



INFLUENCE OF AUTHENTIC LEADERSHIP PRACTICES ON INNOVATIVE WORK BEHAVIOR: MEDIATING ROLE OF PSYCHOLOGICAL EMPOWERMENT AMONG ACADEMIC EMPLOYEES IN PRIVATE UNIVERSITIES

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ABSTRACT

Aim/Purpose	This study investigates the relationship between authentic leadership practices (ALP) and innovative work behavior among faculty members in private universities in Lahore, Pakistan. The research addresses the problem of limited innovation within academic institutions, which is often attributed to insufficient leadership engagement and empowerment mechanisms.
Background	Innovation is a critical driver of academic excellence; yet many private universities in Pakistan struggle to foster innovative work environments. This paper explores how authentic leadership contributes to the enhancement of innovative behaviors among academic staff.

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Methodology	The study employed a quantitative research design using data collected from 490 faculty members across 16 private universities in Lahore. Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to analyze the relationships among the four dimensions of authentic leadership (self-awareness, internalized moral perspective, balanced processing, and relational transparency), psychological empowerment, and innovative work behavior.
Contribution	This research contributes to the body of knowledge by empirically validating the role of authentic leadership in promoting innovation through psychological empowerment in a South Asian academic context. It underscores the mediating role of psychological empowerment in linking leadership practices to innovative outcomes.
Findings	All four dimensions of authentic leadership were found to have a positive and significant correlation with innovative work behavior. Moreover, psychological empowerment partially mediated these relationships, demonstrating its critical role in facilitating innovation through leadership.
Recommendations for Practitioners	University administrators and educational leaders are encouraged to cultivate authentic leadership qualities among academic heads and promote psychologically empowering environments to stimulate innovation within their institutions.
Recommendations for Researchers	Future studies may explore the longitudinal effects of authentic leadership on innovation and extend this framework to public universities or other regions for broader generalizability. Qualitative studies may also provide deeper insights into the lived experiences of faculty members.
Impact on Society	Fostering authentic leadership in higher education can contribute to enhanced academic innovation, better educational outcomes, and ultimately support societal advancement through the development of creative and empowered scholars.
Future Research	Further research is needed to examine contextual factors such as organizational culture, digital readiness, or policy frameworks that may moderate the effects of leadership on innovation in educational settings.
Keywords	authentic leadership, innovative work behavior, psychological empowerment, private universities, higher education, Pakistan

INFORMATION

In the contemporary, rapidly transforming educational environment, private universities are subjected to escalating demands to cultivate innovation to sustain their competitive edge and uphold academic distinction (Avolio & Gardner, 2005). The manifestation of innovative work behavior (IWB) among personnel is paramount for effectively responding to technological progress, refining pedagogical strategies, and promoting institutional advancement (Janssen, 2000). Nevertheless, the degree to which academic personnel participate in innovative work behavior is predominantly influenced by leadership strategies that stimulate creativity and foster intrinsic motivation (Janssen, 2000).

Authentic leadership, delineated by self-awareness, an internalized moral framework, balanced processing, and relational transparency, has surfaced as a pivotal predictor of favorable organizational outcomes (Walumbwa et al., 2008). Leaders who manifest authenticity foster an atmosphere of trust and transparency, thereby establishing a milieu in which employees are motivated to exercise initiative (Gardner et al., 2011). Notwithstanding its increasing acknowledgment, there exists a paucity of

research investigating the impact of authentic leadership on IWB within higher education institutions, particularly in private universities where bureaucratic constraints may impede innovation (Bass & Riggio, 2006).

Psychological empowerment (PE) is a cognitive construct that embodies meaning, competence, self-determination, and impact. It has been recognized as a significant mediator between leadership and innovative behaviors (Spreitzer, 1995). When employees perceive themselves as psychologically empowered, they are considerably more inclined to demonstrate proactive and creative work behaviors (Zhang & Bartol, 2010). Although previous research has investigated the effects of authentic leadership on performance and job satisfaction, the mediating function of PE in the relationship between authentic leadership and IWB has yet to receive a comprehensive examination within academic discourse (Luthans & Avolio, 2003).

The domain of higher education, with a particular emphasis on private universities, functions within an ever-evolving context where academic personnel are anticipated to engage in research endeavors, curriculum enhancement, and institutional advancement (Altbach et al., 2010). Nevertheless, in the absence of conducive leadership, staff members may experience a deficiency in the motivation necessary to take part in innovative pursuits (Amabile & Pratt, 2016). Authentic leaders, through the promotion of transparency and ethical discernment, have the potential to augment employees' perception of empowerment, thus catalyzing innovative work behavior (Laschinger et al., 2015). This research aims to address this deficiency by exploring the impact of authentic leadership practices on innovative work behavior via the intermediary process of psychological empowerment.

The extant body of research concerning authentic leadership has predominantly concentrated on the corporate and healthcare domains, thus creating a significant gap in the exploration of educational environments (A. Rego et al., 2012). Furthermore, although the phenomenon of innovation is extensively investigated within business enterprises, its precursors in academic settings, especially in developing nations, necessitate additional scrutiny (Damanpour & Schneider, 2006). Private higher education institutions, frequently limited by resource constraints, must employ leadership methodologies that optimize employee capabilities without the provision of substantial financial incentives (Mumford et al., 2002). This research endeavor makes a meaningful contribution by empirically evaluating the relationship between authentic leadership and IWB, while also integrating PE as a mediating variable, thereby providing pragmatic insights for leaders in academia.

The current investigation holds considerable importance for both theoretical frameworks and practical applications. From a theoretical perspective, it broadens the authentic leadership paradigm by incorporating PE as a psychological mechanism that propels IWB (Shin & Zhou, 2003). From a practical standpoint, it provides university administrators with empirically grounded strategies for fostering innovation through authentic leadership and empowerment initiatives. By addressing these critical dimensions, this research aspires to enhance organizational efficacy and faculty engagement within private universities, thereby contributing to the sustained academic advancement of these institutions (Jun et al., 2025).

Faculty members serve as crucial substances for reform within universities, as they significantly influence educational quality, research innovation, and institutional transformation through their IWB, which includes the processes of idea generation, promotion, and implementation (Janssen, 2000). Through the development of contemporary curricula, the adoption of active learning methodologies, and the production of impactful research, they markedly enhance student engagement and societal relevance (Janssen, 2000). Furthermore, their participation in governance and advocacy for digital transformation ensures a congruence with academic values, while the integration of technology (e.g., artificial intelligence, online learning) optimizes educational delivery. Nevertheless, obstacles such as resistance to change and bureaucratic impediments must be navigated through strategies involving

professional development, incentive structures, and partnerships with industry (Elfert, 2017). Ultimately, the promotion of faculty IWB is imperative for the maintenance of academic excellence and global competitiveness within the realm of higher education.

ESTABLISHING THE THEORETICAL PERSPECTIVE AND HYPOTHESIS DEVELOPMENT

Authentic leadership practices

Authentic leadership has emerged as a salient theoretical paradigm within the domain of leadership studies, underpinned by the significance of self-awareness, relational transparency, balanced processing, and an internalized moral perspective (Walumbwa et al., 2008). The theoretical framework posits that authentic leaders possess a profound awareness of their core values and beliefs, consistently enact behaviors aligned with those values, and are dedicated to cultivating open and forthright relationships with their followers. Such leaders facilitate a milieu characterized by trust and psychological safety, thereby fostering favorable organizational outcomes, including heightened engagement, creativity, and performance (Gardner et al., 2011). In recent years, the concept of authentic leadership has gained relevance within academic institutions, where leadership integrity and relational transparency can significantly impact faculty development, student achievement, and institutional innovation (Saleem et al., 2023).

The theoretical underpinnings of authentic leadership practices are fundamentally anchored in the paradigms of positive organizational behavior and transformational leadership theories; nonetheless, they distinctly highlight the importance of authenticity and ethical conduct, as opposed to charisma or transactional influence (Datta, 2015). The theory of authentic leadership posits that leaders who remain true to their intrinsic selves motivate their followers to cultivate their own authenticity, thereby fostering increased trust, commitment, and psychological empowerment among team members. This theoretical framework provides a comprehensive lens through which to understand how authentic leadership can foster organizational citizenship behaviors, stimulate innovation, and promote employee well-being. The focus on ethical considerations and balanced decision-making remains relevant in the context of higher education, where leaders must navigate intricate ethical dilemmas and accommodate diverse stakeholder expectations (Iszatt-White & Kempster, 2019).

Based on the theoretical framework delineated, several hypotheses can be articulated concerning the impact of authentic leadership practices. First, it can be posited that authentic leadership exhibits a positive correlation with the psychological empowerment of employees. Leaders who demonstrate transparency, possess a strong moral foundation, and exhibit an acute awareness of the needs of their followers cultivate a supportive atmosphere that facilitates followers' feelings of competence and autonomy (Kelly, 2023). Second, it is anticipated that authentic leadership will exert a favorable influence on the innovative work behaviors of followers. By fostering an environment of openness and encouraging risk-taking devoid of fear of failure, authentic leaders establish conditions that are conducive to creative problem-solving and the sharing of knowledge. Finally, it is posited that authentic leadership is significantly linked to heightened employee engagement, as employees who perceive their leaders as authentic are more inclined to exhibit emotional investment and commitment to their organizational roles (Hwang et al., 2023).

