



# Unraveling the intricate relationship between empowerment role identity and adaptive performance: Evidence from China

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## Abstract

How to inspire employees to develop proficiency in their adaptability to fulfill new job requirements and what benefits can organizations derive from employee empowerment serve as two core questions in management literature. However, the linkage between empowerment and adaptive performance, let alone their interactions with other factors, is seldom studied. This article fills in this gap by examining the relationships among empowerment role identity, adaptive performance, authentic leadership, and leader-member exchange (LMX). Using data collected from a sample of 326 employee-supervisor dyads in China's information, communication, and technology (ICT) industry, this article argues that LMX mediates the positive correlation between employees' empowerment role identity and their adaptive performance. By adopting the Johnson-Neyman technique, this article further showcases the exact extent to which authentic leadership facilitates, counteracts, and undermines the mediating role that LMX plays in helping employees with empowerment needs to achieve greater adaptability.

## Keywords

Adaptive performance, authentic leadership, conservation of resources (COR) theory, empowerment role identity, leader-member exchange (LMX)

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## Practitioner Notes

- Employees with strong empowerment needs are more likely to foster high-quality leader-member exchange (LMX) relationships and subsequently have their adaptive performance enhanced.
- Authenticity is an indispensable attribute of leaders because the extent to which employees' empowerment role identity leads to adaptability in performance is contingent upon their perceived levels of authentic leadership.
- In the paucity or absence of authentic leadership, employees' empowerment role identity will turn into a liability—resulting in undermined LMX relationships and compromised adaptive performance.
- To successfully help their organizations to thrive in fast-changing industries, leaders ought to demonstrate sincerity and professionalism in their daily management practice and fulfill the empowerment aspirations of their subordinates.

## Introduction

The existing literature has long recognized how an increasingly fierce competition among global enterprises brings rising challenges to organizational participants to adapt to the rapidly-changing work context, learn new technologies, and develop innovative survival strategies (Griffin et al., 2007). It is under this circumstance that a growing number of scholars have dissected the concept of adaptive

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performance, attempting to detail the process through which employees cope with organizational changes (Allworth & Hesketh, 1997; Charbonnier-Voirin & Roussel, 2012; Jundt et al., 2015; Pulakos et al., 2000). By definition, adaptive performance refers to employees' capability to adapt to rapidly changing work situations (Hesketh & Neal, 1999). In a general sense, this concept encompasses the elements of problem solving, uncertainty/stress/crisis control, learning new skills, and interpersonal, cultural, and physical adaptability (Park & Park, 2019, p. E3). At first, it was proposed to respond to the dynamic turbulence in the organizational environment and measure the attitude and ability of employees to overcome new and unexpected workplace obstacles (e.g. Niessen & Jimmieson, 2016; Wihler et al., 2017). The ultimate goal is inspiring employees to develop proficiency in their adaptability to fulfill fresh and evolving job requirements (Allworth & Hesketh, 1999; Pulakos et al., 2000).

Having an inspired workforce, however, is easier said than done. Studies have shown that the one of the most challenging managerial tasks facing employers in the current era is to motivate employees who are aching for a high sense of empowerment (Anderson et al., 2012). Employees nowadays hope to not only obtain more resources and information from the organization but also be equipped with more autonomy and decision-making power in their workplace (Keltner et al., 2003). Thus, the concept of empowerment role identity has been explored and defined as "the extent to which individual views him/herself as a person who wants to be empowered in a particular job" (Zhang & Bartol, 2010). As one particular type of self-view, empowerment role identity can serve as a cognitive schema for individuals to ascribe meaning to the self, to help interpret events, and to channel behavioral options (Stryker & Burke, 2000). It is powerful in predicting a variety of behaviors that are in accordance with one's role identity (Riley & Burke, 1995). Given that employees differ in the extent to which they view themselves as psychologically empowered (van Dierendonck, 2011), a key research question arises as to whether empowered employees are likely to be more adaptive in their work performance.

In the extant studies, scholars focus primarily on the following factors to explain the antecedents of adaptive performance: at the organizational level, interpersonal interaction, team support, the relationship between supervisors and subordinates are considered (Griffin & Hesketh, 2003; Griffin et al., 2007); at the individual level, general cognitive ability, knowledge and skills, self-efficacy, and big-five personality traits are taken into account (Chen et al., 2005; Pulakos et al., 2000). Unfortunately, their explorations have never been extended to employee empowerment, whose importance to organizational performance is becoming increasingly self-evident. This paper thus examines the correlations between empowerment role identity and adaptive performance. The central research mission here is to explore the specific mechanisms through which situational factors affect this main relationship of interest.

Specifically, the key notion underlying empowerment role identity is that the roles of employers and employees are interchangeable. The attitudes and behaviors of both employers and employees are in part decided by how well this interchangeable relationship functions (Gerstner & Day, 1997). In the arenas of organizational psychology and organizational behavior, the conservation of resources (COR) theory posits that individuals strive to obtain, retain, foster, and protect what they centrally value (Hobfoll et al., 2018). According to the tenet of this theory, employees with an empowerment role identity tend to pay more efforts to acquire, conserve, and maintain valuable organizational resources that are previously controlled and allocated by their managers (Bakker & Demerouti, 2017). Following this logic, employees are perhaps strongly motivated to improve their dyadic exchange relationship with their supervisors (Kim et al., 2017), which is coined in the extant literature as the leader-member exchange (LMX) relationship. By doing so, employees' needs of empowerment can be fulfilled. This study therefore investigates the mediating role that LMX plays in influencing the relationship between empowerment role identity and adaptive performance.

