p-ISSN: 2184-2205 e-ISSN: 2184-3414 ISBN: 978-989-35106-0-5 © 2023
https://doi.org/10.36315/2023inpact084

AN EMPIRICAL STUDY OF INDEPENDENT VARIABLES OF NURSES' FOLLOWERSHIP

Minoru Nishinobo
Department of Business Administration, Setsunan University (Japan)

Abstract

The topic of nurses' followership is very important in the context of Covid-19 pandemic. During this pandemic, nurses continue to affect the full extent of their expertise for the benefit of public health. Therefore, it is important for public health to identify the determinants of nurses' followership. Then, the purpose of this study is to clarify independent variables of nurses' followership quantitatively. Firstly, I identified how the existence of key-person is related to nurses' followership. Secondly, I use a hierarchical multiple regression analysis to determine how leadership and key-person influence nurses' followership.

The independent variables used in this study were affective commitment and leadership from previous studies. Next, Misumi's (1984) Performance Maintenance (PM) leadership theory (leader emphasis on subordinate performance and maintenance of good relations) is used because Maintenance behavior influenced one dimension of followership of business person (Nishinobo, 2014).

Survey participants were 306 nurses who work full-time in a medium- to larger- sized hospitals (34 males and 272 females, 73 managerial position nurses and 233 general position nurses, 119 key persons and 187 non-key persons).

Independent variables are affective commitment (an affective orientation toward the organization), and Misumi's (1985) PM leadership theory. Dependent variable is nurses' followership.

As a result of analysis, the following four points were indicated. (1) nurses' followership was three dimensions which are follower's Suggestive behavior, Considerate behavior and Supportive behavior. (2) Key person influenced followership (Considerate behavior) positively. (3) Affective commitment influenced followership (Suggestive behavior and Supportive behavior) positively. (4) Maintenance leader's behavior influenced followership (Considerate behavior and Supportive behavior) positively.

Keywords: *Nurses' followership, key-persons, independent variables.*

1. Introduction

The field of hospital nursing is showing a very complex aspect due to the changing needs of patients, advances in information technology, changes in social demands, and the pandemic caused by the covid-19. Under those increasingly complex and diverse nursing field, nursing staff are not only required to comply with instructions, but are also expected to think and act independently. In other words, the environment has become more demanding of followership behaviors than in the past. Lately, in the field of nursing management, nurses' followership behaviors are paid attention in recent years, but there is little accumulated research on this topic.

Until now, followership research in Japan has mainly focused on business persons working in the company. Unlike companies, however, hospitals are not profit-oriented and have the higher public purpose of keeping human health. Therefore, it has been pointed out that nurses' followership behaviors are different from those of business persons.

In addition, previous research of followership in Japan has been conducted mainly within a leader-follower relationship, in which followers influence their leaders effectively. This type of discussion does not seem to be in the actual situation. because team medical care is conducted in hospitals. Nurses don't influence their leader only, and aren't influenced by their leader only. There are some cases where nurses may be influenced by key-persons who are the specialist in each medical field.

2. Objectives

The purpose of this study was to examine the relationship between key-persons and nurses' followership exploratory and empirically. (1) whether nurses' followership behavior differs or not when nurses perceive the existence of key-persons, and (2) how nurse manager's leadership and key-persons influence nurses' followership.

3. Methods

3.1. Participants and procedure

This survey was conducted between February 24 and February 26 in 2021, through an Internet research firm. The survey population consisted of staff level nurses who work full time in medium to larger sized hospitals with 100 or more beds. The final number of participants in the analysis was 306. Sex of the participants was 34 (11.1%) male and 272 (89.9%) female, with female nurses accounting for about 90% of the total. Next, 73 (23.9%) had positions and 233 (76.1%) had no positions, with the majority being nurses without positions. The number of beds was 194 (63.4%) for 100-499 beds, 112 (36.6%) for 500 or more beds, 187 (61.1%) with a key-person, and 119 (38.9%) without a key-person, indicating that many nurses perceived the existence of a key-person. It is a very important factor in this study. Next, 38 (12.4%) had 0-4 years of nursing experience, 91 (29.7%) had 5-9 years, 53 (17.3%) had 10-14 years, 59 (19.3%) had 15-19 years, 52 (17.0%) had 20-24 years, and 13 (4.2%) had 25-29 years.

3.2. Measures

The questionnaire consisted of basic attributes, affective commitment, leadership (Performance behavior, Maintenance behavior), nurse followership (Suggestive behavior, Considerate behavior, Supportive behavior), and the existence of key-persons. In addition, the basic attributes identified were sex, job title, number of beds, existence of key-persons, and years of nursing experience. Regarding the presence of key-persons, we asked, "Are there any influential key-persons in your workplace."

PM theory of leadership. We used the 16-item PM theory leadership questionnaire developed by Misumi (1984) to measure leadership. Because many of the leadership measurement scales used in the analysis of existing followership studies are based on PM theory. Nurses were asked to respond using a 5-point Likert-scale with the instruction, "1: I don't agree at all," "2: I don't agree," "3: Neither," "4: I agree," and "5: I agree very much." We used The Cronbach's alpha coefficient. The first factor was α=.89 and the second factor was =.73, confirming a certain level of reliability. Therefore, the mean value of each factor was used as the variable value in the subsequent analysis.

