



Linking empowering leadership to employee innovation: The mediating role of work engagement

Guixian Tian¹, Zhuo Zhang²

¹School of Business, Zhejiang Wanli University, People's Republic of China

²School of Business, Macau University of Science and Technology, Macao

How to cite: Tian, G., & Zhang, Z. (2020). Linking empowering leadership to employee innovation: The mediating role of work engagement. *Social Behavior and Personality: An international journal*, 48(10), e9320

We investigated empowering leadership as a predictor of employee innovative behavior, with work engagement as a mediator in this relationship. Data were collected from 318 employees and their supervisors in China, and we used structural equation modeling to evaluate our hypotheses. The results suggest that empowering leadership was positively related to employee innovative behavior, and that work engagement partially mediated this relationship. Our findings provide new insight into the effects of empowering leadership on employee innovation, and indicate that it is beneficial for leaders to pay attention to empowering behavior and, in doing so, consider employees' engagement at work.

Keywords

empowering leadership;
leadership style; work
engagement; employee
innovation; innovative
behavior; leader–follower
relationship

Employee innovation has become a focus of organizational behavior research because of its importance for organizations' competitiveness and survival (Scott & Bruce, 1994). Contextual variables such as organizational climate and structure have been identified as drivers of employee innovative behavior (Dedahanov et al., 2017; Shanker et al., 2017), and many researchers have specifically focused on leadership style, which is crucial in influencing employees' daily work (Rahim et al., 2015). The effect of different leadership styles, for example, humorous, transformational, and transactional approaches, on employee innovative behavior has also been examined in numerous studies (see, e.g., Pieterse et al., 2010; Pundt, 2015). More recently, empowering leadership has attracted increasing scholarly attention (A. Lee et al., 2018). Researchers have investigated the effects of empowering leadership on employee innovative behavior, and found that psychological factors, such as motivation, trust, and psychological empowerment, mediate the relationships between empowering leadership and employee creativity and between empowering leadership and innovative behavior (Chow, 2018; Zhang & Bartol, 2010; Zhu et al., 2019).

Work engagement is one of the most important drivers of employee innovative behavior (Gomes et al., 2015). However, despite Zhang and Bartol's (2010) finding that empowering leadership positively affects employees' psychological empowerment, which, in turn, influences their creative process engagement, leading to increased creativity, little attention has been paid to the mediating effect of work engagement in the relationship between empowering leadership and employee innovation. Zhang and Bartol defined *creative process engagement* as the effort that employees spend to identify a problem, obtain information, and generate ideas. *Work engagement*, however, differs in that it is a positive, fulfilling, work-related state of mind characterized by feelings of vigor, dedication, and absorption in work activities (Schaufeli et al., 2006). Thus, we examined the role of work engagement as a psychological mechanism linking empowering leadership to employee innovative behavior. The proposed research model is presented in Figure 1.

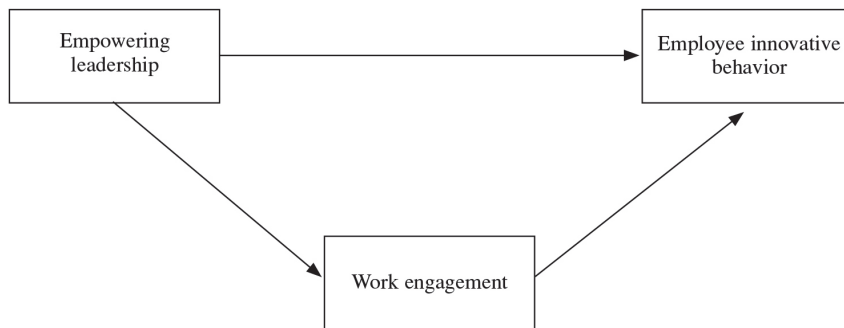


Figure 1. *Proposed Research Model*

Empowering leadership, which originates from structural empowerment (Conger & Kanungo, 1988), is a process whereby leaders create a supportive environment and delegate subordinates power and autonomy in their work and decision making (Zhu et al., 2019). In this environment, subordinates acquire self-determination or decision-making autonomy, which motivates them to engage in their work (Deci et al., 2017; Meyer & Gagnè, 2008). Of the factors that improve employees' engagement with their organizations, leaders are vitally important (Xu & Thomas, 2011). Empowering leaders optimize working conditions for employee engagement by increasing cognitive resources and demands (Tuckey et al., 2012), and enhancing employee work meaningfulness (Bakker, 2011; M. C. C. Lee et al., 2017). When employees perceive their leaders and managers to have an empowering leadership style, they feel that they are engaged with, and belong to, their organization (Albrecht & Andreetta, 2011). J. G. Park et al. (2017) also found that empowering leadership was positively related to work engagement, and that this relationship was mediated by psychological capital. Therefore, we proposed the following hypothesis:

Hypothesis 1: Empowering leadership will be positively related to work engagement.