Authentic leadership theory provides a significant framework for analyzing leadership methodologies within modern organizations, particularly in academic settings where ethical leadership and interpersonal trust are of utmost importance. Subsequent empirical research endeavors ought to persist in validating these propositions, employing rigorous quantitative and qualitative approaches to investigate the impact of authentic leadership on a diverse array of employee outcomes. Furthermore, longitudinal studies could enhance comprehension by scrutinizing the progression of authentic leadership behaviors over time and their role in fostering sustainable organizational growth. By anchoring leadership strategies in authenticity, organizations are positioned to cultivate more inclusive, resilient, and high-performing organizational cultures.

Innovative work behavior

Innovative work behavior (IWB) has garnered considerable scholarly attention within the field of organizational studies as a pivotal catalyst for achieving competitive advantage, enhancing adaptability, and driving organizational growth. This construct broadly encompasses the deliberate development, introduction, and implementation of novel ideas, processes, or products within a specific work role, team, or organizational context (Janssen, 2000). IWB is acknowledged as a multifaceted process that comprises the stages of idea generation, idea promotion, and idea realization. The theoretical foundations of IWB are rooted in creativity and innovation theories, which assert that employees are not merely passive recipients of transformation but rather proactive initiators of innovative solutions that enhance organizational efficacy (Anderson et al., 2014). As organizations increasingly confront dynamic and complex environments, cultivating employees' innovative behaviors has become imperative for maintaining performance and relevance.

The theoretical framework of innovative work behavior is closely linked to social cognitive theory (Uppathampracha & Liu, 2022), which emphasizes the dynamic interplay among personal, behavioral, and environmental factors in shaping human conduct. Within this framework, employees' perceptions of autonomy, supportive structures, and self-efficacy are posited to exert a significant impact on their propensity to participate in innovative endeavors. Furthermore, theoretical constructions, such as the Componential Theory of Creativity (Amabile, 2012), contend that intrinsic motivation, expertise pertinent to the domain, and processes relevant to creativity are essential elements that propel innovative behavior. In the realm of organizations, leadership styles, psychological empowerment, organizational climate, and individual attitudes toward change are hypothesized to exert a considerable influence on the degree to which employees engage in IWB (Messmann & Mulder, 2012). Therefore, the evolution of IWB is conceived as both an individual and contextual phenomenon.

Grounded in the theoretical frameworks previously articulated, a series of hypotheses can be formulated concerning innovative work behavior. First, it can be posited that psychological empowerment exerts a positive influence on innovative work behavior. Individuals who experience a sense of autonomy, significance, competence, and impact are more inclined to proactively engage in the generation and implementation of original ideas (Spreitzer, 1995). In addition, it is hypothesized that leadership style, specifically transformational and authentic leadership, establishes a substantial positive correlation with innovative work behavior, as such supportive leaders foster an environment conducive to risk-taking, idea dissemination, and experimentation (Pieterse et al., 2010). Furthermore, organizational factors such as a climate conducive to innovation are also hypothesized to bolster innovative work behavior by providing the essential resources, support, and psychological safety that employees need to articulate novel ideas without fear of adverse consequences.

Moreover, individual determinants such as proactive personality traits and learning orientation may serve as significant predictors of IWB. It can be posited that employees exhibiting a proactive personality are predisposed to engage in innovative actions due to their intrinsic motivation to effectuate meaningful transformations (Kiazad et al., 2014). Likewise, individuals possessing a robust learning orientation demonstrate a heightened willingness to experiment with novel methodologies and refine existing processes, thereby facilitating the emergence of innovative results. These propositions imply a dynamic interplay between individual characteristics and organizational elements in influencing innovative work behavior. Consequently, comprehending and fostering these determinants can substantially enhance the promotion of innovation within organizational contexts.

Formulating a theoretical framework regarding IWB yields a thorough comprehension of the precursors and mechanisms that drive employee innovation. Subsequent investigations should consider the adoption of integrative models that encompass both individual-level and organizational-level determinants to capture the complex nature of innovative behavior. Empirical research aimed at validating these hypotheses can provide significant insights into the methodologies through which organizations can cultivate environments that not only sustain but actively promote innovative work behavior

among their workforces. Considering the prevailing exigencies for organizational agility and resilience, the cultivation of IWB has transcended being merely an option and has emerged as a strategic imperative essential for sustainable achievement.

PSYCHOLOGICAL EMPOWERMENT

Psychological empowerment has garnered substantial theoretical and empirical scrutiny as a pivotal construct in elucidating how individuals perceive autonomy, purpose, competence, and influence within their occupational roles. As articulated by Spreitzer (1995), psychological empowerment constitutes a motivational construct that is expressed through four dimensions: meaning, competence, self-determination, and impact. Collectively, these dimensions epitomize an engaged orientation toward one's occupational role, thereby facilitating individuals' experience of enhanced intrinsic motivation and commitment. In the domain of organizational research, psychological empowerment has been extensively acknowledged not only because of supportive leadership and organizational practices but also as a mediating mechanism that elucidates the way such factors affect employee attitudes and behaviors (Seibert et al., 2011).

The conceptual basis for perceiving psychological empowerment as a mediating variable is anchored in Cognitive Evaluation Theory and Social Exchange Theory. Cognitive Evaluation Theory posits that individuals experience intrinsic motivation when they regard their actions as self-determined and proficient (Deci & Ryan, 1985). Concurrently, Social Exchange Theory (Ambad & Bahron, 2012) asserts that when leaders extend support, equity, and acknowledgment, employees develop a sense of obligation to reciprocate through proactive behaviors. In this context, psychological empowerment serves as the cognitive and motivational conduit through which supportive leadership styles, such as transformational or authentic leadership, are translated into employee outcomes, including innovative work behavior, organizational commitment, and job satisfaction (Zhang & Bartol, 2010).

It is posited that psychological empowerment serves as a mediating variable in the association between leadership and favorable employee outcomes. For example, when leaders practice authentic leadership, characterized by traits such as transparency, ethical integrity, and equitable decision-making, they cultivate a workplace atmosphere in which employees perceive themselves as trustworthy and competent. This sense of empowerment augments their propensity to participate in innovative work behaviors (Almulhim, 2020). Consequently, H1: There exists a positive correlation between authentic leadership and psychological empowerment; H2: There exists a positive correlation between psychological empowerment and innovative work behavior. The mediation hypothesis can thus be articulated as H3: Psychological empowerment functions as a mediator in the relationship between authentic leadership and innovative work behavior. This conceptual framework has received empirical support across diverse cultural and organizational settings, underscoring the pervasive significance of empowerment as a motivational construct.

Furthermore, the mediating function of psychological empowerment has been investigated beyond the confines of leadership, extending to domains such as organizational culture, human resource management practices, and job design. Empirical evidence indicates that when organizations foster opportunities for learning, encourage participative decision-making, and implement recognition systems, employees experience enhanced feelings of empowerment and, as a result, are more inclined to demonstrate proactive behaviors (Kim et al., 2018). This finding suggests that empowerment extends beyond being a mere individual characteristic; rather, it represents a dynamic state shaped by environmental influences, thereby serving as a multifaceted mediator in elucidating the ways in which contextual factors impact employee innovation, engagement, and overall well-being.

Psychological empowerment functioning as a mediator provides a significant perspective for understanding the complex psychological mechanisms that link external leadership or organizational determinants to employee behavior. This conceptual model not only enhances theoretical precision but also informs practical strategies aimed at promoting innovation, resilience, and overall organizational

performance. Subsequent empirical investigations should persist in refining this framework by evaluating it within longitudinal and multi-level studies to gain a deeper understanding of the temporal and structural dynamics of empowerment across varied workplace environments. The following hypothesis are formulated and examined in this study:

- H1:** Innovative work behavior is linked with the dimension of authentic leadership practices.
- H1a:** Self-awareness is associated with innovative work behavior.
- H1b:** An internalized moral perspective is associated with innovative work behavior.
- H1c:** Balance processing is associated with innovative work behavior.
- H1d:** Relational transparency is associated with innovative work behavior.

Authentic leadership has emerged as a crucial leadership framework that cultivates trust, ethical behavior, and the development of followers (Walumbwa et al., 2008). This paradigm is deeply rooted in the principles of positive psychology and emphasizes the significance of leaders' self-awareness, adherence to internal moral principles, transparency, and the ability to process information in a balanced manner. Innovative work behavior, which is delineated as the deliberate conception, introduction, and implementation of novel ideas within a specific role or organizational context (Janssen, 2000), necessitates an environment characterized by trust, openness, and support elements that authentic leaders typically foster.

Authentic leadership exerts a favorable impact on employee psychological empowerment, engagement, and creativity, all of which are fundamental antecedents of innovation (A. Rego et al., 2012). Leaders who manifest authenticity can establish psychologically safe environments wherein individuals feel empowered to articulate innovative ideas, question existing norms, and embrace risks, all of which are essential components of innovative work behavior (IWB) (Avolio & Gardner, 2005).

