Arrival Date: 11.12.2022 | **Published Date:** 31.01.2023 | **Vol:** 8, **Issue:** 1 | **pp:** 181-189 | **Doi Number:** http://doi.org/10.5281/zenodo.7601342

DOES INNOVATIVE LEADERSHIP AFFECT EVIDENCE-BASED PRACTICE: A PATH ANALYSIS ON THE NURSING GROUP

YENİLİKÇİ LİDERLİK KANITA DAYALI UYGULAMAYI ETKİLER Mİ: HEMŞİRELİK GRUBUNDA BİR YOL ANALİZİ

Ayşegül SARIOĞLU KEMER [1], Esra YILDIZ [2]

[1] Trabzon University, School of Applied Sciences, Department of Emergency Aid and Disaster Management, Trabzon, Türkiye,
[2] Atatürk University, Faculty of Nursing, Department of Public Health Nursing, Erzurum, Türkiye

ABSTRACT

Objectives: Nurses are professionals who lead innovations. They also bring innovations to the clinical field through evidence based practices. This study aims to determine the relationship between nurses' innovative leadership levels and evidence-based practice nursing leadership–work environment levels.

Materials and Methods: This study was conducted with a descriptive correlational design. Data were collected using the personal information form, Innovative Leadership Scale, Evidence-Based Practice Nursing Leadership, and Evidence-Based Practice Work Environment Scales. The study was conducted with 246 volunteer nurses. The models were evaluated using path analysis, and fit indices in the study.

Results: The nurses evaluated that the innovative leadership of the managers was high and the evidence-based practice nursing leadership/the evidence-based practice work environment of their managers was moderate. It was determined that the level of managers' innovative leadership directly and positively affected evidence-based practice nursing leadership, and evidence-based practice work environment.

Conclusions: Innovative leadership positively affects evidence-based practice nursing leadership and evidence-based practice work environment. Managers' innovativeness and leadership characteristics increase innovative leadership and evidence-based practice.

Keywords: Evidence-Based Practice, Innovative Leadership, Nursing, Path Analysis, Structural Equation Modeling, Working Environment

ÖZET

Amaç: Hemşireler yeniliklere liderlik eden profesyonellerdir. Ayrıca yenilikleri klinik alana kanıta dayalı uygulamalar yoluyla taşımaktadır. Bu çalışma, hemşirelerin yenilikçi liderlik düzeyleri ile kanıta dayalı uygulama hemşireliği liderliği-çalışma ortamı düzeyleri arasındaki ilişkiyi belirlemeyi amaçlamıştır.

Gereç ve Yöntem: Bu çalışma, tanımlayıcı ilişkisel desende yapılmıştır. Veriler, Kişisel Bilgi Formu, Yenilikçi Liderlik Ölçeği, Kanıta Dayalı Uygulama Liderlik-Çalışma Ortamı Ölçekleri kullanılarak toplanmıştır. Araştırma 246 gönüllü hemşireyle yürütülmüştür. Çalışmadaki modeller yol analizi ve uyum indeksleri kullanılarak değerlendirilmiştir.

Bulgular: Hemşireler yöneticilerinin yenilikçi liderliğini yüksek, kanıta dayalı uygulama hemşireliği liderliğini kanıta dayalı uygulama çalışma ortamını orta düzeyde değerlendirmişlerdir. Yöneticilerin yenilikçi liderlik düzeylerinin kanıta dayalı uygulama hemşireliği liderliğini ve kanıta dayalı uygulama çalışma ortamını doğrudan ve olumlu yönde etkilediği belirlenmiştir.

Sonuç: Yenilikçi liderlik kanıta dayalı uygulama hemşire liderliğini ve kanıta dayalı uygulama çalışma ortamını pozitif olarak etkilemektedir. Yöneticilerin yenilikçi ve lider özelliklere sahip olması yenilikçi liderliği ve kanıta dayalı uygulamaları yükseltmektedir.