It has been suggested that work engagement is an important antecedent of individual innovation in the workplace (Garg & Dhar, 2017; Gomes et al., 2015), and an indicator of intrinsic motivation (Salanova & Schaufeli, 2008). That is, employees who are more engaged in their work are more capable of solving problems, connecting with coworkers, and developing innovation (Hakanen et al., 2008). Engaged employees increase their work involvement (Iddagoda et al., 2016; May et al., 2004); thus, the importance of work engagement for increasing employee innovative behavior has been demonstrated. Engaged employees expend much effort, find inspiration, and increase their personal initiative in the workplace, which leads to enhancement of their innovative behavior (Hakanen et al., 2008; Y. K. Park et al., 2014). Therefore, we proposed the following hypothesis:

Hypothesis 2: Work engagement will be positively related to employee innovative behavior.

Researchers have shown that empowering leadership is both directly and indirectly related to employee creativity and innovative behavior (Chow, 2018; Gkorezis, 2016; Özarallı, 2015; Sagnak, 2012; Slåtten et al., 2011; Zhang & Bartol, 2010; Zhu et al., 2019). The empowering leader emphasizes employee autonomy (Zhu et al., 2019), which is an important factor in promoting employee creativity (Amabile et al., 2004). Oldham and Cummings (1996) found that employees supervised in a supportive (vs. controlling) work environment produce more creative work. Further, some researchers have suggested that work engagement plays a mediating role in the relationship between leadership and employee proactive behavior. For example, Babcock-Roberson and Strickland (2010) found that work engagement mediated the relationship between charismatic leadership and organizational citizenship behavior. Buil et al. (2019) also found that work engagement mediated the links between transformational leadership and job performance, and between

organizational citizenship behavior and job performance. Therefore, we proposed the following hypotheses:

Hypothesis 3: Empowering leadership will be positively related to employee innovative behavior.

Hypothesis 4: Work engagement will positively mediate the relationship between empowering leadership and employee innovative behavior.

Method

Participants and Procedure

After ethical approval had been granted by the relevant university authorities, we distributed survey forms to full-time employees, who came from all walks of life, at a business in China. The alumni association of a public university in South China helped us to contact the participants. We guaranteed that responses would remain anonymous and be kept confidential, and gave the participants the option to stop taking part in the study at any time without penalty. We distributed 500 surveys to supervisor–subordinate dyads, of which 327 supervisor and 365 subordinate surveys (73% response rate) were returned. After 47 incomplete surveys had been deleted, there were 318 valid paired surveys for supervisor–subordinate dyads.

To reduce potential common method bias, we conducted the survey in two waves: First, participants were asked to rate their perception of empowering leadership and work engagement. One week later, direct supervisors rated their subordinates' innovative behavior. Participants' ages ranged from 25 to 40 years ($M = 34.70$, $SD = 8.24$), the range of tenure with the organization was 3 to 15 years ($M = 7.40$, $SD = 5.57$), and in terms of gender distribution, 112 (35.2%) participants were women and 206 (64.8%) were men.

Measures

The items were originally developed in the English language. Two researchers who were fluent in both English and Chinese translated the items into Chinese and back-translated them into English. We revised the wording of some items to improve clarity in the Chinese language. All items were rated on a 5-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*.

Empowering Leadership

We used Carmeli et al.'s (2011) three-item scale to measure subordinates' perception of their direct supervisor's empowering leadership: "My supervisor encourages an empowering decision-making process," "My supervisor facilitates knowledge sharing among work group members," and "My supervisor fosters collaborative behaviors among work group members." Cronbach's alpha was .82 in this study.

Work Engagement

We measured work engagement using the nine-item Utrecht Work Engagement Scale (Schaufeli et al., 2006). The scale comprises three work engagement dimensions: vigor (e.g., "At my work, I feel bursting with energy," $\alpha = .87$), dedication (e.g., "I am enthusiastic about my job," $\alpha = .84$), and absorption (e.g., "I get carried away when I am working," $\alpha = .85$). Cronbach's alpha for the whole scale was .90. Goodness-of-fit criteria for the three first-order factors plus one second-order factor were acceptable, chi square (χ^2)/degrees of freedom (df) = 2.97, root mean square error of approximation (RMSEA) = .075, comparative fit index (CFI) = .96, incremental fit index (IFI) = .97, indicating that the three dimensions reflected the overall construct.

