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Entrepreneurial and Inclusive Leadership in Enhancing Employee Innovation in the UAE Oil and Gas Sector

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ABSTRACT

This study examines the critical role of leadership and innovation in fostering innovative behavior among employees within the UAE oil and gas industry. Using a **quantitative approach,** the research analyzes the relationships between knowledge sharing, psychological empowerment, entrepreneurial leadership, inclusive leadership, and job insecurity with employee innovative behavior. Additionally, it investigates the moderating effects of nationality, verbal rewards, and material rewards on these relationships. Data were collected through a survey of 380 employees across various oil and gas companies in the UAE and analyzed using Structural Equation Modeling (SEM). The **findings** reveal that knowledge sharing, psychological empowerment, entrepreneurial leadership, and inclusive leadership all have a significant positive impact on employee innovative behavior, while job insecurity negatively affects innovative behavior. Nationality was found to moderate the relationship between knowledge sharing and innovation, while verbal rewards negatively moderated the relationship between entrepreneurial leadership and innovation. Material rewards had no significant effect. These findings emphasize the importance of entrepreneurial and inclusive leadership in creating an innovative organizational culture, as well as the role of psychological empowerment and knowledge sharing in driving innovation, while job insecurity can hinder employee creativity. **The study provides insights** for organizations to foster a supportive environment that enhances innovation and sustains competitiveness.

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1. INTRODUCTION

The oil and gas industry remains a cornerstone of the global economy, and for countries like the UAE, it is a primary driver of national economic prosperity. However, global market dynamics, including fluctuating oil prices and the increasing push for sustainable, environmentally friendly energy sources, are placing unprecedented pressure on this sector. In this highly competitive and volatile environment, the capacity for continuous innovation is no longer a luxury but a necessity for organizational survival and sustained competitive advantage. The industry's future success hinges on its ability to adapt and evolve through the implementation of new technologies, processes, and business models, all of which are products of employee innovation.

Corporate innovation is intrinsically linked to individual employee innovation, as the collective inventive behavior of the workforce forms the bedrock of organizational progress [1]. This necessitates a more

profound understanding of the factors that cultivate innovative work behavior among employees, especially within the unique socio-economic context of the UAE's oil and gas sector [2]. This study specifically examines how leadership styles, psychological empowerment, knowledge sharing, and job insecurity affect employees' innovative behavior, considering the multicultural workforce and reward systems prevalent in the region [3].

Figure 1. SDG 8 and SDG 9

This study also aligns with the United Nations Sustainable Development Goals (SDGs), particularly SDGs 8 (Decent Work and Economic Growth) and SDGs 9 (Industry, Innovation, and Infrastructure). The UAE's oil and gas sector plays a critical role in the national economy, and fostering innovation within this sector is essential for sustainable economic growth. By exploring the relationship between leadership styles and employee innovation, this research contributes to enhancing inclusive economic growth and improving industry standards. Moreover, the findings emphasize the importance of creating inclusive work environments that support decent work and economic empowerment, directly supporting SDGs 8. Additionally, the study highlights how innovation is crucial for developing resilient industries, aligning with SDGs 9, as it calls for the strengthening of industry infrastructure and innovation practices.

Innovation is a human-driven process, crucial for organizational success, encompassing idea generation and implementation. However, research often neglects the behavioral drivers of innovation, particularly in the UAE's oil and gas sector, where traditional leadership styles hinder innovation. Stimulating innovative behavior is vital for organizational performance and long-term success in this challenging sector [4, 5]. Globally, organizations recognize innovative work behavior as essential for gaining a competitive edge and sustainable growth, particularly in knowledge-intensive industries [6, 7].