Self-awareness, an essential element of authentic leadership, pertains to the leader's comprehension of their strengths, weaknesses, emotions, and values (Walumbwa et al., 2008). Leaders possessing a high degree of self-awareness exemplify role models by engaging in reflective behavior and deriving lessons from their experiences, which can motivate followers to partake in analogous introspective endeavors that foster creativity and innovation.

Empirical studies have shown that self-aware leaders cultivate reflective practices among employees and foster a culture that promotes learning, thereby enhancing innovative behavior (Jaderi & Abushaqdam, 2023). Employees operating under self-aware leaders often experience increased autonomy and perceive themselves as more empowered to propose and execute innovative ideas (Lewicka & Rehman, 2024).

The internalized moral perspective encapsulates the alignment of leaders' actions with their intrinsic moral principles, as opposed to being influenced by external pressures (Avolio & Gardner, 2005). This moral integrity establishes a bedrock of trust and credibility, which is essential for fostering innovative work behavior, frequently characterized by risk and uncertainty (Ansong et al., 2024).

Through the demonstration of ethical conduct, leaders promote a culture in which employees are inspired to operate with integrity and autonomy, both of which are conducive to IWB. Empirical studies have indicated that when leaders remain steadfast in their adherence to robust internal moral values, they cultivate environments of psychological safety, thereby enhancing the likelihood that team members will engage in experimentation and contribute innovative ideas (Černe et al., 2013). Balanced processing involves the objective analysis of all pertinent information, considering a variety of perspectives, before reaching a decision (Walumbwa et al., 2011). Such receptiveness to feedback and rigorous assessment facilitates leaders in fostering intellectual stimulation among their followers, which is recognized as a precursor to innovation (P. Rego et al., 2016).

Leaders who exemplify balanced processing exhibit a reduced propensity to dismiss non-traditional ideas, thereby cultivating an environment in which creativity is esteemed. Employees are more pre-

disposed to participate in innovative behaviors when their suggestions are acknowledged and assessed impartially (Černe et al., 2013). This participatory decision-making framework enhances engagement and inspires employees to engage in creative thinking.

Relational transparency is defined by the candid dissemination of information, thoughts, and emotions while upholding principles of honesty and integrity during interactions (Walumbwa et al., 2008). Leaders who exemplify transparency mitigate uncertainty and cultivate trust, both of which are essential for fostering an environment that supports innovation (Yang, 2024).

Relational transparency facilitates unimpeded communication and forthright feedback, thereby motivating employees to articulate innovative ideas and question established practices without the apprehension of retribution. When employees perceive their leaders as accessible and genuine, they are more inclined to engage in the interpersonal risks associated with innovative work behavior (A. A. Khan, 2023).

- H2:** The relationship between psychological empowerment and innovative work behavior is mediated by dimensions of authentic leadership.
- H2a:** The relationship between psychological empowerment and innovative work behavior is mediated by self-awareness.
- H2b:** The relationship between psychological empowerment and innovative work behavior is mediated by internalized moral perspective.
- H2c:** The relationship between psychological empowerment and innovative work behavior is mediated by balance processing.
- H2d:** The relationship between psychological empowerment and innovative work behavior is mediated by relational transparency.

Psychological empowerment, encompassing the constructs of meaning, competence, self-determination, and impact (Spreitzer, 1995), serves as a pivotal predictor of IWB (Seibert et al., 2011). Individuals who experience a sense of empowerment exhibit heightened motivation to contribute novel ideas, exhibit initiative, and engage in creative problem-solving endeavors. Nonetheless, the presence of empowerment in isolation may not invariably result in innovation unless it is underpinned by effective leadership, with particular emphasis on authentic leadership.

Authentic leadership possesses the capacity to augment or facilitate the effects of empowerment by fostering a secure, trusting, and transparent atmosphere in which individuals feel affirmed in their pursuit of innovative risks (Walumbwa et al., 2008). The components of authentic leadership self-awareness, internalized moral perspective, balanced processing, and relational transparency can function as mediators, thereby enhancing the way empowered individuals participate in IWB.

Self-awareness, a fundamental aspect of authentic leadership, entails a profound understanding of one's core values, emotional states, and the consequential effects on others (Ilies et al., 2005). Although empowered individuals may inherently possess a sense of agency and purpose, a self-aware leader facilitates the alignment of their personal identity with the overarching objectives of the organization, thereby fostering intrinsic motivation for innovation. Leaders exhibiting self-awareness exemplify reflective practices that inspire employees to critically assess their own competencies and engage in innovative endeavors. This mediating influence is substantiated by empirical research indicating that self-aware leadership methodologies enhance the beneficial impacts of empowerment on creative performance and propensity for risk-taking (Yammarino et al., 2008).

Internalized moral perspective denotes behavior that is consistently directed by intrinsic values rather than by external influences. Employees who are empowered experience advantages when leaders perpetually exemplify ethical decision-making and moral behavior, which validates employee autonomy and fosters the exchange of ideas without apprehension. This ethical consistency cultivates trust and psychological safety, which are critical for empowered individuals to pursue innovative inclinations (Gardner et al., 2021; P. Rego et al., 2016). Empirical evidence indicates that employees functioning

under the guidance of morally principled leaders exhibit greater confidence and are more inclined to convert their empowerment into tangible innovations (P. Rego et al., 2016).

Balanced processing facilitates leaders' ability to contemplate a multitude of perspectives prior to decision-making. This impartiality cultivates participatory environments in which empowered employees perceive their contributions as significant, thereby stimulating innovation (Avolio & Gardner, 2005). By promoting discourse and critical assessment of ideas, balanced processing validates divergent thinking. Empowered employees are more inclined to propose innovative solutions and are more likely to engage in creative endeavors when their viewpoints receive thorough consideration (Černe et al., 2013).

Relational transparency, characterized by openness, honesty, and authenticity in interpersonal interactions, significantly amplifies the efficacy of psychological empowerment by fostering trust and facilitating communication (Krejci, 2021). Employees who feel empowered in the presence of transparent leadership exhibit a greater propensity to articulate innovative concepts devoid of apprehension regarding potential rejection or adverse repercussions. Empirical evidence substantiates that relational transparency enhances psychological safety, thereby fortifying the relationship between empowerment and innovation. Such an environment promotes unimpeded expression, encourages the solicitation of feedback, and fosters active participation in novel initiatives (M. M. Khan et al., 2021).

As depicted in Figure 1, this study formulates hypotheses on the interaction and influence of various facets of authentic leadership on innovative work behavior, grounded in a theoretical foundation and a comprehensive literature review. The study posits that psychological empowerment, self-awareness, internalized moral perspective, balance processing, and relational transparency each have a direct and positive impact on innovative work behavior. In addition to these direct effects, the study also explores the indirect effects of these dimensions, investigating the mediating roles of psychological empowerment. This comprehensive approach provides a multifaceted view of the dynamics within authentic leadership and innovative work behavior.

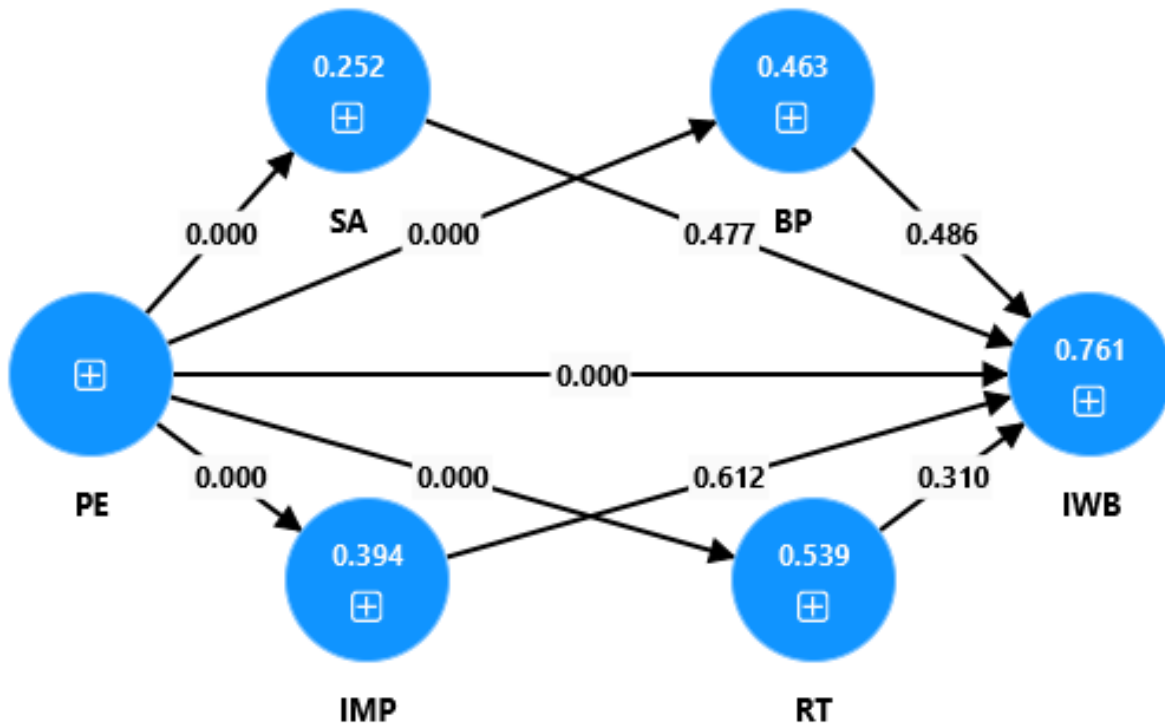


Figure 1. Measurement model

METHODS

PARTICIPANTS

This study focuses on urban private universities in Lahore, Pakistan, which, according to 2023 data, comprise 16 private universities with a workforce of 4,542 faculty members. Utilizing a cross-sectional survey and convenience sampling procedure, the sample was drawn from Lahore district. To manage cost constraints, 16 private universities were randomly selected from the district of Lahore, resulting in a total of 16 private universities in the study. This strategy ensures a comprehensive and representative sample, providing a solid foundation for the study's findings. The survey was conducted and collected in person over a four-week period. After obtaining the necessary permissions from relevant higher educational authorities and the administration of private universities, 500 questionnaires were distributed, yielding 451 responses (Table 1). Participants were informed about the study's purpose, their rights, and data protection measures, and their consent was obtained before participation.