Employee Innovative Behavior

We measured employee innovative behavior using Scott and Bruce's (1994) six-item scale. The immediate supervisors were asked to assess their subordinates' innovative behavior. A sample item is "This employee searches out new technologies, processes, techniques, and/or product ideas." Cronbach's alpha for this scale was .86.

Results

Preliminary Analysis

Confirmatory factor analysis was used to examine the measures' construct validity. The measurement model consisted of empowering leadership, work engagement, and innovative behavior. Results show there was an acceptable fit to the data, $\chi^2/df = 2.05$, RMSEA = .054, CFI = .95, IFI = .96. We also tested a one-factor model in which all items loaded on one factor. This model had a poor fit to the data, $\chi^2/df = 5.45$, RMSEA = .020, CFI = .55, IFI = .57. As all composite reliabilities were greater than .60 and the average variance extracted exceeded the recommended value of .50, the construct validity was acceptable and common method bias was not a significant problem in this study.

Hypothesis Testing

Means, standard deviations, and correlations for the study variables are shown in Table 1. We used structural equation modeling with a 95% confidence interval (CI) to assess the hypotheses. Consistent with our expectation, empowering leadership was significantly and positively correlated with work engagement, $r = .53, p < .01, 95\% \text{ CI } [0.30, 0.75]$, and employee innovative behavior, $r = .32, p < .01, 95\% \text{ CI } [0.14, 0.52]$, supporting Hypotheses 1 and 3. In addition, work engagement was significantly positively correlated with employee innovative behavior, $r = .40, p < .01, 95\% \text{ CI } [0.22, 0.61]$, supporting Hypothesis 2.

To further investigate the mediating effect of work engagement, we used bias-corrected bootstrapping analysis to test the significance of the indirect effect. Results show that the indirect effect ($.53 \times .40 = .21$) of empowering leadership on employee innovative behavior via work engagement was significant and positive, $95\% \text{ CI } [0.09, 0.38]$, which accounted for $.21 \div (.21 + .32) = 39.62\%$ of the variance in the effects. These findings show that work engagement partially mediated the relationship between empowering leadership and employee innovative behavior. Thus, Hypothesis 4 was supported.

Table 1. Means, Standard Deviations, and Correlation Coefficients for Study Variables

	<i>M</i>	<i>SD</i>	1	2	3
1. Empowering leadership	3.57	0.55	1		
2. Work engagement	4.12	0.68	.32**	1	
3. Employee innovative behavior	4.03	0.62	.35**	.44**	1

Note. ** $p < .01$.

Discussion

Our results show that empowering leadership had both a positive indirect effect on employee innovative behavior via work engagement, and a positive direct effect on employee innovative behavior. In addition, work engagement partially mediated the link between empowering leadership and employee innovative behavior.

Theoretical Implications

Our findings contribute to the empirical literature regarding the role of leadership in facilitating work engagement and driving employee innovative behavior. First, the importance of leaders in empowering their employees and fostering their work engagement (M. C. C. Lee et al., 2017; J. G. Park et al., 2017) is a critical factor in promoting employee innovative behavior (Garg & Dhar, 2017; Gomes et al., 2015). The mediating

role of work engagement helps demonstrate the mechanism through which empowering leadership drives employee innovative behavior. Our results suggest that empowering leadership is effective in facilitating employee innovative behavior, and at the same time, in enhancing work engagement. Second, in contrast to the findings of Chow (2018), Gkorezis (2016), and Zhu et al. (2019), our results support a direct effect of empowering leadership on employee innovative behavior. This result also lends support to the findings of Özarallı (2015), Sagnak (2012), and Slåtten et al. (2011), who found that, compared with employees working under conditions of other leadership styles and patterns of authority, employees engage in more creative behavior when leaders exhibit empowering behavior and delegate authority. Thus, our results imply that empowered employees are more innovative (Fernandez & Moldogaziev, 2013).

Practical Implications

Our findings also have important practical implications. To cultivate and improve employees' work engagement and their innovative behavior, organizations need to provide them with organizational support and work autonomy (Siddiqi, 2015). Leaders should also pay more attention to their empowering behavior. Human resource practices should be incorporated in management training for the effective delegation of authority. Organizational efforts to educate managers on how to support and coach subordinates, and to encourage subordinates to participate in work decision making, would also be worthwhile.

