ORIGINAL ARTICLE

The effect of personal initiative behavior on the performance excellence behaviors of patient unit nurse managers at international private hospitals in Thailand

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ABSTRACT

Personal initiative behavior (PIB) is a major concept with effects on the performance of patient unit nurse managers in modern nursing organizations. PIB affects the performance excellence behavior (PEB) of individuals and increases the capacity of a person driving patient-unit competitive advantages and subsequent innovation in the workplace. This study aimed to analyze the following: 1) levels of personal initiative behavior and performance excellence behavior; and 2) influence of personal initiative behavior over performance excellence behavior. The sample consisted of 302 patient unit nurse managers who worked at international private hospitals in Thailand. The sample was selected by simple random sampling by means of drawing lots without returning the lots drawn. Data were collected with self-administered questionnaires on demographic data, personal initiative behavior and performance excellence behavior. Data were analyzed with descriptive and a confirmatory factor analysis that was first conducted to validate all study variables, then, the effect of PIB on PEB was evaluated by structural equation modeling. According to the findings: 1) PIB and PEB were high level ($\overline{X}$ = 4.37 and 4.49, SD = .60 and .62, respectively). PIB had direct influence on PEB (β= .88, $p < .05$). The model was consistent with evidence-based data (χ^2 = 18.033, DF = 6, CMIN/DF = 3.000, GFI= .988, AGFI = .919, CFI = .962, RMR = .048, RMSEA= .080) and was able to predict performance excellence behavior at 78 percent (R^2= .78, $p<.05$). Therefore, nursing organizations should have policies to develop PIB, and human resources departments in nursing organizations should provide practical training to develop personal initiative behavior, which will cause patient unit nurse managers to have performance excellence behaviors.

Key words:
personal initiative behavior; performance excellence behavior; nurse managers

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INTRODUCTION

Health care services in private hospitals certified for international standards by Joint Commission International (JCI) focus on patient-centered medical care. These hospitals respond to the satisfaction of the service users and take into account safety as a priority[1]. The clients of these hospitals all have a need for a high level of service response[2], and expectations of excellent service behavior of nurses[3]. In this regard, nurses are personnel under the nursing organization with a management structure within the organization. A review of empirical evidence reveals that a nursing organization is one of the organizations that generates revenue for hospitals, with most of the income coming from the activities of nursing services 24 hours a day at the patient unit level managed by a nursing manager[4]. Therefore, nurses and nurse managers are important persons who are responsible for implementing policies and supervising the delivery of good services to the patients with their high-level performance behaviors leading to excellent organizational performance at a unit level[5, 6].

The literature review in Thailand found that patient-unit nurse managers at an international private hospital in Thailand will develop potential in two dimensions as follows: (1) process dimension, and (2) outcome management dimension[6,7,8]. From the performance evaluation report of nurse managers in five international private hospitals in Thailand, it was found that 86.27 percent of the 54 nurse managers had an assessment score lower than 90 percent[1]. When analyzing each aspect, low assessment scores were found in the following non-criterion areas: strategic management, innovation development, marketing focus, achievement-oriented at work, cost management and work troubleshooting[6]. These are issues that are important in the operation of international private hospitals that need urgent development.

The work of patient-unit nurse managers includes personal behavior with effects on teams, efficiency of patient unit operations, nursing organizations and hospitals, respectively[9,10]. Patient unit nurse managers are directly tasked with implementing the policies of nursing organizations in practice and play a major role in developing patient unit environments[7]. International private hospitals in Thailand aim to create competitive advantages in the healthcare service business. Most earnings of nursing organizations are generated at the patient unit level[7,11]. Patient unit nurse managers play a key role in steering patient units in the area of international standards and are considered a factor of success for nursing organizations. Therefore, the PEB of patient unit nurse managers is a factor supporting patient unit performance in line with goals, creating innovations in the organization and status as a highly competent organization. In addition, PEB is a factor of success at high levels in the areas of competitiveness and efficiency at the personal and patient unit levels[7,12,13].

