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Causal Model of Cultural Competence and Behavior among Nurses in Thailand's International Hospitals

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Thailand is recognized as an international medical hub and so it is important for its nurses to have appropriate cultural care behaviors to provide care for patients from different countries and cultures. This study aimed to examine the causal model and identify the causal variables affecting the cultural competence and cultural care behavior of professional nurses working in international hospitals in Bangkok, Thailand. The study was based on structural equation modeling analyses of the data collected from 451 registered nurses, selected by stratified random sampling. The data were collected using a set of questionnaires, based on five instruments using six-point rating scales, with the confidence level ranging from 0.67 to 0.94. The results showed that the assumption of a causal relationship model fitted with the empirical data (SRMR = 0.078, RMSEA = 0.072, GFI = 0.97 NFI = 0.97, CFI = 0.97, χ^2/df = 3.35). The factors related to the nurses' cross-cultural experience and cultural attitudes had a direct effect on their cultural competence, (β = 0.22, 0.88, p < .05). Also, their perceived organizational support and cultural competence had a direct effect on the nurses' cultural care behavior (β = 0.11, 0.63, p < .05). This model could explain 84% of the variance in the cultural care behavior of the nurses in the data set. It was revealed that appropriate cultural care behaviors can be developed by increasing cultural competence and from having perceived organizational support. This research recommends that organizations should support training courses to enhance the experience and attitudes of nurses regarding their cultural competence and cultural care behaviors.

Keywords: cross-cultural, cultural competence, cultural care behavior, professional nurse, perceived organizational support

Thailand has adopted a ten year strategy to develop into an international medical hub by 2026 and to increase its competitiveness in the medical and wellness industry (Department of Health Service Support, 2017. Achieving this aim would contribute to economic growth in the country. Therefore, promoting medical services and wellness services has the potential to attract international customers to help Thailand achieve this aim. Many countries in Asia wish to lay claim to being the medical hub of Asia, such as Thailand, Singapore, South Korea, and Malaysia (Department of Health Service Support, 2017). Thailand can boast to having 62 hospitals accredited by the Joint Commission International (JCI), which is a standard organization operating in over 100 countries to improve patient safety and the quality of health care in the international community (Joint Commission International, n.d.). In addition, Thailand was recently ranked as having the world's sixth best healthcare system in 2019 as ranked by the Health Care Index, CEOWorld magazine (Braunhi1, 2019) Thailand's strong claim as a medical hub is based on several factors, including its reasonable prices, good quality and international level service, many respected specialists and expert healthcare providers,

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modern technology, welcoming hospitality, and beautiful tourist attractions (Department of Health Service Support, 2017).

However, a small number of complaints do arise, with the International Health Division reporting a slight rise in complaints from foreigners, with the number increasing in 2015 compared to 2014 from 10 to 11 cases (0.49% and 0.56%) (Department of Health Service Support, 2015). In considering the causes of the problems that can arise in caring for patients with different cultures, Hickling (2012) found that issues can occur when health professionals misunderstand patients from different backgrounds, which can lead to inappropriate treatment and even increased morbidity. Such misunderstanding can be compounded by cultural differences, stereotypes, and even discrimination (Higginbottom et al., 2016). Indeed, some nurses stated that caring for culturally diverse patients can be difficult and challenging because of their unfamiliarity with different cultures and due to issues with language and communication. The needs of such patients are often more demanding on staff, especially when there is a linguistic gap between nurses and patients (Amiri & Heydari, 2017).