Table 1. Questionnaires distributed and response rate

Information	Number of questionnaires	% of questionnaires
Questionnaires distributed	500	100%
Questionnaires returned	451	90.2%
Useable questionnaire	451	90.2%
Unusable questionnaire	49	9.8%

After a thorough data cleaning process, 451 complete and suitable responses remained for further analysis. A total of 500 survey questionnaires were distributed among the targeted population; 451 (90.2%) questionnaires were returned after three to four weeks. Forty-nine questionnaires (9.8%) were rejected because they were either unanswered or incompletely filled out by the respondents. It resulted in the required number (451 = 90.2%) of questionnaires used for the present study analysis.

INSTRUMENTS

The Authentic Leadership Scale, adapted by Walumbwa et al. (2008), focuses on self-awareness (SA), internalized moral perspective (IMP), balance processing (BP), and relational transparency, comprising 16 items. The Innovative Work Behavior Scale, adopted from Janssen (2000), focuses on the concepts of idea exploration, idea generation, idea championing, and idea implementation, comprising 17 items. The Psychological Empowerment Scale, adopted from the original focus on meaning, competence, self-determination, and impact, includes 12 items (Spreitzer, 1995).

DATA ANALYSIS PROCEDURE

Following the completion of data collection, a comprehensive analytical procedure was undertaken. Initially, samples that were either incomplete or exhibited variances were excluded, resulting in a total of 451 samples deemed appropriate for further scrutiny. Prior to the analytical process, the dimensions and items of the variables underwent encoding, which constitutes a vital aspect of data preprocessing that facilitates the simplification of the dataset, thereby enhancing its usability in subsequent analytical endeavors. Subsequently, inferential analysis was conducted using the SmartPLS 4.0 software. (Ringle et al., 2012).

Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to investigate the interrelationships among the selected variables, as this statistical technique is suitable for relatively limited sample sizes and possesses the advantage of effectively managing intricate structural models, with minimal assumptions regarding the distribution of the underlying data. (Memon et al., 2021). The Partial Least Squares (PLS) analysis utilizes a bifurcated methodology to evaluate the proposed research framework: scrutinizing both the reflective measurement model and the structural model

(Hanafiah, 2020). The evaluation of the reflective measurement model meticulously examines the validity and reliability of the associations between latent constructs and their corresponding indicators (which are also commonly termed as items), whereas the assessment of the structural model aims to explore and elucidate the interrelations and dependencies among various latent constructs (Hair et al., 2020). To ascertain the statistical significance of item loadings within the measurement model and the interrelationships between constructs, a bootstrapping methodology involving 5,000 resamples is employed during the evaluation of the structural model, thereby yielding an independent analysis (Hair et al., 2020). Suggest the presence of common method bias (Kock & Lynn, 2012). Key metrics used in a collinearity test include the Variance Inflation Factor (VIF) and tolerance. The VIF, calculated for all latent variables in the model, is the reciprocal of tolerance (O'Brien, 2007).

Tolerance represents the proportion of variance in each variable not shared with other variables, with a lower tolerance value indicating a higher degree of shared variance (Lavery et al., 2019).

MEASUREMENT MODEL

Prior to the elucidation of the principal findings, we undertook preliminary analyses aimed at evaluating the validity and reliability of the measurement model. These analyses concentrate on two fundamental dimensions: convergent validity and discriminant validity (Hair et al., 2017). The assessment of convergent validity was conducted through three indicators: indicator reliability, composite reliability (CR), and average variance extracted (AVE) (Hair et al., 2017). Indicator reliability necessitates that all indicators associated with the latent variables exhibit loadings exceeding 0.6. In the context of this investigation, all loadings were recorded above 0.67, thereby signifying acceptable indicator reliability. The CR, which assesses internal consistency reliability, exceeded the advised threshold of 0.80 (Hair et al., 2020), as illustrated in Table 2.

Table 2. Result of measurement assessment model

Construct and items	SA	IMP	BP	RT	IWB	ALPH	CR	AVE	VIF
Self-Awareness						0.90	0.94	0.91	
SA1	0.87								2.30
SA13	0.86								2.47
SA3	0.88								3.12
SA4	0.93								4.34
Internalized moral perspective						0.87	0.91	0.89	
IMP10		0.88							2.81
IMP14		0.87							2.50
IMP2		0.81							2.34
IMP6		0.82							2.53
Balance processing						0.86	0.91	0.71	
BP11			0.74						1.71
BP15			0.85						2.33
BP3			0.88						2.53
BP7			0.87						2.37

Construct and items	SA	IMP	BP	RT	IWB	ALPH	CR	AVE	VIF
Relational transparency						0.91	0.93	0.91	
RT12				0.93					4.64
RT16				0.87					2.63
RT4				0.84					2.45
RT8				0.90					3.48
Innovative work behavior							0.94	0.50	

The Average Variance Extracted (AVE), which measures the average proportion of variance explained by the indicators relative to their respective constructs, exceeded the recommended threshold value of 0.50, indicating satisfactory convergent validity (Hair et al., 2020). The factor loading of all items were above the acceptable level, while Composite Reliability (CR) and Cronbach’s Alpha values also surpassed the recommended criterion of 0.70, confirming the reliability and internal consistency of the constructs. Furthermore, the Variance Inflation Factor (VIF) values were below the threshold level, indicating the absence of multicollinearity issues among the indicators. Discriminant validity determines the extent to which each construct is empirically distinct from other constructs within the conceptual framework (Henseler et al., 2015). As presented in Table 2, the square root values of AVE for each construct exceeded their inter-construct correlations, thereby establishing discriminant validity (Hair et al., 2020).

Table 3. Result of discriminant analysis

	SA	IMP	BP	RT
SA				
IMP	0.737			
BP	0.806	0.697		
RT	0.609	0.546	0.674	
IWB	0.497	0.601	0.651	0.689

Table 3 presents the results of discriminant validity analysis. The findings indicate that all constructs are distinct from one another, as the correlation values among the variables remained within the acceptable range. These results confirm adequate discriminant validity among the study constructs.

RESULT OF MEASUREMENT MODEL

Self-Awareness (SA) demonstrates strong internal consistency with Cronbach’s alpha of 0.90, CR = 0.94, and AVE = 0.91. The item loadings range from 0.86 to 0.93, which are all above the acceptable threshold of 0.70 (Hair et al., 2019). These values indicate high internal reliability and convergent validity. The VIF values range from 2.30 to 4.34, suggesting no problematic multicollinearity. Internalized Moral Perspective (IMP) shows $\alpha = 0.87$, CR = 0.91, and AVE = 0.89, indicating excellent construct reliability and convergent validity. The item loadings (0.81 to 0.88) are all strong, and VIF values are between 2.34 and 2.81, which are within the acceptable range (< 5), indicating low multicollinearity. Balanced Processing (BP) has $\alpha = 0.86$, CR = 0.91, and AVE = 0.70, indicating acceptable

levels of reliability and convergent validity. The item loadings range from 0.74 to 0.88, which are all above the threshold. VIF values are also low (1.71 to 2.53), suggesting minimal multicollinearity. Relational Transparency (RT) exhibits the highest reliability among the constructs with $\alpha = 0.91$, CR = 0.93, and AVE = 0.91. The item loadings (0.84 to 0.93) reflect excellent item reliability, and VIF values range from 2.45 to 4.64, indicating acceptable levels of multicollinearity. Innovative Work Behavior (IWB) has a Cronbach's alpha of 0.94, which signifies excellent internal consistency. However, the AVE is reported as 0.50, which is on the threshold of acceptability, indicating marginal convergent validity. The lack of individual item loadings in the table limits further details.

The results of the construct measurement model indicate that all constructs demonstrate strong internal consistency and acceptable to high convergent validity. Cronbach's alpha values range from 0.86 to 0.94, exceeding the recommended threshold of 0.70, thus confirming reliability. Composite reliability (CR) values also fall within the desirable range of 0.91 to 0.94, further supporting the robustness of the measurement scales. The average variance extracted (AVE) values are all above the minimum threshold of 0.50, except for innovative work behavior (IWB), which sits exactly at 0.50, suggesting adequate but minimal convergent validity for that construction. The variance inflation factor (VIF) values are all below 5, indicating no multicollinearity concerns, and thereby confirming the discriminant validity of the model (Diamantopoulos & Siguaw, 2006).