Anahtar Kelimeler: Kanıta Dayalı Uygulama, Yenilikçi Liderlik, Hemşirelik, Yol Analizi, Yapısal Eşitlik Modellemesi, Çalışma Ortamı

Sorumlu Yazar / Corresponding Author: Ayşegül SARIOĞLU KEMER, Assistant Prof, Trabzon University, School of Applied Sciences, Department of Emergency Aid and Disaster Management, Trabzon, Türkiye. E-mail: aysegulsarioglu@msn.com

Bu makaleye atıf yapmak için / Cite this article: Sarıoğlu Kemer A, Yıldız E. (2023). Does Innovative Leadership Affect Evidence-Based Practice: A Path Analysis on the Nursing Group. *Gevher Nesibe Journal of Medical & Health Sciences*, 8(1), 181-189. http://doi.org/10.5281/zenodo.7601342

INTRODUCTION

The innovation puts forward new knowledge or ideas at the right time as a product, process, or service and transforms the concept into a social benefit. The needs of individuals are met better and more quickly thanks to newly produced products/services. Therefore, the concept of innovation is the most important way to succeed and progress socially, economically, and scientifically (Oeij et al., 2019; Dabić et al., 2021). Healthcare services are one of the areas where innovation is most intense. Rapid changes in technology, information services, and science shape the expectations and behaviors of both healthcare recipients and providers.

Nurses are the most important health workers because they apply and convey innovative changes to the patient/family and society they serve However, there is a rapid innovation process in the nursing profession because of technological developments and scientific changes, and nurses need to keep up with these advancements (Bagheri & Akbari, 2018; Wang et al., 2019). The purpose of evidence-based practice is to provide the best nurse care with the current information. Nurses are the professionals who lead the transfer of evidence-based practice to health care. They decide on nursing implementations using the best available research results/evidence by tapping into their clinical expertise during the evidence-based practice process (Bianchi et al., 2018; Mathieson et al., 2019; Wang et al., 2021).

Despite the importance of evidence-based practice, it has been determined in the literature that nurses' beliefs and levels of application of evidence-based practice are moderate (Shuman et al., 2019; Saunders et al., 2019). To increase this level leader nurses can support innovativeness and evidence-based practice. In addition, they can make the work environment suitable for evidence-based practices (Gifford et al., 2018). Strategies developed by nurses for evidence-based practice include "creating a culture of evidence-based practice by nurse leaders" and "supporting evidence-based practice" (Cheng et al., 2018; Caramanica & Spiva, 2018).

Nurses play a leading role in experiencing and implementing innovation and evidence-based practice processes one-to-one because of their continuous presence in the clinical field. Nurses have the responsibility to bring innovations to the field. Nurses experience innovation by following scientific developments firstly and bringing this innovation to their environment. Then, they initiate and implement the evidence-based practice process by transferring innovation into interventions (Mohammadi et al., 2018; Melnyk et al., 2018). It is necessary to determine and evaluate the relationship between innovative leadership and evidence-based practice on nurses who are affected by innovations in technology and health care.

Objectives

The study was conducted to evaluate the relationship between nurses' innovative leadership levels and evidence-based practice nursing leadership-work environment levels.

MATERIALS AND METHODS

Research Design

The research is descriptive and correlational.

Sample

The population of the study consisted of all nurses working in a healthcare practice and research center in eastern Türkiye (*N*=548). Using a method for a sample with a known population with a confidence level of t=1.96, frequency of p=.50, sampling error of d=.05, the sample size was specified 246 participants. The sample consisted of 246 volunteer nurses who agreed to participate in the study. Inclusion criteria were as follows: volunteering to participate and working as a nurse in the hospital that the research was occurred.

Instrumentations

For data collection, the personal information form, the Innovative Leadership Scale, the Evidence-Based Practice Nursing Leadership and the Evidence-Based Practice Work Environment Scales were used. The confirmatory factor analysis was performed to test the construct validity of the scales. The maximum likelihood technique and goodness of fit tests (χ^2/Sd, GFI, IFI, CFI, RMSEA) were used. The construct validity of the scales were confirmed before path analysis.

