Organizational Climate, Organizational Commitment and Intention to Leave among Hospital New Nurses in Japan

MINEKO NANBA* YUKI YAJIMA** KAZUE NINOMIYA*

Abstract: Nurses' intention to leave the organization or occupation, especially that of newly graduated nurses, has been the most important issue. If this trend continues, 15,900 nurses will be needed in 2010. The purpose of this study was to investigate the relationship between organizational climate, organizational commitment, and intention to leave the organization to prevent newly graduated nurses from leaving their organizations. A self-administered questionnaire was distributed to 167 newly graduated nurses, sixty-one of whom (36.5%) mailed the questionnaire anonymously. Fifty participants had completed the questionnaire including items on demographics, intention to leave the organization, organizational climate, and organizational commitment. The mean age was 22.3 years, 19 of them (38.0%) had completed a threeyear diploma program in nursing. Only one of them was married. They had worked for an average of 5.2 ± 0.6 months; an average 5.2 ± 2.9 times per month on the night shift, and an average of 6.7 ± 6.4 overtime hours per week. They were working in hospitals with an average of 406 ± 349 beds, half of them in government hospitals. Traditional organizational climate was negatively associated with intention to leave the organization. Path analysis was performed to test the fit of the causal model to the data. As a result, fit of the hypothesized model to the data was considered adequate: chi-square fit statistic (χ^2) = 8.48, DF = 8, p = 0.205, the adjusted goodness-of-fit statistic (AGFI) = 0.848, the goodness-of-fit statistic (GFI) = 0.957, the root mean square error of approximation (RMSEA) = 0.087, and CFI= 0.966. It was found that intention to leave was indirectly influenced by traditional organizational climate through the intervening effect of organizational commitment.

Key words: new nurse, leave organization, commitment, climate

I. Introduction

A high rate of turnover of nurses, especially that of nurses fresh from nursing school, college, and university, is a most important issue. Japanese Nursing Association conducted a survey on the actual conditions of turnover of newly graduated nurses. As a result, 18.7% of the hospitals responded that such nurses had had a rising trend to leave the hospital within one year of employment, the job turnover rate within one

year of employment being $9.3\%^{1)}$. The 6^{th} Nurses Supply and Demand Forecast estimates that, if this trend continues, 15,900 nurses will be needed in $2010^{2)}$.

Previous studies identified factors for turnover of nurses and to prevent newly graduated nurses from stay on their organizations³⁻⁵⁾. In some other occupations, efforts have been made to examine the relationships between organizational commitment and intention to leave the job, and potential

antecedents of organizational commitment⁶⁻¹³⁾. The present authors focused on organizational commitment among other factors, and clarified the relationships between organizational commitment and intention to leave the organization. However, there is a need for further research on potential antecedents of organizational commitment¹⁴⁻¹⁸⁾. Especially, it is necessary to investigate macrolevel organizational characteristics leading to intention to leave the organization, not individuallevel organizational characteristics. Based on these results, we developed a causal model of organizational climate as an antecedent of organizational commitment leading to intention to leave the organization.

The purpose of the study was to investigate a causal model of organizational climate as an antecedent of organizational commitment leading to intention to leave the organization.

II. Methods

1. Study subjects

First, a letter including a request for cooperation and information on the number of nurses within one year of employment was sent to the 79 facilities randomly selected from the 158 hospitals registered in the 2008 List of Health and Welfare Facilities and Hospitals of A Prefecture. 18 facilities and hospitals agreed to cooperate. The directors of nursing there were asked to distribute a self-administered questionnaire to 167 newly graduated nurses, sixty-one of whom (36.5%) mailed the questionnaire anonymously. 50 participants had completed the questionnaire. The survey was conducted in June, 2008.

2. Measurement

1) Demographic characteristics

Participants were asked about age, gender, academic background, marital status. With regard to academic background, participants were asked to choose one of the following: three-year nursing school, college, university, and others.

2) Organizational climate

To measure organizational climate, a 12-item questionnaire developed by Fukui et al., based on Toshima and Maeda's 30-item Organizational Climate scale, was used. This scale comprised two subscales: Traditional Organizational Climate and Participatory Organizational Climate. The former represents coercive, imperative and feudalistic climate, and the latter organizational climate in which rational management and active worker participation are valued 17). Traditional Organization Climate consisted of six items, including "Our supervisors are always watching our every move," and Participatory Organizational Climate consisted of six items, including "The outcomes of our meetings are made the best use of to improve our job performance." Participants answered yes (agree) or no (disagree) to each item, scored 1 and 2 points (2 and 1 points for reverse keyed items), respectively. Additional scores were obtained for each subscale. -Coefficient for the present sample was .46-.67.