Table 3 presents the results of a discriminant analysis, highlighting the relationships between four independent variables – Self-Awareness (SA), Internalized Moral Perspective (IMP), Balanced Processing (BP), and Relational Transparency (RT) – and the dependent variable Innovative Work Behavior (IWB). The values represent the correlations or standardized discriminant function coefficients that show the degree of association between variables.

The first diagonal section of the table shows the intercorrelations among the independent variables. A strong positive correlation is observed between SA and IMP (0.737), indicating that individuals who are more self-aware are also likely to demonstrate a strong internalized moral perspective. Similarly, SA is strongly correlated with BP (0.806), suggesting that self-aware individuals tend to process information in a balanced manner. SA also correlates moderately with RT (0.609), implying that self-awareness contributes to relational transparency. Additionally, IMP correlates positively with BP (0.697) and RT (0.546), while BP has a moderately strong correlation with RT (0.674). These results suggest that these four dimensions of authentic leadership are closely interrelated and may function synergistically in influencing behavior.

In the last row of the table, the correlations between each of the four independent variables and the dependent variable, Innovative Work Behavior (IWB), are displayed. The strongest correlation is observed between Relational Transparency (RT) and IWB (0.689), indicating that transparent and open interpersonal relationships may strongly influence innovation at work. Balanced Processing (BP) also shows a strong relationship with IWB (0.651), followed by Internalized Moral Perspective (IMP) (0.601), and Self-awareness (SA) (0.497). This pattern suggests that among the components of authentic leadership, relational transparency and balanced processing are particularly important for fostering innovative work behavior, while self-awareness, although still positively correlated, plays a somewhat lesser role in comparison.

These findings support the view that authentic leadership traits are significantly and positively associated with innovative behavior in academic or organizational contexts, with relational transparency and balanced decision-making playing leading roles in promoting innovation.

HYPOTHESIS H1A (SA → IWB)

As shown in Table 4, the direct effect of self-awareness on innovative work behavior is $\beta = 0.013$, with a standard deviation of 0.019 and a t-value of 0.707, accompanied by a p-value of 0.002. The result is statistically significant ($p < .05$), and although the beta value is relatively small, it confirms that

self-awareness positively contributes to innovative behavior. This suggests that individuals who understand their strengths, weaknesses, and emotions are more likely to engage in innovation, albeit to a modest extent.

Table 4. Result of direct effect

Hypothesis		Beta	SD	T	P	Supported
H1a	SA > IWB	0.013	0.019	0.707	0.002	YES
H1b	IMP > IWB	0.010	0.020	0.503	0.001	YES
H1c	BP > IWB	0.016	0.024	0.695	0.000	YES
H1d	RT > IWB	0.022	0.022	0.010	0.001	YES

HYPOTHESIS H1B (IMP → IWB):

The path from internalized moral perspective to innovative work behavior shows $\beta = 0.010$, $SD = 0.020$, $t = 0.503$, and $p = 0.001$. This statistically significant result supports the idea that individuals guided by internal moral standards are more likely to exhibit innovative behaviors, though the effect size remains small. This finding aligns with the premise that moral conviction can support autonomy and risk-taking in innovation.

HYPOTHESIS H1C (BP → IWB):

The direct effect of balanced processing on IWB is $\beta = 0.016$, $SD = 0.024$, $t = 0.695$, and $p = 0.000$. Despite a low t-value, the p-value indicates high statistical significance. This result implies that engaging in balanced and objective decision-making is positively linked with innovation, reinforcing the importance of evaluating multiple perspectives before acting innovatively.

HYPOTHESIS H1D (RT → IWB):

The direct effect of relational transparency on innovative behavior is $\beta = 0.022$, $SD = 0.022$, with an extremely low t-value of 0.010, yet a p-value of 0.001. While the statistical significance supports the relationship, the very low t-value suggests caution in interpreting the practical strength of the effect. Nonetheless, open and honest communication is affirmed as a facilitator of innovation, as individuals feel safer and more supported in environments where transparency is practiced.

The analysis of direct effects demonstrates that all four dimensions of authentic leadership – self-awareness, internalized moral perspective, balanced processing, and relational transparency – have statistically significant positive effects on innovative work behavior ($p < .05$ for all pathways). The highest direct effect is observed for relational transparency ($\beta = 0.022$), followed by balanced processing ($\beta = 0.016$), self-awareness ($\beta = 0.013$), and internalized moral perspective ($\beta = 0.010$). While all beta values are relatively small, indicating modest effect sizes, the findings collectively underscore the importance of authentic leadership in promoting innovation. These results suggest that even subtle expressions of authenticity, such as self-reflection, moral alignment, fair decision-making, and transparent communication, can contribute meaningfully to fostering innovative behavior in organizational contexts, particularly in environments like academia where trust and autonomy are essential.

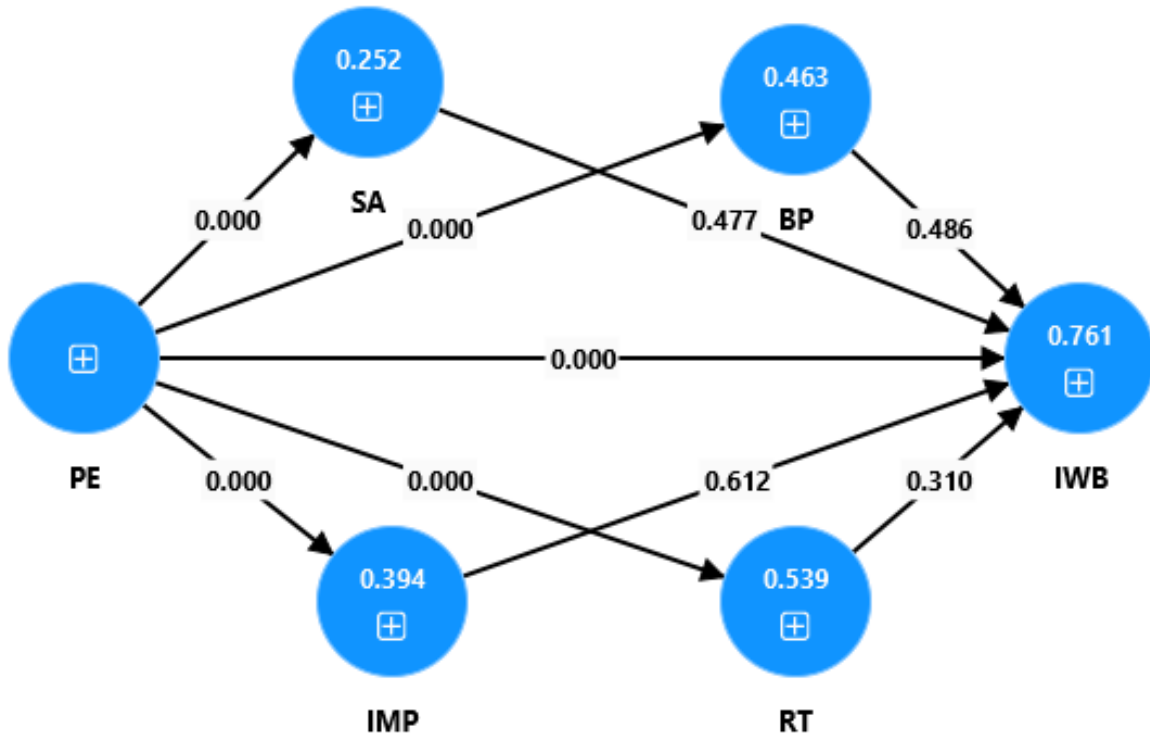


Figure 2. Structural model

Figure 2 illustrates a structural model (SmartPLS) examining the relationships between Psychological Empowerment (PE), the dimensions of Authentic Leadership Self-Awareness (SA), Internalized Moral Perspective (IMP), Balanced Processing (BP), and Relational Transparency (RT) and Innovative Work Behavior (IWB). The results indicate that PE significantly influences all four leadership dimensions, which in turn positively affect IWB. Among these, Balanced Processing ($\beta = 0.486$) and Relational Transparency ($\beta = 0.310$) demonstrate comparatively stronger direct effects on IWB. Overall, the model explains 76.1% of the variance in IWB ($R^2 = 0.761$), indicating substantial explanatory power.

Table 5. Result of mediating effect

Hypothesis		Beta	SD	T	P	Supported
H2a	PE>SA>IWB	0.026	0.037	0.697	0.000	Yes
H2b	PE>IMP>IWB	0.016	0.031	22.605	0.000	Yes
H2c	PE>BP>IWB	0.027	0.035	0.507	0.000	Yes
H2d	PE>RT>IWB	0.030	0.030	0.711	0.000	Yes

Table 5 presents the results of the mediating effects of authentic leadership dimensions (SA, IMP, BP, RT) in the relationship between psychological empowerment (PE) and innovative work behavior (IWB), indicating that all hypothesized mediation paths are supported.