Personal Information Form

The form was prepared by the researchers in light of the Diffusion of Innovation Theory (Roger, 2003), and included six questions. Three of the questions were related to the nurses' gender, age, and professional experience. The other three were about innovation categories, communication skills, and leadership status, where in nurses evaluated their managers.

Innovative Leadership Scale

The Innovative Leadership Scale comprises five subscales and 43 items scored on a 5-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree); it was developed by Sarıoğlu Kemer and Öztürk (2022). The scale can determine innovative leadership level systematically. The total score of the scale were used in this study. The higher scores obtained from the scale show that the level of perceived innovative leadership increased. The nurses evaluated that the innovative leadership of the managers. The Cronbach's alpha coefficient was 0.96 on the original scale (Sarıoğlu Kemer & Öztürk, 2022), whereas it was 0.92 in this study.

Evidence-Based Practice Nursing Leadership Scale

The Evidence-Based Practice Leadership Scale was developed by Pryse et al. (2014), and the Turkish validity and reliability were determined by Türe et al. (2020). The scale consists of 10 items scored using a 5-point Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). An increase in the scores obtained from the scale shows that the level of evidence-based practice nursing leadership has increased. The scale can evaluate the influence of the nurse leader on the nurse's ability to engage in evidence based practice. The scale is unidimensional. The reliability coefficient of the original scale was α=0.97 (Türe et al., 2020), whereas Cronbach's alpha coefficient was 0.93 in this study.

Evidence-Based Practice Work Environment Scale

The scale was developed by Pryse et al. (2014), and a Turkish validity and reliability study was conducted by Türe et al. (2020). The scale consists of eight items, which are scored using a 5-point Likert system ranked from 1 (strongly disagree) to 5 (strongly agree). High scores obtained from the scale indicate that the work environment is more suitable for evidence-based applications. The scale can evaluate the influence of the work environment on the nurse's ability to engage in evidence based practice. The scale is unidimensional. The reliability coefficient of the original scale is α=0.96 (Türe et al., 2020). The Cronbach's alpha coefficient was 0.91 in this study.

Data Collection

Data were collected from nurses who met the conditions for inclusion in the study; because of the physical distancing measures in place during the COVID-19 pandemic, data collection was carried out using an online questionnaire. The link to the online questionnaires was shared in talkgroups that had nurses as members. The nurses were first presented with the consent form with information about the study when they clicked on the link. The page with the study questionnaire appeared if the nurses read and approved the consent form. Data were collected after obtaining ethics committee approval and institutional permission.

Hypothesized Model

There are three dependent variables in the hypothetical model, which are as follows: innovative leadership, evidence-based practice nursing leadership, and evidence-based practice work environment. The independent variables in the model are as follows: innovation classification, professional experience, communication skills, and leadership status. These variables were determined by considering the factors affecting innovation (Roger, 2003). These variables were predicted to affect innovative leadership. In addition, a model was created under the view that innovative leadership affects evidence-based practice nursing leadership and the work environment (Figure 1).

