

Authentic leadership and innovative work behavior: The mediating role of career calling

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Abstract

Purpose: The purpose of this paper is to analyze the mediating role of career calling on the relationships between authentic leadership (AL) and innovative work behavior (IWB) in the context of manufacturing companies in China.

Design/methodology/approach: This study utilized structural equation modeling to assess the impact of AL on career calling and IWB among a sample of 406 employees in Chinese manufacturing firms. The research also examines the potential mediating effect of career calling within the association between AL and IWB framework.

Findings: The empirical result suggests that AL positively influences career calling and IWB; career calling positively influences IWB; career calling mediates the relationship between AL and IWB.

Research limitations/implications: First, the research participants worked in industrial firms and originated from a solitary country. Also, this technique only assesses the variables at a single point, highlighting the constraint in establishing causation.

Practical implications: The findings imply that authentic leadership is an essential tool to promote career calling and IWB.

Originality/value: This study shows the impact of AL and career calling not only in establishing the workplace environment but also in defining how these variables generate IWB among employees.

Keywords: Authentic leadership, Career calling, Innovative work behavior

Introduction

Innovation strengthens competitiveness at individual and organizational levels in a highly competitive environment (Akram et al., 2020). Scholars have devoted significant attention to the issue of innovative work behavior among employees within decades of expansive research on innovation (Abdullah et al., 2016; Caniëls & Veld, 2019), as individual innovation contributes to organizational performance, and it is essential to comprehend the IWB of employees, as their activities and actions are crucial for organizations' continuous development and innovation (Dahiya & Raghuvanshi, 2022). Thus, figuring out what motivates and triggers innovative work behavior is a big step toward understanding innovation on an individual level (Grošelj et al., 2021).

Despite having the world's most extensive and comprehensive manufacturing system, China must improve its industrial chain. The only way to consistently progress to the top of the

industrial chain is through industrial upgrading and innovation-driven technology (Xu, 2021). For organizations to secure their continued existence and development, it is critical that they proactively promote IWB by implementing suitable policies and employing effective leadership strategies. Leadership style is one of the many components of innovation that has a significant impact on employee attitudes and behaviors. Leadership has the ability to foster creativity inside corporations, contribute positively and significantly to the innovation of corporate entities, and ultimately enhance national innovation. The impact of the immediate leader on the IWB of employees is significant (Khan et al., 2021a). Consequently, there is a requirement for further investigation into the current state of knowledge in order to ascertain the mechanisms by which authentic leadership influences IWB. Recently, employees' pursuit of financial rewards has been less enthusiastic due to China's economy's accelerated growth (Liu & Xu, 2022). From the perspective of career calling, numerous scholars have argued for research on encouraging positive employee behaviors (Chen et al., 2022).

Literature Review

Authentic leadership

Recently, authentic leadership has evolved as a critical concept in promoting positive leadership, characterized by transformational, servant, and ethical behavior (Jang, 2022; Walumbwa et al., 2008). Authenticity, which entails having a clear and firm understanding of oneself in all aspects and behaving consistently via self-awareness, is the core value of AL (Gardner et al., 2005). Hence, AL is a psychological competency that promotes positive emotions and authentic talents (Jang, 2022).

Authentic leadership comprises four dimensions: self-awareness, internalized moral perspective, balanced processing, and relational transparency (Walumbwa et al., 2008). Self-awareness is defined as the capacity of a leader to comprehend their strengths and weaknesses and their impact on others (Kernis, 2003). Relational transparency demonstrates a leader's ingenuity to others (Elrehail et al., 2018). Balanced processing is a leadership style that objectively evaluates all pertinent information before deciding (Walumbwa et al., 2008). Lastly, internalized moral perspective refers to ethical issues shaped by moral norms and standards, as well as social and organizational influences (Peus et al., 2012; Ryan & Deci, 2003).

