The Influence of Leadership Style of the Middle Manager on Organizational Performance and Turnover Intentions at a Regional Public Hospital

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Abstract

Background/Objectives: The purpose of this study is to improve the organizational performance of local medical cen ters and to suggest effective ways of human resource management by analyzing the factors affecting leadership styles, organizational commitment, job satisfaction, and turnover intention.

Methods/Statistical analysis: A total of 400 employees at four local medical centers in C province were surveyed fro m June 2 to June 30, 2019. Reliability analysis was conducted to test the validity of measurement variables, and hierar chical analysis was conducted to identify the factors influencing the relationship between leadership, organizational performance (organizational commitment and job satisfaction), and turnover intention.

Findings: Based on respect for members and principle of certainty, which are sub-factors of servant leadership, and ch arisma as the sub-factor of transformational leadership, it was found that the higher the respect for members, the great er was the certainty. Leadership based on charisma enhanced the organizational commitment. Job satisfaction is based on respect for members, a sub-factor of servant leadership. Job satisfaction increased based on respect for members. The turnover intention had a significant influence on charisma, a sub-factor affecting transformational leadership, and respect for members, a sub-factor of servant leadership.

Improvements/Applications: Leadership styles will be used as basic data in studies related to local medical centers to investigate the factors affecting organizational performance (organizational commitment and job satisfaction) and turnover intention of employees at local medical centers, and to suggest methods for effective human resource management.

Keywords: Servant leadership, Transformational leadership, Organizational commitment, Job satisfaction, Turnover intentions.

1. Introduction

Leadership is a key factor in business administration or organization theories. Leadership plays a key role in the success or failure of organization depending on efficient management of people [1]. To maintain and develop a hospital, leadership holds an important position on par with management. Because people manage material resources, even if the organization is equipped with competent human resources and the latest tools and facilities, any mismanagement by human resources or lack of leadership or influence can lead to loss of motivation and loss of control and coordination. As a result, the actions of management will fail to achieve the organizational performance and satisfaction of staff [2].

In order to achieve the organizational goals rationally and efficiently, secure and sustain the organization's growth, and maintain and develop performance, the leadership of middle management is critical in delivering the vision and goals of the CEO to the members of the organization [3]. It is essential to determine the leadership style of middle managers to enhance the efficiency of hospital organization [4]. With the rapidly changing medical environment, the emphasis is on functional areas that ensure universal medical security and promote health activity of the people. Accordingly, local medical institutions should focus on management performance including efficiency and profitability, similar to private medical organizations. Therefore, within the organization of a local medical center consisting of professionals from different occupational categories, efficient human resource management and appropriate leadership changes are needed [5].

The objective of this study is to provide basic data contributing to the efficiency of human resources management by middle managers by classifying the leadership styles of middle managers at local medical centers into servant

leadership and transformational leadership. Further, empirical analysis of organizational performance (organizational commitment and job satisfaction) and the impact on turnover intention of employees at local medical centers are also investigated.

2. Materials and Methods

2.1. Subjects and data collection

A survey of employees at four local medical centers in C province from June 2 to June 30, 2019 analyzed the impact of transformational and servant leadership styles of middle managers at local medical centers on organizational performance (job satisfaction and organizational commitment) and turnover intentions of the members. Of the 400 questionnaires administered, 391 were collected, accounting for a collection rate of 97.8%. A total of 381 questionnaires were finally used for the analysis except for 10 responses, which were intentionally omitted by respondents or considered insincere. The technical positions were included in the health service category, whereas physician and skilled personnel were excluded from this study.

2.2. Data processing and analysis

Student's t-test and one-way ANOVA were used to analyze the the scale values with SPSS Win 23.0 program. Duncan's method was used for post-hoc verification, and the product-moment analysis was conducted based on Pearson's correlation coefficient to determine the relevance among variables.

The data were deemed statistically significant if the p-value was less than or equal to 0.05.

3. Results and Discussion

3.1. General characteristics

In this study, frequency analysis was conducted to identify the general characteristics of the study subjects. The study included 88 males (23.1%) and 293 females (76.9%).

A total of 239 (62.7%) subjects were aged below 39 years and 142 subjects (37.3%) were above 40 years of age, indicating a higher proportion of subjects under 39 years of age. The number of undergraduates was 143 (37.5%) and affiliated with at least 238 universities (62.5%). Based on job category, the study included 209 nursing workers (54.9%), 136 health service workers (35.7%) and 36 administrative workers (9.4%). Based on the number of working years, 206 (54.1%) had less than 5 years of experience, 64 (16.8%) had 11-20 years, 60 (15.7%) over 21 years, and 51 (13.4%) between 6 and 10 years.

