

RELATIONSHIP BETWEEN INNOVATIVE LEADERSHIP AND EMPLOYEE SERVICE INNOVATION BEHAVIOR

Yu-Chi Wu, National University of Kaohsiung, Kaohsiung

Yi-Feng Yang, Shu-Te University, Kaohsiung

Cheng-Se Hsu, National Kaohsiung University of Science and Technology

ABSTRACT

This study investigates if a climate of support for innovation acts as a mediator between innovative leadership and employee service innovation behavior. A total of 238 valid questionnaires were collected from insurance companies. Participants were asked to rate their service innovation behavior, their supervisors' innovative leadership, and the climate of support for innovation in their unit. The study used regression analysis to analyze the data. The results indicated that a climate of support for innovation acts as a mediator between innovative leadership and employee service innovation behavior. Finally, this study discusses the implications of these findings and offers direction for future research.

JEL: M31

KEYWORDS: Innovative Leadership, Employee Service Innovation Behavior, Climate of Support for Innovation

INTRODUCTION

Interactions between service employees and customers are critical in every transaction. To provide high-quality customer service, service employees represent an important role in innovative service implementation (Lee and Hyun, 2016). The rationale of employees' service innovation behavior is to gain customers' positive perception of the service organization (Yuan and Woodman, 2010). Toward this end, employee service innovation behavior deserves further investigation. Researchers have overlooked an opportunity to assist employees in developing service innovation behavior, which is crucial to an organization's capabilities as well as competitive advantages.

Some scholars maintained that leadership is an important precursors of employees' innovation behavior (Gong et al., 2009; Basu and Green, 1997). A prior study defined innovative leadership as leaders who help develop members' creative behavior (Khalili, 2017). Given the fact that leaders in service sectors highly value service quality, one may argue that such may encourage employee service innovation behavior, which in turn can lead to customer satisfaction. However, the relationship between leadership and employee service innovation behavior seems rather confounding and inconsistent in the findings. This suggests that leadership styles may have different relationships with employees' innovation behavior, depending on other variables (Rosing et al., 2011).

Work climate research investigates how employees perceive their work environment and how the perception affects them, such as work behavior (Kuenzi and Schminke, 2009). A work climate (i.e., climate of support for innovation) emphasizes innovation values and norms (Anderson and West, 1998). Scott and Bruce (1994) found that an innovation climate was a mediator between leadership and employee service

innovation behavior. A review of leadership literature to date reveals that leaders affect employees' attitudes or behavior by creating a work climate. We argue that to provide high-quality service, leaders with an innovative leadership style may encourage employee service innovation behavior by providing the employees with a climate of support for innovation. Thus, the research question is to explore if a climate of support for innovation acts as a mediator between innovative leadership and employee service innovation behavior.

This research makes some important contributions. Few empirical studies have investigated the relationship between innovative leadership and employee service innovation behavior. To the best of our knowledge, how innovative leadership influences employee service innovation behavior has not been investigated in the existing literature. Moreover, we propose a link between leadership and employee innovation service behavior. This study can help service organizations provide customers with better service quality, thereby gaining and sustaining competitive advantages.

The article will be conducted with a literature review related to research concepts, followed by a discussion of questionnaires used to collect data. We implement regression analysis to test our hypotheses and produce results. Finally, the conclusions and managerial implications of the article are discussed.

LITERATURE REVIEW

Innovative Leadership, Climate of Support for Innovation, and Employee Service Innovation Behavior

Innovative leaders use innovation and creativity to manage employees and work. They tend to explore new ways and procedures to improve organizational efficiency (Delanoy and Kasztelnik, 2020). Researchers (Mumford and Licuanan, 2004) noted the need for organizations to innovate in order to adapt to changes in the competitive environment. This need has led to a new focus on the role of leaders. For example, innovative leaders tend to adopt new technologies as well as procedures so their employees can act innovatively and stay competitive. By doing so, employees' knowledge will be transformed according to the leaders' expertise (Mumford et al., 2003).