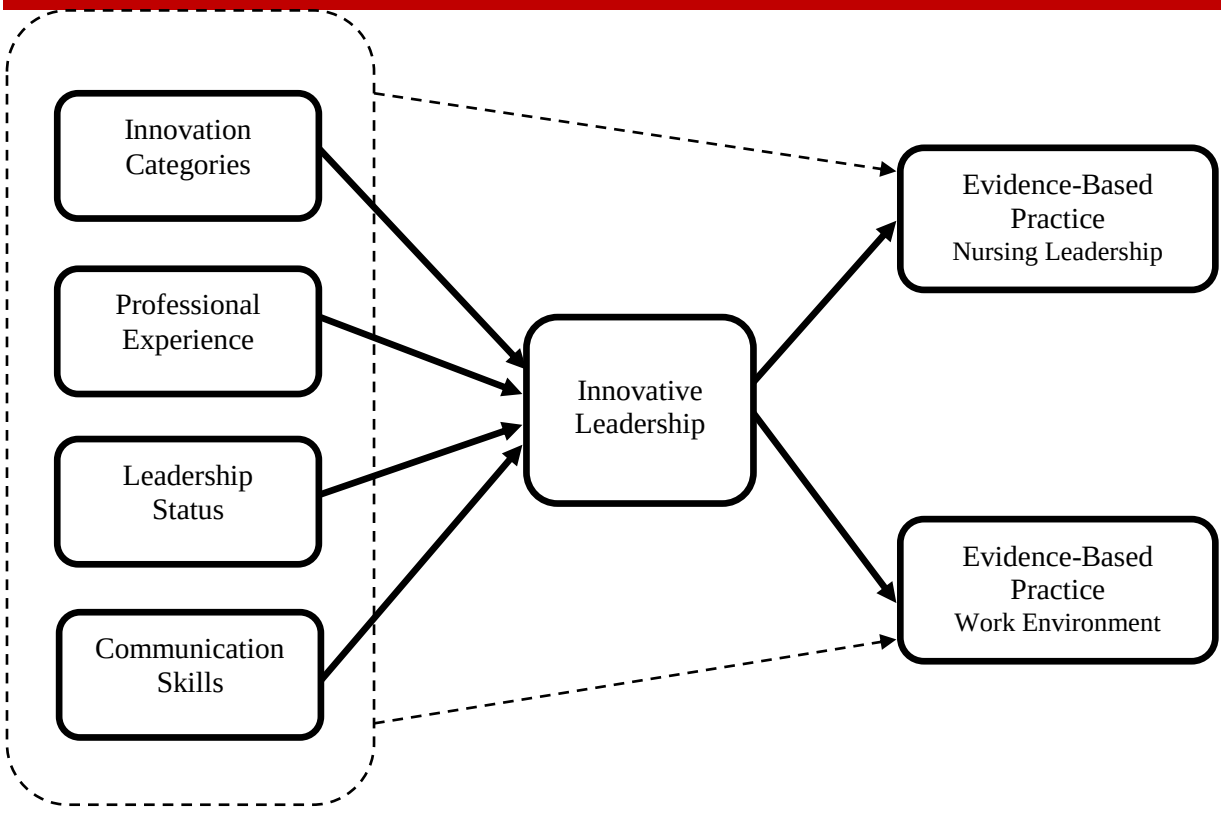

Figure 1. Hypothesized Model

Data Analysis

The study data were analyzed using SPSS and AMOS version 20 software. Number, percentage, and mean tests were used for the descriptive characteristics of the nurses. Correlation analysis was performed to determine the relationship between the scales. In addition, covariance-based structural equation modeling and path analysis were used to determine the relationship between their professional experience, communication skills, innovation classification, leadership status, innovative leadership, evidence-based practice nursing leadership and evidence-based practice work environment in which the nurses evaluated their managers. Maximum likelihood estimation was employed within the scope of the structural equation model. The study model was evaluated using path analysis and fit indices. The indices used were as follows: chi-square/degree of freedom (χ^2/df) $\leq$ 3, goodness-of-fit index (GFI) $\geq$ 0.95, comparative fit index (CFI) $\geq$ 0.97, incremental fit index (IFI) $\geq$ 0.95, and root mean square error of approximation (RMSEA) $\leq$ 0.05 (Özdamar, 2016). P-value $\leq$ 0.05 was considered significant.

RESULTS

Demographic Characteristics, Innovation, and Leadership Assessments

The nurses' demographic characteristics and results for innovativeness and leadership evaluations related to managing nurses are presented in Table 1. In the study, 74.4% of the nurses were female, 56.1% of the nurses had 6 years or more of professional experience and the mean age of the nurses was 27.29±5.59 years. According to the results, 29.7% of the nurses found their manager innovative, 77.6% considered their manager as a leader in evidence-based practices/innovations, and 21.5% thought managers had communication skills (Table 1).

