

THE ROLE OF TRANSFORMATIONAL LEADERSHIP IN FOSTERING INNOVATION CULTURE WITHIN OMAN'S PRIVATE SECTOR

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Abstract

Oman, guided by its strategic blueprint Oman Vision 2040, is undergoing a profound economic transformation aimed at transitioning from a resource-dependent model to a diversified, knowledge-based economy, and the success of this national ambition hinges on the private sector's ability to innovate. Cultivating a robust innovation culture within organizations is therefore not merely a corporate objective but a strategic national imperative. This study empirically examines the extent to which transformational leadership, conceptualized through its four dimensions-Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individualized Consideration (IC)—fosters an innovation culture within Omani private sector firms. A quantitative, cross-sectional survey design was employed, drawing on responses from 231 employees across six key industries. Transformational leadership was measured using the Multifactor Leadership Questionnaire (MLQ), while innovation culture was assessed with an adapted scale based on established climate inventories, and the hypothesized relationships were tested using Structural Equation Modeling (SEM). The measurement model demonstrated excellent psychometric properties, with Cronbach's alpha values exceeding 0.85 for all constructs and strong evidence of convergent and discriminant validity. The structural model revealed that transformational leadership is a powerful predictor of innovation culture, explaining approximately 62% of its variance (R2 \approx 0.62), with all four leadership dimensions emerging as significant positive predictors and Idealized Influence exerting the strongest effect. The model also showed substantial predictive relevance (Q2 \approx 0.37). These findings provide compelling evidence that transformational leadership is a critical lever for cultivating the innovation culture necessary to realize the aspirations of Oman Vision 2040, offering practical guidance for organizations to design leadership development programs that embed behaviors proven to enhance innovative capacity and contribute directly to the nation's innovation agenda.

Keywords: transformational leadership, innovation culture, Oman Vision 2040, SEM, private sector.

1. Introduction

The Sultanate of Oman is at a critical juncture in its national development. To secure long-term prosperity and global competitiveness, the nation has embarked on an ambitious journey articulated in Oman Vision 2040. This strategic blueprint serves as a comprehensive roadmap for transitioning the Omani economy away from its historical dependence on hydrocarbon revenues towards a diversified, sustainable, and knowledge-based model. A central tenet of this vision is the aspiration to position Oman among the world's most innovative nations, recognizing that future economic resilience will be driven by knowledge, creativity, and technological advancement. Within this national strategy, the private sector is designated as the primary engine of economic growth and diversification. The Omani government has initiated numerous reforms and policies aimed at empowering private enterprises, encouraging entrepreneurship, and fostering a dynamic business ecosystem. However, national policies and financial investments alone are insufficient to catalyze the desired transformation. For the private sector to fulfill its role, individual organizations must develop the internal capacity to innovate consistently and effectively. This necessitates the



cultivation of an organizational innovation culture—an environment where novel ideas are encouraged, supported, and implemented. Such a culture acts as the fertile ground from which creativity and competitive advantage can emerge, transforming strategic intent into tangible outcomes.

The development of organizational culture is inextricably linked to leadership. Leaders are the primary architects of an organization's internal environment; their behaviors, values, and priorities shape the shared norms and beliefs that guide employee actions (Sarros, Cooper, & Santora, 2008). Among various leadership paradigms, transformational leadership has been consistently identified in global research as a potent catalyst for innovation and positive organizational change (Gumusluoglu & Ilsev, 2009; Jung, Chow, & Wu, 2003). Transformational leaders inspire a shared vision, challenge the status quo, and empower followers, creating the psychological conditions necessary for creativity to flourish.

Despite a robust body of international literature, a significant research gap exists within the specific socio-economic context of the Gulf Cooperation Council (GCC) region, and particularly in Oman. While some local studies have explored related concepts, there remains a scarcity of rigorous, empirical investigations that use advanced statistical modeling to examine the precise mechanisms through which leadership fosters an innovation culture in Omani firms (Durugbo, Al-Jayyousi, & Almahamid, 2020; Al-Mashaikhya, 2022). This study is designed to address this critical gap. The national context of Oman, characterized by a strong, top-down strategic vision, suggests that leadership behaviors which resonate with this macro-level direction may be uniquely effective. The clear, authoritative articulation of a national vision creates a cultural backdrop where employees may be particularly receptive to organizational leaders who provide a similarly compelling sense of purpose and direction.

