The Dark Side of AI-Augmented Leadership: Authoritarian Leadership as A Boundary Condition

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ABSTRACT

Purpose

This study aims to investigate the influence of AI-augmented leadership on employee well-being in the Middle East and North Africa (MENA). It examine the moderating effect of authoritarian leadership styles.

Design/methodology/approach

A quantitative study was conducted using data collected from a survey of 104 professionals in Tunisia, Egypt, and Saudi Arabia. This research applied the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique to test the proposed conceptual framework.

Findings

The results indicate that AI-augmented leadership significantly improves employee well-being. However, moderation analysis reveals that authoritarian leadership weakens this positive relationship. Specifically, when authoritarian leadership dominates, the stress-reducing benefits of using AI are considerably diminished.

This highlights the impact of cultural leadership norms on the effectiveness of AI-based management approaches.

Originality/value

This study stands out as one of the earliest to empirically examine the interplay between AI technologies, leadership behavior, and employee well-being within the relatively unexplored MENA region. It introduces a human-centric, region-specific model of technology leadership, effectively responding to the critical demand for ethical and inclusive frameworks for AI adoption in both public and private sectors navigating digital transformation.

Keywords: AI-augmented leadership, employee well-being, authoritarian leadership, MENA region

INTRODUCTION

The rapid development and ubiquity of artificial intelligence (AI) is profoundly transforming organizational structures and leadership styles. As AI becomes increasingly integrated into strategic and operational processes, it is crucial for leaders to master the complexities of human-machine collaboration (Dwivedi et al., 2023; Jussupow et al., 2023). This evolution necessitates a re-evaluation of traditional leadership approaches, citing the example of AI-augmented leadership, where human capabilities are enhanced, supported, or partially delegated to intelligent technologies (Dellermann et al., 2022).

Recent research in work and organizational psychology and organizational behavior suggests that AI-driven management practices are transforming the social dynamics between leaders and employees (Zhang & Liu, 2024; Hauff et al., 2023). These studies demonstrate the extent to which employee well-being is influenced by how

AI-augmanted leadership is exercised and the contribution of AI tools to reducing workload, clarifying expectations, and supporting decision-making.

The applicability of these new leadership paradigms remains uncertain in non-Western contexts, which are characterized by distinct cultural and institutional norms. Leadership practices are not applied uniformly across cultural contexts; their effects are conditioned by social expectations related to authority (Harms et al., 2022 ; Metcalfe, 2023).

In the MENA region, governments and organizations are accelerating the adoption of AI as part of their digital transformation programs. Initiatives such as Saudi Arabia's National Strategy for Data and AI (2020), Tunisia's SmartGov program, and Egypt's Vision 2030 demonstrate strong institutional support for AI-driven modernization, often targeting public services and state-owned enterprises (OECD, 2023).

MENA is a theoretically distinct context where institutional pressures coexist with traditional power structures. According to sociotechnical systems theory (Trist and Bamforth, 1951), the success of technology adoption depends on the alignment between social systems (such as leadership) and technical systems. In practice, this alignment remains fragile in many organizations in the MENA region, potentially reinforcing authoritarian leadership dynamics rather than empowering employees (Olan et al., 2022 ; Kshetri, 2023).

The Job Demands–Resources (JD-R) framework offers valuable insights into these dynamics, highlighting AI as either a resource capable of alleviating stressors or as a demand that could heighten pressure, depending on how it is managed (Bakker & Demerouti, 2017; Meijerink et al., 2022). Notably, prevalent leadership styles in the region—especially authoritarian approaches—play a crucial role in determining whether AI is deployed to assist employees or to reinforce monitoring and control (El Sawy et al., 2022).

This study contributes to the literature on AI and leadership by proposing a contextualized framework that examines how AI-augmented leadership influences employee well-being, while explicitly considering authoritarian leadership as a boundary condition. This research aims to empirically test a model linking AI-augmented leadership to employee well-being within local organizations in Tunisia, Egypt, and Saudi Arabia—three countries experiencing rapid AI integration.

The model further investigates how authoritarian leadership modulates this relationship. Data were collected from 104 professionals working in public and private organizations in these three countries.