An organizational climate for innovation includes encouragement via such elements as creativity, autonomy, and sufficient resources (Amabile et al., 1996). Extending this description, an innovation climate can be defined as the extent to which organizational norms and values stress innovation (West and Anderson, 1996). Support for innovation can be translated into expectations, approvals, and practical support, like introducing novel ways of doing things in the workplace (West and Anderson, 1996). Further, West and Anderson (1996) asserted that support for innovation might be conveyed by verbal communication, policy statements, and personnel documents. Further, Abbey and Dickson (1983) concluded that an innovation climate could be demonstrated by rewarding employees' excellent performance or by the organizational willingness to try new ideas. Based on prior research, perception of resource adequacy and support for an innovation climate act on employees psychologically because both lead to employee's beliefs about the intrinsic value of the projects they have carried out (Yang et al., 2021).

According to Amo and Kolvereid (2005), employee service innovative behavior is defined as employees' willingness to come up with creative ideas regarding services, products, and processes in the work environment. Employees with innovative behavior tend to find resources to reinforce novel ideas and are committed to service innovation to improve organizational performance (Kim and Lee, 2013). Hence, we believe this will contribute to both customer satisfaction and service quality.

Hypotheses

By establishing and keeping an organizational climate that nurtures creative efforts and facilitates learning, leaders are able to inspire organizational creativity (Yukl, 2018). Likewise, leaders may affect employee service innovation behavior by defining and shaping work contexts to help employees define problems, goals, or solutions (Redmond et al., 1993). In addition, leaders' unconventional behavior, such as role modeling, articulating a creative mission, and establishing creative group identity, are all conducive to followers' creativity (Azim et al., 2019).

In this line, we argue that leaders with innovative leadership welcome and reward creative ideas, which in turn gives employees autonomy and resources. In the end, a climate of support for innovation, including such elements as creativity, autonomy, and sufficient resources, is established. Thus, the first hypothesis is proposed.

Hypothesis 1: Innovative leadership is positively related to a climate of support for innovation.

A Prior study indicated that an innovative climate within an organization influences employees' motivation, which in turn affects their innovation behavior (Hunter et al., 2007). Given a climate of support for innovation, such as adequate creativity, autonomy, and sufficient resources (Lee and Kim, 2021), we argue that employees in such a climate are more intrinsically motivated, more willing to face challenges, and more satisfied with their work. As such, they explore new ideas and present them through innovative behavior and actions. Hence, the second hypothesis is proposed.

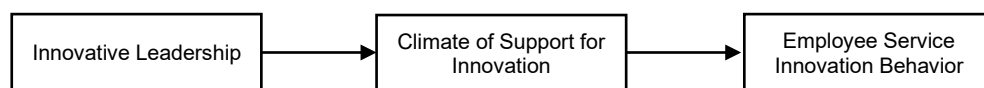
Hypothesis2: A climate of support for innovation is positively related to employee service innovation behavior.

Employees in a climate of support for innovation will be more likely to develop service innovation behavior, such as looking for creative ideas regarding services, products, and procedures in the workplace. Innovative leadership may help shape the climate of support for innovation, which thereafter can affect employee service innovation behavior. Thus, the third hypothesis is proposed.

Hypothesis 3: A climate of support for innovation mediates the relationship between innovative leadership and employee service innovation behavior.

The diagram of the research model is presented in Figure 1.

Figures 1 Diagram of Research Model



Note. This figure is the research model.

DATA AND METHODOLOGY

Sampling and Measure

Participants (insurance agents) were recruited from Taiwan insurance companies in May 2021. Insurance agents usually need to provide an insurance product to fit the customer's needs. To do so, they need to present employee service innovation behavior. The researchers asked the managers of those insurance companies to kindly help with the survey and collect the questionnaires. Participants were asked to rate

their service innovation behavior, their supervisors’ innovative leadership, and the climate of support for innovation in their unit. A total of 238 valid questionnaires were collected. The sample includes 47% males and 53% females, with a mean age of 36.5 years.

All measures were reported on a 7-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Items for measuring innovative leadership were adapted from Karamitri et al. (2020). Participants were asked to evaluate their supervisor’s innovative leadership and indicate the degree of their agreement. Items for measuring a climate of support for innovation were adapted from Anderson and West (1998). Participants were asked to evaluate their unit climate and indicate the degree of their agreement. Finally, employee service innovation behavior was measured with items based on Scott and Bruce (1994). Participants were asked to evaluate their service innovation behavior. As prior studies have suggested that participants’ gender, education, and tenure (Wu et al., 2021; De Dreu, 2006) may influence employee innovation, we controlled the effects of these demographic variables. Variables, variable definitions, and units of measurement are presented in Table 1.