3) Organizational commitment

A 24-item scale developed by Takahashi et al., based on the Organizational Commitment scale developed by Allen & Meyer, was used to measure organizational commitment. This scale consisted of three subscales: Affective Commitment, which has been defined as an employee's emotional attachment to identification with and involvement in the organization; Continuance Commitment, which has to do with one's awareness of the costs associated with leaving the present organization; and Normative Commitment, which has to do with feeling of obligations to the organization based on one's personal norms and values^{18,19)}.

Affective Commitment was assessed using eight items, such as "I would be very happy to spend the rest of my career with this hospital," "This hospital has a great deal of personal meaning for me," and "I feel a strong sense of 'belonging' to this hospital." Continuance Commitment was assessed using eight items, such as "It would be very hard for me to leave this hospital right now," "I would suffer a loss if I decided to leave this hospital right

Table 1
Selected Characteristics of the Sample (N=50)

	Mean	SD
Age	22.3	2.9
Hospital bet Nunber	406.4	348.7
Work lengs /M	5.2	0.6
Over time Work(h/w)	6.7	6.4
Nightshift/M	5.2	2.9
Organizational commitment		
Affective	8.2	11.2
Continuance	10.8	12.1
Normative	8.8	10.2
Oyganizational clime		
Traditional	2.4	1.2
participation	4.6	1.4
Intention leave organization	3.2	1.4

now," and "I don't care if there would be very few available alternatives after leaving this hospital." Normative Commitment was assessed using eight items, such as "I think people change jobs too often recently," "I think it would be immoral to hop from hospital to hospital," and "I would not leave this hospital if another hospital offered a better job."

The response format was a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), and additional scores were obtained for each subscale. Thus, higher scores were indicative of a higher level of commitment. The Organizational Commitment study previously reported in our country provides considerable support for its reliability and validity⁸⁾. In this study the coefficient alpha was .81. Approval for the use of the instrument was obtained from Meyer JP and Kouzi Takahashi.

4) Intention to leave the organization

Participants were asked about intention to leave the hospital in near future using one item: "I would like to leave the present hospital within a few years." The response format was a five-point Likert-type ranging from 1 (I never would) to 5 (I would really like to), with higher scores reflecting a firmer intention to leave.

3. Data analysis

First, descriptive statistics such as total scores,

means and standard deviations were calculated for each variable. Next, Pearson productmoment correlation coefficients were used to determine the relationships among intention to leave the organization, organizational climate, and organizational commitment. Then, based on antecedent and consequence variables of organizational commitment by Allen & Meyer, a causal model was built to examine the relationships between organizational climate, organizational commitment, and intention to leave the organization. It was considered that organizational climate might influence intention to leave directly, without being mediated by organizational commitment. Path analysis was used to assess the fit of the model to the data. Goodness of Fit Index (GFI) and Root Mean Square Error of Approximation (RMSEA) were used to estimate model fit. A Goodness of Fit Index of >0 .90 and an RMSEA of <0.05 are considered good²⁰⁾.

The SPSS15.0J for Windows was used for descriptive analysis and basic hypothesis test, and Amos5 for path analysis.

4. Ethical considerations

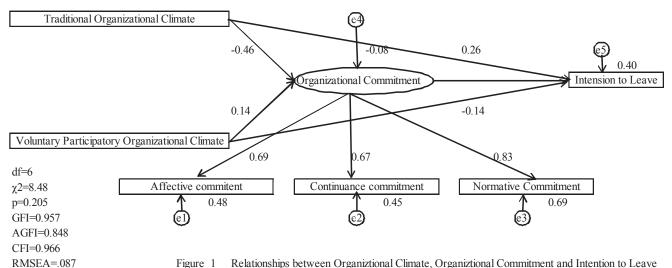
The nurse directors of the hospitals which agreed to cooperate were asked to distribute survey questionnaires to all newly graduated nurses. Subjects were given written explanation about the purposes and method of research, and the rights of participants, such as voluntary participation, withdrawal option, confidentiality and anonymity.

II. Results

1. Subjects

Questionnaires were distributed to all newly graduated nurses (n = 167) at 18 hospitals which agreed to cooperate. Fifty-four subjects (36.5%) returned a questionnaire to the researcher, and 50 questionnaires were completed and analyzed.