The PEB of patient unit nurse managers based on the concept of Koopmans et al.[12] consisted of four dimensions: (1) Task performance, which is a work expression comprising use of personal skills and abilities to plan work, sort issues of importance and manage work to be completed on time by using modern knowledge and skills to continually improve work; (2) Contextual performance, which is an expression supporting organizations to drive other challenging obligations and enables workers to approach work creatively with enthusiasm in solving problems and helping the organization; (3) Adaptive performance, which is a work expression focused on modifying work processes to be flexible, keeping an open mind to listen to others and being able to adapt and manage unexpected

situations with creativity and by creating new concepts for use at work in line with dynamic environmental and work-related situations; and (4) Counterproductive work behavior performance, which is a work expression focused on reducing barriers or work problems preventing success. In the competitive setting of international private hospitals, the PEB of patient unit nurse managers is correlated with VUCA work situation management, development of readiness for new work, personal initiative and influence the effectiveness of individuals and patient units[7]. The PEB of patient unit nurse managers also affects work knowledge, skills and abilities[11, 13]. The personal initiative theory explains that people with PIB will perform their duties, and other related tasks effectively and people who take a proactive approach with perseverance are more likely to focus on the achievement of their work. Therefore, when people have a higher level of PIB, it will result in PEB being higher as well[13,15]. It is believed that excellent performance behavior will be a factor for promoting patient-unit nurse managers to be able to develop themselves and their jobs to achieve the minimum JCI criteria[1].

PIB, which is an important factor that helps promote PEB, is a group of behaviors aimed at developing the personal capacity to support the work of individuals and organizations at advanced levels[13]. The PIB of patient unit nurse managers has three main components[11,13] consisting of (1) Self-starting behavior, which is the development of personal work behaviors to create new things that benefit the nursing organization (2) Proactive behavior, which is the ability to manage work creatively, innovate, accept criticism, discover work problems or barriers and use data to plan the prevention of problems along with updating work plans by seeing benefit from opportunities in the future, and (3) Persistent behavior, which is the determination to discover problems that will become ongoing barriers in working and the use of creative ideas in work process to successfully develop work. According to the literature review, PIB was found to be positively correlated with PIB of supervisors and employees in service work[11, 12,14,15,16].

The above issues are faced by patient-unit nurse managers at international private hospitals in Thailand who have been selected for positions according to the JCI criteria[1], and have not met the performance standards in many areas. Therefore, it is expected that patient unit nurse managers in international private hospitals around the world may have similar issues to those encountered in Thailand. Due to the importance of PEB and for the aforementioned reasons, the researcher's interest is in studying the influence of PIB over the PEB of patient unit nurse managers at international private hospitals in Thailand in order to provide guidelines for nursing organization managers in using knowledge gained to promote PEB among patient unit nurse managers, which will affect outcomes according to goals, organization innovations, competitiveness and effectiveness at the personal and patient unit levels. The researcher expects that this article will be a new body of knowledge that will help develop patient unit nurse managers at international private hospitals around the world to be effective in their future work.

METHODS

Study design and participants

This study was based on an analytic research design. The participants were Thai patient unit nurse managers at international private hospitals in Thailand. The sample size was 246 patient unit nurse managers. In this research, the infinite population determined was based on the formula of

Roscoe [17]. Sample loss (drop-out rate) and incompleteness of the questionnaire were prevented. The researcher increased the number of questionnaires required to collect the sample data by 20% with consideration given to the above risks 20%. Thus, the total sample size of 308 participants was calculated according to the formula of Gapta et al.[18]. Therefore, this meets the criteria of the minimum number of samples in the agreed path statistical analysis of Hair et al.[19]. The samples were selected by simple random sampling without replacement of patient unit nurse managers from 40 JCI private hospitals in Thailand.

Inclusion criteria: (1) patient unit nurse managers working in the position for more than or equal to 1 year and (2) patient unit nurse managers working in a private hospital nursing organization that has received international quality accreditation.

Exclusion criteria: (1) patient unit nurse managers working in the position for less than 1 year and (2) not working during the research data collection period.

Ethical Considerations

This study was approved by the Committee for research ethics of Pathumthani University, NO.012/2022 on September 29, 2022. The protected samples were obtained as personal information and ethical concerns, which included informed-consent and maintaining confidentiality. The samples had the right to cancel participation in the study at any time without any impact.