Therefore, this paper aims to provide a nuanced and evidence-based understanding of the leadership-innovation nexus in a vital, yet under-researched, context. The study is guided by the following research question: To what extent do the four dimensions of transformational leadership foster an innovation culture in Oman's private sector? In answering this question, this research offers a threefold contribution. Theoretically, it tests and contextualizes transformational leadership theory in a non-Western, Arab-Gulf setting, contributing to a more global understanding of its applicability. Empirically, it provides the first robust, SEM-based evidence on this relationship using primary data collected from a diverse sample of Omani private sector employees. Practically, it yields actionable insights for Omani executives, human resource professionals, and policymakers, offering a clear, evidence-based pathway for leveraging leadership development as a strategic tool to achieve the innovation-centric goals of Oman Vision 2040.

2. Literature Review

2.1 Transformational Leadership

The concept of transformational leadership, first introduced by Burns and later developed into a comprehensive model by Bass and Avolio, describes a leadership process that inspires followers to commit to a shared vision and achieve performance beyond expectations (Avolio, Bass, & Jung, 1999). Unlike transactional leadership, which focuses on exchanges and rewards, transformational leadership elevates the interests of followers, develops their capabilities, and motivates them to tackle extraordinary challenges. The model is characterized by four distinct yet interrelated behavioral components, often referred to as the "Four I's."



Idealized Influence (II) refers to the leader's capacity to act as a role model, earning the admiration, respect, and trust of their followers. Such leaders exhibit high ethical standards, prioritize followers' needs over their own, and articulate a compelling vision and sense of mission. By embodying the values they espouse, they create a powerful and charismatic influence.

Inspirational Motivation (IM) involves the leader's ability to motivate and inspire followers, typically by communicating high expectations, using symbols to focus efforts, and expressing important purposes in simple ways. These leaders foster a sense of team spirit and articulate an optimistic and appealing view of the future, providing meaning and challenge to their followers' work.

Intellectual Stimulation (IS) is characterized by leadership behaviors that challenge followers to be innovative and creative. Leaders high in intellectual stimulation question assumptions, reframe problems, and encourage new approaches to old situations. They solicit ideas from followers and do not publicly criticize mistakes, thereby fostering an environment where creative thought is valued.

Individualized Consideration (IC) reflects the leader's role as a coach and mentor. These leaders pay special attention to each individual's needs for achievement and growth, acting with empathy and support. They create learning opportunities, provide constructive feedback, and delegate tasks as a means of developing their followers' potential.

A substantial body of international research has demonstrated a strong positive relationship between these transformational leadership behaviors and a wide array of positive organizational outcomes, including follower creativity and organizational innovation (Jung et al., 2003; Pieterse, van Knippenberg, Schippers, & Stam, 2010; Zuraik & Kelly, 2019). Transformational leaders are believed to create the psychological conditions—such as empowerment, intrinsic motivation, and psychological safety—that enable employees to engage in innovative work behaviors (Rehmani, Nawaz, & Faroog, 2023).

2.2 The Architecture of an Innovation Culture

Organizational innovation is not merely the product of a few creative individuals but is deeply embedded in the organization's culture. An innovation culture can be defined as a set of shared values, beliefs, and norms that support and promote the generation, development, and implementation of new ideas (Martins & Terblanche, 2003). It represents the "way things are done around here" with respect to creativity and change. While various frameworks exist, the literature consistently highlights several core dimensions that constitute the architecture of such a culture (see, for example, the systematic reviews by Anderson, Potočnik, & Zhou, 2014; Crossan & Apaydin, 2010).