Cultural factors influence healthcare treatment, and caregivers must understand the needs of each patient group (Leininger, 1991). Culture is defined as the learning and sharing of beliefs, values, and the lifeways of designated or particular groups, with such cultural norms generally transmitted from generation to generation and they influence both people‘s thoughts and action modes. Nurses are a vital part of the healthcare experience. Therefore, nurses need to learn and understand how to deal with cultural aspects so that they can integrate appropriate cultural considerations into their professional care based on the needs of the patients (Leininger, 1991). Otherwise, if a patient feels that a nurse has a bias or prejudice against them, the patient may not disclose all the required information, either by withholding some relevant information or due to poor communication, or they may display, a lack of cooperation regarding their treatment decisions, or even change their behavior because they feel conflicted, stressed, or a sense of hopelessness. This can affect the level of care and the treatment they receive. Nurses thus need to understand and gain experience of the different cultures of patients. Gaining such cultural competence usually requires exposure to caring for patients from various cultures and countries. Consequently, experienced nurses tend to have cultural knowledge and awareness (Almutairi et al., 2017). However, all nurses need competency in nursing culture, namely the ability to express behaviors or perform actions that are responsive to patients’ beliefs, attitudes, traditions, and ways of life (Campinha-Bacote, 2002). Caring for multicultural patients requires an element of cultural desire, which is defined as nurses' motivation to want to engage in the process of becoming culturally aware to be able to care for people from diverse cultures. This is related to seeking to improve their practice of care to such patients, who may have different expectations of how caring is expressed and experienced. Cultural desire thus motivates and energizes nurses to develop other components of cultural competence, including the essential cultural competences of required to be able to care for patients from different backgrounds (Cai et al., 2017).

Amiri & Heydari (2017) found that experienced nurses in caring for foreign patients reported the following problems: 1) problems interacting with patients from different cultures during care; 2) inadequate knowledge of diverse cultures caused a feeling of being desperate and worried, about making mistakes, sometimes even leading to a choice to avoid such patients; 3) a feeling such patients need more attention and a lot of time to provide good care for; and 4) language barriers to communicate with patients and culture. In addition to cultural

knowledge, nurses must show respect and have positive attitudes toward other cultures (Cai, 2016). Nurses believe that training is important, to help them gain, cultural capabilities, and to prepared them to be able to provide care in accordance with the patients' and families' needs. Studies have shown that the perceived organizational support has an influence on nurses' cultural competence (Gunawan et al., 2018). When nurses are trained to have cultural competencies, it can result in an improvement in the perception and the actual quality of care provided by the health services. A previous study evaluated the cultural competence training included in medical education in 18 Programs in USA from 2000 to 2015 and found that such training changed the carers' knowledge, skills, and attitudes in caring for patients from diverse cultures and background. (Jernigan et al., 2016)

At present, many people from different countries and cultures move to foreign countries for work, education, and travel, including for medical tourism, with Thailand a popular destination for many. Alongside this trend, Thailand is becoming a more multicultural society. This impacts Thailand in terms of the presence of multiple ethnic groups, yet many services show a lag in responding to this trend and there is currently a lack of cultural care diversity. Healthcare providers can find themselves in the frontline in dealing with changes in society and can encounter a variety of problems, in terms of technology, politics, law, economy, society, religious practices, values, beliefs, and ways of life (Leininger, 2001). Cultural care in a healthcare setting is appropriate care that is provided in accordance with the beliefs and lifeways of the patients. In addition, many nurses have a lack of linguistic skills, so communication without an interpreter can potentially lead to misunderstandings. Many problems in interacting with foreign patients can arise due to cultural differences, such as giving patients a lack of information, disparate information, a lack of social support, or having a lack of resources to treat them (Alpers & Hanssen, 2014). Communication problems and a lack of interpreters can cause nurses to become frustrated or stressed when dealing with patients from different cultures (Uzun & Sevinc, 2015; Chiangkhong et al., 2019). Therefore, it is important for nurses to be culturally competent to provide good care results to such patients. Patient-centered care is important for both patients and their families, and who can help them participate in the decision-making process relate to their management of care. Therefore, health personnel should have cultural competencies.

With regard to caring for patients in a multicultural society, Leininger (1991) provided culturally congruent care guidelines that incorporated three-way decision-making and nursing care practices. These guidelines highlighted the importance of the following: 1) cultural care preservation and maintenance to help people from a particular culture to retain and/or preserve relevant care beliefs and values so that they can maintain their well-being, recover from illness, or face handicaps and/or death; 2) cultural care accommodation and/or negotiations to help people of a designated culture adapt to, or to negotiate with, others for a beneficial or satisfying health outcome; and 3) cultural care re-patterning and restructuring to help patients reorder, change, or greatly modify their lifeways for new, different, and beneficial healthcare patterns. Thus, nurses need to learn about and understand cultural differences as this is important for them determining how to care and adopt appropriate care guidelines for patients from different backgrounds. Culture is an important aspect of this in terms of helping nurses to determine the most appropriate care methods based on assistive, supportive, facilitative, and enabling acts or decisions that are tailor-made to fit with individual, group, or institutional cultural values, beliefs, and lifeways in order to provide or support meaningful, beneficial, and satisfying health care, and well-being services (Leininger, 1991).