In addition, leadership styles play an essential role in determining organizational performance (Chia Huei & Sharon, 2013). Different management styles bring about different experience to employees whose behaviors are subsequently influenced (Detert & Burris, 2007). In recent years, for example, authentic leadership, which represents a leadership pattern characterized by pursuing purpose with passion, practicing solid values, leading with heart, establishing enduring relationships, and demonstrating self-discipline (George, 2003, p. 18), has attracted growing attention from emerging scholars. It is commonly contended that authentic leaders positively impact employees' attitudes by demonstrating and practicing balanced processing of information, relational transparency, and internalized morality (Alexander & Lopez, 2018; Alilyyani et al., 2018; Avolio & Gardner, 2005). This stance is originated from the copious research on authenticity, which at its core is "being true to oneself" (Kernis, 2003). Simply put, when leaders act upon their authentic values, beliefs, and strengths, others are encouraged to follow suit (Walumbwa et al., 2008). On the part of the employees, those with high empowerment role identity tend to both present themselves and behave in an authentic manner (Zhang & Bartol, 2010). When there is a discrepancy between leaders and employees in their perceived levels of transparency and authenticity, nonetheless, any positive outcomes stemming from empowerment role identity might be impeded or compromised. On this note, it is meaningful to also probe the moderating effect of authentic leadership on the mediated relationship between empowerment role identity and adaptive performance.

To unveil the above-mentioned intricacies pivoting around the main relationship of interest, this study draws

on the practice of the information, communication, and technology (ICT) industry in China and collects survey data from 13 private enterprises. The selection of the ICT sector as the object of this research rests on three primary reasons. To begin with, compared to other industries, the ICT industry is characterized by distinctive features of high innovation demand, rapid technological renewal, and intense peer competition. This puts ICT workers under the pressing need of strong adaptability, which in turn, justifies our examination of workers' adaptive performance and demystification of relevant contributing mechanisms. Second, China in recent years has witnessed a remarkable boom in the ICT industry. ICT giants as well as countless small and medium ICT companies are mushrooming in Chinese metropolises, especially in megacities such as Beijing, Shenzhen, and Suzhou. Data collected from, so to speak, Beijing and Jiangsu province, are thus feasible and representative of the extensive practice of China's ICT industry. Furthermore, as ICT increasingly becoming a new engine for economic growth, the findings of this paper hold the potential to enlighten the ICT practitioners and trigger managerial improvements in the ICT practice.

The remainder of this paper proceeds as follows. Based on the COR theory, we first discuss how employees with an empowerment role identity can produce adaptive performance (i.e. main relationship). Then, we examine the mediating and moderating effects that LMX and authentic leadership respectively exert on the main relationship. An integrated moderated mediation model with regard to the mechanisms whereby antecedent factors affecting the interplay between employee empowerment and performance adaptability is subsequently proposed. Data sources, quantification strategies, and empirical findings are described in detail, constituting a considerable portion of this paper. The article concludes with pragmatic takeaways and pointers for future research.

## Theory and hypotheses

### *Empowerment role identity and adaptive performance: Leader-member exchange (LMX) as the mediator*

According to the COR theory, resources play an important role in eliciting positive performance of employees in that employees are provided with an incentive to acquire, conserve, and maintain those resources (Hobfoll, 1988). However, resources can also be a double-edged sword. For example, employees tend to exhibit negative reactions and behaviors when the given resources fail to satisfy their demands at work (Demerouti et al., 2001). On this note, leaders ought to think about how to properly empower their employees.

Employees' empowerment role identity is defined as "the extent to which individual views him/herself as a person who wants to be empowered in a particular job." This

particular role identity weighs more important than other "multiple selves" and can be seen as a kind of autonomous motivation of employees (Zhang & Bartol, 2010). Employees with a strong empowerment role identity are often accompanied with a strong sense of self-control and desire to gain more decision-making power and influence in their employing organizations (Dunbar & Abra, 2010). In the organizational context, more notably, individual employees' different ability levels of acquisition and maintenance of job resources are contingent upon their relationships with the leaders, which are academically referred to as the leader-member exchange (LMX) (Scott & Bruce, 1994). Employees with a stronger empowerment role identity are bound to have greater incentives to strengthen their LMX, thus receiving recognitions from their leaders and getting involved in the loop of decision making. In other words, employees with an empowerment role identity tends to become active in improving LMX for the sake of obtaining greater job resources and power.

Imaginably, when employees are in a high LMX condition, they are likely to be given sufficient resources and decision-making power. Provided with a sense of respect and empowerment, these employees are incentivized to both contribute original ideas to the long-term development of the organizations and engage in overcoming challenging tasks facing their work units (Scott & Bruce, 1994). Some studies have even found that LMX can bring about positive emotions to certain employees (e.g. Ilies et al., 2007). Under a high-quality LMX relationship, employees are compelled to believe that they should demonstrate greater initiative, ability, and adaptability at workplace to avoid disappointing their leaders. As pointed out by Graen and Scandura (1987), the achievement of organizational objectives is decided to a great extent by employees' interpersonal relationships with their leaders. The presence of high-quality LMX can make employees feel the concern, care, trust, and even favoritism from leaders. These feelings, as a matter of fact, are essential to the delivery of adaptive performance (Mumford et al., 2002). Staying in a high-quality LMX relationship, for example, supervisor can exploit the maximum potential of their employees by encouraging them to take risks when implementing creative ideas and by minimizing their concerns on the possibility of being held accountable for the possible undesirable outcomes associated with the adaptive, out-of-the-box performance (Campbell, 2000; Scandura, 1999).