LITERATURE REVIEW

AI-Augmented Leadership

The emergence of artificial intelligence (AI) is profoundly changing how leadership is exercised in modern organizations. AI-augmented leadership refers to the integration of intelligent technologies into the roles and responsibilities of leaders. These technologies can support managerial capabilities in areas such as communication, control, performance evaluation, and strategic planning (Dellermann et al., 2022). Rather than replacing human leadership, AI acts as a lever for optimization; it improves management, strengthens the consistency of decisions, and enables the scaling of managerial practices (Jussupow et al., 2023). For example, AI can propose strategic scenarios or anticipate trends. A recent study by Zaman (2025) describes a model of "agentic leadership," where AI is a decision-making companion that supports autonomous decision-making and strategic vision, while maintaining a human dimension. Other research shows how AI can alter power dynamics within organizations by automating certain decision-making tasks (Joshi, 2025).

Finally, the adoption of AI in leadership raises institutional and cultural issues. In this sense, AI-augmented leadership presents a dual challenge: leveraging technical skills while preserving the human and ethical integrity of the leadership role.

Employee Well-Being

According to Bakker and Oerlemans (2011), well-being at work results from the combination of feelings of satisfaction and pleasure (hedonic dimension) and optimal functioning (eudaimonic dimension). It encompasses various aspects such as life satisfaction, positive and negative emotional states, autonomy, personal development, and the quality of social relationships.

According to the International Labour Organization, well-being at work refers to a state encompassing the entire professional experience, including the physical environment, perceptions of work, and the organizational climate. Today, it is increasingly seen as a strategic objective for companies (Brough et al., 2023; Grant, 2022). Research by Taris and Schaufeli (2015) and by Page and Vella-Brodrick (2009) identifies four key dimensions for measuring this well-being: positive affect, negative affect, life satisfaction, and job satisfaction. Furthermore, Bakker and Oerlemans (2012) describe well-being at work as a multidimensional phenomenon based on optimal functioning, combining job satisfaction, engagement, burnout, and work addiction. This highlights that this experience can include both pleasant and unpleasant aspects. Diener and Ryff differentiate between two main axes: subjective well-being, based on life satisfaction and emotional balance, and eudaimonic well-being, focused on personal fulfillment, development, and individual growth. Finally, according to Grant et al. (2020), well-being results from a combination of hedonic and eudaimonic perspectives, while also integrating social dimensions and external influences such as culture, community, nature, and governance on employees. The Job Requirements and Resources (JDR) model, proposed by Bakker and Demerouti in 2017, provides a robust and relevant theoretical framework for examining the effects of AI on employee well-being. In this model, leadership is viewed as a resource capable of reducing negative job demands while strengthening work engagement (Bakker et al., 2023). Consequently, it plays a key role as a moderator in managing these dynamics, significantly influencing the impact of AI on employee well-being, either amplifying or mitigating it (Meijerink et al., 2022).

The Moderating Role of Authoritarian Leadership

Authoritarian leadership is characterized by strong discipline, centralized authority, and strict control over subordinates. This type of leadership demands rigid and strict work standards (Karakitapoğlu-Aygün et al., 2021). According to Chiang et al. (2020), this style exerts high pressure on subordinates, thus limiting their confidence and ability to act independently.

According to Farh and Cheng (2000), authoritarian leadership is characterized by a style in which the leader exercises total control, makes all crucial decisions without consultation, and imposes authority unilaterally. This type of leadership relies on the leader's dominance, highly centralized authority, and a notable lack of delegation to team members.

Furthermore, authoritarian leadership can stifle innovation and creativity, restrict autonomy, and harm employee well-being (Pan et al., 2023). Indeed, when an authoritarian leader uses AI as a means of control or surveillance, they can undermine the benefits that AI-augmented leadership might offer, notably by increasing stress and reducing freedom of initiative.

Recent studies, however, suggest that the impacts of authoritarian leadership are not always uniform. For example, Zhao, Su, Lou, and Zhang (2022) identified a form of authoritarian leadership focused on discipline, which can, under certain circumstances, foster employee creativity. This occurs through creative self-efficacy, particularly when strategic events enhance the critical importance of the leader's role.