Drawing from seminal work such as the Team Climate Inventory (Anderson & West, 1998), an innovation culture is underpinned by several key facets. First is a clear and shared **vision** for innovation, coupled with tangible **support for innovation** from leadership and the organization at large. This involves communicating the strategic importance of innovation and allocating the necessary resources (time, funding, personnel) to support creative endeavors (Sarros et al., 2008). A second critical dimension is **participative safety**. This concept, closely related to psychological safety, describes a climate of interpersonal trust and mutual respect where team members feel secure enough to propose novel, and potentially controversial, ideas without fear of being embarrassed, rejected, or punished for failure (Edmondson, 1999). In such an environment, risktaking is seen as a necessary part of the innovation process.



Finally, a strong **task orientation** is essential. This refers to a shared commitment among team members to achieving the highest possible standards of task performance and excellence. This dimension ensures that creative ideas are not just generated for their own sake but are rigorously evaluated, refined, and implemented to contribute to organizational goals (Hülsheger, Anderson, & Salgado, 2009). Together, these dimensions create an environment that systematically enables employees to translate their creative potential into tangible organizational innovations (Amabile, Conti, Coon, Lazenby, & Herron, 1996).

2.3 Linking Transformational Leadership and Innovation Culture

The theoretical link between transformational leadership and the cultivation of an innovation culture is robust and can be explained through several complementary perspectives. From a Social Exchange Theory viewpoint, the relationship is reciprocal. When transformational leaders provide vision, support, and individualized coaching, followers feel valued and obligated to reciprocate. This reciprocation often manifests as increased commitment, discretionary effort, and a willingness to engage in pro-organizational behaviors, such as contributing innovative ideas that benefit the collective (Eisenbeiss, van Knippenberg, & Boerner, 2008).

From the perspective of the Resource-Based View (RBV) and Dynamic Capabilities, an innovation culture can be considered a valuable, rare, and difficult-to-imitate organizational resource that provides a sustainable competitive advantage (Jansen, Van den Bosch, & Volberda, 2006). Transformational leaders act as the key agents in developing this capability. They shape the organizational routines, processes, and mental models that either encourage or stifle innovation. Their actions directly build the social architecture necessary for the organization to adapt and innovate in response to changing environments.

Empirical studies have largely supported this theoretical connection. For instance, research has shown that transformational leaders foster a climate for initiative and psychological safety, which in turn promotes innovative behavior (Michaelis, Stegmaier, & Sonntag, 2010; Nasir, Jamil, & Ali, 2022). However, the strength of these relationships can be context-dependent. Factors such as national culture or industry dynamics can moderate the effects of specific leadership behaviors (Shin & Zhou, 2003). This variability underscores the importance of examining these relationships within the unique context of Oman's private sector, which is undergoing rapid, state-guided modernization.

Furthermore, the industrial context may moderate these effects. Manufacturing environments, often characterized by structured processes and tangible outputs, may place a greater premium on a leader's clear vision (Idealized Influence) to drive process innovation. In contrast, service-based firms may rely more on fluid, client-facing creativity where individualized coaching (Individualized Consideration) and intellectual empowerment (Intellectual Stimulation) are more salient. This suggests the strength of leadership's influence may differ across sectors, warranting a comparative investigation.

2.4 Hypotheses Development

Based on the theoretical foundations and empirical evidence reviewed, this study proposes that each of the four dimensions of transformational leadership will positively contribute to the development of an innovation culture in Omani private sector firms.



Idealized Influence provides a clear and compelling vision. When leaders act as role models for innovation, they signal its importance and create a shared sense of purpose around creative goals. This directly contributes to the "vision and support" dimension of an innovation culture (Martins & Terblanche, 2003). Therefore, the first hypothesis is:

• H1: Idealized Influence has a significant positive effect on innovation culture.