A number of research studies have been performed on cultural competencies and cultural care as factors affecting the cultural competencies of nurses in Thailand and other countries (Chunrat & Jumpamool, 2018; Ahn, 2017; Cruz et al., 2016; Songwathana & Siriphan, 2015). However, no studies have yet been performed on private international hospitals as tertiary care centers in Bangkok meeting the criteria of the Joint Commission International (JCI) accreditation and certification of health care organizations and programs across the globe. JCI is one of the world's leading nonprofit patient safety organizations and their accreditation and certification of recognized as the top recognition in health-care quality of care and patient safety, and allows foreign patients to feel confident in the treatment and services they will receive.

This research investigated the factors that could contribute to cultural competency and cultural care behavior. The findings will be useful in explaining cultural care behavior and they factors affecting cultural competencies and cultural care behaviors, which could in turn aid the development and training of health providers for the improved care of multicultural patients at government and private hospitals.

Literature Review and Hypotheses

Social Cognitive Theory

The main theoretical concept used by researchers in this field is the social cognitive theory of Bandura (1986) which explains both the causal factors and the effects of *cultural care behavior*. The social cognitive theory of Bandura established a basic social learning theory in which individual behaviors occur and can change due to environmental and personal factors. Further, these factors are joined together in a process of reciprocal determinism, as shown in Figure 1.

Figure 1

Reciprocal Determinism of Behavioral Factors (Bandura, 1986)

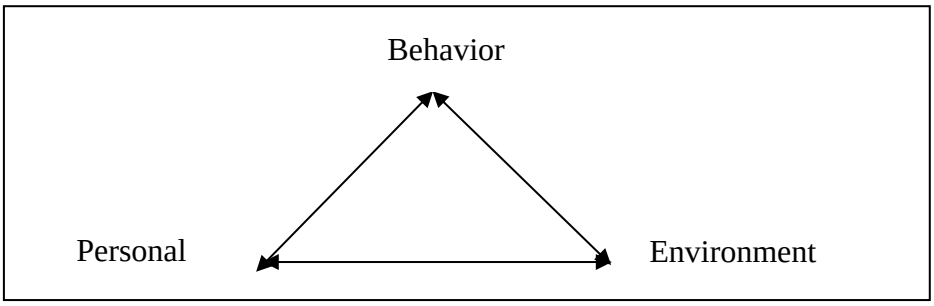


Figure 1 shows that a person's behavior, their environment and their personal factors including cognitive factors and other internal factors, are interrelate and affect their behavior. These three factors help define each other, but this does not mean they are defined equally. Some factors may have more influence than over others, but such influences do not occur at the same time, and it takes time for one factor to affect others (Bandura, 1986). Thus a specific behavior may not persist because a person's environment changes, so both a person's environment and their behavior are influenced by each other. In this way, social learning theory

explains that human behavior is caused by two main factors: personal factors and environmental factors. Here, the important variables as personal factors that affect *cultural care behavior* among professional nurse are their cross-cultural experiences and cultural attitudes; while for the environmental factors, the important aspect is the perceived organizational support. Together these represent causes and effects of cultural care behavior.