This study fills this gap by providing a robust analytical framework designed to explore how specific leadership styles and crucial organizational variables can effectively cultivate innovative behaviors among employees. While studies in Asia and Europe, such as those by [4] and [6], have examined leadership and innovation, they often overlook the region-specific variables that influence behavior within the UAE's oil and gas sector. This research uniquely integrates the cultural and organizational characteristics of the UAE to offer a tailored leadership model that promotes innovation in a highly competitive and culturally diverse environment. The purpose of this research is to shed light on the delicate interplay that exists between leadership styles, employee behavior, and the ultimate innovation outcomes. This will be accomplished by concentrating on frontline professionals working within the dynamic oil and gas business. It seeks to determine the extent to which leadership approaches, such as entrepreneurial and inclusive leadership, can foster an environment conducive to innovative behavior, while also considering factors such as psychological empowerment, knowledge sharing, and job insecurity [8, 9].

2. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This study addresses the gap in existing literature by specifically focusing on the leadership styles and innovation behaviors unique to the UAE's oil and gas sector, which is shaped by its distinct socio-economic and cultural dynamics. While previous research has explored leadership and innovation broadly, the socio-cultural nuances of the UAE such as the interplay of nationalities, the impact of hierarchical structures, and the diverse reward systems in play have often been overlooked. By examining the intersection of entrepreneurial and inclusive leadership with the unique organizational context of the UAE, this research highlights how leadership

styles can directly influence employee innovation in ways that are not only culturally contextual but also deeply embedded in the region's evolving economic landscape. Recent studies such as those by [4] and [7] provide a backdrop for this analysis, but they fall short of fully addressing how UAE's oil and gas sector marked by its reliance on multicultural teams and a volatile market necessitates tailored leadership approaches to foster innovation. This study, therefore, extends the current body of work by providing a comprehensive model that integrates leadership, psychological empowerment, knowledge sharing, and job insecurity, with a focus on the UAE's specific industry and cultural context.

2.1. Theoretical Underpinning

This study is based on Entrepreneurial Leadership Theory by [10], which emphasizes leaders inspiring followers through purpose, faith, and vision. Key components idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration create an environment where employees are empowered to exceed expectations through creativity and innovation. Entrepreneurial leaders foster psychological ownership, boosting innovative work behaviors [8, 11]. Similarly, Inclusive Leadership Theory highlights leaders who value diverse perspectives, fostering belonging and psychological safety to encourage novel ideas and calculated risks [12].

This study also draws upon Social Exchange Theory, which suggests that a reciprocal relationship between an employer and employee, facilitated by trust and fair treatment, can lead to positive behavioral outcomes like innovative behavior [13–15]. When employees perceive their contributions are valued and that they are treated equitably, they are more likely to reciprocate with discretionary effort, including the development and sharing of new ideas. These theoretical lenses provide a robust framework for understanding how leadership styles and perceived organizational support influence employee innovative behavior [14, 16]. Furthermore, the study integrates elements from the Conservation of Resources theory, which posits that individuals strive to obtain, retain, and protect their valued resources, and that resource loss is a central mechanism in the stress process [17].

Inclusive leadership, which emphasizes respect, fairness, and belonging, positively influences innovative behavior by fostering psychological safety and perceived organizational support [18–20]. It encourages risk-taking and novel idea generation [21, 22]. The impact of inclusive leadership on innovation is further supported by psychological safety and a sense of accomplishment [23, 24]. Entrepreneurial leaders, through intellectual stimulation and individualized consideration, empower employees to engage in creative problem-solving, enhancing innovation [25].

2.2. Literature Review

Innovative Behavior (IB) is a multi-faceted process encompassing the generation, promotion, and implementation of new ideas within organizations. It plays a crucial role in ensuring long-term organizational success, especially in dynamic and competitive markets [26–28]. Previous studies have explored various aspects of innovative behavior, yet most have focused on general theories without considering the unique contextual factors of specific industries. This study fills this gap by examining the role of leadership styles in fostering innovative behavior, particularly in the UAE's oil and gas sector. While studies by [22] and others have emphasized the importance of individual creativity in innovation, our research highlights how leadership, psychological empowerment, and knowledge sharing act as key drivers in transforming individual creativity into organizational innovation.