To sum up, employees with a high empowerment role identity tend to have a stronger motivation to proactively improve their LMX in order to acquire and maintain resources for empowerment. When perceiving the presence of friendly LMX relationships, these employees are then inclined to propose innovative, albeit risky, solutions to the difficulties facing the organizations and to improve their adaptive performance. In other words, the empowerment role identity of employees can trigger the improvement of their LMX relationship, through which the adaptive

performance of theirs is subsequently enhanced as a result. Therefore, the following hypothesis is proposed:

*H<sub>1</sub>: LMX mediates the relationship between employees' empowerment role identity and their adaptive performance.*

### **The moderating role of authentic leadership**

While resources play a pivotal role in determining the interaction outcomes between individuals and their organizations, it must also be acknowledged that the organizational environment may cultivate or impede individuals' ability to acquire resources needed for their survival (Hobfoll et al., 2018). Countless empirical studies have shown that the attitudes and behaviors of employees are influenced to various degrees by organizational environment (Scott, 1995), within which leadership style stands out as an important factor (Detert & Burris, 2007). Authentic leadership, for example, is considered as a desirable style that encompasses positivity, honesty, morality, self-consciousness, unbiased information processing, internalized ethics, and transparency on the part of organizational leaders in their daily management (Gardner et al., 2011; Kernis, 2003). Leaders exhibiting an authentic leading style are able to stimulate intense self-consciousness, active learning, and prosocial organizational behaviors from their subordinates (Avolio et al., 2004). Following this line of thought, it can be inferred that authentic leadership is capable of moderating the relationship between empowerment role identity and LMX in that a more genuine and transparent interaction context facilitates the process of resource-based exchange between employees and their leaders.

Specifically, under an authentic leadership setting, leaders and employees are motivated to show their authentic selves. An authentic and trustworthy image that leaders demonstrate before their subordinates helps establish mutual trust and rapport. Employees can consequently experience an enhanced sense of job security and a more comfortable working environment (Avolio et al., 2004). Imaginably, they will spare no effort to pursue empowerment and needed resources as they do not need to worry excessively about the side effects of publicly showing their authentic craving for power. Second, authentic leaders will objectively and transparently analyze work-related information and provide honest, unbiased feedback to employees in terms of how their performance can be further improved (Leroy et al., 2015). Employees, in turn, are likely to view themselves as co-producers with their leaders and express their opinions, ideas, and even emotions in an unreserved manner (Sutherland & Markauskaite, 2012). Moreover, authentic leaders commonly hold themselves to the highest ethical standards, meaning that their leadership effectiveness is unlikely to be weakened by the undue pressure from the peers, the organizations, and the society (Gardner et al., 2005). Taken together, the perceived candor,

fairness, and morality of the leadership in action tend to increase the self-confidence of their employees in the vertical communication process and subsequently strengthen the LMX relationship (Liu et al., 2015).

In summary, it is our belief that the magnitude of the positive relationship between empowerment role identity and LMX tends to be increased when the level of authentic leadership is high. However, if the degree of authentic leadership is deemed low, the relationship between empowerment role identity and LMX will become less positive or even turn negative due to the perceived absence of sufficient self-consciousness, unbiased information processing, internalized ethics, and managerial transparency on the part of organizational leaders during the course of their day-to-day decision making. Thus, the following hypothesis is proposed:

*H<sub>2</sub>: Authentic leadership moderates the relationship between employees' empowerment role identity and LMX. When authentic leadership is running high, the positive effect of empowerment role identity on LMX is expected to be stronger.*

### **The moderated mediation model**

This study so far has explored (1) the mediating effect of LMX on the relationship between the employees' empowerment role identity and their adaptive performance and (2) the moderating function that authentic leadership exhibits in the relationship between the employees' empowerment role identity and LMX. When these two hypothesized processes are simultaneously considered, we can reasonably conjecture that authentic leadership also moderates the mediating effect of LMX on the relationship between the employees' empowerment role identity and adaptive performance. A first-stage moderated mediation model can thus be envisioned and visualized in Figure 1 below.

That is, when the level of authentic leadership is high, employees with a higher empowerment role identity tend to forge a higher-quality LMX relationship and achieve more satisfactory adaptive performance. However, when authentic leadership stays at a low level, even employees with a high empowerment role identity cannot do wonders. Trapped in an undesirable working environment, they are unlikely to find ways to strengthen the LMX relationship. Under some circumstances, their desire for empowerment can even be a liability that works against them. Put differently, the empowerment role identity of employees can possibly be negatively related to their adaptive performance due to the undermined, unfavorable LMX relationship. The following hypothesis is postulated:

*H<sub>3</sub>: Authentic leadership moderates the mediating effect of LMX on the relationship between the empowerment role identity of employees and their adaptive performance.*

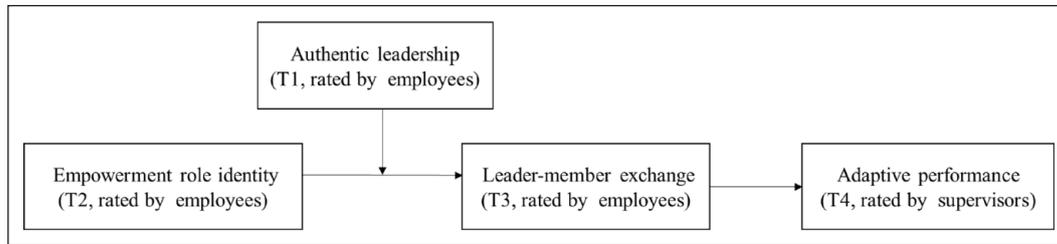


Figure 1. Theoretical model.