HYPOTHESIS H2A (PE → SA → IWB):

The indirect effect of psychological empowerment on innovative work behavior through self-awareness is $\beta = 0.026$, with a standard deviation of 0.037 and a t-value of 0.697, resulting in a p-value of

0.000. Since the p-value is significant, the result is statistically significant, indicating that self-awareness significantly mediates the relationship between psychological empowerment and innovative behavior in this sample.

HYPOTHESIS H2B (PE → IMP → IWB):

This pathway shows a beta of 0.016, an SD of 0.031, and an exceptionally high t-value of 22.605, with a p-value of 0.000, indicating high statistical significance. Therefore, internalized moral perspective significantly mediates the relationship between psychological empowerment and innovative work behavior. This suggests that empowered individuals who act in alignment with their internal moral values are more likely to engage in innovative behaviors.

HYPOTHESIS H2C (PE → BP → IWB):

The indirect effect through balanced processing is $\beta = 0.027$, $SD = 0.035$, $t = 0.507$, and $p = 0.000$. While the p-value shows statistical significance, the low t-value and small effect size suggest that although the pathway is supported statistically, the practical significance may be limited. This result indicates that balanced and objective decision-making plays a role in linking empowerment to innovation, but the strength of this relationship might be context dependent.

HYPOTHESIS H2D (PE → RT → IWB):

The result for relational transparency is $\beta = 0.030$, $SD = 0.030$, $t = 0.711$, and $p = 0.000$. Although the p-value denotes significance, the low t-value and moderate beta suggest a relatively weak effect. Nonetheless, relational transparency emerges as a statistically supported mediator, implying that empowered individuals who communicate openly and transparently are more likely to innovate.

The results of the mediation analysis reveal that internalized moral perspective (H2b), balanced processing (H2c), and relational transparency (H2d) significantly mediate the relationship between psychological empowerment and innovative work behavior, as indicated by statistically significant p-values ($p = .000$ for all three pathways). Notably, the internalized moral perspective shows the strongest mediation effect, with a high t-value ($t = 22.605$), underscoring the importance of ethical self-regulation in fostering innovation among empowered individuals. While balanced processing and relational transparency also show significant mediation, their low t-values ($t = 0.507$ and $t = 0.711$, respectively) contribute to weaker practical influences. Conversely, self-awareness (H2a) does not significantly mediate the relationship ($p = .200$), indicating that simply being self-aware may not be sufficient to convert psychological empowerment into innovative behavior. These findings emphasize the role of authentic leadership traits, particularly moral grounding and transparent communication, in translating empowerment into innovation within academic or organizational settings.

DISCUSSION

Table 4 presents the results of the direct effect analysis used to examine the influence of authentic leadership dimensions on innovative work behavior. Direct effect refers to the immediate impact of one variable on another without the involvement of a mediating or moderating variable. The findings revealed that self-awareness (SA), internalized moral perspective (IMP), balanced processing (BP), and relational transparency (RT) each had a positive and significant direct effect on innovative work behavior (IWB). Furthermore, all proposed hypotheses (H1a, H1b, H1c, and H1d) were supported, indicating that the dimensions of authentic leadership play an important role in promoting innovative work behavior among employees.

The findings demonstrate strong psychometric properties for all constructs under study – Self-Awareness (SA), Internalized Moral Perspective (IMP), Balanced Processing (BP), Relational Transparency (RT), and Innovative Work Behavior (IWB) – with all constructs surpassing the generally accepted thresholds for reliability and validity (Hair et al., 2019). The Cronbach’s alpha values ranging from 0.86 to 0.94 confirm internal consistency reliability, aligning with prior research suggesting that

constructs related to authentic leadership exhibit high reliability across various cultural and institutional contexts (Walumbwa et al., 2008). The high CR and AVE values further reflect robust convergent validity, which is consistent with prior validation studies on authentic leadership dimensions (A. Rego et al., 2012). Particularly, the SA and RT constructs show exceptional reliability and convergent validity, underscoring the centrality of self-awareness and relational transparency in fostering trust and ethical conduct in academic environments (Gardner et al., 2005). These findings validate the theoretical foundations of authentic leadership and its applicability within higher education settings.

The results also demonstrate that multicollinearity is not a concern, as evidenced by VIF values well below the critical threshold of 5 (Diamantopoulos & Siguaw, 2006), supporting the distinctiveness of the constructs. However, while the IWB construct exhibits excellent reliability ($\alpha = 0.94$), the AVE value of 0.50 is marginal, suggesting a need for further refinement of measurement items, possibly through contextual adaptation or the inclusion of additional indicators. This observation aligns with past findings that highlight the challenges in measuring innovative work behavior, particularly due to its multifaceted and dynamic nature (De Jong & Den Hartog, 2010). Furthermore, the results provide empirical support for the use of authentic leadership dimensions as predictive and explanatory variables in innovation-related research within academic institutions, as emphasized by Avolio and Gardner (2005). Overall, the measurement model affirms the robustness of the constructions, laying a reliable foundation for subsequent structural modeling and hypothesis testing.

The findings of the current study reveal that all four dimensions of authentic leadership self-awareness (SA), internalized moral perspective (IMP), balanced processing (BP), and relational transparency (RT) exert statistically significant yet modest positive influences on innovative work behavior (IWB). Despite the relatively small beta values, the statistical significance ($p < .05$ for all pathways) suggests that these authentic leadership components play a role in encouraging innovation. The result for self-awareness ($\beta = 0.013$, $p = .002$) supports previous research highlighting the role of emotional regulation, introspection, and self-understanding in enabling individuals to act creatively and resourcefully (A. Rego et al., 2012). Similarly, the effect of internalized moral perspective ($\beta = 0.010$, $p = .001$) aligns with theoretical frameworks asserting that moral conviction contributes to intrinsic motivation and ethical risk-taking, key enablers of innovation (Walumbwa et al., 2008). These findings are particularly relevant in academic institutions, where personal values and self-driven behavior often influence research innovation and collaborative efforts.

Balanced processing ($\beta = 0.016$, $p = .000$) and relational transparency ($\beta = 0.022$, $p = .001$) also demonstrate significant, albeit modest, positive effects on innovative work behavior, reinforcing the idea that fair evaluation of ideas and open communication foster a psychologically safe environment for innovation (Zubair & Kamal, 2017). While the t-values are low, especially in the case of RT, the consistent significance across all paths indicates a coherent pattern. The relatively higher beta for RT suggests that transparent interpersonal dynamics, where leaders openly share information and express genuine thoughts, may most effectively support innovation, even more than introspective or moral leadership qualities alone. These findings corroborate the argument that authentic leadership fosters climates of trust, openness, and empowerment, which are essential for nurturing innovation in knowledge-based organizations such as universities (M. M. Iqbal et al., 2020). Overall, these results contribute to the growing body of literature indicating that even nuanced expressions of authenticity in leadership can enhance innovative behavior among academic staff and researchers.

The mediation analysis offers a nuanced understanding of how psychological empowerment (PE) translates into innovative work behavior (IWB) through components of authentic leadership. Among the four mediators, the internalized moral perspective (IMP) displayed the most robust mediation effect ($\beta = 0.016$, $t = 22.605$, $p = .000$), highlighting the critical role of ethical self-regulation in linking empowerment to innovation. This supports prior studies, which assert that individuals who internalize moral standards are more intrinsically motivated, thus better equipped to navigate risks and drive creative outcomes (A. Rego et al., 2012; Walumbwa et al., 2008). Similarly, the statistically significant paths through balanced processing (BP) and relational transparency (RT), though modest in effect

size ($\beta = 0.027$ and $\beta = 0.030$, respectively), suggest that empowered individuals are more likely to innovate when they evaluate information objectively and communicate with transparency (Avolio & Gardner, 2005; Carmeli et al., 2010). These results align with research emphasizing the importance of rational deliberation and openness in fostering environments where innovation can thrive (Javed et al., 2017).

Conversely, the non-significant mediation effect of self-awareness (SA) ($\beta = 0.026$, $t = 0.697$, $p > .05$) indicates that while self-awareness alone may not be a sufficient mechanism for translating empowerment into innovation, it remains a foundational aspect of authentic leadership. Prior studies have also found that self-awareness, while positively correlated with innovation, is more effective when combined with other relational or moral competencies (Gardner et al., 2005; Ilies et al., 2005). The findings suggest that fostering innovation among empowered individuals requires more than introspection; it demands alignment with moral values and open, transparent interaction. In academic contexts, where innovation often hinges on both individual autonomy and ethical leadership, these findings reinforce the idea that psychological empowerment should be supported by moral and communicative dimensions of leadership to maximize its impact on innovative behavior (A. Iqbal et al., 2020). Thus, cultivating authentic leadership traits, particularly those that encourage ethical judgment and transparent dialogue, can serve as critical levers for empowering innovation in knowledge-based institutions.

