessment

The measurement model was tested to check the reliability and convergent validity of the study constructs. Internal consistency was assessed using Cronbach's alpha and average variance extracted (AVE) was used to test convergent validity. Cronbach's alpha values ranged from 0.718 to 0.817 and composite reliability values ranged from 0.715 to 0.832 as presented in Table 2. These values were higher than the recommended value of 0.70, which means that there was satisfactory internal consistency. AVE values for Leader Intellectual Humility, Employee Voice and Leadership Legitimacy were 0.606, 0.632 and 0.583 respectively. Convergent validity was satisfactory with all three values being above the recommended minimum of 0.50. The results show that the constructs accounted for a sufficient amount of variance in the indicators.

Table 2. Reliability and Convergent Validity

Constructs	Cronbach's alpha	CR	AVE
Leader Intellectual Humility	0.718	0.832	0.606
Employee Voice	0.817	0.721	0.632
Leadership Legitimacy	0.724	0.715	0.583

In general, the reliability and AVE values reported were satisfactory for the constructs to meet the minimum recommended value for internal consistency and convergent validity. The measurement model was thus used as a foundation for moving on to the assessment of structural relationships.

Discriminant Validity

To assess the discriminant validity, the three constructs were tested to see if they were empirically distinct concepts. For this assessment, it was suggested that the heterotrait–monotrait ratio (HTMT) be taken into consideration. Table 3 shows that the HTMT values for Leader Intellectual Humility and Employee Voice, Leader Intellectual Humility and Leadership Legitimacy, and Employee Voice and Leadership Legitimacy were 0.572, 0.641 and 0.793, respectively. The constructs were found to have acceptable discriminant validity with all reported values being below the conservative value of 0.85. The value of the relationship between Employee Voice and Leadership Legitimacy was the highest (0.793) but still in the recommended range. This indicates that the constructs were correlated but measured different aspects of workplace behaviour and perceptions of leadership.

Table 3. Discriminant Validity (HTMT)

Constructs	LIH	EV	LL
Leader Intellectual Humility (LIH)	—		
Employee Voice (EV)	0.572	—	
Leadership Legitimacy (LL)	0.641	0.793	—

Source: Authors' analysis.

Collinearity Assessment

The variance inflation factor (VIF) was examined to assess potential collinearity concerns in the structural model. Table 4 presents the VIF values for the relationships. The VIF value for Leader Intellectual Humility and Employee Voice was 1.010, while the corresponding value for Leadership Legitimacy was 2.100. Both values were below the commonly applied threshold of 3.3, suggesting that collinearity was not a serious concern in the reported model. Therefore, the structural relationships could be assessed without evidence of problematic multicollinearity based on these values.

Table 4. Collinearity Assessment

Structural relationship	VIF
LIH → Employee Voice	1.010
LIH → Leadership Legitimacy	2.100

Explanatory Power of the Structural Model

The explanatory power of the structural model was assessed using the coefficient of determination (R^2) and adjusted R^2. The results are presented in Table 5. Employee Voice demonstrated an R^2 value of 0.510 and an adjusted R^2 value of 0.508. This indicates that Leader Intellectual Humility explained 51.0% of the variance in Employee Voice according to the reported model results. Similarly, Leadership Legitimacy achieved an R^2 value of 0.469 and an adjusted R^2 value of 0.467. This indicates that the model explained 46.9% of the variance in Leadership Legitimacy. The small differences between R^2 and adjusted R^2 suggest that the explanatory estimates remained relatively stable after adjustment. Overall, the reported R^2 values demonstrate that Leader Intellectual Humility has considerable explanatory relevance for understanding employee voice and leadership legitimacy in the investigated workplace context.

Table 5. Explanatory Power of the Structural Model

Endogenous construct	R^2	Adjusted R^2
Employee Voice	0.510	0.508
Leadership Legitimacy	0.469	0.467

Effect Size Assessment

The effect size (f^2) was analyzed to see how much the Leader Intellectual Humility construct contributes to the explanatory power of each endogenous construct. Cohen (2013) suggests that f^2 values of 0.02, 0.15 and 0.35 indicate small, medium and large effects, respectively. The relationship between Leader Intellectual Humility and Employee Voice resulted in an f^2 value of 0.449 (Table 6), which is considered as a large effect. The same is true for the correlation between Leader Intellectual Humility and Leadership Legitimacy with an f^2 value of 0.368, which is also a large effect. The results show that Leader Intellectual Humility is a significant contributor to the explanation of both employee voice and leadership legitimacy. The impact was relatively greater in the case of Employee Voice than Leadership Legitimacy.