Many studies corroborate that authentic leadership increases employee creativity in the workplace (Imam et al., 2020; Phuong & Takahashi, 2021). Unfortunately, inadequate empirical studies have directly linked authentic leadership to employee IWB. Most prior researchers have examined the influence of AL on creativity, which is the initial stage of IWB (Malik et al., 2016). Nevertheless, minimal research has been conducted on implementing ideas (Yamak & Eyupoglu, 2021).

Career calling

Career calling is a psychological condition that indicates an individual's enthusiasm for a career regarded as the meaning of their life (Duffy & Dik, 2013). It indicates the attitudes and perceptions of employees regarding their current employment (Dobrow & Tosti-Kharas, 2011). Many reliable information shows that possessing a calling at work changes one's attitude toward both work and life (Cai et al., 2022; Tian & Ge, 2019; Thompson & Bunderson, 2019). In light of this, researchers have viewed career calling as the sole cause rather than a consequence (Liu & Xu, 2022). They primarily investigate the positive impacts of career calling on desirable individual and organizational outcomes, including contextual performance

(Lee et al., 2016), engagement (Xie et al., 2016), work efficacy (Dobrow & Tosti-Kharas, 2012), and organizational commitment (Afsar et al., 2018).

Career calling is not binary, such that a person "has" or "does not have" a calling but ranges from weaker to stronger (Dobrow & Tosti-Kharas, 2011). Thus, career calling can be measured quantitatively. Career calling has a single dimension and a multidimensional aspect in Western culture. Dobrow and Tosti-Kharas (2011) conducted a 7-year follow-up survey of 1,500 individuals from various fields, including music, art, business, and management. Their research revealed that career calling can be measured using a 12-item scale, demonstrating consistent reliability and validity across different contexts and over time (Pei, 2015). Chinese scholars Pei and Zhao (2015), Han and Li (2018), and Wang and Zhang (2020) used this scale to measure career calling and performed well with reliability and validity.

Innovative work behavior

Innovative work behavior encompasses the intentional generation, promotion, and realization of new and valuable ideas in the workplace (Janssen, 2000). The present study defined innovative work behavior as academic behavior focused on proactively and deliberately integrating creative and valuable ideas, procedures, methods, or procedures into the design of courses and the delivery of academic work (Cheah et al., 2023).

Many scholars agree that IWB can be defined by two dimensions: idea generation and idea implementation (Yuan & Woodman, 2010). Idea generation is when an employee identifies an issue and devises creative methods to address the circumstance. Idea implementation refers to the process in which an employee actively endorses and carries out novel solutions inside the workplace (Volery & Tarabashkina, 2021). In contrast, it is evident that, despite claims that innovative work behavior is multidimensional, its current scales are typically unidimensional (Dahiya & Raghuvanshi, 2022). De Jong and Den Hartog (2010) discovered less complex IWB models. This viewpoint was also confirmed by Liu and Shi (2009), who demonstrate that the innovative work behavior has a single dimension with high reliability and validity in China.

Hypothesis Development

Authentic leadership and innovative work behavior

Authentic leadership is well-suited for the promotion of innovation and the cultivation of creativity, as evidenced by its core characteristics (Grošelj et al., 2021). Authentic leaders are persons who exhibit a high degree of self-awareness. They acknowledged their fallibility and extend the same level of kindness toward others. When employees perceive managers as tolerant of their mistakes, they are more inclined to engage in risky conduct, such as IWB (Kafeel et al., 2023). In an empirical study, Schuckert et al. (2018) investigated a research model that investigates the influence of transformational and AL on followers' IWB. Grošelj et al. (2021) observed that psychological empowerment plays a moderating role in the relationship between AL and IWB. However, research investigating authentic leadership's influence on IWB is lacking (Khan et al., 2021b). This study suggests the following hypothesis, drawing upon previous research findings:

H1. AL has a positive effect on IWB.