Furthermore, Nawaz, Usman, Ul Mulk, Ahmad, and Shahzad (2022) indicate that this type of leadership can have a positive effect on employee performance and role clarity. These effects are particularly noticeable in organizations characterized by a high power distance, as is often the case in some companies located in the Middle East.

In short, although authoritarian leadership is often perceived negatively, some research shows that it can be mitigated if the leader possesses high competence, as mentioned in a longitudinal study that demonstrated that a

leader's competence moderates the negative impact of their authoritarianism on employee affective commitment and performance.

The MENA Region: A Unique Context for AI and Leadership

Many countries, such as Saudi Arabia, Egypt, and Tunisia, have explored AI, but empirical research in the MENA region remains scarce. Furthermore, organizational cultures often lean toward hierarchical leadership, meaning employees will have limited influence over technological changes (OECD, 2023). This makes the region a unique context for studying the practical operation of AI-augmented leadership and its impact on human factors such as trust, stress, and well-being.

This study empirically examines the relationships between AI-augmented leadership, employee well-being, and, more specifically, the moderating role of authoritarian leadership in organizations in the MENA region.

Theoretical Framework and Hypotheses Development

This study aims to develop a multidimensional model that establishes a link between AI-augmented leadership and employee well-being. It is based on the Job Demands and Resources (JD-R) theory proposed by Bakker and Demerouti in 2017, as well as the situational and contingency leadership approaches developed by Fiedler in 2023. However, it goes beyond these classic frameworks by integrating an institutional and cultural perspective to better understand the specific interactions between leadership, technology, and well-being in the MENA region.

Drawing on theories of intercultural organizational behavior (Gelfand et al., 2021) and sociotechnical systems thinking (Brougham et al., 2024), it is argued that the integration of artificial intelligence interacts with leadership culture and the degree of power distance, thus directly influencing employee well-being.

Theoretical Foundation: Job Demands–Resources and Augmented Leadership

In rapidly changing digital environments, AI systems can act as both a resource and a requirement, depending on how they are deployed and perceived by employees (Meijerink et al., 2022; Dwivedi et al., 2023).

This model explains how job resources such as benevolent leadership and fair practices and job demands (e.g., AI monitoring, digital overload) influence employee outcomes such as well-being, stress, and engagement.

The JD-R framework offers a foundational but incomplete explanation when applied globally. As noted by Hauff et al. (2023), contextual variables such as national culture, power asymmetry, and institutional expectations moderate how resources (e.g., leadership support, AI tools) influence well-being. In high power-distance cultures like MENA (Hofstede, 2023), leaders often act as gatekeepers of resources, shaping whether AI is perceived as empowering or controlling. Thus, AI-augmented leadership can become either a job resource or a job demand depending on cultural alignment and leadership behavior.

Within the framework of leadership practices, we consider perspectives from augmented leadership (Dellermann et al., 2022), which emphasize that AI technologies tend to enhance managerial decision-making rather than replace it. By leveraging AI to optimize communication, feedback, and fairness, leaders can appear more competent and transparent (Jussupow et al., 2023), contributing to a safer and more collaborative work environment.

To adapt this logic to MENA organizations, we integrate insights from socio-technical systems theory, which emphasizes the mutual adaptation between social structures (e.g., leadership, norms) and technological infrastructures (Trist & Bamforth, 1951; Brougham et al., 2024). In societies where leadership authority is centralized, such adaptation may be asymmetrical: AI serves to reinforce existing hierarchies rather than to decentralize control. This makes the MENA context theoretically significant, as it tests the boundary conditions of JD-R and leadership theories that were primarily validated in Western, low power-distance environments (Harms et al., 2022).

This study is primarily based on the Job Demands-Resources (JDR) model developed by Bakker and Demerouti in 2017. This model explores how job resources, such as benevolent leadership or fair practices, as well as demands such as artificial intelligence surveillance or digital overload, influence key aspects such as employee well-being, stress, and engagement. In the context of environments marked by digital transformation, AI systems can simultaneously play the role of a resource or constitute a requirement, depending on the modalities of their implementation and the perception that employees have of them (Meijerink et al., 2022; Dwivedi et al., 2023).