Table 1 summarizes the demographic characteristics and job specifications of the subjects. The subjects ranged in age from 21 to



Relationships between Organiztional Climate, Organiztional Commitment and Intention to Leave

32, with a mean age of 22.3 ± 2.9 years. They had completed an average of years of formal education; 19 of them (38.0%) had completed a three-year diploma program in nursing, and 6 (12.0%) a course for a Bachelor's degree. Only one of them was married. They had worked for an average of 5.2 ± 0.6 months; an average 5.2 ± 2.9 times per month on the night shift, and an average of 6.7 ± 6.4 overtime hours per week. They were working in hospitals with an average of 406 ± 349 beds, half of them in government hospitals.

2. Variables

Table 1 also summarizes the mean and standard deviation for each of the variables used in the analysis. The mean for intention to leave the organization was 3.2 (SD = 1.4) . Nearly half of the subjects (44.0%) answered that they would, or would rather, like to leave the present hospital.

3. Relationships among organizational climate, organizational commitment, and intention to leave the organization

Intention to leave the organization was negatively associated with organizational commitment (r = -0.598), and traditional organizational climate was also negatively associated with organizational commitment (r = -0.396).

A causal model was used to examine the relationships between organizational climate, organizational commitment, and intention to leave the organization, and path analysis was performed to assess the fit of the model to the data. As a result, as shown in Figure 1,

(Five measures showed that) fit of the proposed model to the data was considered adequate: chisquare fit statistic (χ^2) = 8.48, DF = 8, p = 0.205, the adjusted goodness-of-fit statistic (AGFI) = 0.848, the goodness-of-fit statistic (GFI) = 0.957, the root mean square error of approximation (RMSEA) = 0.087, and CFI= 0.966.

IV. Discussion

This study examined a causal model of organizational climate, organizational commitment, and intention to leave with a view to preventing newly graduated nurses from leaving the organization.

To avoid bias, a random sample of hospitals was drawn from as many hospitals as could be approached in a prefecture. Questionnaires were distributed to all newly graduated nurses working at each selected hospital. Fifty-four nurses returned a questionnaire (32.3%). The results of the analysis of the 50 completed questionnaires

indicate that the present sample represents a diversity of characteristics, such as educational background, age, and hospital of employment. However, the low response rate may limit the generalizability of the findings.

A significant relationship was found between intention to leave the organization and organizational commitment in the newly graduated nurses. This finding was supported by the previous study which reported a significant relationship between intention to leave and organizational commitment ^{11,16,22-24)}. That is, intention to leave the organization tended to be less firm, as organizational commitment became stronger.

Moreover, the relationships among intention to leave the organization, organizational commitment, and organizational climate as a macro-level organizational characteristic were examined. As a result, it was found that intention to leave was not directly influenced by either traditional or participatory organizational climate, although previous studies showed that intention to leave was significantly affected by negative organizational climate among newly graduated nurses 14,15). However, intention to leave was found to be indirectly influenced by traditional organizational climate through the intervening effect of organizational commitment. That is to say, as traditional organizational climate becomes predominant, organizational commitment is reduced, and subsequently intention to leave becomes more common.

The results of the present study is parallel to those of a few previous studies, which have pointed out that at the earliest stage of career superiors may play an important role in improving organizational commitment ^{11,16}. Given that the participants had worked for approximately 5.2 months, they were still in the process of adjusting to the organization, and their superiors and colleagues were not only their supporters but their educators and supervisors. If they found themselves in such a coercive, forceful, feudalistic traditional organizational climate, their organizational

commitment might be seriously affected, leading to a high rate of leaving.

V. Study limitations

Although the findings suggest a significant relationship among intention to leave the organization, organizational commitment, and organizational climate, there are a number of limitations in this study. First, given the low response rate and the small sample size, the nurses surveyed may not be representative of newly graduated nurses. Second, although random sampling was used to select hospitals, the possibility of selection bias could not be tested (denied?) . Third, the subscales may lack analytical power and preciseness due to the small size of variables. Overall, further study needs to increase the power and precision of the research design.

Since this study was cross-sectional, it was impossible to further explore this issue.

VI. Conclusions

A significant relationship was found between intention to leave the organization and organizational commitment among the newly graduated nurses. Moreover, intention to leave was indirectly influenced by traditional organizational climate. These findings suggest that by shifting its organizational climate from traditional to participatory organizational climate any organization may increase its organizational commitment, subsequently lowering staff turnover among newly graduated nurses.