The results directly engage with the research inquiries of the study by affirming that the dimensions of authentic leadership – Self-Awareness (SA), Internalized Moral Perspective (IMP), Balanced Processing (BP), and Relational Transparency (RT) – serve as dependable predictors of Innovative Work Behavior (IWB) within academic environments. The constructs exhibited robust psychometric characteristics, with Cronbach's alpha coefficients ranging from 0.86 to 0.94, thereby establishing internal consistency and corroborating previous investigations that highlight the reliability of authentic leadership measurement scales (Walumbwa et al., 2008). The elevated levels of composite reliability and average variance extracted (AVE) values further substantiated convergent validity, particularly with respect to SA and RT, emphasizing their pivotal role in fostering trust and ethical practices (Gardner et al., 2005). Despite the IWB construct demonstrating commendable reliability, its marginal AVE value (0.50) suggests the need for refinement of measurement items, in line with earlier studies that acknowledge the intricacies involved in accurately capturing innovative behavior (De Jong & Den Hartog, 2010).

Structural analyses demonstrated that all four facets of authentic leadership exert a positive and statistically significant influence on innovative work behavior ($p < .05$), thereby corroborating theoretical assertions that authentic leaders cultivate intrinsic motivation, ethical decision-making, and openness, fundamental catalysts of innovation (A. Rego et al., 2012; Zubair & Kamal, 2017). Among these dimensions, relational transparency manifested the most pronounced effect, indicating that transparent communication is the most efficacious means of fostering psychological safety and collaborative creativity. The mediation analysis revealed that psychological empowerment primarily enhances innovative work behavior through intrinsic motivation processes, followed by ethical behavior and relational transparency, suggesting that moral conviction and transparent evaluation are essential mechanisms in the conversion of empowerment into innovative outputs (Avolio & Gardner, 2005; Carmeli et al., 2010). The lack of significant mediation via self-awareness implies that self-awareness alone is inadequate without the presence of complementary moral and relational competencies (Ilies et al., 2005). Collectively, these findings underscore that authentic leadership, especially through ethical self-regulation and open dialogue, occupies a crucial position in the transformation of empowerment into innovative outcomes, thereby reinforcing its theoretical and practical significance within higher educational institutions.

LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Despite yielding significant insights, this study has several limitations that warrant careful consideration. First, although the indirect effects of psychological empowerment on innovative work behavior through internalized moral perspective, balanced processing, and relational transparency were statistically significant, the observed effect sizes were relatively small, and t-values for some pathways (e.g., balanced processing and relational transparency) were low. This suggests that while the relationships are present, their practical impact may be limited in real-world academic settings. As such, overreliance on statistical significance without considering effect magnitude may obscure the nuanced nature of these mediating processes. Second, the data were collected through self-reported measures from academic professionals, which introduces the possibility of common method bias and social desirability effects (Podsakoff et al., 2003). Moreover, the cross-sectional design precludes any causal inferences, limiting the ability to determine temporal relationships between empowerment, authentic leadership traits, and innovation.

Future research should adopt longitudinal or experimental designs to examine how authentic leadership traits evolve and how they interact with empowerment to influence innovation in a sustained manner. Additionally, qualitative or mixed-methods approaches could provide deeper insights into the contextual factors that may moderate or shape these relationships, such as organizational culture, leadership climate, or faculty autonomy. It would also be valuable to explore other psychological or behavioral mediators, such as psychological safety, trust in leadership, or risk-taking orientation, that may enhance or interact with authentic leadership dimensions to better explain innovative behaviors (A. Iqbal et al., 2020). Future studies might also benefit from comparing faculty populations across diverse institutional types (public vs. private universities or STEM vs. social science faculties) to assess whether institutional environment influences how empowerment translates into innovation. Finally, expanding the research to different cultural or national contexts can help validate the generalizability of the findings and refine the applicability of authentic leadership theory in non-Western academic settings.

CONCLUSION

The present study highlights the crucial role of authentic leadership dimensions, including self-awareness, internalized moral perspective, balanced processing, and relational transparency, in fostering innovative work behavior within academic environments. Despite some modest effect sizes, the constructs demonstrated strong psychometric properties, confirming their validity and reliability across the sample. Notably, internalized moral perspective emerged as the most influential mediator between psychological empowerment and innovation, highlighting the importance of ethical self-regulation in fostering creativity. The findings further validate the theoretical framework of authentic leadership by demonstrating that empowered individuals are more likely to innovate when their actions are aligned with deeply held values and when they communicate openly and evaluate information objectively.

While self-awareness showed weaker mediation effects, it still plays a foundational role in supporting other leadership traits that facilitate innovation. Collectively, these results contribute to the growing literature affirming the value of authentic leadership in higher education, especially in contexts requiring autonomy, collaboration, and ethical decision-making. By reinforcing psychological empowerment through moral grounding and transparent dialogue, academic institutions can cultivate environments conducive to innovation and sustainable growth. These insights offer practical implications for leadership development programs, suggesting that targeted efforts to enhance authentic leadership capacities among faculty and administrators may yield meaningful improvements in institutional innovation.

The research highlights that the dimensions of authentic leadership, including self-awareness, internalized moral perspective, balanced processing, and relational transparency, substantially enhance innovative work behavior within academic environments. Internalized moral perspective has been identified as the most significant mediator between psychological empowerment and innovation, thereby highlighting the critical role of ethical self-regulation in this relationship.

ETHICS STATEMENT

All procedures performed in studies involving human participants were in accordance with the ethical standards of Universiti Sains Malaysia.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

DATA AVAILABILITY

Data will be made available on request.

REFERENCES

- Almulhim, A. F. (2020). Linking knowledge sharing to innovative work behaviour: The role of psychological empowerment. *The Journal of Asian Finance, Economics and Business*, 7(9), 549-560. <https://doi.org/10.13106/jafeb.2020.vol7.no9.549>
- Altbach, P. G., Reisberg, L., & Rumbley, L. E. (2010). *Trends in global higher education: Tracking an academic revolution*. Brill - Sense.
- Amabile, T. M. (2012). *Componential theory of creativity* (Working Paper, No. 12-096). Harvard Business School.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in Organizational Behavior*, 36, 157-183. <https://doi.org/10.1016/j.riob.2016.10.001>
- Ambad, S. N. A., & Bahron, A. (2012). Psychological empowerment: The influence on organizational commitment among employees in the construction sector. *Journal of Global Business Management*, 8(2), 73.
- Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*, 40(5), 1297-1333. <https://doi.org/10.1177/0149206314527128>
- Ansong, A., Andoh, R. P. K., Ansong, L. O., & Adu, P. (2024). Leader trustworthiness and intrapreneurial behaviour in the manufacturing industry: The roles of psychological safety and psychological availability. *International Journal of Productivity and Performance Management*, 74(5), 1700-1716. <https://doi.org/10.1108/ijppm-09-2023-0491>
- Avolio, B. J., & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership. *The Leadership Quarterly*, 16(3), 315-338. <https://doi.org/10.1016/j.leaqua.2005.03.001>
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology Press. <https://doi.org/10.4324/9781410617095>
- Carmeli, A., Reiter-Palmon, R., & Ziv, E. (2010). Inclusive leadership and employee involvement in creative tasks in the workplace: The mediating role of psychological safety. *Creativity Research Journal*, 22(3), 250-260. <https://doi.org/10.1080/10400419.2010.504654>
- Černej, M., Jaklič, M., & Škerlavaj, M. (2013). Authentic leadership, creativity, and innovation: A multilevel perspective. *Leadership*, 9(1), 63-85. <https://doi.org/10.1177/1742715012455130>
- Damanpour, F., & Schneider, M. (2006). Phases of the adoption of innovation in organizations: Effects of environment, organization and top managers. *British Journal of Management*, 17(3), 215-236. <https://doi.org/10.1111/j.1467-8551.2006.00498.x>

- Datta, B. (2015). Assessing the effectiveness of authentic leadership. *International Journal of Leadership Studies*, 9(1), 62-75.
- Deci, E. L., & Ryan, R. M. (1985). Conceptualizations of intrinsic motivation and self-determination. In *Intrinsic Motivation and Self-Determination in Human Behavior. Perspectives in Social Psychology* (pp. 11-40). Springer. https://doi.org/10.1007/978-1-4899-2271-7_2
- De Jong, J., & Den Hartog, D. (2010). Measuring innovative work behaviour. *Creativity and Innovation Management*, 19(1), 23-36. <https://doi.org/10.1111/j.1467-8691.2010.00547.x>
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282. <https://doi.org/10.1111/j.1467-8551.2006.00500.x>
- Elfert, M. (2017). UNESCO, the World Bank, and the struggle over education for development through the lens of the Faure Report (1972) and the Delors Report (1996). *L'éducation en Débats: Analyse Comparée*, 8, 5-21.
- Gardner, W. L., Avolio, B. J., Luthans, F., May, D. R., & Walumbwa, F. (2005). "Can you see the real me?" A self-based model of authentic leader and follower development. *The Leadership Quarterly*, 16(3), 343-372. <https://doi.org/10.1016/j.leaqua.2005.03.003>
- Gardner, W. L., Cogliser, C. C., Davis, K. M., & Dickens, M. P. (2011). Authentic leadership: A review of the literature and research agenda. *The Leadership Quarterly*, 22(6), 1120-1145. <https://doi.org/10.1016/j.leaqua.2011.09.007>
- Gardner, W. L., Karam, E. P., Alvesson, M., & Einola, K. (2021). Authentic leadership theory: The case for and against. *The Leadership Quarterly*, 32(6), 101495. <https://doi.org/10.1016/j.leaqua.2021.101495>
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1, 107-123. <https://doi.org/10.1504/IJMDA.2017.087624>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hanafiah, M. H. (2020). Formative vs. reflective measurement model: Guidelines for structural equation modeling research. *International Journal of Analysis and Applications*, 18(5), 876-889. <https://doi.org/10.28924/2291-8639-18-2020-876>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hwang, C. Y., Kang, S.-W., & Choi, S. B. (2023). Coaching leadership and creative performance: A serial mediation model of psychological empowerment and constructive voice behavior. *Frontiers in Psychology*, 14, 1077594. <https://doi.org/10.3389/fpsyg.2023.1077594>
- Ilies, R., Morgeson, F. P., & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader-follower outcomes. *The Leadership Quarterly*, 16(3), 373-394. <https://doi.org/10.1016/j.leaqua.2005.03.002>
- Iqbal, A., Latif, K. F., & Ahmad, M. S. (2020). Servant leadership and employee innovative behaviour: Exploring psychological pathways. *Leadership & Organization Development Journal*, 41(6), 813-827. <https://doi.org/10.1108/LODJ-11-2019-0474>
- Iqbal, M. M., Abid, I., Hussain, S., Shahzad, N., Waqas, M. S., & Iqbal, M. J. (2020). The effects of regional climatic condition on the spread of COVID-19 at global scale. *Science of the Total Environment*, 739, 140101. <https://doi.org/10.1016/j.scitotenv.2020.140101>