Nurses' followership. We used the 30-item Nurses' followership questionnaire developed by Nishinobo (2022) to measure followership, because this is the only measurement of nurses' followership scale in Japan Nishinobo's (2022). Nurses were asked 18 questions related to Suggestive behavior, 6 questions related to Considerate behavior, and 6 questions related to Supportive behavior. We used The Cronbach's alpha coefficient. The first factor was α=.95, the second factor was =.81 and the third factor was=.82. Therefore, we confirmed the reliability sufficiently.

Affective commitment. We used the 6-items affective commitment questionnaire developed by Allen & Meyer's (1996) to measure affective commitment, because this measurement is often used in followership research in Japan. Sample items include "I would be very happy to spend the rest of my working life (career) at my current hospital." Nurses were asked to respond using a 5-point Likert-scale with the instruction, "1: I don't agree at all," "2: I don't agree," "3: Neither," "4: I agree," and "5: I agree very much."

4. Results

4.1. Leadership and key-person in relation to followership

Followership (considerate behavior) and followership (supportive behavior) were statistically significantly higher when there was a key-person than no-key person (Table 1).

Table 1. Results of t-test.

		Follwership (Suggestive behavior)		Follwership (Considerate behavior)		Follwership (Supportive behavior)	
		Mean	t value	Mean	t value	Mean	t value
Key-person	Non-exist	2.39	-1.77	3.01	-4.14***	2.47	-2.53***
	Exist	2.52		3.32		2.67	

Note) $^{***}p<0.001$

Next, we analyzed a binomial logistic regression analysis and a hierarchical multiple regression analysis to show how leadership and key-person influence nurses' followership (Table 2, 3). Leadership (M behavior) was shown to have a significant positive influence followership (considerate behavior) and followership (supportive behavior). Furthermore, key-persons were shown to have a positive influence followership (considerate behavior) only. And leadership didn't influence the existence of a key-person.

Table 2. Results of binomial logistic.

Variable	Partial Regression Coefficients B	Standard Error	P Value	Odds Ratio Exp(B)	95% Lower Limit	95% Upper Limit
Leadership (M behavior)	0.275	0.162	.090	1.316	0.958	1.809
Leadership (P behavior)	0.108	0.181	.549	1.114	0.782	1.587
Sex	0.275	0.375	.464	1.317	0.631	2.749
Position	0.419	0.289	.146	1.521	0.864	2.677
Years of Nursing Experience	0.035	0.092	.703	1.036	0.865	1.240

Note) Dependent variable: Existence of Key-persons

Table 3. Results of hierarchical multiple regression.

Variable	Followership (Suggeestive Behavior)			Followership (Considerate Behavior)			Followership (Supportive Behavior)		
	Step1	Step2	Step3	Step1	Step2	Step3	Step1	Step2	Step3
Sex (1 : Female)	-0.068	-0.067	-0.070	0.076	0.078	0.068	-0.039	-0.034	-0.037
Position (1 : Position)	0.181*	0.172*	0.168*	0.107	0.081	0.066	0.262***	0.222***	0.216***
Years of Nursing Experience (1 : 0-4 years、2 : 5～9 years、3 : 10～1years年、4 : 15～19 years、5 : 20～24 years、6 : 25～ years29)	0.105	0.123*	0.122	0.085	0.137*	0.134*	0.007	0.088	0.087
Affective Commitment	0.204***	0.170**	0.164**	0.177*	0.086	0.064	0.292***	0.146**	0.138*
Leadership (M behavior)		0.077	0.074		0.226***	0.214***		0.345***	0.340***
Leadership (P behavior)		0.024	0.023		0.034	0.031		0.091	0.090
Key-person (1 : Exist)			0.055			0.202***			0.073
Adjust R^2	0.112	0.112	0.112	0.048	0.085	0.122	0.167	0.267	0.270
F value	10.656***	7.405***	6.490***	4.817**	5.705***	7.059***	16.317***	19.504***	17.088***

Note) $^{***}p<0.001$, $^{**}p<0.01$, $^{*}p<0.05$; VIF<1.25

5. Conclusions

This study examined the effects of leadership and key-person on nurses' followership. The analysis showed 2 points. Firstly, leadership (M behavior) influenced followership (considerate behavior) and followership (supportive behavior). The practical implication is to have manager level nurses participate in training to improve their leadership (M-behavior). Secondly, existence of key-person influenced followership (considerate behavior). The practical implication is that hospitals identify the trait that nurses recognize as key-person and consider placing them in departments where they do not exist.

References

Allen, N, J., and J, P, Meyer. (1996). Affective, Continuance, and Normative Commitment to the Organization: An Examination of Construct Validity. *Journal of Vocational Behavior,* 49, 32-40.

Mismi, J. (1984). *The behavioral science of leadership*, Yuhikaku Publishing.

Nishinobo, M. (2022). Relationship between nurses' followership and personal characteristics - Quantitative analysis focusing on sex, job title and years of nursing experience -. *Journal of Business Administration and Information,* 29, 1.2, 65-75.