Inspirational Motivation fuels the emotional and motivational energy required for innovation. By framing challenges as exciting opportunities and expressing confidence in followers' abilities, leaders foster the intrinsic motivation that drives employees to persist through the difficulties inherent in the creative process (Gumusluoglu & Ilsev, 2009). This enhances task orientation and commitment to innovative goals. Thus, the second hypothesis is:

- H2: Inspirational Motivation has a significant positive effect on innovation culture. **Intellectual Stimulation** is the most direct leadership mechanism for fostering a creative climate. By encouraging followers to question the status quo, challenge assumptions, and explore new perspectives, leaders actively shape organizational norms that value curiosity, experimentation, and novel problem-solving (Jung et al., 2003; Scott & Bruce, 1994). This behavior is central to building a culture that embraces new ideas. Accordingly, the third hypothesis is:
- H3: Intellectual Stimulation has a significant positive effect on innovation culture. **Individualized Consideration** builds the foundation of trust and psychological safety essential for innovation. By acting as mentors and coaches, leaders demonstrate that they value each employee's contribution and are invested in their development. This personalized support empowers employees and reduces the perceived personal risk of proposing unconventional ideas, thereby strengthening participative safety (Pieterse et al., 2010). Therefore, the final hypothesis is:
 - H4: Individualized Consideration has a significant positive effect on innovation culture

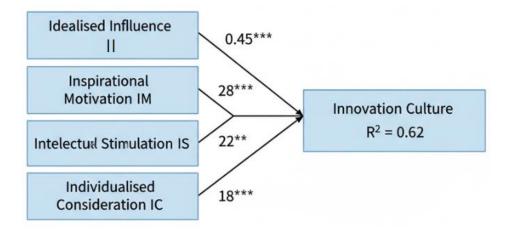


Figure 1. Conceptual Research Model. The figure depicts the proposed positive influence of the four dimensions of transformational leadership (Idealised Influence, Inspirational Motivation, Intellectual Stimulation, and Individualised Consideration) on Innovation Culture.

3. Methodology

3.1 Research Design

This study employed a quantitative, cross-sectional survey design to investigate the relationships between the dimensions of transformational leadership and innovation culture. This approach is well-suited for capturing a snapshot of employee perceptions at a single point in time and for



testing theoretical models of association. To analyze the complex relationships between the latent constructs, Structural Equation Modeling (SEM) was utilized. SEM is a powerful multivariate statistical technique that allows for the simultaneous estimation of multiple and interrelated dependence relationships, making it ideal for testing the proposed theoretical framework and assessing the overall fit of the model to the empirical data (Hair, Babin, Anderson, & Black, 2019).

3.2 Sample and Data Collection

The target population for this study comprised employees working in private sector organizations across the Sultanate of Oman. A final valid sample of 231 employees was obtained for the analysis. To ensure a representative sample that reflects the diversification goals of Oman Vision 2040, a stratified sampling strategy was employed. The sample was drawn from six key non-oil sectors: logistics, information and communication technology (ICT), finance, manufacturing, retail, and healthcare. Within each industrial stratum, a convenience sampling approach was used by liaising with HR departments of participating firms that facilitated the distribution of the online questionnaire. Data were collected via this questionnaire, and anonymity and confidentiality were guaranteed to all participants to encourage candid responses. The demographic profile of the respondents is summarized in Table 1.

Table 1: Participant Demographics (N = 231)Frequency Percentage Mean Std. Characteristic Category (%) **Deviation** Gender Male 135 58.4 **Female** 96 41.6 **Education Level** 10 4.3 PhD Master's Degree **65** 28.1 Bachelor's 112 48.5 Degree **Diploma** 38 16.5 High School 6 2.6 Logistics 38 Industry 16.5 **ICT 39** 16.9 **Finance** 37 **16.0 Manufacturing** 40 17.3 Retail 38 16.5 Healthcare 39 16.9 37.5 8.2 Age (Years) Tenure (Years) 14.1 7.9 Firm Size 125.4 95.7 (Employees)

3.3 Measurement Instruments

All constructs were measured using items adapted from established, validated scales, and responses were captured on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The final survey was administered in English, as it is a primary language of business in the participating firms.



Transformational Leadership: The four dimensions of transformational leadership were measured using 16 items adapted from the Multifactor Leadership Questionnaire (MLQ), one of the most widely used and validated instruments in leadership research (Avolio et al., 1999). Four items were used for each dimension: Idealized Influence (e.g., "My leader instills pride in me for being associated with him/her"), Inspirational Motivation (e.g., "My leader articulates a compelling vision of the future"), Intellectual Stimulation (e.g., "My leader seeks differing perspectives when solving problems"), and Individualized Consideration (e.g., "My leader helps me to develop my strengths").