Knowledge Sharing (KS) as a primary objective of knowledge management systems, knowledge sharing involves the transfer of information, ideas, and expertise among employees within an organization. It is a critical antecedent to innovation, as it allows employees to learn from one another, combine their diverse expertise, and generate new solutions by leveraging collective intelligence and fostering a collaborative environment where creativity can flourish [29]. Moreover, effective knowledge sharing can mitigate the risks associated with novel idea generation by allowing for peer review and refinement of concepts prior to widespread implementation, thereby reducing the potential for costly errors and accelerating the innovation lifecycle [30].

Psychological Empowerment (PE) this is an intrinsic form of motivation where employees feel a sense of control and autonomy over their work. It is characterized by four dimensions: meaning, competence, self-determination, and impact. A high level of psychological empowerment equips employees with the confidence and autonomy necessary to engage in proactive, innovative behaviors, leading to enhanced problem-solving capabilities and a greater willingness to explore novel approaches to challenges. Furthermore, psychological empowerment has been shown to moderate the relationship between inclusive leadership and innovation

performance, suggesting that when employees feel empowered, the positive effects of inclusive leadership on innovation are amplified [31]. This empowerment translates into a heightened capability for individuals to apply their new ideas in products or processes, thereby contributing significantly to organizational innovation [32, 33].

Entrepreneurial Leadership (EL) this leadership style focuses on inspiring and motivating followers by setting an example and encouraging creativity. It has been widely recognized as a catalyst for innovation, as it challenges employees to think critically and outside the box, ultimately fostering an environment where employees are empowered to develop and implement novel solutions. Inclusive Leadership: Distinct from entrepreneurial leadership, inclusive leadership emphasizes fairness, respect, and a sense of belonging for all employees, which has been shown to significantly predict employees' innovative behavior by creating an open and supportive environment [1]. This leadership style nurtures a workplace where diverse perspectives are not only tolerated but actively sought and integrated, thereby enriching the ideation process and fostering a collective commitment to innovative outcomes [31, 34].

Inclusive Leadership (IL) focuses on valuing all employees and fostering a sense of belonging, where individuals feel safe to share unique perspectives. It creates psychological safety, allowing employees to express ideas without fear of negative consequences [35, 36]. This environment encourages risk-taking, innovation, and idea implementation. Inclusive leadership enhances innovation performance by promoting psychological safety and a sense of accomplishment, encouraging novel ideas. Research shows that IL directly boosts innovative behavior by supporting risk-taking and idea generation, particularly during uncertain times like the global pandemic, where it played a key role in organizational adaptation and decision-making [31].

Job Insecurity (JI) defined as the subjective perception of an impending, involuntary job loss, job insecurity can have detrimental effects on employee well-being and performance. It is a significant stressor that can inhibit an employee's willingness to take risks and engage in discretionary, innovative behaviors. In the context of the oil and gas industry, where economic fluctuations and industry-specific challenges can contribute to perceived instability, job insecurity can act as a significant impediment to fostering a culture of innovation. Employees experiencing job insecurity may prioritize task completion and adherence to established procedures over creative problem-solving or the proposal of novel ideas, fearing that deviation from the norm could jeopardize their employment. Moreover, an environment characterized by pervasive job insecurity can lead to reduced organizational commitment and increased turnover intentions, further depleting the intellectual capital necessary for sustained innovation within the sector.

Moderating Variables this study also examines the moderating role of nationality, verbal rewards, and material rewards. These factors are hypothesized to influence the strength or direction of the relationships between independent and dependent variables [37]. They act as catalysts or inhibitors that can amplify or diminish the impact of leadership styles and organizational support on employee innovative behavior. This comprehensive approach allows for a deeper understanding of the complex relationship between leadership, organizational factors, and individual characteristics in shaping innovative outcomes within the specific context of the UAE oil and gas sector [38]. This research aims to bridge existing gaps in the literature by providing a comprehensive analysis of how various leadership styles, particularly inclusive leadership, interact with employee psychological states and extrinsic motivators to influence innovative behavior within a critical economic sector [39].