AI-Augmented Leadership and Employee Well-Being

Employee well-being in IO psychology refers to a multidimensional construct encompassing hedonic (affective) and eudaimonic (functional) well-being, including autonomy, engagement, and perceived purpose (Grant et al., 2020; Brough et al., 2023).

While AI technologies are often linked to process improvement, their influence on well-being depends heavily on how managers integrate and manage these tools (George et al., 2022). By leveraging AI, leaders can limit areas of uncertainty, enhance the quality of feedback, and encourage more inclusive communication, particularly through increased transparency in algorithms (Ransbotham et al., 2023).

The concept of AI-augmented leadership refers to practices where AI is used to strengthen decision-making, improve communication, optimize monitoring, and foster team development (Dellermann et al., 2022). Far from seeking to replace leaders, artificial intelligence enhances their cognitive abilities, enabling a more responsive and data-driven management style (Jussupow et al., 2023). However, the impact of AI-augmented leadership on employee well-being depends not only on efficiency gains but also on how employees perceive the use of this technology, particularly in terms of fairness, transparency, and trust.

Recent research indicates that the use of technology in leadership can have a positive impact on well-being by strengthening perceptions of competence, autonomy, and fairness (Meijerink et al., 2022; Hauff et al., 2023). Consistent with JD-R theory, AI-augmented leadership is presented as a professional resource capable of promoting psychological health, provided it is implemented inclusively and with an ethical approach.

H1: AI-augmented leadership is positively associated with employee well-being.

Moderating Role of Authoritarian Leadership Style

An authoritarian leadership style, often marked by centralized control, reduced upward communication, and unilateral decision-making, risks hampering the benefits of psychological safety and fairness, particularly in technological environments.

Integrating contingency and cultural leadership theories (House et al., 2024), this study conceptualizes authoritarianism as a contextual moderator that shapes the translation of AI leadership into psychological outcomes. While AI tools can enhance communication and fairness in participatory settings, they may instead strengthen control and stress in authoritarian systems. This cultural contingency is central to understanding the boundary conditions of AI leadership effectiveness in the MENA region.

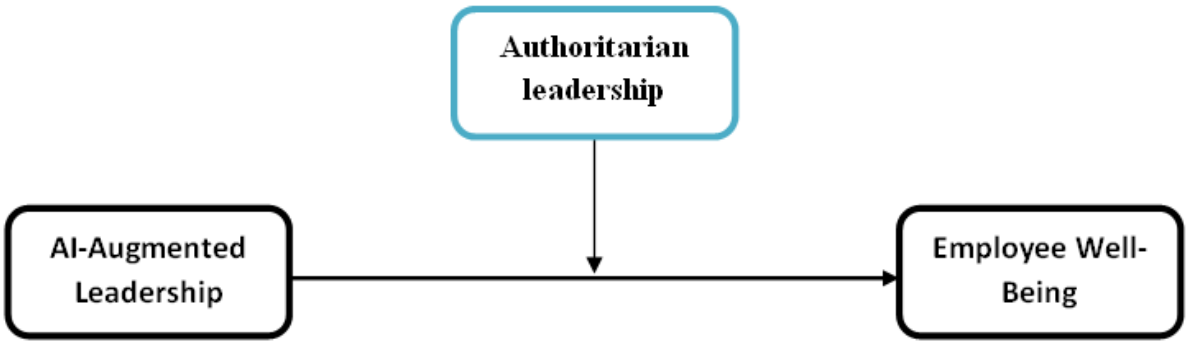
In many companies located in the MENA region, the adapted leadership styles are authoritarian, marked by a high degree of control, rigid hierarchy, and limited employee involvement, and risk limiting the benefits that AI could offer. Although integrating AI into leadership can generate positive results, its effectiveness remains closely linked to the overall leadership conditions within organizations. This type of approach can intensify stress within teams and reduce perceptions of fairness (Olan et al., 2022; Kshetri, 2023). In these contexts, employees may not view AI as an opportunity for empowerment, but rather as a tool intended to strengthen control mechanisms.

