

Leadership and Intention to Leave Among Public Health Sector Physicians in Cyprus: A National Cross-Sectional Study

Ioanna GREGORIOU^{a,1}, Eleftheria Ch. ECONOMIDOU^b, Demetris AVRAAM^c,

Elpidoforos S. SOTERIADES^{d,e}, Evridiki PAPASTAVROU^a, Andreas CHARALAMBOUS^a, Antonis STYLIANIDES^a and Anastasios MERKOURIS^a

^aDepartment of Nursing, School of Health Sciences, Technological University of Cyprus, Limassol, Cyprus

^bSchool of Medicine, University of Ioannina, Ioannina, Greece

^cDepartment of Public Health, Policy and Systems, University of Liverpool, Liverpool, UK

^dHealthcare Management Program, School of Economics and Management, Open University of Cyprus, Nicosia, Cyprus

^eEnvironmental and Occupational Medicine and Epidemiology (EOME), Department of Environmental Health, Harvard T.H. Chan School of Public Health, Boston, USA

Abstract. Physician shortage is a major concern in many health care systems globally, while healthcare leadership constitutes one of the most vital factors within human resource management. Our study examined the relationship between managers' leadership styles and physicians' intent to leave their current position. In this cross-sectional national survey, questionnaires were distributed to all physicians working in the public health sector of Cyprus. Most demographic characteristics evaluated by chi-square or Mann-Whitney test, were statistically significantly different between those who intended to leave their job and those who did not. The results of our study demonstrated that transformational leadership has a positive influence on retention of physicians in public hospitals, while non leadership infers a negative influence. Developing leadership skills in physician supervisors is of a great importance for organizations to make a large impact on health professionals' retention and overall performance.

Keywords. Physicians, Leadership, Intention to leave, Cyprus

1. Introduction

The concept of leadership has a multidimensional character, while it is further broadened by the various different characteristics that define a leader. Therefore, the multidimensional character of leadership and its characteristics combined with the various modes of leadership recorded in the international literature add even more

¹ Corresponding Author: Ioanna Gregoriou, e-mail: dr.gregoriou.i@gmail.com

complexity to the construct of leadership [1]. Physician shortage is an increasing problem that threatens the functioning of the health care sector worldwide [2]. Understanding the relationship between leadership styles and physicians' intent to leave is fundamental for retaining physicians in the workforce. This is worrying, given that turnover intention has a direct association with actual turnover and is regarded as an important predictor of job quitting [3].

Previous studies have found that intention to leave is associated with certain demographics, organizational commitment, job satisfaction, factors in the personal or family domain, job-related well-being and other career-related aspects [4]. Moreover, job dissatisfaction, work-related stress, work-family conflict, mental and physical health, physical violence and threats from patients have all been associated with higher levels of physicians' turnover intentions [5, 6]. However, there is a gap in the literature on how leadership can influence physicians' intention to leave their job [7].

The aim of our study was to evaluate the association between physician managers' leadership styles (transformational, transactional, laissez-faire leadership styles) and intention to leave among physicians in the public health sector of Cyprus.

2. Materials and Methods

2.1. Setting and Study population

A national cross-sectional survey was conducted between October 2016 and January 2017 among all physicians working in the public healthcare sector of Cyprus. Out of 690 physicians, 502 completed the survey (response rate 73%). A total of 188 cases were excluded because they were undetermined with respect to their intention to leave. Therefore, a total of 314 physicians were included in the current analysis.

2.2. Questionnaire

Physicians' leadership was evaluated by the Multifactor Leadership Questionnaire (MLQ). Initially known as the MLQ-5X, its strength depends on its ability to capture several leadership styles in a single measurement instrument. MLQ-5X comprises of 45 items where the first 36 items measure the type of leadership style and the next 9 items examine the leadership outcomes. It incorporates a range of nine subscales to capture transformational, transactional, and non-leadership styles, as well as leadership outcomes [8]. Each of the 45 items is rated using a 5-point Likert scale. A double reverse translation and adaptation from a specialized health professionals' team for the Cypriot population was applied to adjust the questionnaire to the cultural context. Participants were also assessed whether they intended to leave their institution within the following year. The study was approved by the Cyprus National Bioethics Committee (07/04/2016, Protocol number EEBK EII 2016.02.57), the office of the Commissioner for the Protection of Personal Data and the Ministry of Health.

2.3. Statistical analysis

Welch two sample t-tests were used to indicate if there is a statistically significant difference in means on the average scores of leadership styles between physicians who

intended or not to leave their job. In addition, multivariable logistic regressions were performed between leadership styles and intention to leave. The models were adjusted by demographic characteristics of the participants. All, statistical analyses were performed using the “R” open-source software (version 4.2.0).

3. Results

A total of 314 physicians (158 male and 154 female) were included in the current study. Leadership as evaluated by the Multifactor Leadership Questionnaire (MLQ) relative to intention to leave is presented in Table 1.