Limitations and Directions for Future Research

There are some limitations in this study. First, data were collected using self-reports from supervisors and subordinates, and variables were measured in a two-wave, time-lagged design. Although confirmatory factor analysis showed that common method bias was not a significant concern, future researchers could obtain more objective innovative behavior data in longitudinal research to replicate our findings. Second, this study was conducted in China, which is a country with a high power distance culture. Power distance may moderate the relationship between organizational leadership and work engagement. For example, Ahmad and Gao (2018) suggested that in organizations with a low (vs. high) power distance orientation, the ethical leadership–work engagement relationship is stronger. Thus, future researchers could verify the relationships we observed in cross-cultural contexts.

References

Ahmad, I., & Gao, Y. (2018). Ethical leadership and work engagement: The roles of psychological empowerment and power distance orientation. *Management Decision*, *56*(9), 1991–2005.
<https://doi.org/10.1108/MD-02-2017-0107>

Albrecht, S. L., & Andretta, M. (2011). The influence of empowering leadership, empowerment and engagement on affective commitment and turnover intentions in community health service workers: Test of a model. *Leadership in Health Services*, *24*(3), 228–237.
<https://doi.org/10.1108/17511871111151126>

Amabile, T. M., Schatzel, E. A., Moneta, G. B., & Kramer, S. J. (2004). Leader behaviors and the work environment for creativity: Perceived leader support. *The Leadership Quarterly*, *15*(1), 5–32.
<https://doi.org/10.1016/j.leaqua.2003.12.003>

Babcock-Roberson, M. E., & Strickland, O. J. (2010). The relationship between charismatic leadership, work engagement, and organizational citizenship behaviors. *The Journal of Psychology*, *144*(3), 313–326.
<https://doi.org/10.1080/00223981003648336>

Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, *20*(4), 265–269.
<https://doi.org/10.1177/0963721411414534>

Buil, I., Martínez, E., & Matute, J. (2019). Transformational leadership and employee performance: The role

of identification, engagement and proactive personality. *International Journal of Hospitality Management*, 77, 64–75.

<https://doi.org/10.1016/j.ijhm.2018.06.014>

Carmeli, A., Schaubroeck, J., & Tishler, A. (2011). How CEO empowering leadership shapes top management team processes: Implications for firm performance. *The Leadership Quarterly*, 22(2), 399–411.

<https://doi.org/10.1016/j.leaqua.2011.02.013>

Chow, I. H. S. (2018). The mechanism underlying the empowering leadership-creativity relationship. *Leadership & Organization Development Journal*, 39(2), 202–217.

<https://doi.org/10.1108/LODJ-03-2016-0060>

Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *The Academy of Management Review*, 13(3), 471–482.

<https://doi.org/10.2307/258093>

Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43.

<https://doi.org/10.1146/annurev-orgpsych-032516-113108>

Dedahanov, A. T., Rhee, C., & Yoon, J. (2017). Organizational structure and innovation performance: Is employee innovative behavior a missing link? *Career Development International*, 22(4), 334–350.

<https://doi.org/10.1108/CDI-12-2016-0234>

Fernandez, S., & Moldogaziev, T. (2013). Employee empowerment, employee attitudes, and performance: Testing a causal model. *Public Administration Review*, 73(3), 490–506.

<https://doi.org/10.1111/puar.12049>

Garg, S., & Dhar, R. (2017). Employee service innovative behavior: The roles of leader-member exchange (LMX), work engagement, and job autonomy. *International Journal of Manpower*, 38(2), 242–258.

<https://doi.org/10.1108/IJM-04-2015-0060>

Gkorezis, P. (2016). Principal empowering leadership and teacher innovative behavior: A moderated mediation model. *International Journal of Educational Management*, 30(6), 1030–1044.

<https://doi.org/10.1108/IJEM-08-2015-0113>

Gomes, C., Curral, L., & Caetano, A. (2015). The mediating effect of work engagement on the relationship between self-leadership and individual innovation. *International Journal of Innovation Management*, 19(1), 1–18.

<https://doi.org/10.1142/S1363919615500097>

Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73(1), 78–91.

<https://doi.org/10.1016/j.jvb.2008.01.003>

Iddagoda, Y. A., Opatha, H. H. D. N. P., & Gunawardana, K. D. (2016). Towards a conceptualization and an operationalization of the construct of employee engagement. *International Business Research*, 9(2), 85–98.