Table 1: Variables, Variable Definitions, and Unit of Measurement

Variables	Variable Definitions	Unit of Measurement
Innovative Leadership	Innovative leaders use innovation and creativity to manage employees and work.	Individual Level
Climate of Support for Innovation	Climate of Support for Innovation can be translated into expectations, approvals, and practical support like introducing novel ways of doing things in the workplace.	Individual Level
Employee Service Innovative Behavior	Employee service innovative behavior is defined as employees’ willingness to come up with creative ideas regarding services, products, and processes in the work environment.	Individual Level

This table indicates the variables, variable definitions, and unit of measurement.

RESULTS

Table 2 presents means, standard deviations, reliabilities, and intercorrelations among the variables.

Table 2: Means (M), Standard Deviations (SD), and Correlations

Variable	M	SD	1(IL)	2(CSI)	3(ESIB)
1. Innovative Leadership (IL)	5.13	0.98	(0.92)		
2. Climate of Support for Innovation (CSI)	4.98	0.72	0.21**	(0.81)	
3. Employee Service Innovation Behavior (ESIB)	5.22	0.89	0.23**	0.38**	(0.95)
4. Age	36.5	0.87			

*This table sows summary statistics. Reliabilities (coefficient alpha) in parentheses on the diagonal. Sample size N = 238. Two-tailed tests. ***, ** and * indicate significance at the 1, 5 and 10 percent levels respectively.*

SPSS macro (PROCESS) developed by Hayes (2013) is used to test the mediation model (Hypotheses 1-3). It is developed based on regression analysis. The following regression equation (1) was estimated to identify determinants of a climate of support for innovation. The following regression equation (2) was estimated to identify determinants of Employee service innovation behavior.

$$\text{Climate of Support for Innovation} = \beta_0 + \beta_1(\text{Gender}) + \beta_2(\text{Education}) + \beta_3(\text{Tenure}) + \beta_4(\text{Innovative Leadership}) \tag{1}$$

$$\text{Employee Service Innovation Behavior} = \beta_{01} + \beta_{11}(\text{Gender}) + \beta_{21}(\text{Education}) + \beta_{31}(\text{Tenure}) + \beta_{41}(\text{Climate of Support for Innovation}) + \beta_{51}(\text{Innovative Leadership}). \quad (2)$$

Ordinary Least Squares estimates were obtained. Table 3 shows the results. The parameter β_k ($k=0, \dots, 4$) indicates an unstandardized regression coefficient. Moreover, The parameter β_{k1} ($k=0, \dots, 5$) indicates an unstandardized regression coefficient.

As seen in Table 3, innovative leader style is positively related to a climate of support for innovation ($\beta = 0.14, t = 2.39, p < 0.05$). Hypothesis 1 is supported. A climate of support for innovation is positively related to employee service innovation behavior ($\beta = 0.48, t = 5.86, p < 0.001$). Hypothesis 2 is supported. The mediation effects (indirect effect through a climate of support for innovation = 0.06 is significantly different from zero (95% CI [0.01, 0.13])). The mediation model (Hypothesis 3) is supported.

Table 3: Regression Results for Simple Mediation

Variables	β	SE	t	p
Regressed on Climate of Support for Innovation R2 0.27; Adjusted R2 0.26				
Constant	4.18***	0.36	11.42	<0 .001
Gender	-0.14	0.09	-1.49	0.137
Education	0.04	0.07	0.61	0.546
Tenure	0.08	0.05	1.48	0.139
Innovative Leadership	0.14*	0.06	2.39	0.017
Regressed on Employee Service Innovation Behavior R2 0.39; Adjusted R2 0.38				
Constant	0.45	0.59	0.76	0.451
Gender	0.05	0.13	0.38	0.707
Education	-0.02	0.09	-0.28	0.783
Tenure	-0.01	0.07	-0.19	0.842
Climate of Support for Innovation	0.48***	0.09	5.86	< 0.001
Innovative Leadership	0.44***	0.07	5.87	<0 .001

*This table shows regression analysis results. Unstandardized regression coefficients are reported. Bootstrap sample size = 1,000. Two-tailed tests.***, ** and * indicate significance at the 1, 5 and 10 percent levels respectively.*

CONCLUDING COMMENTS

A review of the existing literature has revealed that little, if any, extant research on how innovative leaders affect employee service innovation behavior. To fill the gap, this study integrates the variable, a climate of support for innovation, into our conceptual framework. Interactions between service employees and customers are considered critical in every transaction. The results of this study match the ideas that service employees play an important role in innovative service implementation (Lee and Hyun, 2016). This study found that innovative leadership exerts a strong influence on a climate of support for innovation, which thereafter reinforces employees' innovation behavior.