Table 1. General characteristics of study subjects

Variables		N	%	
C 1	Man	88	23.1	
Gender	Women	293	76.9	
A	≥39	239	62.7	
Age	≤40	142	37.3	
Level of Education	Below college	143	37.5	
	Above university	238	62.5	
	Nursing workers	209	54.9	
Occupational	health service workers	136	35.7	
	Administrative workers	36	9.4	
Employment	>5	206	54.1	
period	5≤	175	45.9	
Total		381	100.0	

3.2. Analysis of leadership style according to general characteristics

As shown in Table 2, the leadership style differed according to general characteristics, based on respect of members, which was 3.98 for males compared with 3.70 for females, indicating a statistically significant difference (p < .001). Age accounted for 3.87 points for those below 39 years compared with 3.59 for those above 40 years of age, indicating a statistically significant difference (p < .001). Based on working years, it was 3.86 for those with five years or less compared with 3.65 for those with five years or more of experience, indicating a statistically significant difference (p < .01). No statistically significant difference was found between the level of education and occupation.

The analysis of growth frequency of members indicated that male gender accounted for 4.04 compared with 3.77 for f emales, suggesting a statistically significant difference (p < .01). The frequency associated with age was 3.91 for those below 39 years of age compared with 3.68 for those above 40 years of age, which was a statistically significant difference (p < .01). The frequency based on working years was 3.94 for those with five years or less compared with 3.70 for those with five years or more, suggesting a statistically significant difference (p < .001). There was no statistically significant difference between the level of education and occupation.

The bonding frequency based on gender was 3.96 in males compared with 3.73 in females, indicating a statistically significant difference (p < .01). The frequency of bonbon based on age was 3.90 for those below 39 years of age compared with 3.58 for those above 40 years of age, suggesting a statistically significant difference (p < .001). Based on the number of working years, the frequency was 3.91 for those with five years or less compared with 3.62 for those with five years or more, which was statistically significant (p < .001). No statistically significant difference was found between the level of education and occupation.

In terms of certainty, the frequency based on gender was 4.05 in males compared with 3.79 in females, suggesting a statistically significant difference (p < .01). Based on age, the frequency was 3.96 for those below 39 years of age compared with 3.66 for those aged above 40 years, which was a statistically significant difference (p < .001). Based on the number of working years, the frequency was 3.97 for those with five years or less experience compared with 3.70 for those with five years or more, indicating a statistically significant difference (p < .001). There was no statistically significant difference between the level of education and occupation.

In terms of stewardship, the frequency was 4.01 in males compared with 3.76 for females, indicating a statistically significant difference (p < .01). Based on age factor, the frequency was 3.92 for those below 39 years of age compared with 3.65 for those above 40 years of age, indicating a statistically significant difference (p < .001). Based on the number of working years, the frequency was 3.94 for those with five years or less of experience compared with 3.67 for those with five years or more, with statistically significant differences (p < .001). There was no statistically significant difference between the level of education and occupation.

In terms of charisma, male gender accounted for a frequency of 3.83 compared with 3.65 for females, indicating a statistically significant difference (p < .05). Based on age, the frequency was 3.92 for subjects below 39 years of age compared with 3.65 for those above 40 years of age, which was a statistically significant difference (p < .001). Based on the number of working years, the frequency was 3.81 for those with five years or less experience compared with 3.54 for those with five years or more, suggesting statistically significant differences (p < .001). There was no statistically significant difference between the level of education and occupation.

In terms of intellectual stimulus, male gender accounted for a frequency of 3.83, which was higher than 3.65 for females, suggesting a statistically significant difference (p < .05). Based on age, the frequency was 3.92 for those under 39 years of age, which was higher than 3.65 for those below 40 years of age, suggesting a statistically significant difference (p < .001). The frequency was 3.81 for those with five years or less of work experience compared with 3.54 for those with five years or more, suggesting a statistically significant difference (p < .001). There was no statistically significant difference between the level of education and occupation.