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- Iszatt-White, M., & Kempster, S. (2019). Authentic leadership: Getting back to the roots of the 'root construct'? *International Journal of Management Reviews*, 21(3), 356-369. <https://doi.org/10.1111/ijmr.12193>
- Jaderi, S., & Abushaqdam, Z. (2023). *The role of authentic and transformational leadership styles in enhancing employees' psychological capital in the international hospitality industry* [Master dissertation, University West, Sweden]. <https://www.diva-portal.org/smash/get/diva2:1781796/FULLTEXT01.pdf>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and Organizational Psychology*, 73(3), 287-302. <https://doi.org/10.1348/096317900167038>
- Javed, B., Khan, A. A., Bashir, S., & Arjoon, S. (2017). Impact of ethical leadership on creativity: The role of psychological empowerment. *Current Issues in Tourism*, 20(8), 839-851. <https://doi.org/10.1080/13683500.2016.1188894>
- Jun, K., Hu, Z., & Lee, J. (2025). Unlocking the relationship between authentic leadership and organizational citizenship behavior: The key roles of organizational support and identification. *Management Research Review*, 48(1), 57-77. <https://doi.org/10.1108/MRR-09-2023-0662>
- Kelly, L. (2023). *Mindfulness for authentic leadership: Theory and cases*. Springer. <https://doi.org/10.1007/978-3-031-34677-4>
- Khan, A. A. (2023). Motivating innovation: Exploring the link between performance measurement and employee creativity. *Advance Social Science Archive Journal*, 1(1), 18-26.
- Khan, M. M., Ahmed, S. S., & Khan, E. (2021). The emerging paradigm of leadership for future: The use of authentic leadership to lead innovation in VUCA environment. *Frontiers in Psychology*, 12, Article 759241. <https://doi.org/10.3389/fpsyg.2021.759241>
- Kiazad, K., Seibert, S. E., & Kraimer, M. L. (2014). Psychological contract breach and employee innovation: A conservation of resources perspective. *Journal of Occupational and Organizational Psychology*, 87(3), 535-556. <https://doi.org/10.1111/joop.12062>
- Kim, M., Beehr, T. A., & Prewett, M. S. (2018). Employee responses to empowering leadership: A meta-analysis. *Journal of Leadership & Organizational Studies*, 25(3), 257-276. <https://doi.org/10.1177/1548051817750538>
- Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), Article 2. <https://doi.org/10.17705/1jais.00302>
- Krejci, J. (2021). *Leader's relational transparency and team-level trust and distrust* [Doctoral dissertation, Walden University].
- Laschinger, H. K. S., Borgogni, L., Consiglio, C., & Read, E. (2015). The effects of authentic leadership, six areas of worklife, and occupational coping self-efficacy on new graduate nurses' burnout and mental health: A cross-sectional study. *International Journal of Nursing Studies*, 52(6), 1080-1089. <https://doi.org/10.1016/j.ijnurstu.2015.03.002>
- Lavery, M. R., Acharya, P., Sivo, S. A., & Xu, L. (2019). Number of predictors and multicollinearity: What are their effects on error and bias in regression? *Communications in Statistics – Simulation and Computation*, 48(1), 27-38. <https://doi.org/10.1080/03610918.2017.1371750>
- Lewicka, D., & Rehman, H. U. (2024). Authentic leadership and innovative work behaviour: Exploring the role of trust, power distance orientation, and job satisfaction. *Krakow Review of Economics and Management [Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie]*, 3(1005), 99-121. <https://doi.org/10.15678/krem.15236>
- Luthans, F., & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach. In K. S. Cameron, J. E. Dutton & R. E. Quinn (Eds.), *Positive Organizational Scholarship* (pp. 241-261). Barrett-Koehler.
- Memon, M. A., Ramayah, T., Cheah, J.-H., Ting, H., Chuah, F., & Cham, T. H. (2021). PLS-SEM statistical programs: A review. *Journal of Applied Structural Equation Modeling*, 5(1), i-xiv. [https://doi.org/10.47263/JASEM.5\(1\)06](https://doi.org/10.47263/JASEM.5(1)06)

- Messmann, G., & Mulder, R. H. (2012). Development of a measurement instrument for innovative work behaviour as a dynamic and context-bound construct. *Human Resource Development International*, 15(1), 43-59. <https://doi.org/10.1080/13678868.2011.646894>
- Mumford, M. D., Scott, G. M., Gaddis, B., & Strange, J. M. (2002). Leading creative people: Orchestrating expertise and relationships. *The Leadership Quarterly*, 13(6), 705-750. [https://doi.org/10.1016/S1048-9843\(02\)00158-3](https://doi.org/10.1016/S1048-9843(02)00158-3)
- O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & Quantity*, 41, 673-690. <https://doi.org/10.1007/s11135-006-9018-6>
- Pieterse, A. N., van Knippenberg, D., Schippers, M., & Stam, D. (2010). Transformational and transactional leadership and innovative behavior: The moderating role of psychological empowerment. *Journal of Organizational Behavior*, 31(4), 609-623. <https://doi.org/10.1002/job.650>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Rego, A., Sousa, F., Marques, C., & e Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), 429-437. <https://doi.org/10.1016/j.jbusres.2011.10.003>
- Rego, P., Lopes, M. P., & Nascimento, J. L. (2016). Authentic leadership and organizational commitment: The mediating role of positive psychological capital. *Journal of Industrial Engineering and Management*, 9(1), 129-151. <https://doi.org/10.3926/jiem.1540>
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). Editor's comments: A critical look at the use of PLS-SEM in MIS Quarterly. *MIS Quarterly*, 36(1), iii-xiv. <https://doi.org/10.2307/41410402>
- Saleem, S., Ayub, M., Raziq, M. M., & Iqbal, M. Z. (2023). A multilevel study of authentic leadership, collective efficacy, and team performance and commitment. *Current Psychology*, 42, 18473-18487. <https://doi.org/10.1007/s12144-022-04029-3>
- Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of Applied Psychology*, 96(5), 981-1003. <https://doi.org/10.1037/a0022676>
- Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *The Academy of Management Journal*, 46(6), 703-714.
- Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442-1465. <https://doi.org/10.2307/256865>
- Uppathampracha, R., & Liu, G. (2022). Leading for innovation: Self-efficacy and work engagement as sequential mediation relating ethical leadership and innovative work behavior. *Behavioral Sciences*, 12(8), 266. <https://doi.org/10.3390/bs12080266>
- Walumbwa, F. O., Avolio, B. J., Gardner, W. L., Wernsing, T. S., & Peterson, S. J. (2008). Authentic leadership: Development and validation of a theory-based measure. *Journal of Management*, 34(1), 89-126. <https://doi.org/10.1177/0149206307308913>
- Walumbwa, F. O., Mayer, D. M., Wang, P., Wang, H., Workman, K., & Christensen, A. L. (2011). Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*, 115(2), 204-213.
- Yammarino, F. J., Dionne, S. D., Schriesheim, C. A., & Dansereau, F. (2008). Authentic leadership and positive organizational behavior: A meso, multi-level perspective. *The Leadership Quarterly*, 19(6), 693-707. <https://doi.org/10.1016/j.leaqua.2008.09.004>
- Yang, Y.-K. (2024). A conceptual model of authentic leadership in cross-cultural context. *International Journal of Cross Cultural Management*, 24(3), 609-629. <https://doi.org/10.1177/14705958241286690>

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107-128. <https://doi.org/10.5465/amj.2010.48037118>

Zubair, A., & Kamal, A. (2017). Perceived authentic leadership, psychological capital, and creative work behavior in bank employees. *Pakistan Journal of Psychological Research*, 32(1), 35-53.

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