According to Sarma and Braganza (2023); Employees in these regions may perceive AI tools more as surveillance than as support mechanisms. This negative perception may thus limit the positive impact that psychological safety and fairness could have on employee well-being.

In short, leadership culture, particularly in societies with significant power distance, such as those in the MENA region, exerts a decisive influence on the adoption and integration of artificial intelligence (AI) (Olan et al., 2022 ; Hofstede Insights, 2023).

H2: Authoritarian leadership moderates the relationship between AI-augmented leadership and employee well-being

Figure 1: The research model



METHODOLOGY

Research Design

Given the exploratory and predictive nature of the research design, a survey methodology was adopted to collect data from employees of several organizations in the MENA region.

A structured questionnaire was developed and distributed to professionals working in public and private sector organizations undergoing digital transformation in three MENA countries: Tunisia, Egypt, and Saudi Arabia.

Sampling and Data Collection

The study collected data via an online questionnaire targeting employees and leaders in public and private sector organizations across Tunisia, Egypt, and Saudi Arabia. These countries were chosen for their advanced digital transformation initiatives and culturally diverse environments. To ensure meaningful results, a purposive sampling strategy was employed, specifically focusing on individuals actively engaged in or influenced by AI-driven leadership practices. This method aimed to gather nuanced insights into the effects of AI integration in professional settings. Following data cleaning, the final sample consisted of 104 valid responses. Data collection took place between December 2024 and April 2025, utilizing both online surveys and printed questionnaires disseminated through professional networks, academic alumni groups, and organizational human resources departments. The purposive sample targeted knowledge workers, mid-level managers, and senior professionals familiar with the use of AI tools in their work environments. While a total of 137 responses were initially received, incomplete or invalid submissions were excluded, leaving 104 usable responses for analysis. Participants represented various industries including finance, healthcare, education, manufacturing, and public administration. The gender distribution was approximately 58% male and 42% female, with 63% of respondents employed in the private sector and 37% in the public sector. Notably, over 70% of respondents reported frequent interaction with AI-enabled systems such as chatbots, data analytics platforms, and AI-enhanced decision-making tools. Geographically, 43 respondents were based in Tunisia, 31 in Egypt, and 30 in Saudi Arabia.

Measurement Instruments

The questionnaire included validated scales adapted to the study context, all measured on a **5-point Likert scale** (1 = strongly disagree to 5 = strongly agree):

- **AI-Augmented Leadership**: Measured using a 6-item scale adapted from Dellermann et al. (2022) and Jussupow et al. (2023), capturing leader reliance on AI tools in decision-making, communication, and monitoring.

- **Authoritarian Leadership Style**: Measured using a 5-item scale adapted from Cheng et al. (2004), capturing control and hierarchical leadership traits.

- **Employee Well-Being**: Measured using a 7-item scale adapted from Danna and Griffin (2022), capturing affective and cognitive aspects of well-being at work.

Data Analysis

The data analysis followed a two-stage approach consistent with best practices for structural equation modeling:

1. **Measurement Model Assessment:** 1. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to test the measurement model and structural paths using SmartPLS 4.0. This method was chosen due to its suitability for exploratory models with latent constructs, small-to-medium sample sizes, and moderation effects (Hair et al., 2023). Measurement model validity was assessed through indicator reliability, composite reliability, average variance extracted (AVE), and discriminant validity (Fornell-Larcker and HTMT criteria).

2. **Structural Model Testing:** Hypotheses were tested using bootstrapping with 5,000 resamples to assess path coefficients, significance, effect sizes (f^2), and predictive relevance (Q^2).

Justification for Using SmartPLS

SmartPLS, a variance-based structural equation modeling tool, was selected for several reasons:

- It performs robustly with moderate sample sizes, such as the 104 responses in this study, unlike covariance-based SEM, which typically demands larger samples (Hair et al., 2019).

- It is well-suited for analyzing complex models that incorporate moderation effects.

- It accommodates the expected data distribution in the MENA context by not requiring strict normality assumptions (Sarstedt et al., 2020).

- It includes bootstrapping procedures that enable reliable significance testing for both indirect and interaction effects (Ringle et al., 2020).