Table 1: Association of leadership with intention to leave

MLQ Scale	Intention to leave		p-value
	Yes mean (SD)	No mean (SD)	
idealized influence (attributed)	1.6 (0.9)	2.1 (1.0)	<0.001
idealized influence (behavior)	1.7 (0.9)	2.0 (0.8)	0.010
inspirational motivation	1.6 (1.0)	2.0 (0.9)	0.008
intellectual stimulation	1.4 (0.8)	1.8 (0.8)	<0.001
individual consideration	1.4 (0.8)	1.7 (0.8)	0.030
contingent reward	1.3 (0.8)	1.7 (0.9)	<0.001
management by exception (active)	2.0 (0.9)	2.0 (0.8)	0.905
management by exception (passive)	2.5 (0.9)	2.2 (1.0)	0.010
laissez-faire leadership	2.4 (0.9)	2.0 (1.0)	0.002
extra effort	1.2 (1.0)	1.9 (1.1)	<0.001
effectiveness	1.4 (1.0)	2.0 (1.1)	<0.001
satisfaction	1.5 (1.0)	2.0 (1.1)	<0.001
Factor			
transformational leadership	1.5 (0.7)	1.9 (0.8)	<0.001
transactional leadership	1.9 (0.5)	2.0 (0.5)	0.473
non-leadership	2.4 (0.9)	2.0 (1.0)	0.002
Total	1.8 (0.5)	1.9 (0.6)	0.017

4. Discussion and Conclusion

In summary, we evaluated the association between physician managers’ leadership styles and intention to leave among physicians in the public health sector of Cyprus. The results of our study demonstrated that transformational and transactional leadership have a

positive influence on retention of physicians in public hospitals, while non leadership (laissez-faire leadership) infers a negative influence.

Several studies have described the positive contribution of physician managers using transformational leadership practices. Weberg emphasized that a transformational leader is one who can elevate the interests of staff, facilitate their commitment to the mission and values of the organization and lead staff to rise above their personal interests [9]. Lavoie-Tremblay et al. indicated that transformational leaders potentially lead to high quality care and weak intention to quit the healthcare facilities, while abusive leadership potentially leads to poorer quality care and strong intention to quit [10]. Moreover, our findings are in line with Martinussen reporting that supportive leadership may have a positive influence on retention of physicians in public hospitals [7].

Although we had a high response rate, we excluded a large number of responders due to indetermination with respect to their intention to leave. Data were collected only from physicians, while other aspects in addition to intention to leave such as physician well-being, burnout, stress, professional fulfilment, and workplace satisfaction were not assessed.

Our study showed that transformational leadership is associated with physicians' retention in public hospitals. Developing leadership skills in physician supervisors is of great importance for health professionals' retention and overall performance.

References

- [1] King AS. Evolution of leadership theory. *Vikalpa: The Journal for Decision Makers*. 1990;15(2):43–56.
- [2] Heponiemi T, Hietapakka L, Kaihlanen A, Aalto AM. The turnover intentions and intentions to leave the country of foreign-born physicians in Finland: a cross-sectional questionnaire study. *BMC Health Serv Res*. 2019 Sept;19, 624. <https://doi.org/10.1186/s12913-019-4487-1>
- [3] Hann M, Reeves D, Sibbald B. Relationships between job satisfaction, intentions to leave family practice and actually leaving among family physicians in England. *Eur J Public Health*. 2011 Aug;21(4):499–503. doi: 10.1093/eurpub/ckq005. Epub 2010 Feb 8. PMID: 20142402.
- [4] Jenkins M, Paul Thomlinson R. Organisational Commitment and Job Satisfaction as Predictors of Employee Turnover Intentions. *Management Research News*. 1992 Oct;15(10):18–22. <https://doi.org/10.1108/eb028263>
- [5] Lu Y, Hu XM, Huang XL, Zhuang XD, Guo P, Feng LF, Hu W, Chen L, Zou H, Hao YT. The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a cross-sectional study. *BMJ Open*. 2017 May 12;7(5):e014894. doi: 10.1136/bmjopen-2016-014894. PMID: 28501813; PMCID: PMC5566636.
- [6] Williams ES, Konrad TR, Scheckler WE, Pathman DE, Linzer M, McMurray JE, Gerrity M, Schwartz M. Understanding physicians' intentions to withdraw from practice: the role of job satisfaction, job stress, mental and physical health. *Health Care Manage Rev*. 2001 Winter;26(1):7–19. doi: 10.1097/00004010-200101000-00002. PMID: 11233355.
- [7] Martinussen PE, Magnussen J, Vrangbæk K, Frich JC. Should I stay or should I go? The role of leadership and organisational context for hospital physicians' intention to leave their current job. *BMC Health Serv Res*. 2020 May 11;20(1):400. doi: 10.1186/s12913-020-05285-4. PMID: 32393343; PMCID: PMC7212554.
- [8] Bass BM, Avolio BJ. Transformational leadership development: Manual for the Multifactor Leadership Questionnaire. Palo Alto, CA: Consulting Psychologists Press; 2004.
- [9] Weberg D. Transformational leadership and staff retention: an evidence review with implications for healthcare systems. *Nurs Adm Q*. 2010 Jul-Sep;34(3):246–58. doi: 10.1097/NAQ.0b013e3181e70298. PMID: 20562573.
- [10] Lavoie-Tremblay M, Fernet C, Lavigne GL, Austin S. Transformational and abusive leadership practices: impacts on novice nurses, quality of care and intention to leave. *J Adv Nurs*. 2016 Mar;72(3):582–92. doi: 10.1111/jan.12860. Epub 2015 Nov 25. PMID: 26602068.