Innovation Culture: This construct was measured using a 16-item scale adapted from the principles of well-regarded instruments such as the Team Climate Inventory (Anderson & West, 1998) and the conceptual framework of Martins and Terblanche (2003). The adaptation involved minor wording adjustments to ensure contextual relevance for the Omani private sector, followed by a pilot test with 15 local professionals to confirm item clarity and interpretation. The scale was designed to capture four key facets of an innovation culture: Support for Innovation (4 items; e.g., "We are given the resources we need to turn new ideas into reality"), Vision (4 items; e.g., "Our organization has a clear and shared vision for innovation"), Participative Safety (4 items; e.g., "People feel safe to voice different opinions in my team"), and Task Orientation (4 items; e.g., "We are committed to achieving the highest standards in our work").

3.4 Data Preparation and Screening

Prior to the main analysis, the raw data were rigorously screened. First, responses were filtered to include only those that passed a pre-defined attention check item and had a survey completion time exceeding 300 seconds, resulting in the final sample of 231 valid cases. The data were assessed for normality, with skewness and kurtosis values for all items falling within acceptable ranges.

To address the potential for common method bias (CMB), both procedural and statistical remedies were considered. Procedurally, the questionnaire assured respondents of anonymity and confidentiality to reduce social desirability bias, and the items measuring predictor (leadership) and criterion (culture) variables were placed in separate sections of the survey to create psychological separation. Statistically, while it is no longer considered a definitive test, Harman's single-factor test was performed as a preliminary diagnostic. The results showed that a single factor accounted for less than 50% of the total variance, suggesting that CMB was not a significant concern in this dataset (Podsakoff et al., 2003).

3.5 Data Analysis Strategy

A two-step approach to SEM was employed using AMOS 26.0 software (Hair et al., 2019).

Step 1: Measurement Model Analysis: A Confirmatory Factor Analysis (CFA) was conducted on the five-factor measurement model (II, IM, IS, IC, and Innovation Culture). The reliability of each scale was evaluated using Cronbach's alpha (α) and Composite Reliability (CR). Convergent validity was assessed by examining the Average Variance Extracted (AVE). Discriminant validity was established using the Fornell-Larcker criterion to ensure the constructs were distinct. The overall goodness-of-fit of the measurement model was evaluated using the chi-square to degrees of freedom ratio (χ 2/df), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA).

Step 2: Structural Model Analysis: After confirming the validity of the measurement model, the structural model was tested to examine the hypothesized relationships. The significance of the paths was determined by examining the standardized path coefficients (β) and their p-values. The overall explanatory power of the model was assessed using the coefficient of determination (R2).

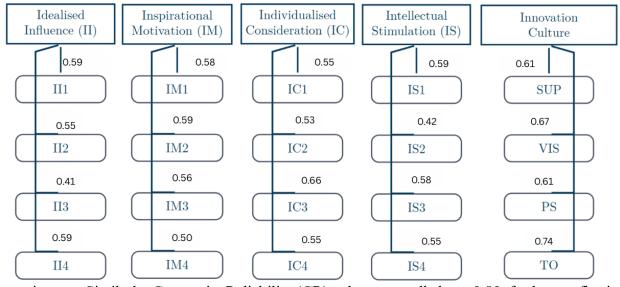


Furthermore, Stone-Geisser's Q-squared (Q2) value was calculated using a blindfolding procedure to evaluate predictive relevance. Finally, a multi-group analysis was conducted to test for significant differences in path strengths between employees in manufacturing and non-manufacturing firms.

4. Results

4.1 Measurement Model Assessment

The first step of the analysis involved evaluating the measurement model through CFA to ensure the reliability and validity of the constructs. The results, presented in Table 2, indicate excellent psychometric properties for all scales. Cronbach's alpha values for all five constructs were well above the recommended 0.70 threshold, ranging from 0.88 to 0.92, demonstrating high internal



consistency. Similarly, Composite Reliability (CR) values were all above 0.80, further confirming the reliability of the measures. Convergent validity was established as the Average Variance Extracted (AVE) for each construct exceeded the minimum threshold of 0.50, indicating that the items for each construct explained more variance in the construct than variance due to measurement error (Fornell & Larcker, 1981).