Data Collection

The researcher sent a letter requesting permission to collect data from the Faculty of Nursing, Pathumthani University, and a letter requesting support for the appointment of research data collection coordinators to the administrators of 40 hospitals. After receiving approval, the researcher coordinated with the research coordinators of each hospital to collect data. The questionnaires were sent to the research coordinators and returned to the researcher via EMS post office. After the patient unit nurse managers had completed the questionnaires, the questionnaires were placed in envelopes prepared by the researcher, sealed and returned to the coordinators to be collected and returned to the researcher. Data were collected from 1 October 2022 to 30 October 2022. The researcher received 308 questionnaires, and 302 of these questionnaires were analyzed (98.05%). In cases where the data were incomplete, the researcher asked the respondents to complete the questionnaires again on an online platform created by the researcher, which was accessible and convenient for questionnaire responses.

Instruments

This study was divided into two sections. Section 1: Personal information included questions on gender, age, marital status, educational attainment, specialized education in nursing, work experience, experience in ward management and honorable mention of a patient-unit. Some of the question types were multiple choice and others were fill-in-the-blank questions. Section 2: The questionnaire measured the following variables: (2.1) PIB questions used a rating scale with five designated class intervals in the 9 questions, asking about the self-starting behavior , proactive behavior and persistent behavior of patient unit nurse managers (i.e., Were you accepted for having management knowledge in creating innovations such as budget procurement, team and network development ?, Do you see opportunities in creating your work to generate more benefit and value ?, Do you use your skills to solve many types of work problems with greater coverage of issues ?) . Details elicited included whether a respondent had presented suggestions, talked to their supervisor about a work problem, attempted to determine why work problems

existed, or had changed a work procedure. In this study, the researcher used the PIB of Head Nurse Questionnaire of Wongsaree et al.[11] The PIB scale had 3 dimensions with the content validity index (CVI) of 9 questions on the scale at 1.00 and a reliability score of .80. Factor loading was in the range .83-.90 by confirmatory factor analysis (P-value = .893, chi square = 15.8, df= 24, χ^2 /df = .660, GFI = .983, AGFI = .968, RMR = .011, RMSEA = .000, TLI =1.000, CFI = 1.000)[15]. (2.2) The PEB scale had 4 dimensions developed according to the concept of Koopmans et al.[12],Answers were on a rating scale and were designated from the following five class intervals, asking about the task performance (7 items), contextual performance (6 items), adaptive performance (5 items) and counterproductive work behavior performance of patient unit nurse managers (5 items) (i.e., Do you have a plan to get the job done on time ?, Do you volunteer to take on challenging tasks when given the opportunity ?, Have you shown flexibility in your work ?, Do you focus your attention on solvable problems before looking at big problems that are difficult to solve). Total number of questions was 23 items., The results of the weight factor analysis for each element found that all items had a component weight factor greater than .3. The content validity index (CVI) of 23 items was .98 with a reliability score of .88. Factor loading was in the range of .48-.96 by confirmatory factor analysis (P-value = .785, chi square = 134.26, df= 165, χ^2 /df = .970, GFI =.920, AGFI = .906, RMR = .018, RMSEA = .000, CFI = .903).

The participants completed the self-administrated questionnaire and 5-point Likert rating scales were used to rate the responses. The choices ranged from most agree (5 points) to least agree (1 point). The criteria and interpretation of grade point averages on class interval of Best and Kahn[19] were used. The total average scores ranged between 1.00- 5.00. The highest mean score indicated the opinion level of the patient unit nurse manager for that variable was at the highest level.

Data Analysis

1) Descriptive statistics such as frequency, percentage, average, and standard deviation were used to describe the general characteristics of the study participants.

2) Hypothesis testing was performed by analyzing the route, using the computer of analysis package program to analyze the construct validity of the model. The SEM model reported acceptable value of CMIN/DF < 3, GFI > .90, AGFI >.90, CFI>.90, RMR < .05, RMSEA <.08[19,23].

RESULTS

Of the 302 subjects in the sample, most were females (97.34%) with a mean age of 44.70 years (SD = 12.78) and a large number of subjects were aged 41-50 years (44.00%). Most of the sample was married (66.00%), had bachelor's degree educational attainment (67.33%) and had graduated with a master's degree in nursing administration (37.74%). Of the 98 subjects with master's degrees, 36.33% were trained in nursing specialty courses with 45 subjects who had been trained for four months in specialty courses in the field of nursing administration (41.28%). The 109 subjects who had received specialty training had worked in the nursing profession for a mean of 43.30 years (SD = 10.03). Most of the sample had worked in the nursing profession for 11-20 years (45.67%) with a mean of 11.32 years of experience in managing a patient unit (SD = 11.51). Most of the sample (57.00%) had experience within a range of 1-10 years (57.00%), and most of the sample had

received patient-unit/certificates of honor from agencies or organizations (64.67%).