RESULTS

Descriptive Statistics

The study involved 104 respondents, comprising employees from public and private sector organizations across Tunisia, Egypt, and Saudi Arabia. Participants were between the ages of 25 and 55, with a gender distribution of 62% male and 38% female. Around 54% held mid-level managerial roles, while 46% worked in front-line positions. Nearly 68% indicated that AI technologies were actively integrated into their workplaces, particularly for tasks such as performance tracking, scheduling, and supporting decision-making processes.

Measurement Model Assessment

To assess construct validity and reliability, the measurement model was evaluated using SmartPLS 4.0.

Table 1. Reliability and Convergent Validity of the Constructs

Construct	Cronbach's Alpha	Composite Reliability	AVE
AI-Augmented Leadership	0.87	0.91	0.63
Authoritarian Leadership	0.83	0.87	0.59
Employee Well-Being	0.91	0.93	0.68

All loading values exceeded 0.70 and discriminant validity was confirmed using both the Fornell–Larcker criterion and HTMT ratio (<0.85).

Structural Model Results

The structural model was evaluated using bootstrapping (5,000 resamples). The path coefficients, t-values, and p-values are shown below:

Table 2. Hypotheses Testing Results

Hypothesis	Path	β (Beta)	t-value	p-value	Result
H1	AI-Augmented Leadership → Well-Being	0.32	3.84	<0.001	**Supported**
H2	Authoritarian Leadership (moderator) × AI-Augmented Leadership → Employee Well-Being	–0.22	2.15	0.032	**Supported**

Moderation Effects

Moderation analyses revealed that an authoritarian leadership style negatively influenced the following relationships: employee well-being - AI-augmented leadership. These results suggest that in environments characterized by authoritarian leadership, the beneficial effects of AI-augmented leadership are diminished.

DISCUSSION

This research aimed to examine the impact of AI-augmented leadership on employee well-being, highlighting the moderating role of authoritarian leadership style in MENA-based organizations. The findings provide robust empirical support for a majority of hypotheses and provide valuable insights into the implications of human-centered implications of AI-augmented leadership in developing digital economies.

Main Findings

First, consistent with previous research (Dellermann et al., 2022; Dwivedi et al., 2023), the results confirm that AI-augmented leadership positively influences employee well-being, both directly and indirectly. Leaders who integrate AI to improve decision-making, transparency, and communication report higher job satisfaction, reduced stress, and a fairer perception of their management. These observations support the idea that AI, when deployed ethically and strategically, can serve as a valuable resource in the workplace (Meijerink et al., 2022; Bakker and Demerouti, 2017).

Authoritarian leadership style was shown to moderate key relationships. In highly authoritarian environments, the positive impacts of AI-augmented leadership on psychological safety and perceived fairness were attenuated, consistent with the findings of Olan et al. (2022) and Kshetri (2023). These findings highlight the need to consider contextual leadership culture, particularly in hierarchical or paternalistic systems typical of many organizations in the MENA region.

Short, this study confirms and expands on the findings established in the Global North on several key points. Similar to the work of Jussupow et al. (2023), it highlights that human-AI collaboration in leadership can generate positive results, but only if it is based on ethical leadership behavior. Unlike in Western contexts, where transformational leadership predominates, this research reveals that authoritarian leadership can reduce or even reverse the benefits provided by AI, particularly in cultures marked by high power distance (El Sawy et al., 2022).

Practical and Theoretical Implications

This study adds valuable insights to the expanding research at the crossroads of artificial intelligence, leadership, and employee well-being, offering several significant theoretical implications. It enhances the understanding of AI leadership within specific contexts. In the MENA region, where leadership tends to be centralized, access to digital technologies remains unequal, and employee participation is often limited, the use of AI tools carries the risk of reinforcing existing power dynamics if not implemented with care. The results suggest that unless leadership evolves toward greater inclusivity and transparency, the ethical and psychological challenges posed by AI could surpass its potential benefits in terms of efficiency.

The moderating role of authoritarian leadership highlights the importance of contextual and cultural variables in leadership and AI research. This observation supports the arguments of researchers such as Metcalfe (2023) and Kshetri (2023) for a more localized and culturally adapted understanding of digital transformation in non-Western contexts. In particular, the identified negative moderating effects indicate that distance and hierarchical rigidity can neutralize the developmental benefits of AI, if not intentionally addressed.