## Data sources and quantification strategies

### Sample composition and survey procedures

Data used in this study are collected from 13 private organizations in ICT industry in Beijing and Jiangsu province of China. With the country's rapid development of information technology, these firms are in dire need of continuous innovation to cope with fast-paced external challenges. On this note, a desirable level of adaptability of their employees becomes of paramount importance. In addition, a substantial fraction of the employees in these firms are youngsters who are more likely to have an empowerment role identity than their senior counterparts do. It is thus crucial for the top echelons of these firms to consider how to better cater to the empowerment needs of their young subordinates to ultimately achieve greater adaptive performance at both the individual and collective levels.

These firms were provided with the relevant background information of this study and assured that their identities would be anonymized. With the permission of their CEOs, the liaison persons in the respective human resources departments of these firms randomly chose work units to participate in our study. A total number of 69 teams and 539 employees were ultimately reached. Each participant was assigned a unique code for data matching purposes. The survey questionnaire was subsequently sent to these participants in the form of an online link. They were expected to complete it using either their mobile devices or personal computers.

To minimize the common-method bias, data were collected in four different periods (the time interval was about 15–20 days) in light of parallel methods that combine employees' self-reported evaluations with their immediate supervisors' ratings. In Time 1, a survey measuring the perceived levels of authentic leadership of their direct supervisors was sent out to 69 teams (539 employees) and received valid responses from 439 people. In Time 2, a survey measuring the extent of their empowerment role identity was distributed to all employees; 407 people eventually responded; In Time 3, a survey measuring the degrees of LMX relationships was disseminated among employees; 367 valid responses were recorded. In Time 4, notably, 69 team supervisors were surveyed to rate the adaptive performance of their subordinate employees. In the end, 363 complete responses were provided by these leaders. As individual

identifiers were assigned to all the employees, we were able to use these numbers to match the employees' self-reported data on the survey items and obtain full sets of responses from 346 employees. We then matched these responses with supervisor-reported data and obtained a final number of 326 paired responses.

In our eventual sample, half of our respondents are female. The average age was 29.347 years old ( $SD=5.407$ ), organization tenure was 3.867 years ( $SD=3.317$ ), and the length of time they had been working with their leaders was 3.252 years ( $SD=2.892$ ). In terms of the educational levels, more than half of the respondents were bachelors (56%); the remaining ones held either junior-college diplomas (40.5%) or postgraduate degrees (3.4%).

### Variable measurements

Main variables of interest in this study are empowerment role identity, authentic leadership, LMX, and adaptive performance. They are measured on empirically verified 7-point Likert scales from strongly disagree (1) to strongly agree (7). Considering that the original scales are expressed in English, this study uses the translation-and-back-translation procedure to generate their Chinese version that accurately captures the meanings of the original questionnaire items.

**Empowerment role identity.** Zhang and Bartol's (2010) 4-item scale is adopted to measure employees' empowerment role identity. Questions include, but are not limited to: "I have a clear concept of myself as an employee who wants to have greater decision-making power" and "Having certain degree of power and discretion is an important part of my identity". All these items were self-rated by employees. The Cronbach's alpha is .891.

**Authentic leadership.** Neider and Schriesheim's (2011) 14-item scale is adopted to measure authentic leadership. Questions include, but are not limited to: "My leader clearly states what he/she means," "My leader shows consistency between his/her beliefs and actions" and "My leader openly shares information with others." All these items were rated by employees themselves. The Cronbach's alpha is .975.

**LMX.** Scandura and Graen's (1984) 7-item scale is adopted to measure employees' perceived LMX relationship. Questions include, but are not limited to: "I feel well that my

**Table 1.** Results of discriminant validity.

Models	$\chi^2$	df	$\Delta\chi^2$	$\chi^2/df$	CFI	TLI	RMSEA	SRMR
4-Factor model	1494.328	521	—	2.868	0.897	0.890	0.076	0.035
3-Factor model I	2062.892	524	568.564***	3.937	0.838	0.826	0.095	0.069
3-Factor model II	2065.295	524	570.967***	3.941	0.838	0.826	0.095	0.072
3-Factor model III	2594.625	524	1100.297***	4.952	0.782	0.766	0.110	0.084
3-Factor model IV	4325.398	524	2831.070***	8.255	0.599	0.571	0.149	0.188
3-Factor model V	4341.690	524	2847.362***	8.286	0.598	0.569	0.149	0.192
2-Factor model modelEI + AL + LMX	3133.849	526	1639.521***	5.958	0.725	0.707	0.123	0.102
1-Factor model	5826.915	527	4332.587***	11.057	0.441	0.405	0.176	0.214

\*\*\* $p < .001$ .

leader understands my problems and needs,” and “I have enough confidence in my leader that I would defend and justify his or her decisions if he or she were not present to do so.” Again, all these items were rated by employees themselves. The Cronbach’s alpha is .953.