Concerning the results from the analysis of mean scores of PIB and PEB of patient unit nurse managers at international private hospitals in Thailand, the mean scores of PIB were high ($\overline{X}$ = 4.37, SD. = .60) . When PIB was considered individually, all minor components were found to have high mean scores. Working with determination was the component with the highest mean score, followed by proactive work methods and creative practices ($\overline{X}$ = 4.37, 4.35, 4.33 and SD. = .63, .69, .74, respectively). In addition, the mean scores for PEB were the highest ($\overline{X}$ = 4.49, SD. = .62). When each area was considered, task performance and adaptive performance had mean scores at the highest level ($\overline{X}$ = 4.60, 4.50 and SD. = .53, .57, respectively). Contextual performance and counterproductive work behavior performance had high mean scores ($\overline{X}$ = 4.41, 4.38 and SD. = .58, .60, respectively) (Table 1).

Table 1 Mean scores of PIB and PEB of patient unit nurse managers working at international private hospitals in Thailand (n = 302)

Variable	$\overline{X}$	SD	Level
1. Personal Initiative Behavior (PIB, α = .82)	**4.37**	**.60**	**high**
- Self-Starting Behavior (SS, 3 items, α = .83)	4.33	.74	high
- Proactive Behavior (Pro, 3 items, α = . 79)	4.35	.69	high
- Persistent Behavior (Per, 3 items, α = . 80)	4.37	.63	high
2. Performance Excellence Behavior (PEB, **α = .81)**	**4.49**	**.62**	**highest**
- Task Performance (Task_P, 7 items, α = . 73)	4.60	.50	highest
- Contextual Performance (Con_P, 6 items, α = . 78)	4.41	.58	high
- Adaptive Performance (AD_P, 5 items, α = . 75)	4.53	.57	highest
- Counterproductive Work Behavior Performance (CWB_P, 5 items, α = . 78)	4.38	.60	high

The analyzed of relationship between PIB and PEB showed PIB to be positively correlated with PEB at a medium level (r = .548, p < .01) (Table 2).

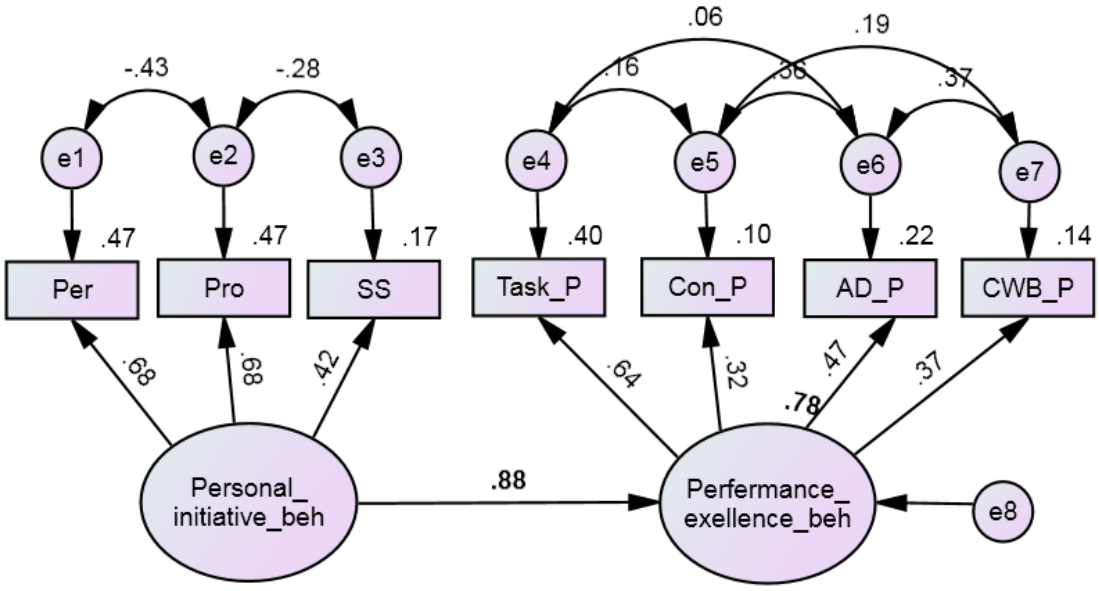
Table 2. Correlation between PIB and PEB of patient unit nurse managers working at international private hospitals in Thailand (n = 302)