Table 6. Effect Size Assessment

Relationship	f^2	Effect
LIH → Employee Voice	0.449	Large
LIH → Leadership Legitimacy	0.368	Large

Hypothesis Testing

The hypothesized relationships were evaluated using the bootstrapping procedure with 5,000 resamples. Path coefficients (β), t-statistics, and p-values were examined to determine the direction and statistical significance of the relationships. The results presented in Table 7 demonstrate that both hypothesized relationships were positive and statistically significant.

Table 7. Structural Model and Hypothesis Testing

Hypothesis	Relationship	β	t-value	p-value	Decision
H1	LIH → Employee Voice	0.557	12.846	<0.001	Supported
H2	LIH → Leadership Legitimacy	0.519	10.972	0.001	Supported

The results showed that there was a positive and statistically significant relationship between Leader Intellectual Humility and Employee Voice ($\beta = 0.557$, $t = 12.846$, $p < 0.001$), which was consistent with H1. The result indicates that the employees are more willing to make suggestions, share concerns and communicate work-related ideas when their leaders recognize their weakness and are open to the employees' knowledge and opinions. In the same way, H2 was positively correlated with statistically significant relationships with Leadership Legitimacy ($\beta = 0.519$, $t = 10.972$, $p = 0.001$). This finding suggests that when leaders are open to learning, acknowledge others' knowledge and expertise, and admit their own knowledge gaps, employees are more likely to believe that their leaders are legitimate. Compared to this, the path coefficient for Leader Intellectual Humility and Employee Voice ($\beta = 0.557$) was somewhat stronger than its path coefficient with Leadership Legitimacy ($\beta = 0.519$). However, both of these relationships were statistically significant, indicating the importance of intellectual humility for employee communication and employee perceptions of leadership authority in AI-enabled workplaces. Thus, both hypotheses were confirmed.

Discussion

This is the Leader Intellectual Humility and Employee Voice.

The results confirm H1, which suggests that there is a positive and statistically significant relationship between leader intellectual humility and employee voice ($\beta = 0.557$, $t = 12.846$, $p < 0.001$). This indicates that when leaders recognise their own lack of knowledge and value employee expertise, employees are more likely to share their ideas, concerns and constructive suggestions. This is especially crucial in AI-driven work environments, where staff members might have hands-on expertise with technology that surpasses that of their managers. The result is in line with Owens et al. (2013) who found that expressed humility is one of the leadership traits that is linked with positive organizational outcomes. Likewise, Morrison (2014) highlighted that the workplace environment and employees' attitudes towards managerial receptivity shape employee voice. Zou and Chen (2022) also noted the role that leader expressed humility plays in fostering employee voice. All of these views indicate that intellectually humble leaders foster a more comfortable atmosphere for employees to voice their opinions. Leaders' willingness to acknowledge employees' technological knowledge is crucial in the context of AI in the workplace. If the employees are aware of the use of AI, how the system can be improved, and where there are gaps in the system, they can provide valuable insights to the organization. If leaders recognize these contributions, rather than solely by their position, then staff might feel that their skills are appreciated. Thus, intellectual humility is an important leadership behavior that is linked to employee participation and positive communication.

Leader Intellectual Humility and Leadership Legitimacy

The results also confirm H2, which shows a positive and statistically significant correlation between leader intellectual humility and leadership legitimacy ($\beta = 0.519$, $t = 10.972$, $p = 0.001$). This suggests that when leaders are open, admit their own lack of knowledge, and accept subordinates' knowledge, employees are more likely to feel that leaders are legitimate. This relationship is in line with Suchman's (1995) definition of legitimacy as the perception that the authority and organizational actions are legitimate and acceptable. Tyler (2006) also noted that people comply with authority not when it is simply a matter of formal power, but when it is seen as legitimate. These views are especially important in an AI-integrated workplace, where workers might be more technologically savvy than their managers. The results indicate that leadership legitimacy is not solely based on technical expertise or on possessing a higher rank. Rather, leaders build credibility in their organizations by being intellectually open and appreciative of the contributions of their employees. This demonstrates respect, fairness and a desire to learn, and can help to reinforce acceptance of management authority among employees. With the changing nature of technology in the workplace, leaders are forced to make decisions in areas where their employees may know more about the practical aspects of the job. Leaders who are intellectually humble are able to accept these differences without compromising their leadership role. Leaders show that their authority is used for informed and respectful decision making, not through hierarchy alone, by being open to employee knowledge and expertise and taking on board other viewpoints.