Managerial Implications

The findings offer several practical insights for organizational leaders, HR professionals, and policymakers in the MENA region and similar emerging economies.

Organizations should treat AI-augmented leadership not as a technical solution but as a strategic capability that requires ethical training, change management, and human-centered implementation. Leaders should be trained to use AI tools in ways that promote transparency, reduce ambiguity, and invite employee participation.

In some industries in the MENA region, authoritarian leadership styles often remain deeply entrenched. It is crucial for senior leadership teams to evaluate these practices and move toward more inclusive and participatory leadership. This transition will not only increase the effectiveness of AI tools but also strengthen organizational resilience and employee well-being.

Finally, policymakers in nations aspiring to digital transformation must establish regulatory frameworks and promote educ literacy initiatives aimed at ethical AI adoption. Partnerships between governments and industry sectors can help develop ethical standards for the use of AI in leadership and human resources, ensuring that this innovation brings tangible benefits to human development.

Limitations, Future Research and Conclusion

This study opens promising avenues for future research. Further analysis of the interactions between AI technologies and leadership styles, taking into account diverse cultural contexts and organizational levels, would be valuable. Longitudinal and experimental approaches could provide a better understanding of how these dynamics evolve over time. Furthermore, it would be worthwhile to investigate the influence of other contextual factors such as trust in AI, digital maturity, and organizational transparency.

From a practical perspective, the results demonstrate that the successful integration of AI is not merely a technical challenge but also a leadership imperative. Companies seeking to maximize the benefits of AI will need to invest in strengthening managerial skills, fostering employee engagement, and designing systems that prioritize fairness. In regions like MENA, where authoritarian leadership sometimes remains dominant, it is

essential to promote more participatory and inclusive management practices while firmly committing to digital transformation initiatives.

In conclusion, the human impact of AI in organizations depends as much on the technology itself as on how it is implemented, managed, and understood. Human-centered leadership, guided by ethical principles and cultural sensitivity, is crucial for transforming innovation into a source of well-being.

Despite the contributions of this study, certain limitations must be acknowledged, paving the way for future investigations.

First, this research uses a cross-sectional design, limiting the possibility of inferring causal relationships. Nevertheless, the objective was exploratory and theoretical rather than confirmatory. The use of PLS-SEM is appropriate for testing preliminary models and laying empirical groundwork for future longitudinal validations.

Second, while the MENA region offers a rich and relatively unexplored context, it is not culturally homogeneous. Variations between countries in terms of power distance, institutional trust, and digital maturity likely influence leadership-AI interactions. Comparative and multi-level studies could better clarify these effects.

Third, the quantitative methodology used allows for hypothesis testing and model validation, but may be limited in capturing the subjective and emotional dimensions of employees' perceptions of AI. Qualitative approaches, such as in-depth interviews or focus groups, could enrich our understanding of the relational and ethical challenges of AI integration.

Finally, future research could examine other psychological mechanisms, such as perceived empowerment, algorithmic transparency, and trust in AI, to better understand the impact of AI-augmented leadership on employee well-being.

In summary, this study makes a theoretical contribution by situating AI-augmented leadership within institutional and intercultural contexts, and a methodological one by demonstrating the exploratory validity of PLS-SEM in emerging regions. Future longitudinal or experimental research will be essential to establish causal pathways and refine the conditions for the effectiveness of AI-augmented leadership.

This study aimed to explore the impact of AI-augmented leadership on employee well-being in the MENA region, focusing on the role of authoritative leadership. Based on the Job Demands-Resources (JD-R) framework and recent research on human-AI collaboration, a conceptual model was developed and empirically tested using data collected from 104 professionals in Tunisia, Egypt, and Saudi Arabia. This research makes several important contributions. First, it presents AI-augmented leadership as an innovative and influential concept in the fields of organizational behavior and digital transformation. Second, it highlights the importance of authoritative leadership in determining the effectiveness of AI adoption, particularly in hierarchical and culturally complex contexts such as those observed in the MENA region.

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