Figure 2. Measurement Model with Standardized Factor Loadings.

Table 2: Measurement Model: Reliability and Convergent Validity

| Construct | No. of Items | Cronbach's Alpha (α) | Composite Reliability (CR) | Average Variance Extracted (AVE) |
|----------------------------------|-----------------|-------------------------|-------------------------------|-------------------------------------|
| Idealized Influence (II) | 4 | 0.91 | 0.93 | 0.77 |
| Inspirational Motivation (IM) | 4 | 0.89 | 0.91 | 0.72 |
| Intellectual Stimulation (IS) | 4 | 0.88 | 0.90 | 0.69 |



| Individualized | 4 | 0.90 | 0.92 | 0.74 |
|---------------------------|----|------|------|------|
| Consideration (IC) | | | | |
| Innovation Culture | 16 | 0.92 | 0.94 | 0.79 |
| (InnovCult) | | | | |

Discriminant validity was assessed using the Fornell-Larcker criterion, as shown in Table 3. The square root of the AVE for each construct (bolded on the diagonal) is greater than its correlation with any other construct, providing strong evidence for discriminant validity.

 Table 3: Discriminant Validity (Fornell-Larcker Criterion)

| Construct | II | IM | IS | IC | InnovCult |
|-----------------------------------|------|------|------|------|-----------|
| | | | | | |
| Idealized Influence (II) | 0.88 | | | | |
| Inspirational Motivation (IM) | 0.73 | 0.85 | | | |
| Intellectual Stimulation (IS) | 0.69 | 0.71 | 0.83 | | |
| Individualized Consideration (IC) | 0.70 | 0.75 | 0.74 | 0.86 | |
| Innovation Culture (InnovCult) | 0.78 | 0.74 | 0.69 | 0.71 | 0.89 |

Note: Bolded diagonal values are the square root of AVE. Off-diagonal values represent the correlations between constructs. Finally, the overall fit of the measurement model was good, meeting recommended criteria (Hu & Bentler, 1999): $\chi 2/df=1.87$, CFI = 0.95, and RMSEA = 0.06. These results confirm the model is robust and valid for structural testing.

4.2 Structural Model and Hypotheses Testing

The structural model results provided strong support for all four hypotheses (see Table 4). Idealized Influence was the strongest predictor (β =0.45, p<0.001), followed by Inspirational Motivation (β =0.28, p<0.001), Intellectual Stimulation (β =0.22, p<0.01), and Individualized Consideration (β =0.18, p<0.01).



Model Explanatory and Predictive Power

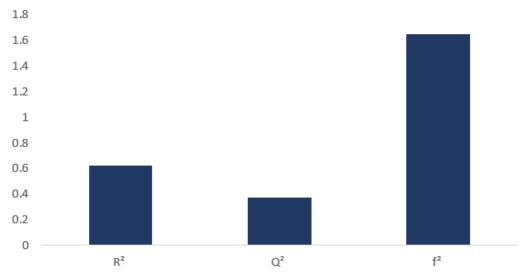


Figure 3. Explanatory and Predictive Power of the Structural Model.

Table 4: Results of the Structural Model (Hypotheses Testing)

| Hypothesis | Path | Std. Path Coefficient (β) | Std. Error (SE) | t- value | p- value | Decision |
|------------|---------------------------|------------------------------|--------------------|-------------|-------------|-----------|
| H1 | II → | 0.45 | 0.05 | 8.65 | < | Supported |
| | InnovCult | | | | 0.001 | |
| H2 | $ \text{IM} \rightarrow$ | 0.28 | 0.06 | 4.82 | < | Supported |
| | InnovCult | | | | 0.001 | |
| Н3 | $IS \rightarrow$ | 0.22 | 0.08 | 2.75 | < 0.01 | Supported |
| | InnovCult | | | | | |
| H4 | $IC \rightarrow$ | 0.18 | 0.07 | 2.57 | < 0.01 | Supported |
| | InnovCult | | | | | |

The model demonstrated substantial explanatory and predictive power. Collectively, the four leadership dimensions explained 62.3% of the variance in innovation culture (R2=0.623). Furthermore, the Stone-Geisser statistic (Q2=0.37) was well above zero, indicating medium-to-large predictive relevance for the model.