<https://doi.org/10.5539/ibr.v9n2p85>

Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, 39(3), 306–325.

<https://doi.org/10.1002/job.2220>

Lee, M. C. C., Idris, M. A., & Delfabbro, P. H. (2017). The linkages between hierarchical culture and empowering leadership and their effects on employees' work engagement: Work meaningfulness as a mediator. *International Journal of Stress Management*, 24(4), 392–415.

<https://doi.org/10.1037/stro000043>

May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77(1), 11–37.

<https://doi.org/10.1348/096317904322915892>

Meyer, J. P., & Gagnè, M. (2008). Employee engagement from a self-determination theory perspective. *Industrial and Organizational Psychology*, 1(1), 60–62.

<https://doi.org/10.1111/j.1754-9434.2007.00010.x>

Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607–634.

<https://doi.org/10.5465/256657>

Özaralli, N. (2015). Linking empowering leader to creativity: The moderating role of psychological (felt) empowerment. *Procedia - Social and Behavioral Sciences*, 181, 366–376.

<https://doi.org/10.1016/j.sbspro.2015.04.899>

Park, J. G., Kim, J. S., Yoon, S. W., & Joo, B.-K. (2017). The effects of empowering leadership on psychological well-being and job engagement: The mediating role of psychological capital. *Leadership & Organization Development Journal*, 38(3), 350–367.

<https://doi.org/10.1108/LODJ-08-2015-0182>

Park, Y. K., Song, J. H., Yoon, S. W., & Kim, J. (2014). Learning organization and innovative behavior: The mediating effect of work engagement. *European Journal of Training and Development*, 38(1–2), 75–94.

<https://doi.org/10.1108/ejtd-04-2013-0040>

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>

Pundt, A. (2015). The relationship between humorous leadership and innovative behavior. *Journal of Managerial Psychology*, 30(8), 878–893.

<https://doi.org/10.1108/JMP-03-2013-0082>

Rahim, R. A., Salleh, N. F., Ahmad, S. F., & Mustapha, R. M. (2015). Exploring the relationship between leadership style, knowledge management practices, and innovative behavior. In R. Hashim & A. Abdul Majeed (Eds.), *Proceedings of the Colloquium on Administrative Science and Technology* (pp. 499–508). Springer.

https://doi.org/10.1007/978-981-4585-45-3_48

Sagnak, M. (2012). The empowering leadership and teachers' innovative behavior: The mediating role of innovation climate. *African Journal of Business Management*, 6(4), 1635–1641.

Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *The International Journal of Human Resource Management*, 19(1), 116–131.

<https://doi.org/10.1080/09585190701763982>

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701–716.

<https://doi.org/10.1177/0013164405282471>

Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580–607.

<https://doi.org/10.5465/256701>

Shanker, R., Bhanugopan, R., van der Heijden, B. I. J. M., & Farrell, M. (2017). Organizational climate for innovation and organizational performance: The mediating effect of innovative work behavior. *Journal of Vocational Behavior, 100*, 67–77.

<https://doi.org/10.1016/j.jvb.2017.02.004>

Siddiqi, M. A. (2015). Employee innovative work behavior and its roots in their work engagement: An Indian experience. *Pranjana: The Journal of Management Awareness, 18*(2), 1–18.

<https://doi.org/10.5958/0974-0945.2015.00008.4>

Slåtten, T., Svensson, G., & Sværi, S. (2011). Empowering leadership and the influence of a humorous work climate on service employees' creativity and innovative behavior in frontline service jobs. *International Journal of Quality and Service Sciences, 3*(3), 267–284.

<https://doi.org/10.1108/17566691111182834>

Tuckey, M. R., Bakker, A. B., & Dollard, M. F. (2012). Empowering leaders optimize working conditions for engagement: A multilevel study. *Journal of Occupational Health Psychology, 17*(1), 15–27.

<https://doi.org/10.1037/a0025942>

Xu, J., & Thomas, H. C. (2011). How can leaders achieve high employee engagement? *Leadership and Organization Development Journal, 32*(4), 399–416.

<https://doi.org/10.1108/01437731111134661>

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>

Zhu, J., Yao, J., & Zhang, L. (2019). Linking empowering leadership to innovative behavior in professional learning communities: The role of psychological empowerment and team psychological safety. *Asia Pacific Education Review, 20*, 657–671.

<https://doi.org/10.1007/s12564-019-09584-2>