Table 2. Analysis of leade	ership style accordin	ng to general characteristics
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(Unit (Mean±S.D))

Variable	Servant leader	Transformational leadership					
Variable	Respect for members	Growth of members	Bonding	Certainty of purpose	stewardship	Charisma	Intellectual stimulus
Gender							
Man	$3.98 \pm .74$	$4.04\pm.74$	$3.96 \pm .75$	$4.05 \pm .66$	$4.01 \pm .71$	$3.83 \pm .69$	$4.04 \pm .66$
Woman	$3.70 \pm .69$	$3.77 \pm .69$	$3.73 \pm .72$	$3.79 \pm .71$	$3.76 \pm .77$	$3.64 \pm .69$	$3.78 \pm .74$
F/t	3.361***	3.182**	2.601**	3.097**	2.667**	2.282^{*}	2.947**
Age							
≥39	$3.87 \pm .61$	3.91±.67	$3.90 \pm .68$	$3.96 \pm .65$	$3.92\pm.70$	$3.92 \pm .70$	$3.95 \pm .68$
≤40	$3.59 \pm .82$	$3.68 \pm .75$	$3.58\pm.78$	$3.66\pm.76$	$3.65 \pm .77$	$3.65 \pm .77$	$3.67 \pm .77$
F/t	3.758***	3.109**	4.137***	4.116***	3.359***	3.975***	3.661***
Level of education							
Below college	$3.73 \pm .74$	$3.77 \pm .74$	$3.74 \pm .74$	$3.82 \pm .74$	$3.77 \pm .77$	$3.63 \pm .66$	$3.77 \pm .76$
Above university	$3.78 \pm .69$	$3.86 \pm .69$	$3.81 \pm .73$	$3.87 \pm .69$	$3.85 \pm .76$	$3.72\pm.71$	$3.88 \pm .71$
F/t	667	-1.308	896	601	925	2.07	.152

Occupation

Nursing workers	$3.73 \pm .66$	$3.85 \pm .67$	$3.78\pm.70$	$3.85 \pm .69$	$3.81 \pm .73$	$3.71 \pm .64$	$3.85 \pm .69$
Health service workers	3.81±.76	3.79±.75	3.76±.80	3.85±.73	3.83±.80	3.68±.74	3.84±.78
Administrative workers	3.77±.81	3.86±.79	3.87±.71	3.89±.74	3.81±.83	3.59±.77	3.83±.83
F/t	.601	.316	.294	.058	.012	.432	.015
Employment period							
>5	$3.86 \pm .66$	$3.94 \pm .70$	3.91±.71	$3.97 \pm .70$	$3.94 \pm .78$	$3.81 \pm .69$	$3.96 \pm .71$
5≤	$3.65 \pm .75$	$3.70\pm.71$	$3.62 \pm .72$	$3.70 \pm .70$	$3.67 \pm .71$	$3.54 \pm .66$	$3.70\pm.73$
F/t	2.974**	3.321***	3.916***	3.810***	3.553***	3.948***	3.403***

^{*}p<.05, **p<.01, ***p<.001

3.3. Analysis of differences between organizational performance and turnover intention according to general characteristics

Based on the differences between organizational performance (organizational commitment and job satisfaction) and turnover intentions according to general characteristics, as shown in Table 3, the contribution of males and females to organizational commitment was 3.72 and 3.36, respectively, suggesting a statistically significant difference (p < .001). The age-related frequency was 3.66 for subjects above 40 years of age compared with 3.31 for those below 39 years of age, which was a statistically significant difference (p < .001). The frequency of health service workers was the highest at 3.72, followed by administrative workers at 3.44 and nursing jobs at 3.26, with statistically significant differences (p < .01). Based on working years, it was 3.57 for those with five years or more compared with 3.34 for those with five years or less, suggesting statistically significant differences (p < .01). There was no statistically significant difference in the level of education. In terms of job satisfaction, the male gender was accounted for 3.56 compared with 3.29 for females, with a statistically significant difference (p < .01). Health service workers accounted for the highest frequency at 3.56, followed by nursing at 3.26 and administrative at 3.44, with statistically significant differences (p < .001). There were no statistically significant differences in terms of age, level of education, and working years. In terms of turnover intentions, the female gender accounted for the highest frequency at 2.84, followed by administrative positions at 2.80 and health service personnel at 2.43 (p < .001).

Table 3. Analysis of the differences between organizational performance and turnover intentions according to general characteristics (Unit:(Mean±S.D))

Variable	Organizational commitment	Job satisfaction	Turnover intentions		
Gender					
Man	$3.72 \pm .60$	$3.56 \pm .65$	2.35±.82		
Women	3.36±.65	$3.29 \pm .75$	2.79±.91		
F/t	4.403***	2.940^{**}	-4.017***		
Age					
≥39	3.31±.70	$3.25 \pm .75$	$2.84 \pm .87$		
40≤	3.66±.59	$3.53 \pm .68$	2.43±.90		
F/t	-3.306***	190	1.380		
Level of education					
Below college	3.51±.67	$3.38 \pm .78$	$2.60\pm.97$		
Above university	$3.40 \pm .69$	$3.34 \pm .72$	$2.74 \pm .86$		
F/t	1.486	.486	-1.547		
Occupation					
Nursing workers	3.26±.68	$3.26 \pm .72$	$2.84 \pm .89$		
health service workers	$3.72 \pm .58$	$3.56 \pm .69$	2.43±.85		
Administrative workers	$3.44 \pm .68$	3.11±.82	2.80±.99		
F/t	21.205***	9.585***	9.019***		
Employment period					
>5	3.34±.69	$3.35 \pm .74$	2.74±.88		
5≤	3.57±.65	3.36±.74	2.62±.94		