Authentic leadership and career calling

Authentic leaders are characterized by aligning their internal beliefs with their external behaviors. To clarify, individuals consistently connect their professed values and their actual conduct, reflecting their thoughts in actions (Luthans & Avolio, 2003). Authentic leadership has positively influenced individuals' intrinsic motivation, reflecting their attitudes

towards work and life. When individuals perceive a leader to possess self-awareness, internalized moral perspective, balanced processing, and relational transparency, they perceive their work as meaningful and experience intrinsic motivation to engage in proactive behaviors (Zhang & Jin, 2019). These behaviors primarily revolve around the charitable aspect of their career calling. Thus, the following hypothesis is formed considering the discussed theoretical explanations and available empirical evidence:

H2. AL has a positive effect on career calling.

Career calling and innovative work behavior

Prior studies have shown that persons who have a strong sense of purpose in their careers have enhanced effectiveness in their job (Dik et al., 2008) and have a clear understanding of themselves and their professional decisions (Duffy & Sedlacek, 2010; Hirschi & Herrmann, 2013). Duan et al. (2020) found that organizational support and career calling had a significant impact on employee creativity. The results have demonstrated a favorable correlation between perceived organizational support, career calling, and employee creativity. Based on the foregoing rationale, the following hypothesis is proposed

H3. Career calling has a positive effect on IWB.

Mediating role of career calling

Work engagement (Laguna et al., 2019), inventive climate (Korku & Kaya, 2023), and flow at work (Cheah et al., 2023) were investigated in the current study as potential mediators between AL and IWB (Laguna et al., 2019). Akgunduz et al. (2018) and Duan et al. (2020) found that career calling somewhat mediates the relationship between perceived organizational support and creativity. There is a need for more academic investigation into the mediating function of career calling in the relationship between AL and IWB. When staff perceive their supervisor as an authentic leader, they are more inclined to view their job as crucial and feel truly motivated to engage in proactive behaviors, particularly those related to the altruistic aspect of their career calling (Grošelj et al., 2021). Career calling encourages workers to exert significant effort in acquiring new information and mastering advanced abilities, empowering them to confront challenges more effectively and fostering creativity (Lv et al., 2021). The following hypothesis is offered considering the preceding discussion (see Figure 1):

H4. Career calling positively mediates the relationship between AL and IWB.

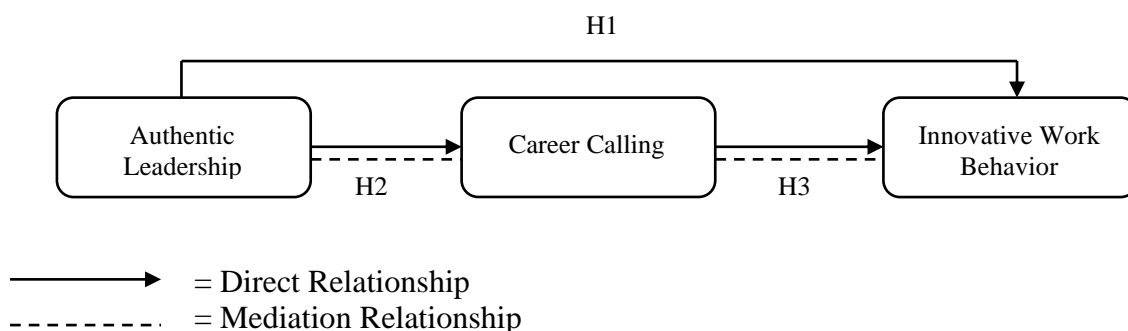


Figure 1. Conceptual framework

Methods

Sampling and Data Collection

This study implemented a judgment sampling methodology because responses from full-time personnel employed by Chinese manufacturing enterprises were necessary. An online survey was deemed suitable because it can connect researchers with participants who are geographically separated via the Internet. Data was collected at two separate times to mitigate the potential influence of common method variance (CMV). During Time 1, the participants completed a questionnaire that included their demographic information and measures of authentic leadership. One month later, during Time 2, the participants completed measures assessing employee career calling and IWB. The scales included in this study were based on employee self-report measures. The completion of each questionnaire was voluntary. 501 questionnaires were gathered at Time 1, and 406 were collected at Time 2, for a response rate of 81.04%. Males constitute 49.20% of the sample, while females comprise 50.78%; the average age was 38.24 years ($SD = 10.39$). Regarding education level, 24.70% of the participants possessed a master's or doctorate (Ph.D.) degree, while 75.30% were bachelor's or lower. 10.72 is the mean length of work experience ($SD = 8.27$). The average experience span was 10.72 ($SD = 8.27$) years (see Table 1).