Concept of Cultural Care Behavior

Leininger (1991) defined *cultural care* as assistive, supportive, and facilitative or enabling acts that can maintain good health, improve living conditions, improve way of life or help patients to confront illness, disability or death. Further, Leininger (1999) defined *cultural care* as appropriate care in accordance with the beliefs and lifeways of the patients. Nurses assess the needs of their patients in line with the patients' health beliefs using tools, such as the Transcultural Assessment Model by Giger and Davidhizar (2002), which consists of six elements: 1) communication; 2) space; 3) social organization; 4) time; 5) environmental control; and 6) biological variations. Language is an important tool that can support access to care because nurses understand other cultures. Odhiambo et al. (2019) found that White, Filipino, and Hispanic nurses lacked cultural knowledge of and cultural encounters with African-Americans that impacted their patient care. This led to some patients feeling there was some nurse bias and nurses to feel frustrated because they didn't understand when a patient explained their health. This can create issues having healthcare providers with a bias and, without awareness or cultural skills for assessing their patients' needs may result in different interactions between the patients and healthcare providers and may cause patients to feel stereotyped. To avoid this, nurses need to have a component of cultural competence (Cai et al., 2017). Leininger (1991) provided guidelines for decision-making in nursing care practice and according to the cultural care of patients, which would allow patients and family members to participate in the care and to negotiate and evaluate the outcomes. *Cultural competence factors have* an important effect on cultural behavior in terms of how nurses care for patients from different cultures. This study adopted the tools of caring behavior according to. (Wu et al., 2006) who defined care behavior according to four elements: 1) assurance of human presence; 2) professional knowledge and skills; 3) respecting the cultures of patients; and 4) positive connectedness. In conclusion, cultural care behavior can be recognized as the creative or enabling acts or decisions that are tailor made to fit individuals by maintaining, compromising, and negotiating with patients to satisfy their lifestyles and cultures.

Conceptual Framework

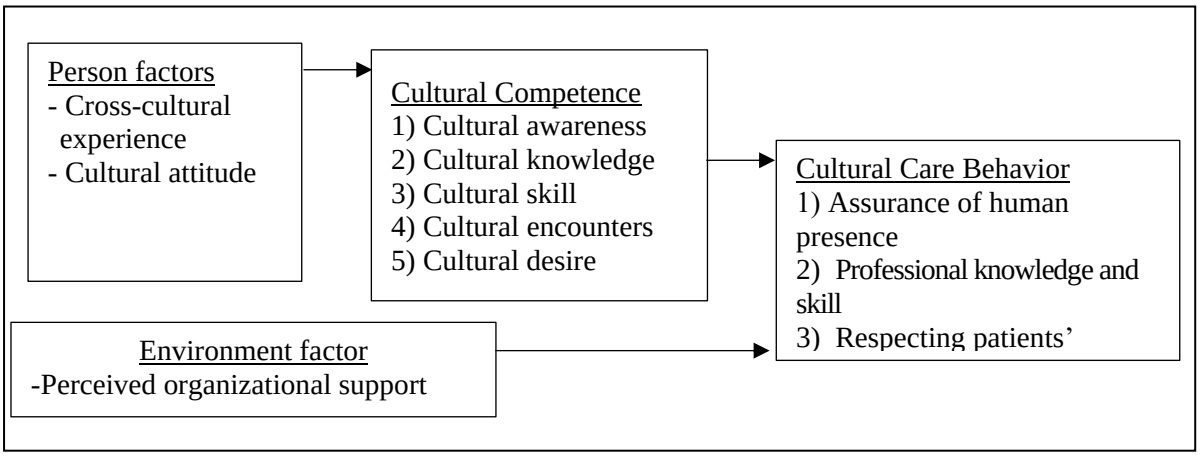
The development of a causal model of *cultural care behavior* among professional nurses was essential in this research. Leininger (1991) defined culture as sharing learning and conveying the values, beliefs, norms, and way of life of an individual or group as a guideline for thinking, making decisions, and supporting the methods of living things. The aspect of culture is very important in health because it is a factor that influences the concept of health beliefs, illness and treatment, but it can generate challenges when to caring for patients in a multicultural society. The dimensions of cultural and social structures cover many aspects, including technological, religious and philosophical, kinship and social, cultural values, and lifeways, such as political, legal, economic, and education. Leininger (1991) believed that healthcare systems combine two key systems: people and professional systems. Nurses providing care need to have positive cultural attitudes and; cultural competencies, which refer to are the ability of people in one culture to interact with people from different cultures. In