Table 1. Demographic Characteristics, Innovation, and Leadership Assessments

Variables	**Mean ± Sd***	
Age	27.29 ±5.59	
	Frequency (n)	**Percentage (%)**
Gender		
Female	183	74.4
Male	63	25.6
Professional experience		
1-5 years	108	43.9
6 years +	138	56.1
Innovation categories		
Innovator	73	29.7
Laggard	173	70.3
Leadership status		
Leader	55	22.4
Not a leader	191	77.6
Communication skills		
Yes	53	21.5
No	193	78.5

*Sd=Standard deviation

Innovative Leadership and Evidence-Based Practice Nursing Leadership-Work Environment

According to the evaluations of the nurses, the innovative leadership of the managers (*mean*=4.04±0.41) was high. In addition, nurses evaluated the evidence-based practice nursing leadership (*mean*=3.68±0.34) and the evidence-based practice work environment (*mean*=3.69 ±0.36) of their managers as moderate. A weak relationship was determined between the evidence-based practice nursing leadership and the evidence-based practice work environment (r=0.46; p <0.001; Table 2). The innovative leadership was highly associated with the evidence-based practice nursing leadership (r=0.73; p<0.001) and moderately associated with the evidence-based practice work environment (r=0.58; p <0.001).

Table 2. Mean Scores and Correlations Values of Study Variables

Variables	**Mean±Sd***	**Innovative leadership**	**Evidence-based practice nursing leadership**	**Evidence-based practice work environment**
Innovative leadership	4.04±0.41	1	0.729**	0.576**
Evidence-based practice nursing leadership	3.68±0.34		1	-0.462**
Evidence-based practice work environment	3.69±0.36			1

*Sd=Standard deviation; **p < 0.001

Hypothesized Model

In study, two models were tested. Firstly, the hypothesized model was tested. It was determined that the experience and communication skill variables did not significantly affect innovative leadership in that model (p> 0.05). These variables were excluded from the hypothesized model, and the emerging model was tested secondly (Figure 2). It was found that the fit values of the emerging model were higher, and the relationships between the variables were significant (p< 0.05; Table 3).

Table 3. Fit index values of default and improved models

Models	CMIN			GFI	IFI	CFI	RMSEA
	χ^2	df	χ^2/df(p-value)				
Hypothesized model	22.85	15	1.52 (0.087)	0.972	0.973	0.972	0.046
Emerging model	7.55	6	1.25 (0.273)	0.987	0.994	0.994	0.032
Ranges for fit indexes			≤ 3	≥ 0.95	≥ 0.95	≥ 0.97	≤ 0.05

Emerging Model

In the emerging model, perceiving managers as innovative according to nurses' perception positively affected innovative leadership (β=0.15, p<0.05). In addition, being perceived as innovative indirectly and positively affected the evidence-based practice nursing leadership (β=0.10, p<0.05) and the evidence-based practice work environment (β=0.08, p<0.05). According to their subordinates' perceptions, there was a direct positive relationship between managers' having leadership characteristics and the managers were innovative leaders (β=0.30, p<0.01). Managers' leadership characteristics indirectly affected the evidence-based practice nursing leadership (β=0.18, p<0.01) and the evidence-based practice work environment (β=0.14, p< 0.01) through innovative leadership (Table 4).

Table 4. The path analysis, and the effect level of variables

Dependent variables	Innovation categories			Leadership status			Innovative leadership		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
Innovative leadership	0.15*	-	0.15*	0.30**	-	0.30**	-	-	-
Evidence-based practice nursing leadership	-	0.10*	0.10*	-	0.18**	0.22**	0.71**	-	0.71**
Evidence-based practice work environment	-	0.08*	0.08*	-	0.14**	0.16**	0.53**	-	0.53**

*p<0.05 ; **p<0.001

When the relationship between the two dependent variables of the model was evaluated (Table 4), it was determined that innovative leadership directly and positively affected the evidence-based practice nursing leadership (β=0.71, p<0.01) and the evidence-based practice work environment leadership (β=0.53, p<0.01; Fig. 2). Innovative leading nurses encourage an evidence-based practice work environment and evidence-based practice nursing leadership.