Reference

- 1) Japanese Nursing Association. Sinsotu kanngoshi no Nyusyokugo Soukirisyoku Boushi Taisaku Houkokusyo. 2006.
- 2) Suzuki Rie, Kotani Yuki. 2005nen Byouin niokeru Kangosyokuin Zyukyuuzyoukyou Tyousa. 2006; 58: 30-31.
- 3) Yumiko Matushita, Kumiko Sibata, Factor in Early Retirement of Nurses Newly Graduated

- from College. Bulletin of Yamanashi College of Nursing. 2004; 6: 65-71.
- 4) Sumiyo Hanaoka, Atuko Fukuda, Noriko Tuda. A study of Adaptation to Atmospheres of Workplace in Hospitals perceived by New Graduate Nurses: Based on Identifying the Latent Structure of Adaptation to Atmospheres of Workplace, and Relation with Factors of "Reality Shock" Bulletin of Faculty of Health Science, Kobe University. 2007; 22: 1-11.
- 5) M. Flinkman, M. Laine, H. Leino-Kilpi, et al. Explaining young registered nurses intention to leave the profession. International Journal of Nursing Studies. 2008; 45 (5): 727-39.
- 6) Angle, HL, MB Lawson. Changes in Affective and Continuance Commitment in Times of Relocation. Journal of Business Research. 1993; 26: 3-15.
- 7) De Cotiis TA, TP Summers. A path Analysis of a Model of The Antecedents and Consequences of Organization Commitment. Human Relations. 1987; 40 (7): 445-470.
- 8) Allen NJ, Meyer JP. Organizational Commitment: Evidence of Career Stage Effects. Journal of Business Research. 1993; 26: 49-61.
- 9) Meyer JP, Allen NJ. Commitment in Workplace. Sage Publications. 106. 1997.
- Steers RM. Antecedents and Autcomes of Organizational Commitment. Administrative Science Quarterly. 1997; 22: 46-56.
- 11) Mathien JE, Zajac. A review meta-analysis of the antecedents, correlates and consequences of organizational commitment. Psychological Bulletin. 1990; 108: 171-194.
- 12) McNees Smith, D.K., Crook, M., Nursing values and changing nurse workforce. Journal of Nursing Administration. 2003; 33 (5): 260-270.
- 13) Chang Cs, Du Pl, Hung Ic. Nurse'sperceptions of severe acuteres piratory syndrome: relationship between commitment and intention to leave nursing. Journal of Nursing Administration. 2006; 54: 171-179.
- 14) Schaefer J, Moos Rh. Effects of Work Stressors and Climate on Long-Term Care Staffs Job

- Morale and Functioning. Research in Nursing & Health. 1996; 19: 63-73.
- 15) keiko Toyomasu. An analysis of the Organizational Climate Found in the Nursing Workplace through Interviews with Recently-hired New Graduate Nurses. Bulletin of St. Luke's College of Nursing. 1996; 22:29-41.
- 16) Mineko Nanba, Yuki Yajima, Kazue Ninomiya et.al. The Relationship between Job and Organizational Characteristics, Organizational Commitment, and Intention to Leave Organization among Japanese Nurses. The Journal of Japan Academy of Health Sciences. 2009; 12 (1):16-24.
- 17) Satore Fikui, Takashi Haratani, Yutaka Toshima et al. Measuring Workplace Climate. Sangyo Eiseigaku Zasshi. 2004; 46: 213-222.
- 18) Meyer JP., Allen NJ. Catherine, A. Smith. Commitment to Organization and Occupations: Extension and Test of a Three-Component Conceptualization. Journal of Applied Psychology. 1993; 78 (4):538-551.
- 19) Takahashi kouzi. Sosiki Sinri Sokuteiron. Tokyo: Hakutou Syobou; 1999: 131-154.
- Toyota Hideki. Kyoubunsan Kouzou Bunnseki.
 Tokyo: Toukyo Tosyo; 2007: 18.
- 21) Japanese Nursing Association. The 2009 White Paper on Nursing.
- 22) Mineko Nanba, Yuki Yajima, Kazue Ninomiya et.al. Relatioship between Nurses Career Stages and Factors Relating to Nurses Affective Commitment to Organization. Bulletin of Faculty of Health and Welfare Science, Okayama Prefectural Universty. 2007; 14: 63-71.
- 23) Liou SR, Grobe SJ. Perception of Practice Environment, Organizational Commitment and Intention to Leave among Asian Nurses Working in U.S.. J Nurses Staff Dev. 2. 2008; 4 (6): 276-82.
- 24) Liou SR, Cheng CY. Organizational Climate, Organizational Commitment and Intention to Leave amongst Hospital Nurses in Taiwan. J Clin Nurs. 2010; 19 (11,12): 1635-44.

新人看護師における職場の組織風土とコミットメントおよび離職意向の 関連

難波峰子* 矢嶋裕樹** 二宮一枝*

*岡山県立大学保健福祉学部看護学科 〒719-1197 総社市窪木111 **新見公立大学看護学部看護学科 〒718-8585 新見市西方1263-2

キーワード: 新人看護師、離職、コミットメント、風土