**Adaptive performance.** Griffin et al.’s (2007) 9-item scale is adopted to measure adaptive performance. Questions include, but are not limited to: “This employee adapted well to changes in core tasks”, “This employee dealt effectively with changes affecting your work unit (e.g. new members)” and “This employee learnt skills or acquired information that helped you adjust to overall changes in the organization.” These items were assessed by the immediate leaders of the respective employees. The Cronbach’s alpha is .976.

Based on the usual practice adopted by prior studies of similar nature, this project treats individual respondents’ gender, age, educational level, tenure in the organization, and the total amounts of time they have been working with their current supervisors as control variables. Pertinent information is gleaned from databases managed by the human resources departments of the organizations in which the survey was conducted.

### Data analysis

In order to examine the discriminant validity of the four focal variables in this study, a series of confirmatory factor analyses (CFA) were conducted. Specifically, we compared a 4-factor model (empowerment role identity, authentic leadership, LMX, and adaptive performance) against (1) five 3-factor models (Model I: empowerment role identity and authentic leadership were combined into one factor; Model II: empowerment role identity and LMX were combined into one factor; Model III: authentic leadership and LMX were combined into one factor; Model IV: LMX and adaptive performance were combined into one factor; Model V: authentic leadership and adaptive performance were combined into one factor), (2) one 2-factor model (empowerment role identity, authentic leadership, and LMX were combined into one factor) and (3) one 1-factor model (all four variables were

combined into one factor). According to the CFA results in Table 1 below, the model-fit indices of the 4-factor model ( $\chi^2/df=2.868$ , CFI=0.897, TLI=0.890, RMSEA=0.076, SRMR=0.035) reaches the standards recommended by Hair et al. (2010). This model is thus statistically superior to other alternatives, suggesting that there is sufficient discriminant validity among empowerment role identity, authentic leadership, LMX, and adaptive performance.

Additionally, the analyses of variance inflation factor (VIF) are also conducted to detect the possible multi-collinearity problem among the explanatory variables included in the model. According to the suggested cutoff points by O’Brien’s (2007), the values of tolerance and VIF for the predictors should be larger than 0.1 and less than 10 respectively. It turns out that all three independent variables in our model: empowerment role identity (tolerance=0.901, VIF=1.110), authentic leadership (tolerance=0.620, VIF=1.613), and LMX (tolerance=0.629, VIF=1.590), fall within the acceptable ranges. It is therefore safe to conclude that no serious multi-collinearity issue exists among them. Moreover, the CFA results also show that the factor loadings of survey items are unvaryingly above 0.70, indicating high convergent validity of the latent constructs (Hair et al., 2010). We can therefore be assured that common method variance is unlikely to pose a significant threat to the validity of our findings.

Table 2 below shows the means, standard deviations, correlations, and Cronbach’s alpha of all concerned variables in this study. As can be seen from this table, empowerment role identity is positively related to LMX ( $r=.269$ ,  $p < .01$ ) but insignificantly associated with adaptive performance ( $r=.039$ ,  $p > .05$ ). LMX is positively correlated with both adaptive performance ( $r=.158$ ,  $p < .01$ ) and authentic leadership ( $r=.601$ ,  $p < .01$ ). These descriptive statistics provide preliminary evidence that support our proposed hypotheses.

### Empirical results

The variables are all mean-centered prior to the analysis. This study uses PROCESS macro (Hayes, 2013) and bootstrap analysis (set to 5,000 replicates) to examine the mediation and moderation effects at the confidence level of 95%.

**Table 2.** Descriptive statistics, correlations, and reliabilities.

	M	SD	1	2	3	4	5	6	7	8	9
1. Gender	0.500	0.501									
2. Age	29.350	5.407	.042								
3. Education level	3.480	0.763	.060	.080							
4. Working time in the firms	3.867	3.317	.067	.500***	-.185**						
5. Working time with the leaders	3.252	2.882	.184**	.433***	-.192***	.874***					
6. Empowerment role identity	5.392	1.114	.034	-.011	.086	-.058	-.081	(.891)			
7. LMX	5.294	1.159	.078	.026	.003	.045	.050	.269***	(.953)		
8. Authentic leadership	5.577	1.165	.088	-.100	.094	-.016	.003	.292***	.601***	(.975)	
9. Adaptive performance	5.017	1.000	-.080	.178**	.075	.222***	.217***	.039	.158**	.162**	(.976)

Note. N=326. Diagonal values in brackets are the Cronbach's  $\alpha$  coefficients.  
 \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 3.** Results of the mediating effect of LMX.

	B	SE	t	R <sup>2</sup>
LMXEmpowerment role identity	0.283	0.056	5.033**	0.081***
Gender	0.139	0.130	1.074	
Age	0.000	0.014	0.021	
Education	-0.020	0.085	-0.234	
Working time in the organization	0.005	0.041	1.111	
Working time with current supervisor	0.019	0.046	0.401	
(constant)	3.680	0.518	7.105**	
Adaptive performance LMX	0.131	0.047	2.768**	0.108***
Empowerment role identity	0.009	0.049	0.189	
Gender	-0.275	0.109	-2.517*	
Age	0.011	0.011	1.005	
Education	0.160	0.072	2.217*	
Working time in the organization	0.018	0.035	0.507	
Working time with current supervisor	0.062	0.039	1.591	
(constant)	3.252	0.470	6.927**	
	Coefficient	SE	LLCI	ULCI
Mediating effect	.037	0.014	0.014	0.071
	Coefficient	SE	Z	
Sobel test	.037	0.015	2.283*	