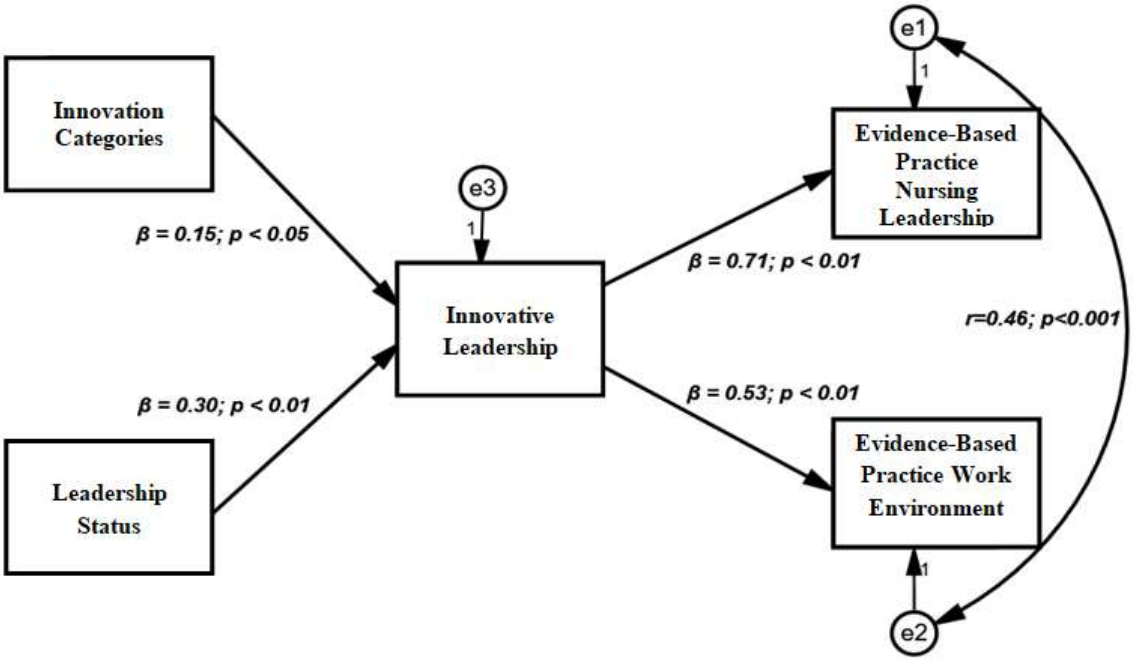

Figure 2. Emerging Model

DISCUSSION

Nurses evaluated their managers according to the factors affecting innovation, and the results were mostly discussed in light of the literature. According to the study, approximately one in four nurses evaluated their manager as a leader and innovative (Table 1). In Türkiye the healthcare reform has promoted leadership in nursing since 2003. This result suggests that nurses perceive their manager nurses as more innovative and leaders in their practices with the healthcare reform program experienced in Türkiye.

It was found that nurses perceived their managers to have a high level of innovative leadership. Innovative leadership behavior is important for nurses in today's dynamic healthcare systems. Leaders' support for innovation to bring about improvement in healthcare systems is an important factor in these systems (Bagheri & Akbari, 2018; Dabić et al., 2021). In the study, it was determined that innovative leadership increased evidence-based practice nursing leadership. In addition, a moderate relationship was determined between the evidence-based practice work environment and innovative leadership (Table 2).

Nursing leadership has been shown to be vital for implementing evidence-based practice, deeply influencing the institutional culture of nurses, especially in formal leadership roles, and playing an important role at the unit level (Pryse et al., 2014). Variables like the work environment should be considered for nurses to be involved in the decision-making process based on evidence. This result reveals that both the work environment and the leadership affected the evidence-based practice. Institutional facilities, innovation opportunities, and a work environment provide a setting that supports nurses' evidence-based practices (Pryse et al., 2014). The impact of evidence-based practices increases when leadership and a supportive work environment are combined (Dabić et al., 2021).