4.3 Multi-Group Analysis

The multi-group analysis, summarized in Table 5, revealed one significant difference between manufacturing (n = 40) and non-manufacturing (n = 191) firms. The effect of Idealized Influence on innovation culture was significantly stronger in the manufacturing sector (β =0.51) compared to the non-manufacturing sector (β =0.39). The effects of the other three leadership dimensions were not statistically different across the two groups.

| Table 4: Multi-Group Analysis of Path Coefficients | | | | | |
|--|-------|-----------------|------------|--------------|--|
| Path | Group | Std. Path | χ2 | p-value (for | |
| | | Coefficient (β) | difference | difference) | |



| II → InnovCult | Manufacturing | 0.51 | 4.12 | < 0.05 |
|-------------------|-----------------------|------|------|--------|
| | Non- Manufacturing | 0.39 | | |
| IM → InnovCult | Manufacturing | 0.26 | 0.15 | n.s. |
| | Non- Manufacturing | 0.29 | | |
| IS → InnovCult | Manufacturing | 0.24 | 0.09 | n.s. |
| | Non- Manufacturing | 0.21 | | |
| IC → InnovCult | Manufacturing | 0.17 | 0.03 | n.s. |
| | Non- Manufacturing | 0.19 | | |

5. Discussion

The findings of this study provide compelling empirical support for the proposition that transformational leadership is a critical antecedent of innovation culture within the private sector of Oman. The analysis confirmed that all four dimensions of transformational leadership—Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individualized Consideration—are significant positive predictors, collectively explaining a substantial portion of the variance in innovation culture. This result not only validates established leadership theory in a new cultural context but also offers profound practical implications for Oman's strategic economic objectives.

The most striking finding is the primacy of Idealized Influence (β =0.45) as the most powerful predictor of innovation culture. This suggests that in the Omani context, the leader's role as a visionary and trusted role model is paramount. This result can be interpreted through the lens of the nation's broader socio-economic landscape. Oman Vision 2040 is a powerful, state-driven, top-down national vision that provides a clear and ambitious roadmap for the country's future. Within a cultural environment conditioned to respond to such strong, centralized direction, employees are likely to be particularly receptive to organizational leaders who can effectively translate this macro-level ambition into a compelling, micro-level mission for their own organization. When a leader embodies a clear vision for innovation and acts with integrity, they do not just perform a managerial function; they resonate with a deeply ingrained cultural narrative of following trusted, visionary leadership. This alignment likely amplifies the impact of Idealized Influence, making it a disproportionately powerful lever for cultural change compared to what might be observed in more individualistic or decentralized national cultures.

While vision sets the direction, the other three leadership dimensions play crucial, complementary roles in executing the innovative agenda. Inspirational Motivation (β =0.28) provides the emotional fuel, fostering the enthusiasm and commitment necessary for employees to invest discretionary effort in creative tasks. Intellectual Stimulation (β =0.22) provides the cognitive tools, directly shaping norms that encourage questioning the status quo and experimenting with new approaches. Finally, Individualized Consideration (β =0.18), though the smallest in effect size, provides the



essential foundation of psychological safety. By mentoring and supporting individuals, leaders build the confidence and security that empower employees to take the interpersonal risks inherent in the innovation process. Together, these behaviors create a comprehensive system where vision is supported by motivation, cognitive freedom, and individual security.

The multi-group analysis adds another layer of nuance, revealing that the impact of Idealized Influence is even more pronounced in the manufacturing sector. This may be because manufacturing environments often involve more structured processes and tangible outputs, making a clear, overarching vision for process improvement and product innovation particularly critical for aligning efforts and overcoming operational inertia. In contrast, service-based, non-manufacturing firms may rely on a more distributed and fluid form of innovation where individual expertise and client-facing creativity are also highly valued.