2.3. Hypotheses Development

Knowledge sharing is fundamental to fostering an innovative environment within organizations. By facilitating the exchange of ideas, expertise, and experiences among employees, it cultivates a collective intelligence that fuels creativity and problem-solving. This collaborative process allows individuals to build upon each other's insights, identify novel approaches, and refine concepts, ultimately leading to the development and implementation of new products, services, or processes. Therefore, a positive and significant impact of knowledge sharing on employee innovative behavior is anticipated, as it directly supports the generation and adoption of innovative practices. The relationship between knowledge sharing and innovation performance has been empirically supported in various contexts, highlighting its crucial role in organizational success.

H1: Knowledge sharing has a positive and significant impact on employees innovative behavior.

Psychological empowerment is a critical factor that significantly influences an employee's propensity to engage in innovative behaviors. When employees feel a sense of control over their work, have access to necessary resources, and believe their contributions are meaningful, they are more likely to take initiative, ex-

periment with new ideas, and proactively seek solutions to challenges. This intrinsic motivation, stemming from a feeling of empowerment, directly correlates with a higher likelihood of exhibiting innovative behaviors, such as generating novel concepts and implementing creative solutions. Furthermore, research indicates that psychological empowerment mediates the relationship between knowledge sharing and innovative work behavior, underscoring its central role in translating shared knowledge into tangible innovative outcomes.

H2: Psychological empowerment has a positive and significant impact on employees' innovative behavior.

Entrepreneurial leadership inspires employees by articulating a clear vision and fostering a supportive environment, which encourages them to transcend their self-interests for the greater benefit of the organization. This leadership style motivates employees to achieve higher levels of performance and innovation by appealing to their intrinsic values and higher needs. Consequently, entrepreneurial leadership is expected to have a positive and significant impact on an employee's innovative behavior. Leaders employing this style often empower their subordinates, encouraging them to challenge existing norms and explore novel solutions, thereby fostering a climate conducive to innovation [40].

H3: entrepreneurial leadership has a positive and significant impact on employees' innovative behavior.

Inclusive leadership fosters an environment where employees feel valued and respected, regardless of their background or role. This sense of belonging encourages individuals to contribute their unique ideas and perspectives, thereby enhancing their innovative behavior. By promoting psychological safety and open communication, inclusive leaders empower employees to take risks and think creatively, which are essential components of innovation. This leadership style is particularly effective in stimulating innovative behavior by reducing employee silence and promoting the open expression of ideas, even those that challenge the status quo [1].

H4: Inclusive leadership has a positive and significant impact on employees' innovative behavior.

The hypothesis that job insecurity has a negative and significant impact on employees' innovative behavior is grounded in the psychological contract theory and self-determination theory. When employees perceive a threat to their job security, their focus tends to shift from growth and exploration to survival and safety. This heightened sense of anxiety and uncertainty can inhibit intrinsic motivation, reduce willingness to take risks, and discourage the proactive engagement necessary for innovative activities, ultimately leading to a decline in their innovative output. This reduction in creative output is compounded by the tendency of insecure employees to adhere rigidly to established protocols, thereby stifling the generation of novel ideas and experimental approaches essential for innovation. Furthermore, the constant worry about potential job loss diverts cognitive resources away from creative problem-solving, thereby diminishing an employee's capacity for innovative thought and action [41].

H5: Job insecurity has a negative and significant impact on employees' innovative behavior.