Note. N=326. Gender, age, educational level, organizational tenure, and the total length of time respondents have been working with their current supervisors were controlled.  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Mediating effect testing**

As showed in Table 3, the variable empowerment role identity is positively correlated with LMX ( $\beta = .283, t = 5.033, p < .01$ ), which is also positively associated with adaptive performance ( $\beta = .131, t = 2.768, p < .01$ ). The role of LMX as a mediator is thus supported at a statistically significant level ( $\beta = .037, LLCI = 0.014, ULCI = 0.071$ ). We further confirm this mediating effect through the Sobel Test. It turns out that the mediation effect of LMX does exist ( $Z = 2.283, p < .05$ ). Hypothesis 1 is therefore substantiated: LMX mediates the relationship between empowerment role identity and adaptive performance. In other words, employees with higher empowerment role identity tend to exhibit greater sensitivity in maintaining LMX relationships and will subsequently deliver better adaptive performance.

**Moderating effect testing**

As shown in Table 4, the interaction term “empowerment role identity  $\times$  authentic leadership” presents a significant path coefficient ( $\beta = .090, p < .05$ ). At the same time, when this interaction term is added to the model, the change in the  $R^2$  value was also noticeable. These results indicate the existence of a moderation effect triggered by authentic leadership.

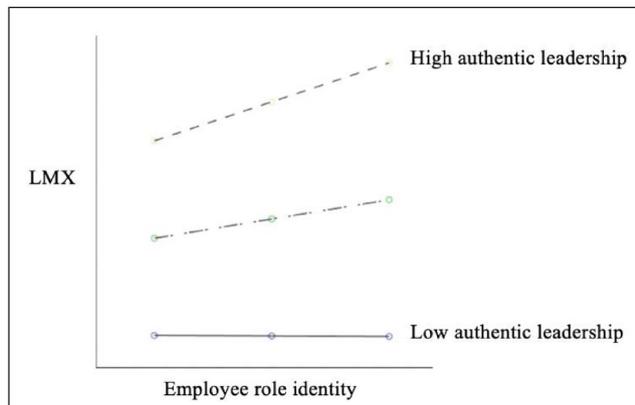
To examine the magnitude of the moderating effect that authentic leadership exerts on the relationship between empowerment role identity and LMX, we further manipulate this moderator at different levels. As reported in Table 4, when authentic leadership is high (MEAN + SD), the effect of empowerment role identity on LMX is significantly positive ( $\beta = .205, p < .01$ ). When authentic leadership is

**Table 4.** Results of the moderating effect of authentic leadership.

	Coefficient	SE	t	R <sup>2</sup>
Authentic leadership (AL)	.586	0.046	12.671**	0.395***
Empowerment role identity (ERI)	.100	0.048	2.087*	
AL × ERI	.090	0.037	2.423*	
Gender	.064	0.106	0.601	
Age	.021	0.011	1.876	
Education	-.097	0.070	-1.384	
Working time in the organization	.003	0.033	0.085	
Working time with current supervisor (constant)	-.008	0.038	-0.220	
	4.966	0.356	13.940***	
	ΔR <sup>2</sup>	F		p
	0.011	5.799		.017

Note. N = 326. Gender, age, educational level, and organizational tenure were controlled. Empowerment role identity and authentic leadership were mean centered.

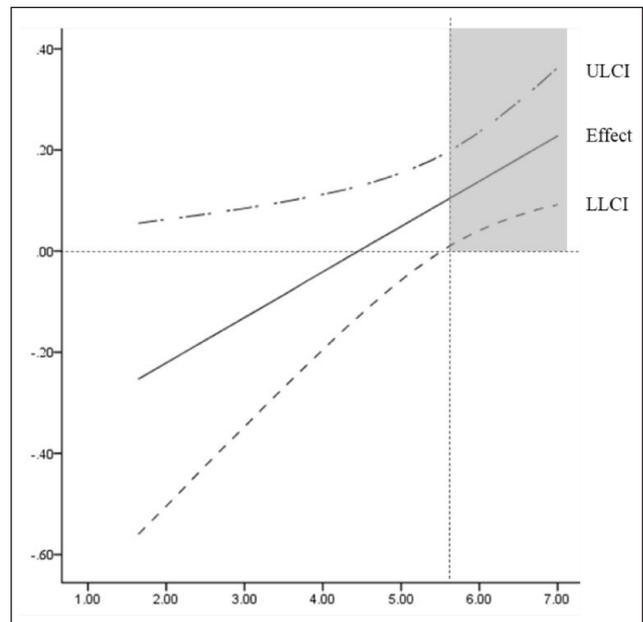
\*p < .05. \*\*p < .01. \*\*\*p < .001.



**Figure 2.** The moderating effect of authentic leadership.

adjusted to be medium (MEAN), the concerned effect is still significantly positive but becomes weaker ( $\beta = .100, p < .05$ ). When authentic leadership is attached to a low value (MEAN - SD), however, empowerment role identity no longer significantly influences LMX ( $\beta = -.004, p > .05$ ). Simply put, when authentic leadership is low, one's empowerment role identity does not necessarily lead to his or her improvement in establishing or maintaining LMX relationships. To visualize the significant moderating effect of authentic leadership, we plot in Figure 2 the relationships between empowerment role identity and LMX when authentic leadership stays respectively at the high (MEAN + SD) and low (MEAN - SD) levels. The different slopes of the two regression lines suggest that hypothesis 2 is supported.