Table 1 Respondents' profile

Variable	Value	n (406)
Gender	Male	49.20%
	Female	50.78%
Education Level	Diploma	32.50%
	Bachelor	42.80%
	Master	19.40%
	PhD	5.30%
	Mean (SD)	
Age		38.24(10.39)
Experience		10.72(8.27)

Measurement

The study employed the Smart PLS-SEM 4.0 program to assess the hypotheses. Prior to this, descriptive and preliminary data analysis was conducted using SPSS (Hair et al., 2017). This study included a seven-point Likert scale that ranged from strongly disagree to strongly agree. Additionally, a thorough translation-back method was implemented.

Career calling

Career calling was measured by adapting a 2-item questionnaire from Dik and Duffy's (2009) Brief Calling Scale (BCS).

Authentic leadership

The Authentic Leadership Questionnaire used in this study was 16-items developed by Walumbwa et al. (2008). The Chinese version has been validated by Han and Yang (2011), Liu and Xu (2021), Song and Dong (2021), Wang and Zhang (2019), Zhang and Hu (2021), and Zou and Yang (2013).

Innovative work behavior

In measuring IWB, six items were adapted from Scott and Bruce (1994), which is the most popular scale and proved suitable in the Chinese context (Liu, 2021; Liu et al., 2022; Wang & Luo, 2011; Yang & Zhang, 2012; Ye, 2021).

Findings***Measurement model***

According to Hair et al. (2022), if the measurement models meet all the required criteria (Anderson & Gerbing, 1988), researchers can proceed with the structural model assessment. The measurement model was evaluated by assessing the loadings, composite reliability (CR), and average variance extracted (AVE). The values of loadings should be >0.5 (Hair et al., 2021), the AVE should be >0.5 (Hair et al., 2021), and the CR should be > 0.7 (Gefen et al., 2000). Based on the data in Table 2, all loadings exceeded 0.5, all AVEs surpassed 0.5, and all CRs were over 0.7. Hair et al. (2021) introduced the heterotrait-monotrait ratio (HTMT) of correlations as an improved substitute for evaluating discriminant validity, as suggested by Henseler et al. (2015). Franke and Sarstedt (2019) subsequently provided an update on this notion.

Table 2 Measurement Model

Variable	Items	Loadings	CR	AVE
AL	AL_1	0.903	0.953	0.581
	AL_2	0.697		
	AL_3	0.708		
	AL_4	0.759		
	AL_5	0.740		
	AL_6	0.795		
	AL_7	0.761		
	AL_8	0.748		
	AL_9	0.763		
	AL_10	0.763		
	AL_11	0.725		
	AL_12	0.780		
	AL_13	0.717		
	AL_14	0.787		
	AL_15	0.746		
	AL_16	0.780		
Career Calling	CC_1	0.886	0.708	0.773
	CC_2	0.872		
IWB	IWB_1	0.966	0.940	0.780
	IWB_2	0.969		
	IWB_3	0.711		
	IWB_4	0.963		
	IWB_5	0.663		
	IWB_6	0.967		

The discriminant validity was evaluated by the HTMT criterion, as proposed by Henseler et al. (2015) and revised by Franke and Sarstedt (2019). HTMT values exceeding 0.85 (Kline, 2011) (the stringent criterion) or 0.90 (Gold et al., 2001) (the conservative criterion) are acceptable. The results presented in Table 3 indicate that all HTMT values fell below the more stringent

threshold of 0.85. Therefore, each of these validity tests confirms that the measuring items were both reliable and valid.