particular the cultural competence concept of (Campinha-Bacote, 2002) is considered here, which covers: 1) cultural awareness; 2) cultural knowledge; 3) cultural skills; 4) cultural encounters; and 5) cultural desire. Leininger (1991) defined cultural care in the healthcare setting as assistive, supportive, facilitative or enabling acts to maintain good health, improve living conditions, and improve patients' way of life through the provision of appropriate care in accordance with the beliefs and lifeways of the patients (Leininger, 1999). When nurses are culturally aware, it will reduce the risk of them being biased against other cultures that are different from their own culture. Developing oneself to have cultural knowledge and skills, enables a more effective interaction with other cultures. The main theoretical concept used by researchers in this field is the social cognitive theory of (Bandura, 1986), which explains that personal behavior is affected by two main influences personal factors and environmental factors. When nurses communicate interact with patients from different cultures, it leads to them developing greater awareness and knowledge, often causing them to change their attitudes as well as to reduce their bias toward patients from different cultures. These results are important for self-development of someone who wishes to improve their cultural competency and cultural care behavior.

Based on the literature review, a conceptual model of the factors that influence cultural care behavior and cultural competence was constructed, as shown in Figure1. Here personal factors, such as cross-cultural experience and cultural attitudes, were considered within the medium of cultural competence. It is proposed that the environmental factors, essentially in terms of the perceived organizational support, have a direct effect on cultural care behavior. In addition, it is proposed that cultural competence has a direct effect on cultural care behavior, as shown in Figure 2.

Figure 2

The Conceptual Framework



Hypotheses

Nine hypotheses were proposed and tested in this research:
H1: Cultural competence has a direct effect on cultural care behavior.
H2: Cross-cultural experience has a direct effect on cultural competence.
H3: Cultural attitudes have a direct effect on cultural competence.
H4: Cultural attitudes have a direct effect on cultural care behavior.
H5: Perceived organizational support has a direct effect on cultural competence.

H6: Perceived organizational support has a direct effect on cultural care behavior.
H7: Perceived organizational support has an indirect effect on cultural care behavior.
H8: Cross-cultural experience has an indirect effect on cultural care behavior.
H9: Cultural attitude has an indirect effect on cultural care behavior.

Method

Design

This study took a quantitative approach by using structured equation modeling to examine the direct and indirect relationships between the personal and environmental factors and the cultural competence and cultural care behaviors of professional nurses.

Participants

In total, 451 people were included in this study, which was performed from 14 July 2017 to 14 July 2018. The inclusion criteria were professional nurses with at least 1 year of experience caring for foreign patients, aged 20 years or over, working in inpatient or outpatient services at one of four private international hospitals in Thailand. Further, the participants needed to understand the purpose of the study and must have signed consent to participate in the study. The exclusion criteria were: nurses who had no experience or less than a year's experience of providing nursing care for foreign patients or who were unwilling to answer the questionnaires.

It was important to ensure a sample size of 10 to 20 participants per measurable variable (Wiruchchai, 1999) to obtain reliable results. In this study, there were 20 participants per variable and the estimated sample size was at least 1:10. According to the requirements, this needed at least 400 people. The sample group was nurses who had worked for at least 1 year in one of four private international hospitals, and these were selected from proportional stratified random sampling, with the ratio between the populations per sample estimated at approximately 2:1. Over 480 questionnaires were thus distributed and 451 questionnaires were returned. 10 of these participants were excluded from the analysis due to missing data in the questionnaires related to cross-cultural experience.

Ethical Considerations

Ethical approval was granted by the Institutional Review Board (SWUEC/E – 136/2560). The researcher contacted the nursing departments in each hospital where the data were collected. The participants were informed of the purpose of the survey and their written consent was obtained.

Measurement

This study used five instruments, each measured using 6-point Likert scales

1. Cultural care behavior instrument. This was originally developed by Wu et al. (2006) and Luengarun et al. (2012). There included a total of 24 items, covering the following four elements: 1) the assurance of a human presence, 2) professional knowledge and skills, 3) respecting the cultures of patients, and 4) positive connectedness. Cronbach's alpha coefficient of confidence was .93.

2. Cultural competence instrument. This was based on the instrument developed by Phokha (2009) and Chantarasenanon (2010). There were a total of 21 items, covering five elements: 1) cultural awareness, 2) cultural knowledge, 3) cultural skills, 4) cultural encounter, and 5) cultural desire.