Variable	PIB	SS	Pro	Per	PEB	Task_P	Con_P	AD_P	CWB_P
1. PIB	1								
1.1 SS	.621**	1							
1.2 Pro	.708**	.781**	1						
1.3 Per	.723**	.584**	.762**	1					
2. PEB	**.548****	.306**	.351**	.385**	1				
2.1Task_P	.693**	.208**	.398**	.377**	.693**	1			
2.2 Con_P	.720**	.276**	.320*	.394**	.720**	.317**	1		
2.3 AD_P	.782**	.365**	.272**	.299**	.782**	.340**	.449**	1	
2.4 CWB_P	.666**	.329**	.391**	.287**	.666**	.536**	.483**	.480**	1

** p < .01, * p<.05

From testing basic agreements for statistical path analysis, the correlations between PIB and PEB showed PIB to be positively correlated with PEB at a medium level ($r = .548$, $p < .01$)[20, 21]. Overall, the correlation coefficient between observed and latent variables did not exceed .90. Therefore, the independent variables were concluded to not be significantly related in the same direction and the correlation scores of each and every pair exceeded .30, which was not excessively low[20]. From normal distribution test results, Skewness was found to have not exceeded 3 and Kurtosis did not exceed 10, indicating the date was not excessively skewed and curved[23]. Hair et al.[24] recommended not placing importance on normal data distribution when the sample exceeds 200 subjects. In addition, the researcher collected data from subjects who were good representatives of the population. Therefore, the researcher ignored basic agreements for using statistics and was able to use data in statistical path analysis.

From path analysis, the hypothesis model was found to be consistent with evidence-based data in Figure 1.1.



$\chi^2 = 18.033$, DF = 6, CMIN/DF = 3.000, GFI= .988, AGFI = .919, CFI = .962, RMR = .048, RMSEA= .080

Figure 1. SEM of PIB Influence on PEB

In studying the influence of PIB over PEB of patient unit nurse managers working at an international private hospital in Thailand, the findings revealed PIB had a direct influence over PEB with statistical significance ($\beta = .88$, $p < .05$). The model was consistent with the evidence-based data ($\chi^2 = 18.033$, DF = 6, CMIN/DF = 3.000, GFI= .988, AGFI = .919, CFI = .962, RMR = .048, RMSEA= .080) and was able to predict PEB at 78 percent ($R^2 = .78$ $p<.05$). This was consistent with evidence-based practice and the research hypothesis. Therefore, the findings support the research hypothesis.

DISCUSSION

The mean scores for PEB of patient unit nurse managers working at

international private hospitals in Thailand were highest ($\overline{X}$ =4.49, SD =.62), possibly because, in the context of international hospitals, nursing organizations have clear and systematic specifications of roles and duties in work positions, organization management mechanisms consistent with international standards and specification of indicators according to plans[1,21]. In addition, top executives have policies to continually meet customer satisfaction, causing new challenges and unfamiliar risks to occur at all times. In this study, the patient-unit nurse managers had been taught about work before being given assignments. Moreover, the teams in the chain of command provided consultation, monitored and advised the patient-unit nurse managers closely[7,11]. The work process developed patient unit nurse managers to focus on working according to specified roles and duties, and to adapt and work by mainly following the results of patient units and organizations, causing patient unit nurse managers to achieve scores of PEB at the highest level. In addition, the patient-unit nurse managers at international hospitals take part in working groups under projects that may not be related to the patient units of nurse managers, and work characteristics focus on quality standards according to JCI indicators. Moreover, the nurse organizations in this study had policies to maintain the organizations' reputations, causing values in working together to be similar [7,10,13]. The patient-unit nurse managers emphasized solving problems and managing other problems in the overall view of the nursing organization. Patient-unit nurse managers were taught to primarily focus on main issues at work. Most communications emphasized positive speech[7], causing the patient-unit nurse managers to award high opinion scores. When considering the qualifications of patient unit nurse managers, JCI was found to require patient unit nurse managers to have evidence indicating management ability[1]. The demographic data also indicated that some of the patient-unit nurse managers had education at the level of master's degree and specific courses in the fields of nursing/nursing administration. Thus, the nurse managers had direct experience from educational courses that could be applied to their work in patient units. At the same time, the nursing organizations provided training and had coaching systems. Therefore, the development of work competency meeting standard criteria and development of work skills in new situations caused patient unit nurse managers to continually learn and develop personal skills and abilities[8]. For the aforementioned reasons, these factors supported patient-unit nurse managers to have mean scores for PEB at the highest level.