This study used SPSS macro (PROCESS) developed by Hayes (2013) to test the mediation model (Hypotheses 1-3). It is developed based on regression analysis. Although the findings of this study yield some valuable insights, several limitations of this study should be recognized. First, this study does not include individuals' personalities as moderating effects. There are some individuals' personalities related to innovation behavior that is worthy of further investigation, such as openness to experience dimension of

the Five-Factor Model of personality (McCrae and Costa, 2004) or Gough's (1979) Creative Personality Scale. Second, the data were collected only from one industry, insurance companies. Therefore, future studies may consider collecting data from other service industries, such as banks or hotels, to test the robustness of the model.

REFERENCES

- Abbey, A. and Dickson, J. W. (1983) "Rand Work Climate and Innovation in Semiconductors," *Academy of Management Journal*, vol. 26(2), p. 362-368
- Amabile, T. M. Conti, R. Coon, H. Lazenby, J. and Herron, M. (1996) "Assessing the Work Environment for Creativity," *Academy of Management Journal*, vol. 39(5), p. 1154-1184
- Amo, B. W. and Kolvereid, L. (2005) "Organizational Strategy, Individual Personality and Innovation Behavior," *Journal of Enterprising Culture*, vol. 13(1), p. 7-1.
- Anderson, N. R. and West, M. A. (1998) "Measuring Climate for Work Group Innovation: Development and Validation of the Team Climate Inventory," *Journal of Organizational Behavior*, vol. 19(3), p. 235-258
- Azim, M. T. Fan, L. Uddin, M. A. Jilani, M. M. A. K. and Begum, S. (2019) "Linking Transformational Leadership with Employees' Engagement in the Creative Process," *Management Research Review*, vol. 42(7), p. 837-858
- Basu, R. and Green, S. G. (1997) "Leader-Member Exchange and Transformational Leadership: An Empirical Examination of Innovative Behaviors in Leader-Member Dyads," *Journal of Applied Social Psychology*, vol. 27(6), p. 477-499
- De Dreu, C. K. (2006) "When Too Little or Too Much Hurts: Evidence for a Curvilinear Relationship between Task Conflict and Innovation in Teams," *Journal of Management*, vol. 32(1), p. 83-108
- Delanoy, N. and Kasztelnik, K. (2020) "Business Open Big Data Analytics to Support Innovative Leadership and Management Decision in Canada," *Business Ethics and Leadership*, vol. 4(2), p. 56-74
- Gong, Y. Huang, J. C. and Farh, J. L. (2009) "Employee Learning Orientation, Transformational Leadership, and Employee Creativity: The Mediating Role of Employee Creative Self-Efficacy," *Academy of Management Journal*, vol. 52(4), p. 765-778
- Gough, H. G. (1979) "A Creative Personality Scale for the Adjective Check List," *Journal of Personality and Social Psychology*, vol. 37(8), p. 1398-1405
- Hayes, A. F. (2013) *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Press, New York.
- Hunter, S. T. Bedell, K. E. and Mumford, M. D. (2007) "Climate for Creativity: A quantitative review," *Creativity Research Journal*, vol. 19(1), p. 69-90
- Karamitri, I. Kitsios, F. and Talias, M. A. (2020) "Development and Validation of a Knowledge Management Questionnaire for Hospitals and Other Healthcare Organizations," *Sustainability*, vol. 12(7), p. 2730-2747