Nationality, as a significant demographic factor, can influence how employees perceive and engage with knowledge-sharing initiatives, thereby moderating its impact on innovative behavior. Cultural norms, communication styles, and even language barriers associated with different nationalities can shape the effectiveness of knowledge exchange within an organization. Understanding how these national differences interact with knowledge-sharing processes is important for improving innovation outcomes in a diverse workforce. For instance, some cultures may prioritize hierarchical knowledge dissemination, while others may encourage more horizontal, peer-to-peer knowledge transfer, influencing the degree to which shared knowledge translates into innovative practices. This study, unlike prior research focused on external variables, uniquely examines how an organizational innovative climate can enhance staff psychological safety, knowledge sharing, and innovative work behavior [42]. Indeed, psychological safety is a critical antecedent that enables both knowledge sharing and innovative work behavior [43].

This moderation effects warrant investigation to determine how different national contexts might facilitate or impede the transformation of shared knowledge into novel ideas and solutions. Furthermore, the diverse cultural backgrounds present in the UAE oil and gas sector might lead to varied interpretations of psychological safety, which is integral for fostering an environment conducive to risk-taking and the sharing of nascent ideas [16, 42].

H6: Nationality moderates the association between knowledge sharing and an employee's innovative behavior.

Verbal rewards, such as praise and positive feedback, can play a significant role in moderating the relationship between entrepreneurial leadership and employee innovative behavior. entrepreneurial leaders often inspire and motivate their followers through various means, including communication and recognition [44, 45]. Verbal rewards can amplify the positive impact on innovation when they align with and reinforce

the leader's vision and efforts. Conversely, if verbal rewards are perceived as insincere, inconsistent, or poorly timed, they might undermine the leader's influence and dampen the innovative spirit of employees [16].
H7: Verbal reward moderates the association between entrepreneurial leadership and employee's innovative behavior.

Material rewards, such as bonuses, promotions, or other tangible benefits, can play a role in moderating the association between knowledge sharing and an employee's innovative behavior. While knowledge sharing itself fosters an environment conducive to innovation, the presence and type of material incentives may influence how motivated employees are to share their knowledge and, consequently, how their innovative behavior is affected [46, 47]. The effectiveness of knowledge sharing might be amplified or diminished depending on whether it is accompanied by appropriate material rewards, thus suggesting a potential moderating influence. The strategic application of such rewards could therefore either catalyze or impede the intrinsic and extrinsic motivations underpinning knowledge exchange and subsequent innovative output.
H8: Material rewards moderate the association between knowledge sharing and an employee's innovative behavior.

3. METHODOLOGY

3.1. Research Design and Data Collection

This study operationalizes key variables using established frameworks and validated measurement scales to ensure data reliability and validity. Table 1 presents the key variables, their definitions, and the measurement methods used in this study.

Table 1. Key Variables and Their Operationalization

Variable	Definition	Measurement
Knowledge Sharing	The transfer of information, ideas, and expertise among employees within an organization.	Questionnaire based on a 5-point Likert scale (1=Strongly Disagree to 5=Strongly Agree)
Psychological Empowerment	Intrinsic motivation where employees feel a sense of control, autonomy, and meaningfulness in their work.	4 Dimensions, Meaning, Competence, Self-determination, Impact
Entrepreneurial Leadership	Leadership style that inspires and motivates followers to achieve higher levels of performance and innovation.	Self-reported leadership effectiveness scale
Inclusive Leadership	Leadership that fosters respect, fairness, and a sense of belonging, encouraging employees to share their unique perspectives.	Adapted from a validated leadership scale
Job Insecurity	Subjective perception of an impending involuntary job loss.	5-point Likert scale on job insecurity perception
Employee Innovative Behavior	Employee's proactive and creative actions that result in new solutions, products, or processes.	Measured by self-reported innovation behaviors

This study used a quantitative, cross-sectional survey design. Data were collected from a convenience sample of 380 employees across 15 oil and gas companies in the UAE, including government, semi-government, and privately owned firms. The diverse sample aimed to capture a range of leadership and management practices. A 5-point Likert scale questionnaire (1 = Strongly Disagree to 5 = Strongly Agree) was developed based on validated instruments to measure the study variables, as shown in Table 1. The questionnaire was administered physically and via Google Forms to ensure a high response rate and broad reach, mitigating biases from a single data collection method.