It was determined that experience and communication skills variables of nurses did not affect the Innovative Leadership Scale mean scores in the hypothetical model applied (p>0.05). These variables were excluded from the model, and the narrowed model was tested (Fig. 2). According to the results, innovation indirectly and positively affects evidence-based practice the nursing leadership and the evidence-based practice work environment. Spiva et al. (2017) found that the evidence-based practice training of mentor nurses was effective in evidence-based practice leadership and the evidence-based practice work environment. Supporting evidence-based practice nursing practices by nurses' leaders increases the quality of evidence-based care (Bianchi et al., 2018; Melnyk et al., 2018). In the previous studies, it was found that nurse managers/leaders supported clinical nurses for

evidence-based evidence-based practices, developed vision, and overcame obstacles. These findings support the results of this study (Caramanica & Spiva, 2018; Cheng et al., 2018).

It was found that the values were within acceptable values when the fit index values of the models assumed and developed in the study were compared. This analysis revealed the importance of the relationship between the latent variables and the observed variables (Table 3).

Using the emerging model, it was found that innovative leadership positively affects evidence-based practice nursing leadership and the evidence-based practice work environment, both indirectly and directly (Table 4). Innovative leadership was found to be effective in the development of evidence-based practice nursing leadership and the evidence-based practice work environment in all cases in light of these results. Lam et al. (2020) concluded that the evidence-based practice work environments of students were affected by role models in the clinical setting. Wang et al. (2021) found similar results in China to those of this study in their regression analysis using the same scale. The finding that the work environment affects leadership is also a sign of similarity between Chinese and Turkish societies regarding evidence-based practices.

CONCLUSION AND RECOMMENDATIONS

It was determined that innovative leadership positively affects the evidence-based practice leadership and the evidence-based practice work environment. The evidence-based practice nursing leadership and the evidence-based practice work environment also positively affect each other. In addition, managers' innovativeness and leadership characteristics positively affect innovative leadership and evidence-based practices. It is recommended to conduct intervention studies and test the effectiveness of nursing leaders to improve the evidence-based practices in light of all these results. Similar studies are recommended in other parts of Türkiye.

Limitation

This study is limited in that it represents the opinions of nurses in the east of Türkiye, since it was conducted only in this region.

Author Contributions

Plan, design: ASK, EY; **Material, methods and data collection:** ASK, EY; **Data analysis and comments:** ASK; **Writing and corrections:** ASK, EY

Acknowledgement

The authors gratefully would like to thank the nurses participating in the research.

Funding

The authors received no financial support for the research.

Conflict of interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

REFERENCES

Bagheri, A., & Akbari, M. (2018). The impact of entrepreneurial leadership on nurses' innovation behavior. Journal of Nursing Scholarship, 50(1), 28-35. https://doi.org/10.1111/jnu.12354

Bianchi, M., Bagnasco, A., Bressan, V., Barisone, M., Timmins, F., Rossi, S., Pellegrini, R., Aleo, G., & Sasso, L. (2018). A review of the role of nurse leadership in promoting and sustaining evidence-based practice. Journal of Nursing Management, 26(8), 918-932. https://doi.org/10.1111/jonm.12638

Caramanica, L. & Spiva, L. (2018). Exploring nurse manager support of evidence-based practice: clinical nurse perceptions. The Journal of Nursing Administration 48(5): 272-278. https://doi.org/10.1097/NNA.0000000000000612

Cheng, L., Feng, S., Hu, Y., & Broome, M.E. (2018). Leadership practices of nurse managers for implementing evidence- based nursing in China. Journal of Nursing Management, 26(6): 671–678. https://doi.org/10.1111/jonm.12594

Dabić, M., Stojčić, N., Simić, M., Potocan, V., Slavković, M., & Nedelko, Z. (2021). Intellectual agility and innovation in micro and small businesses: the mediating role of entrepreneurial leadership. Journal of Business Research, 123, 683-695. https://doi.org/10.1016/j.jbusres.2020.10.013

Gifford, W., Zhang, Q., Chen, S., Davies, B., Xie, R., Wen, S.W., & Harvey, G. (2018). When east meets west: a qualitative study of barriers and facilitators to evidence-based practice in Hunan China. BMC Nursing, 17(26), 1-11. https://doi.org/10.1186/s12912-018-0295-x