- Khalili, A. (2017) "Creative and Innovative Leadership: Measurement Development and Validation," *Management Research Review*, vol. 40(10), p. 1117-1138
- Kim, T. T. and Lee, G. (2013) "Hospitality Employee Knowledge-Sharing Behaviors in the Relationship between Goal Orientations and Service Innovative Behavior," *International Journal of Hospitality Management*, vol. 34(1), p. 324-337
- Kuenzi, M. and Schminke, M. (2009) "Assembling Fragments into a Lens: A Review, Critique, and Proposed Research Agenda for the Organizational Work Climate Literature," *Journal of Management*, vol. 35(3), p. 634-717
- Lee, K. H. and Hyun, S. S. (2016) "An Extended Model of Employees' Service Innovation Behavior in the Airline Industry," *International Journal of Contemporary Hospitality Management*, vol. 28(8), p. 1622-1648
- Lee, Y. and Kim, J. (2021) "Cultivating Employee Creativity through Strategic Internal Communication: The Role of Leadership, Symmetry, and Feedback Seeking Behaviors," *Public Relations Review*, vol. 47(1), p. 101998
- McCrae, R. R. and Costa, P. T. (2004) "A Contemplated Revision of the NEO Five-Factor Inventory," *Personality and Individual Differences*, vol. 36(3), p. 587-596
- Mumford, M. D. Connelly, S. and Gaddis, B. (2003) "How Creative Leaders Think: Experimental Findings and Cases," *The Leadership Quarterly*, vol. 14(4-5), p. 411-432
- Mumford, M. D. and Licuanan, B. (2004) "Leading for Innovation: Conclusions, Issues, and Directions," *The Leadership Quarterly*, vol. 15(1), p. 163-171
- Redmond, M. R. Mumford, M. D. and Teach, R. (1993) "Putting Creativity to Work: Effects of Leader Behavior on Subordinate Creativity," *Organizational Behavior and Human Decision Processes*, vol. 55(1), p. 120-151
- Rosing, K. Frese, M. and Bausch, A. (2011) "Explaining the Heterogeneity of the Leadership-Innovation Relationship: Ambidextrous Leadership," *The Leadership Quarterly*, vol. 22(5), p. 956-974
- Scott, S. G. and Bruce, R. A. (1994) "Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace," *Academy of Management Journal*, 37(3), p. 580-607
- Wu, Q. Dbouk, W. Hasan, I. Kobeissi, N. and Zheng, L. (2021) "Does gender affect innovation? Evidence from female chief technology officers," *Research Policy*, vol. 50(9), p. 104327.
- West, M. A. and Anderson, N. R. (1996) "Innovation in Top Management Teams," *Journal of Applied Psychology*, 81(6), p. 680-693
- Yang, M. Luu, T. T. and Qian, D. (2021) "Dual-Focused Transformational Leadership and Service Innovation in Hospitality Organisations: A multilevel investigation," *International Journal of Hospitality Management*, vol. 98, p. 103035
- Yuan, F. and Woodman, R. W. (2010) "Innovative Behavior in the Workplace: The role of Performance and Image Outcome Expectations," *Academy of Management Journal*, 53(2), p. 323-342

Yukl, G. (2018) *Leadership in organizations*. Prentice-Hall, Upper Saddle River, NJ.

BIOGRAPHY

Yu-Chi Wu is a professor at the Institute of Business and Management, National University of Kaohsiung, Kaohsiung, Taiwan. His main research interests include issues relating to service marketing and service management. Professor Wu can be contacted at Institute of Business and Management, National University of Kaohsiung, Kaohsiung, Taiwan. 700, Kaohsiung University Rd., Nanzih District, Kaohsiung 811, Taiwan.

Yi-Feng Yang is a professor at the Graduate School of Business and Administration, Shu-Te University, Kaohsiung, Taiwan. His systematic research includes studies of transformational leadership (TL), customer relationship management (CRM), resource-based theory (RBT), balanced scorecard (BSC) and others. Professor Yang can be contacted at Graduate School of Business and Administration, Shu-Te University, Kaohsiung, Taiwan. No. 59, Hun Shang Rd., Yen Chao Dist., Kaohsiung 824, Taiwan.

Cheng-Se Hsu, corresponding author, is an assistant professor in the Foreign Language Education Center, National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan. Her research interests include electronic commerce, knowledge management, and virtual communities. Professor Hsu can be contacted at Foreign Language Education Center, National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan. No. 58, Shenzhong Rd., Yanchao Dist., Kaohsiung 824, Taiwan.