3.4. Correlation between leadership, organizational performance, and turnover intentions

The analysis of correlation between leadership style, organizational performance, and turnover intentions revealed that most of the variables showed a positive (+) correlation, but a negative (-) correlation with turnover intension, as shown in Table 4. A positive (+) correlation was found between the following variables: charisma and intellectual stimulus (r = .865, p < 0.01), charisma and growth of members (r = .805, p < 0.01), charisma and bonding (r = .813, p < 0.01), charisma and certainty of purpose (r = .813, p < 0.01), consciousness of stewardship (r = .779, p < 0.01), charisma and organizational commitment (r = .309, p < 0.01), job satisfaction (r = .343, p < 0.01), charisma and organizational commitment (r = .309, p < 0.01), and job satisfaction (r = .343, p < 0.01).

However, a negative (-) correlation was found with turnover intention (r = -.241, p < 0.01) (Table 4). Organizational commitment according to the leadership style showed a slightly higher correlation with transformational leadership compared with servant leadership. This result corresponded to the results showing that the charisma of transformational leadership was more related to job engagement than servant leadership [6,7].

Job satisfaction had a statistically significant positive correlation with all sub-factors of servant leadership and transformational leadership. A high correlation existed between respect for members of servant leadership and organizational commitment. However, in the study of nutritionists for school feeding, job satisfaction was increased as the level of transformational leadership perceived by cooking workers increased, and the correlation between sub-factors of transformational leadership and job satisfaction was very high, whereas the correlation between servant leadership and job satisfaction was low or average [8].

Turnover intention showed a statistically significant positive correlation with all sub-factors of servant leadership and transformational leadership. Turnover intention showed a correlation with servant leadership, growth of members, and charisma of transformational leadership. In the study of employees at small and medium hospitals and general hospitals, transformational leadership had a higher correlation with turnover intention [9,10].

The above study showed that the leadership of the middle management had a significant impact on organizational performance (organizational commitment and job satisfaction) and turnover intention. Although transformational leadership had a greater impact on organizational commitment than servant leadership, the results of job satisfaction and turnover intention suggest that the leadership that complements transformational leadership and servant leadership is the ideal.

Table 4	. Correla	ation betwe	een leade	rship, orga	nizational p	erformance	, and turnov	er inter	ntion	
	A	В	С	D	Е	F	G	Н	I	J
A.Charisms	1									
B.Intellectual stimulus	.865**	1								
C.Respect for members	.711**	.690**	1							
D.Growth of members	.805**	.788**	.749**	1						
E.Bonding	.813**	.791**	.712**	.794**	1					
F.Propose of certainty	.813**	.845**	.772**	.851**	.858**	1				
G.stewardship	.779**	.797**	.659**	.771**	.788**	.879**	1			
H.Organizational commitment	.309**	.303**	.295**	.300**	.259**	.247**	.274**	1		
I.Job satisfaction	.343**	.342**	.632**	.340**	.277**	.306**	.292**	.614**	1	
J.Turnover	241**	-221**	270**	242**	178**	205**	184**	657*	* -533**	1

intentions	
**p<.01	

4. Conclusion

The study analyzed the leadership of the middle manager who influences the organizational performance (organizational commitment and job satisfaction) and turnover intentions of employees at the local medical centers. The results of analysis are as follows.

First, the differences in leadership style according to general characteristics were statistically significant in gender, age, and working years in terms of sub-factors of servant leadership and transformational leadership.

Second, organizational commitment showed statistically significant differences in gender, age, occupation, and working years. Job satisfaction showed statistically significant differences in age and occupation. Turnover intention showed statistically significant differences in gender and occupation.

Third, the analysis of leadership style of the middle manager, organizational performance (organizational commitment and job satisfaction) and turnover intentions revealed a high degree of positive correlation among variables, and a negative correlation with turnover intention.

Therefore, based on the results of this study in the future, the leadership styles

will be used as basic data in studies at local medical centers investigating the factors affecting organizational performance (organizational commitment and job satisfaction) and turnover intentions of employees at local medical centers, and to recommend methods for effective human resource management.

5. References

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