Lam, C. K., Schubert, C.F., & Herron E.K. (2020). Evidence-based practice competence in nursing students preparing to transition to practice. Worldviews on Evidence-Based Nursing 17(6): 418-426. https://doi.org/10.1111/wvn.12479

Mathieson, A., Grande, G., & Luker, K. (2019). Strategies, facilitators and barriers to implementation of evidence-based practice in community nursing: a systematic mixed-studies review and qualitative synthesis. Primary Health Care Research & Development, 20(e6): 1-11. https://doi.org/10.1017/S1463423618000488

Melnyk, B.M., Gallagher-Ford, L., Zellefrow, C., Tucker, S., Thomas, B., Sinnott, L.T., & Tan, A. (2018). The first US study on nurses' evidence-based practice competencies indicates major deficits that threaten healthcare quality, safety, and patient outcomes. Worldviews on Evidence-Based Nursing, 15(1), 16-25. https://doi.org/10.1111/wvn.12269

Mohammadi, M.M., Poursaberi, R., & Salahshoor, M.R. (2018). Evaluating the adoption of evidence-based practice using Rogers's diffusion of innovation theory: a model testing study. Health Promotion Perspective, 8(1): 25-32. https://doi.org/10.15171/hpp.2018.03.

Oeij, P.R.A., van der Torre, W., Vaas, F., & Dhondt, S. (2019). Understanding social innovation as an innovation process: applying the innovation journey model. Journal of Business Research, 101, 243-254. https://doi.org/10.1016/j.jbusres.2019.04.028

Özdamar, K. (2016). Scale and test development structural equation modeling. (1st ed.), Nisan Publications.

Pryse, Y., McDaniel, A., & Schafer, J. (2014). Psychometric analysis of two new scales: the evidence-based practice nursing leadership and work environment scales. Worldviews on Evidence-Based Nursing, 11(4):240-247. https://doi.org/10.1111/wvn.12045

Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press

Sarıoğlu Kemer, A., & Öztürk, H. (2022). A psychometric assessment of nurses: Development of the innovative leadership scale. Perspectives in Psychiatric Care, 58(4), 1832-1838. https://doi.org/10.1111/ppc.12996

Saunders, H., Gallagher-Ford, L., Kvist, T., & Vehviläinen-Julkunen, K. (2019). Practicing healthcare professionals' evidence-based practice competencies: an overview of systematic reviews. Worldviews on Evidence-Based Nursing, 16(3), 176-185. https://doi.org/10.1111/wvn.12363

Shuman, C.J., Powers, K., Banaszak-Holl, J., & Titler, M.G. (2019). Unit leadership and climates for evidence-based practice implementation in acute care: a cross-sectional descriptive study. Journal of Nursing Scholarship, 51(1), 114-124. https://doi.org/10.1111/jnu.12452

Spiva, L., Hart, P.L., Patrick, S., Waggoner, J., Jackson, C., & Threatt, J.L. (2017). Effectiveness of an evidence-based practice nurse mentor training program. Worldviews on Evidence-Based Nursing, 14(3):183-191. https://doi.org/10.1111/wvn.12219

Türe, A., Demirsoy, N., & Yıldırım, A. (2020). Validity and reliability of evidence-based practice leadership scale and evidence-based work environment scale in Turkish. Perspectives In Psychiatric Care, 56(4), 968-978. https://doi.org/10.1111/ppc.12529

Wang, M., Zhang, Y. P., & Guo, M. (2021). Development of a cadre of evidence-based practice mentors for nurses: what works?. Worldviews on Evidence-Based Nursing, 18(1), 8-14. https://doi.org/10.1111/w v n .124 82

Wang, Y.X., Yang, Y.J., Wang, Y., Su, D., Li, S.W., Zhang, T., & Li, H.P. (2019). The mediating role of inclusive leadership: work engagement and innovative behavior among Chinese head nurses. Journal of Nursing Management, 27(4), 688-696. https://doi.org/10.1111/jonm.12754