It is worth noting that we also adopt the Johnson-Neyman technique to pinpoint the accurate regions of significance within which authentic leadership can switch the relationship between empowerment role identity and LMX from significant to insignificant, and vice versa. Figure 3 below shows the moderation range of authentic leadership and the shaded area marks the significance (at a 5% alpha level) region. It



**Figure 3.** The moderation range of authentic leadership.

turns out that the magic number for authentic leadership is 5.517 (on a 7-point scale). When authentic leadership is rated as 5.517 and above, employees with higher empowerment role identity tend to achieve greater LMX relationships. When authentic leadership drops below 5.517, nevertheless, the positive correlation between empowerment role identity and LMX turns to be insignificant. More notably, when authentic leadership is rated between 1.643 and 4.321, the relationship between empowerment role identity and LMX, albeit insignificant, becomes negative. When the authentic leadership rating is further slipped down to 1.643 and below, the negative correlation between empowerment role identity and LMX at a marginally significance level comes into being ( $\beta = -.253, p = .107$ ). Clearly, only under an encouraging and

**Table 5.** Results of the moderated mediation effect.

	Coefficient	SE	t	p	LLCI	ULCI
Direct effect	.009	0.049	0.189	.850	-0.088	0.106
Authentic leadership	Boot indirect effect		Boot SE	Boot LLCI	Boot ULCI	
MEAN - SD	-0.001		0.011	-0.025	0.021	
MEAN	0.013		0.008	0.001	0.036	
MEAN + SD	0.027		0.012	0.009	0.059	
	Index		Boot SE	Boot LLCI	Boot ULCI	
Moderated mediation effect	0.012		0.007	0.002	0.030	

Note.  $N=326$ . Gender, age, educational level, and organizational tenure were controlled. Empowerment role identity and authentic leadership were mean centered.

supportive work environment will employees' empowerment aspirations make a difference. The full results of Johnson-Neyman technique are shown in the Appendix (Table A1).

### Moderated mediation testing

Finally, our study investigates the moderating effect of authentic leadership on the full path from empowerment role identity to adaptive performance through LMX. The results are showed in Table 5. The index of moderated mediation, which generates inference on whether the association between the indirect main effect and the moderator is statistically significant, is hence adopted for confirmation purposes (Hayes, 2015). As predicted, the computed index value is non-zero and significant (INDEX=0.012, LLCI=0.002, ULCI=0.030). In other words, the moderated mediation effect undoubtedly exists.

Also in Table 5, we demonstrate the changes in the magnitude of the mediation effects when the levels of authentic leadership move from low to high. Specifically, (1) when authentic leadership is high (MEAN + SD), the mediation effect of LMX on the relationship between empowerment role identity and adaptive performance is significantly positive ( $\beta=.027$ , LLCI=0.009, ULCI=0.059); (2) When authentic leadership becomes medium (MEAN), the LMX still plays its role as a positive mediator, despite with a smaller effect size ( $\beta=.013$ , LLCI=0.001, ULCI=0.036); and (3) When authentic leadership is set at a low level (MEAN - SD), the mediation function of LMX disappears, evidenced by its insignificant slope coefficient (LLCI=-0.025 ULCI=0.021). These results combine to indicate that the extent to which LMX mediates the positive correlation between empowerment role identity and adaptive performance depends heavily on the perceived levels of authentic leadership. Hypothesis 3 is thus corroborated.

### Conclusion and discussion

Departing from the COR theory, this study conducts a multi-source survey on ICT company workers in China and examines the mechanisms through which the empowerment role identity of employees influences their levels of

adaptive performance. The empirical results show that (1) LMX plays a mediating role between empowerment role identity and adaptive performance, and (2) authentic leadership significantly moderates the mediating effect of LMX on the main relationship of interest. In other words, the extent of the positive correlation between empowerment role identity and LMX is contingent on the perceived levels of authentic leadership. Only when the authentic leadership level is rated higher than 5.517 on a 7-point Likert measurement, will the positive effect of empowerment role identity on LMX be manifested. When the authenticity of leaders is considered as below 1.643 in the eyes of their subordinates, however, LMX backfires in a sense that it begins to slightly undermine the relationship between one's empowerment role identity and his or her adaptive performance level. Taken together, this study suggests that employees are willing to accustom themselves to and excel at the changing business environment when they are granted a high sense of empowerment and have witnessed the display of an authentic leadership style from the top management.

### Theoretical implications

The theoretical contributions made by this paper is mainly threefold. First and foremost, this study expands the intellectual boundaries of adaptive performance research by enriching the antecedent factors that contribute to the enhancement of employees' performance in adaptability. While adaptive performance has become an increasingly important element of organizational growth, the existing studies that explore its antecedents remain scarce (Niessen & Jimmieson, 2016). In light of the COR theory, this study makes a pioneering attempt to study the correlation between empowerment role identity and adaptive performance and finds that when the perceived levels of authentic leadership are high, empowerment role identity can significantly promote employees' adaptive performance via LMX. In a sharp contrast, when the perceived levels of authentic leadership are extremely low, empowerment role identity could begin to weaken employees' adaptive performance via LMX. To a certain extent, this study facilitates a more comprehensive and nuanced understanding of the mechanisms underlying the determinants of adaptive performance.