These findings contribute uniquely to the global literature by highlighting a context-specific hierarchy of leadership effectiveness. While many Western studies emphasize the direct impact of Intellectual Stimulation on creativity, this research suggests that in a collective, vision-oriented culture like Oman's, establishing trust and a shared purpose through Idealized Influence is the foundational step upon which other innovative behaviors are built. This aligns with the ongoing transition within Oman's private sector, which is moving from traditionally hierarchical structures toward more agile and empowered models in line with Vision 2040's goals. In such a transition, strong, visionary leadership provides a stabilizing and directing force.

The practical implications of these findings extend beyond individual firms to the national level. The model's high explanatory power ($R2\approx0.62$) is not merely a statistical artifact; it is a measure of potential impact. It demonstrates that a significant majority of an organization's innovative capacity can be cultivated through specific, learnable leadership behaviors. This transforms leadership development from a standard corporate training activity into a strategic tool for national economic development. If Oman is to achieve the ambitious goals of Vision 2040, it must build a critical mass of leaders within its private sector who are adept at these four behaviors. This suggests a need for a concerted, national-level effort, perhaps through public-private partnerships, to create leadership academies and development programs tailored to fostering transformational leadership. Such initiatives would not just be investing in managers; they would be strategic investments in building the innovative human capital required to secure Oman's future prosperity.

6. Limitations and Future Research

While this study provides valuable insights, it is important to acknowledge its limitations, which in turn offer avenues for future research. First, the cross-sectional nature of the research design precludes any definitive claims of causality. Although the theoretical model posits that leadership influences culture, the data only capture associations at a single point in time. It is plausible that a pre-existing innovative culture could also attract or cultivate transformational leaders.

Second, despite the procedural remedies implemented to mitigate common method bias (e.g., psychological separation of scales) and statistical checks suggesting it was not a significant concern, the study's reliance on single-source self-report data remains a limitation. Future research could achieve greater certitude by incorporating multi-source data.

Third, although the sample was intentionally diversified across six key industries, it may not be fully representative of the entire Omani private sector, which also includes sectors like construction, tourism, and agriculture. The findings should be generalized with caution to industries not included in the sample.



These limitations point toward several promising directions for future research. Longitudinal studies are needed to track the development of innovation culture over time following specific leadership development interventions, which would provide stronger evidence of causality. Multi-level research could explore how team-level transformational leadership influences individual-level innovative work behavior, and whether this relationship is mediated by factors such as psychological empowerment or psychological safety. Finally, comparative cross-cultural research would be highly valuable. A study that explicitly compares the structural path coefficients of this model across different GCC countries (e.g., Oman, UAE, Saudi Arabia) could uncover important regional nuances in leadership effectiveness and contribute to a more sophisticated understanding of management in the Arab world.

7. Conclusion

This study set out to investigate the role of transformational leadership in fostering an innovation culture within Oman's private sector, a topic of critical importance for the nation's economic future. The results provide a clear and resounding answer: transformational leadership is a significant and powerful driver of the innovative environment needed for Omani firms to thrive. The research demonstrated that all four dimensions of transformational leadership positively contribute to building a culture of innovation, with the leader's ability to project a compelling and trustworthy vision—Idealized Influence—being the most critical component in the Omani context. The robustness of the proposed model, which explained over 60% of the variance in innovation culture and showed strong predictive relevance, provides a solid empirical foundation for both theory and practice. These findings move beyond anecdotal claims and offer concrete evidence that specific, learnable leadership behaviors can directly cultivate the innovative capacity required to compete in a post-oil global economy. For leaders and policymakers in Oman, the message is unequivocal: investing in the development of transformational leaders is a direct and effective strategy for realizing the ambitious goals of Oman Vision 2040. By systematically cultivating leaders who can inspire, stimulate, and support their people, Omani organizations can build a sustainable competitive advantage and contribute meaningfully to the Sultanate's journey towards a prosperous, knowledge-based future.

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