The mean scores for PIB among patient-unit nurse managers working at international private hospitals in Thailand were at a high level ($\overline{X}$ =4.37, SD =.60). This may be because, in the context of international hospitals, nursing organizations had policies to promote creative work, developed innovations and provided practical training to continually develop new working capabilities for patient unit nurse managers[22]. This caused the patient unit nurse managers to have high mean scores for creative work. In addition, the patient unit nurse managers working at the international private hospitals had to play roles in many areas such as marketing, strategic planning and building innovations to create competitive business advantages, causing the patient-unit managers to have to develop capabilities with a focus on safety, maximum satisfaction among service recipients, competitors, quality management, creation of valuable new inventions, governance of success indicators and behaviors that lead to success[7,13]. Consequently, the patient unit nurse managers needed to use proactive work strategies and significant efforts to work successfully in line with their goals

and work plans, possibly explaining why the mean scores for PEB among the patient unit nurse managers were high. The findings were consistent with previous studies[7,17] on PIB of patient unit managers in three components, namely creative work, proactive work methods and need for effort at work, mean scores for PIB, creative work, proactive work methods and need for effort to work were high, which was similar to the findings of this study.

PIB was found to be correlated with PEB ($r = .548$, $p < .05$) and had influence over PEB of patient unit nurse managers working at international hospitals in Thailand at a high level ($\beta = .88$, $p < .05$), possibly because the purpose of expressing PIB and PEB of patient unit nurse managers was to improve the organization's effectiveness, performance and personal capabilities[4,7,13]. Therefore, the patient-unit nurse managers used this group of behaviors as a framework for personal development in order to drive work to achieve objectives, causing mean scores for PIB and PEB to be high level and at the highest level, which was consistent with the research hypothesis. That means scores are both at high levels causing the two behaviors to be correlated[20,21]. This may have caused PIB to have an influence over PEB at a high level, which was consistent with the findings of the studies [11,14,15,16] revealing PIB to be correlated with and influencing the performance behaviors of individuals. The findings of this study were also consistent with the Personal Initiative Theory[13], which states that PIB causes individuals at every level to have a high capacity for work. Therefore, the PEB of patient unit nurse managers should have effects on the effectiveness and results of organizations in other areas, including the capabilities of patient unit nurse managers in other areas[7,12,13]. The fact that PIB can predict PEB at 78 percent ($R^2 = .78$, $p<.05$) indicates that PIB is a major factor for PEB among patient unit nurse managers in private hospitals.

In this research, personal initiative (PI) theory developed by Frese and Fay[13], which can be defined as a behavioral syndrome that results in an individual taking an active and self-starting approach to work goals and tasks and persisting in overcoming barriers and setbacks is used. The theory explains that PI will encourage individuals to achieve their potential and perform at a high level[13]. The novelty of this research is the proof that PIB is a newly discovered behavior that affects the PEB of patient unit nurse managers in Thailand. The PIB in aspects of self-starting behavior, proactive behavior and persistent behavior will be a factor that will help develop the potential of patient unit nurse managers in the future.

CONCLUSION AND RECOMMENDATIONS

In this study, the PIB was able to clearly explain PEB with coverage of every dimension of patient unit nurse managers' role in private hospitals. Therefore, in order for patient unit nurse managers to have PEB particularly task performance and adaptive performance, nursing organizations should have policies for developing PIB by using the conceptual framework of PIB as a framework for developing capabilities of patient unit nurse managers or persons who will become patient unit managers, which will provide nursing organizations with highly capable patient unit nurse managers. In addition, human resource departments in nursing organizations should provide practical training especially proactive behavior development to develop PIB, which will cause patient unit nurse managers to have PEB. In the area of research, quasi-experimental research should be carried out by using PIB to develop a program for developing PIB

among patient unit managers in order to provide new options for developing capabilities of patient unit nurse managers in the future.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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