Second, this study showcases the mediating role that LMX plays in the relationship between empowerment role identity and adaptive performance. Admittedly, previous studies have argued that employees with quality LMX relationships tend to exhibit a higher sense of belonging to their employing organizations, a stronger feeling of competence, more perceived job autonomy, and eventually greater creativity (Atwater & Carmeli, 2009; Volmer et al., 2012). This study then extends the reach of LMX to the field of adaptive management, empirically proving the interconnectedness between routine organizational behavior and adaptive performance of frontline employees.

Finally, by confirming the moderating effect of authentic leadership on the mediated relationship between empowerment role identity and adaptive performance through LMX, our analysis echoes the emerging scholarly view that authenticity is increasingly becoming a must-have attribute of leaders facing great global challenges these days (Gardner et al., 2011; George, 2003; George et al., 2007). Given the fact that the majority of the current studies focuses on identifying the positive outcomes that authentic leadership directly yields on employees (Clapp-Smith et al., 2009; Ilies et al., 2005), our analysis concentrates on measuring the likelihood of a moderating role that authentic leadership as a contextual factor is capable of playing to the relationships of interest.

### *Practical implications*

This study also helps inform the practice in several ways. To begin with, leaders should recognize the existence of the linkage between empowerment role identity and organizational performance. At least in the realm of the ICT sector (or fast-changing industries in general) where environmental turbulence is high, leaders should not only pay attention to the strategies that cope with external risks and uncertainties per se but also the reactions and attitudes that internal employees exhibit toward those outside challenges. The primary reason is that talented employees these days hope to be granted a sense of empowerment in decision-making. Leaders should be cognizant of this need and try to the best of their ability to satisfy it.

Secondly, authentic leadership is indispensable in management practice. It can help to create a relaxing work atmosphere and facilitate LMX relationships within the organizations. When leaders are considered as untruthful and hypocritical, as uniquely pointed out in this paper, employees' empowerment role identity will turn into a mixed blessing—possibly leading to undermined LMX relationships and ultimately compromised adaptive performance. Thus, leaders must demonstrate sincerity in their daily management practice. When facing employees with a strong desire for empowerment, leaders can employ more decentralized approaches to display their authenticity and thus solicit proactive attitudes and adaptive behaviors from their subordinates. Finally, adaptive performance is an important concept in its own right. Organizations crave for

adaptive work as much as employees call for authentic leaders. Since empowered employees are better able to develop a sense of self-efficacy that is significantly associated with their levels of adaptability, performance-oriented leaders ought to adopt diversified means to meet this very psychological need of organizational participants.

### *Limitations and future research directions*

Admittedly, this paper is subject to several limitations. First, our study tests all major effects at the individual level. However, it might be more appropriate to measure some important variables, such as authentic leadership, at the team or departmental level. Future inquiries can develop a multi-level model to further examine the findings generated from our analysis. Secondly, this study finds that LMX mediates the relationship between empowerment role identity and adaptive performance. However, we cannot rule out the possibility that the indirect effect of empowerment role identity on adaptive performance is owing to other factors besides LMX. In other words, some discernible mediators affecting the main relationship might have been overlooked and need to be explored and incorporated by future scholars. Lastly, the sample of this study is composed of individual workers from the Chinese ICT industry. The generalizability of our findings is thus questionable. Future studies should test the related hypotheses in other fields or cultural contexts.

### **Author Contributions**

SG and BW generated the research idea, developed the theoretical framework, and designed the model. SG and QH collected the data, carried out the pertinent analysis and interpretation, and worked out almost all of the technical details. BW drafted the research article and was involved in coordinating and supervising the work progress. BW, JW, and YK revised and refined the manuscript for submission. All authors have read, commented on, discussed, and approved the manuscript.

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## Appendix

**Table A1.** Full results of applying the Johnson-Neyman technique to reveal the moderating effect of authentic leadership on LMX.

Authentic leadership	Effect of ERI on LMX	SE	t	p	LLCI	ULCI
1.643	−0.253	0.156	−1.616	.107	−0.560	0.055
1.911	−0.229	0.147	−1.556	.121	−0.518	0.061
2.179	−0.205	0.138	−1.487	.138	−0.476	0.066
2.446	−0.181	0.128	−1.407	.161	−0.433	0.072
2.714	−0.157	0.119	−1.313	.190	−0.391	0.078
2.982	−0.133	0.110	−1.202	.230	−0.350	0.084
3.250	−0.109	0.101	−1.070	.285	−0.308	0.091
3.518	−0.085	0.093	−0.911	.363	−0.267	0.098
3.786	−0.060	0.084	−0.716	.474	−0.227	0.106
4.054	−0.036	0.076	−0.477	.634	−0.187	0.114
4.321	−0.012	0.069	−0.180	.857	−0.148	0.123
4.589	0.012	0.062	0.186	.852	−0.111	0.134
4.857	0.036	0.056	0.631	.528	−0.075	0.147
5.125	0.060	0.052	1.150	.251	−0.042	0.162
5.393	0.084	0.049	1.710	.088	−0.013	0.180
5.517	0.095	0.048	1.967	.050	0.000	0.190
5.661	0.108	0.048	2.249	.025	0.014	0.202
5.929	0.132	0.049	2.696	.007	0.036	0.228
6.196	0.156	0.052	3.009	.003	0.054	0.258
6.464	0.180	0.056	3.194	.002	0.069	0.291
6.732	0.204	0.062	3.283	.001	0.082	0.326
7.000	0.228	0.069	3.311	.001	0.092	0.363

Note. N = 326. ERI = empowerment role identity.