Table 3 Discriminant Validity (HTMT Ratios)

Variable	AL	CC	IWB
AL			
CC	0.819		
IWB	0.815	0.704	

Structural model

The path coefficients, standard errors, t-values, and p-values for the structural model were reported following Hair et al. (2019) using a 5,000-sample re-sample bootstrapping procedure (Ramayah et al., 2018). The structural model in Table 4 demonstrates that all provided hypotheses had statistical significance. H1, relating AL to IWB, was significant ($\beta=0.577$, $p<0.001$). The second hypothesis that related authentic leadership to career calling was also supported ($\beta=0.819$, $p<0.001$). The third hypothesis suspected a relationship between career calling and IWB was also supported ($\beta=0.704$, $p<0.001$). Finally, career calling was purported to mediate the relationship between AL and IWB, which was found to be significant ($\beta=0.577$, $p<0.001$) (see Table 5).

Table 4 Hypothesis Testing Direct Effects

Hypothesis	Relationship	β	SE	t-value	p-value	BCI LL	BCI UL
H1	AL→IWB	0.577	0.579	17.094	$p<.001$	0.514	0.626
H2	AL→CC	0.819	0.820	40.257	$p<.001$	0.779	0.847
H3	CC→IWB	0.704	0.705	25.929	$p<.001$	0.654	0.744

Table 5 Hypothesis Testing Indirect Effect

Hypothesis	Relationship	β	SE	t-value	p-value	BCI LL	BCI UL
H4	AL→CC→IWB	0.577	0.579	17.371	$p<.001$	0.505	0.637

Discussion and Conclusion

Discussion

This research aimed to explore how manufacturing firms can increase the IWB of their employees. In achieving this objective, the research investigated the factors and processes that underlie the relationship between AL and IWB. Its four hypotheses were tested in this study. The first hypothesis was supported. Previous research has provided similar results (Kafeel et al., 2023). Authentic leaders provide openness, sharing, and support for their employees, critical variables in IWB. The study's results supported the second hypothesis, which suggested a relationship between AL and career calling. Specifically, authentic leaders arrange high moral behavior standards, objectively provide facts, and encourage open communication with their employees (Yamak & Eyupoglu, 2021). By having these characteristics, authentic leaders can strengthen their employees' motivation, and hence, employees will feel encouraged to voice difficulties and offer innovative work behavior (Rego et al., 2012). The third hypothesis was supported. Results confirmed that career calling and IWB are positively correlated, consistent with those obtained previously (Duan et al., 2020). Finally, the analysis concludes that career calling mediates the relationship between AL and IWB, which is the fourth hypothesis.

Theoretical Implications

First, this paper describes the positive effect of career calling on IWB, contributing to authentic leadership theory by considering authentic leadership as a vital construct in China. Second, this study validates the mediating effect of career calling, showing the importance of career calling when authentic leaders want to stimulate innovative work behavior. Several studies have noted that internal variables, such as personal characteristics, can influence IWB (Ali, 2019; Guo, Su et al., 2017). However, this paper focuses specifically on career calling. Career calling can catalyze individuals to consistently engage in innovative practices, aligning with the social ideals advocated (Liu & Xu, 2020).

Practical and Social Implications

First, due to the labor-intensive nature of the manufacturing industry, the present research findings offer significant contributions to developing more authentic leadership development programs. Enhancing the IWB of employees, which is crucial in the current uncertain manufacturing environment, is possible if organizations choose leaders who possess authentic qualities (Yamak & Eyupoglu, 2021). Implementing scientific systems to encourage IWB among employees may benefit manufacturing firms. Second, this research paper provides substantial practical implications by showing that in addition to identifying and selecting employees with intrinsic qualities that encourage IWB, organizations must establish authentic leadership that facilitates IWB (Ribeiro et al., 2020).

Limitations and Suggestions for Future Research

The study has several contributions, but it also has several limitations that need to be noted. First, the study participants were employed in manufacturing enterprises and came from a single country. Thus, the results may not apply to industries and cultures in the West or other Asian countries. Additional research could examine whether the current empirical results can be reproduced in countries with distinct cultural contexts. Also, this approach evaluates the variables at only one point, indicating the limitation when attempting to establish causality. Although the findings support the hypotheses, further research should prioritize a longitudinal methodology to elucidate the theoretical underpinnings of causality.

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