3.2. Statistical Analysis

The collected data was analyzed using the Statistical Package for the Social Sciences (SPSS) and AMOS software. AMOS (Analysis of Moment Structures) was chosen for this study over other tools such as SmartPLS due to its particular strengths in testing complex structural equation models (SEMs) with a focus

on covariance-based methods. While PLS-SEM is widely used for variance-based SEM and is useful for exploratory research, AMOS is specifically designed for covariance-based SEM, which is more appropriate for testing theories that involve well-established constructs and require robust validation of model fit [48]. AMOS provides more precise estimation of model parameters, making it ideal for hypothesis testing where causal relationships are central to the research [49]. Furthermore, AMOS offers distinct advantages in handling models with latent variables and provides reliable fit indices, which are crucial for confirming the structural validity of the proposed framework. Previous studies such as those by [1, 22] have successfully utilized AMOS in similar research, demonstrating its robustness and reliability for testing complex relationships within leadership and innovation studies. Therefore, AMOS was selected for its robust capabilities in handling the model's complexities and ensuring reliable results in this specific cultural and sectoral context.

Preliminary data screening, including checks for missing values, outliers (using Mahalanobis distance), and multicollinearity, was conducted to ensure data integrity. Confirmatory Factor Analysis (CFA) was performed to assess the validity and reliability of the measurement model. The structural model and hypotheses were then tested using SEM, with the moderating effects analyzed through multi-group analysis in AMOS. The significance of the hypotheses was determined using path coefficients and p-values ($p < 0.05$). This rigorous statistical approach allows for the comprehensive evaluation of complex relationships between variables, offering solid information about the interplay of leadership, innovation, and employee behavior within the UAE's oil and gas sector.

4. RESULT

The results of the hypothesis testing are presented in Table 2, showing that Knowledge Sharing, Psychological Empowerment, Transformational Leadership, and Inclusive Leadership positively impact Employee Innovative Behavior, while Job Insecurity has a negative effect. Nationality and Verbal Rewards also moderate the relationship between leadership styles and innovation.

Table 2. Path Coefficients and Significance Levels for Hypotheses

Hypothesis	**Path Coefficient (β)**	**Significance (p-value)**	**Result**
H1: Knowledge Sharing → Employee Innovative Behavior	0.14	< 0.001	Supported
H2: Psychological Empowerment → Employee Innovative Behavior	0.15	< 0.001	Supported
H3: Entrepreneurial Leadership → Employee Innovative Behavior	0.22	< 0.001	Supported
H4: Inclusive Leadership → Employee Innovative Behavior	0.23	< 0.001	Supported
H5: Job Insecurity → Employee Innovative Behavior	-0.12	< 0.05	Supported
H6: Nationality moderates Knowledge Sharing → Employee Innovative Behavior	-	-	Supported
H7: Verbal Reward moderates Entrepreneurial Leadership → Employee Innovative Behavior	-0.18	< 0.005	Supported (Negative Moderation)
H8: Material Reward moderates Knowledge Sharing → Employee Innovative Behavior	-	< 0.19	Supported

The initial five hypotheses (H1–H5) were all supported. Knowledge sharing ($\beta = 0.14$, $p < 0.001$), psychological empowerment ($\beta = 0.15$, $p < 0.001$), entrepreneurial leadership ($\beta = 0.22$, $p < 0.001$), and inclusive leadership ($\beta = 0.23$, $p < .001$) were all found to have a significant and positive impact on employee innovative behavior. In line with the hypothesis, job insecurity demonstrated a significant negative impact on innovative behavior ($\beta = -0.12$, $p < 0.05$). Nationality significantly moderated the relationship between knowledge sharing and innovative behavior, as hypothesized in H6. The effect was strongest among Emirati, Indian, and European employees, indicating that cultural background influences the effectiveness of knowledge sharing.