Combined, the results point to the importance of leader intellectual humility as a leadership trait that is linked to employee voice and leadership legitimacy in AI-enabled workplaces. Positive relationships suggest that accepting gaps in knowledge and understanding and recognising employees' expertise improves communication in the workplace and employees' sense of legitimate leadership authority. The relationship between employee voice and the other relationships were comparatively stronger than the relationship between leadership legitimacy ($\beta = 0.557$) and the other relationships ($\beta = 0.519$). The results were also explained by using the Social Exchange Theory (Blau, 2017). Leaders who show respect, value employee knowledge and are open to other viewpoints may be perceived as supportive treatment by employees. These perceptions foster responses in turn, such as increased willingness to share ideas and increased acceptance of authority of the leader. Additionally, the study contributes to the discourse on humble leadership by examining the evolving landscape of technological knowledge in AI-driven work environments. It links employee voice research to leadership legitimacy, and emphasizes the importance of leaders keeping their credibility in the organization while acknowledging that employees may have knowledge and skills outside of their own. Overall, the results indicate that intellectual humility is not an indication of a lack of managerial authority, but rather of increased employee participation and increased acceptance of managerial authority in technologically changing organizational contexts.

Conclusion and Recommendations

The effect of Leader Intellectual Humility on Employee Voice and Leadership Legitimacy in AI-enabled workplaces was explored in this study. The results confirmed both hypotheses, as leader intellectual humility was found to be positively and significantly related to both outcome variables. Specifically, employee voice ($\beta = 0.557$, $p < 0.001$) and leadership legitimacy ($\beta = 0.519$, $p = 0.001$) were found to be positively related to leader intellectual humility. The results emphasize the significance of leadership behavior in organizations where traditional knowledge, expertise, and managerial authority are being reshaped by the use of artificial intelligence. Staff can become more hands-on with the use of AI and digital technologies than their managers. In such situations, leaders who recognize that they do not know everything, value employee knowledge, and are willing to learn build more positive relationships at work. The study shows that intellectual humility is not just a factor that facilitates employees' expression of ideas and concerns, but also enhances their sense of legitimate leadership. The results align with the tenets of the Social Exchange Theory, which indicates that positive employee responses are linked to respectful and receptive leadership behaviour. The study adds to the body of humble leadership literature by emphasizing the importance of intellectual humility in an AI-driven world, where leaders must be open, willing to learn, and acknowledge the skills of their employees.

Develop intellectually humble leadership: Organizations can incorporate intellectual humility into leadership development programmes. Managers should be encouraged to admit to their lack of knowledge, take constructive criticism and appreciate the professional and technological skills of employees. Promote employee input: Create positive communication avenues for employees to provide their ideas, ideas, and concerns about the challenges of implementing AI. Feedback sessions and participative decision making can help to involve employees. Encourage collaborative technological learning: Leaders should foster the sharing of knowledge between managers and employees, especially where employees have more hands-on experience with certain AI applications. Organizational understanding can be enhanced through collaborative training and technology related discussions. Enhance the legitimacy of leadership: Managers must be seen as fair, transparent and open in their decision making on AI-driven processes. Appreciating employee efforts and taking other perspectives can improve employees' buy-in of managerial authority. Use humility as a part of the assessment of managerial performance: Human resource departments should take into account employees' perceptions of the openness of managers, receptiveness to feedback, and recognition of employees' expertise when evaluating managerial performance. Longitudinal research designs could be used in future studies to explore the relationship between leader intellectual humility and employee voice and leadership legitimacy over time. Other factors to explore are psychological safety, trust in leadership, employee AI literacy, and perceived technological competence. Comparative studies between industries and countries may give further insights into the relationships between organizational and cultural differences. Overall, the research highlights that effective leadership in an AI-driven work environment goes beyond mere authority. Intellectual humility, openness to learning and recognition of employee expertise are important leadership behaviours related to employee participation and leadership legitimacy.

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