The moderating effects of rewards (H7 & H8) yielded mixed results. Verbal reward was found to be a significant negative moderator between entrepreneurial leadership and innovative behavior ($\beta = -0.18$, $p < 0.005$). This intriguing finding suggests that excessive verbal praise may be perceived as inauthentic or even patronizing, weakening the positive effects of entrepreneurial leadership. Conversely, the moderating effect of material rewards between knowledge sharing and innovative behavior was found to be insignificant ($p = 0.19$).

5. MANAGERIAL IMPLICATIONS

The management implications of this study highlight several strategic insights for both academic researchers and industry practitioners, particularly within the UAE's oil and gas sector. The positive relationships between knowledge sharing, psychological empowerment, entrepreneurial leadership, and inclusive leadership with innovative behavior reaffirm the essential role of these factors in fostering creativity and performance. Leaders who articulate a clear vision, empower their teams, and build inclusive environments can create a strong foundation for innovation, thereby enhancing competitiveness and long-term sustainability. Furthermore, the negative relationship between job insecurity and innovative behavior underscores the importance of cultivating a stable and trustworthy organizational climate. When employees feel secure, they are more likely to engage in proactive problem-solving, take risks, and generate creative ideas that contribute to continuous improvement.

The moderating effects observed in this study reinforce the need for culturally sensitive and context-specific leadership strategies. The significant moderating role of nationality emphasizes the importance of adapting motivational and communication approaches to align with the diverse cultural backgrounds of employees. Meanwhile, the negative moderating influence of verbal rewards suggests that excessive or insincere praise can diminish leadership effectiveness, highlighting the value of authenticity in recognition practices. Additionally, the non-significant role of material rewards on the knowledge-sharing–innovation link implies that intrinsic motivation and collaborative work culture may be stronger drivers of innovation than financial incentives. Organizations should thus focus on fostering purpose-driven collaboration and authentic engagement to strengthen innovative behavior across teams.

6. CONCLUSION

This study provides a comprehensive framework that integrates leadership styles, psychological empowerment, and knowledge sharing as key drivers of innovative behavior within the UAE's oil and gas industry. The empirical findings underscore that entrepreneurial and inclusive leadership styles are instrumental in inspiring creativity among employees, enabling them to take ownership of ideas and contribute significantly to the organization's success. Additionally, psychological empowerment and inclusivity play pivotal roles in enhancing innovation, cultivating an environment of trust and collaboration that sustains long-term competitiveness. The study highlights the critical importance of leadership in fostering a culture of innovation, where employees are encouraged to take risks and explore new approaches to problem-solving.

However, the cross-sectional nature of this study limits the ability to establish causal relationships. To gain deeper insights into the long-term effects of leadership styles on innovation, future research should adopt longitudinal or mixed-method designs. This would allow for tracking changes over time and provide a more comprehensive understanding of the dynamics between leadership, motivation, and innovation. Furthermore, expanding the research to include other sectors or regions would help assess the generalizability of the results and identify any context-specific factors that may influence innovative behavior across different industries and cultural settings.

The findings also suggest that innovation thrives in environments characterized by trust, openness, and psychological safety. Leaders in the UAE oil and gas sector, and similar industries, must move beyond traditional transactional management styles. By focusing on empowering employees to express ideas freely, experiment, and take calculated risks, organizations can foster an innovative culture that enhances their capacity to adapt in the face of rapid technological and economic changes. Ultimately, by cultivating inclusive and supportive work environments, organizations can ensure long-term innovation and competitiveness in today's dynamic market landscape.

7. DECLARATIONS

7.1. About Authors

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7.2. Author Contributions

Conceptualization: RE; Methodology: YM; Software: MF; Validation: RE and MF; Formal Analysis: YM; Investigation: MF; Resources: RE; Data Curation: YM; Writing Original Draft Preparation: MF and YM; Writing Review and Editing: MF and YM; Visualization: RE; All authors, RE, YM, and MF, have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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