3. Cross-cultural experience instrument. Here, the researcher developed the instrument from the cross-cultural experience instrument of Bernal and Froman (1993) and the cross cultural experience scale of Farber (2015). There were a total of 7 items, covering the following three elements: 1) education experience and learning a foreign language, 2) employment experience, and 3) life and work experience. Cronbach's alpha coefficient of confidence was .90.

4. Cultural attitude instrument. The researcher developed this instrument based on a concept outlined in McGuire (1985) and Sillapaprommas (2004). There were a total of 11 items, covering the following three elements: 1) cognitive components, 2) affective components, and 3) action tendency components. Cronbach's alpha coefficient of confidence was .70.

5. Perceived organizational support instrument. This tool was based on the instrument developed by Thiposot (2013) and Pimthong (2014). There were a total of 26 items, covering the following five elements: 1) compensation, 2) knowledge of work and opportunities, 3) job security, 4) emotional factors, and 5) work practices. Cronbach's alpha coefficient of confidence was .96.

Data Collection

The data collection was conducted using structured self-reported questionnaires between January and March of 2018. The researcher contacted the nursing departments in four private international hospitals in Bangkok. The researcher explained the purpose of the current study and the data collection methods to the nursing managers and requested their participation in the study. The eligible participants were recruited in line with the inclusion criteria. The participants were asked to complete the informed consent form and to also complete the survey. The questionnaires were sealed in envelopes and sent to the relevant nursing departments for the collection of data. The signed consent forms and completed surveys were collected two weeks later by post.

Data Analysis

The data analysis involved analysis of the basic statistics of the observable variables to test the hypothetical model (Figure 2). An examination of the model was tested using the goodness of fit test. The parsimony fit indices were based on a chi-square (χ^2/ df≤5), a standardized chi-square test, and the incremental fit index (SRMR ≤ 0.08, RMSEA ≤ 0.08, GFI ≥ 0.90, CFI ≥ 0.90, NFI ≥ 0.90) (Schumacker & Lomax, 2010; Hair et al., 2010).

Results

Demographic Characteristics

The data were collected from 451 professional nurses, comprising 7 men (1.6%) and 444 women (98.4%), who could be divided by age as: 20–30 years old, 132 people (51.4%); 31–40 years old, 170 people (37.7%); 41–50 year old, 42 people (9.3%); and 51–60 years old, 7 (1.6%). In terms of religion, the participants were primarily Buddhists, 416 people (92.2%), together with 26 Christians (5.8%) and 9 Muslims (2%). In terms of work experience, 198 of the subjects had worked for 1 to 5 years (43.5 %); 136 staff members had 10 years of work

experience; 33 had 11–15 years of experience (29.5%); while 42 (42 %) had more than 15 years (16%) experience. In terms of their work department, 50 staff members (11%) worked in the outpatient department; 166 (36.8%) in the outpatient department; and 285 in inpatient departments (63.2%). The majority had the ability to communicate in a foreign (second) language, comprising 441 English speakers (91.8%), 20 Arabic speakers (3.5%), 3 Chinese speakers (0.7%), as well as other languages, including Cambodian, Lao, Korean, Malaysian, and 26 speakers of Japanese (5.7%). The test results showed that all the observed variables had a normal curvature distribution based on the statistical significance test results for both skewness and kurtosis

Test of the hypothetical model

Table 2

Assumptions in the causal relationship model fitting with the empirical data (Kline, 2016)

	χ^2	SRMR	RMSEA	GFI	NFI	CFI	PNFI	χ^2/df	p
Threshold value		<.08	<.08	≥.90	>.90	≥.90	≥.50	<5.0	<0.05
Index value	499.34	0.078	0.072	0.97	0.97	0.97	0.75	3.35	.00

In Table 2, the results of the data analysis revealed an acceptable fit (Kline, 2016) for SRMR, RMSEA, GFI, NFI, CFI, chi-square correlation (χ^2/ df) as tested for the hypothetical model. The results were SRMR = 0.078, RMSEA = 0.072, GFI = 0.97, NFI = .97, CFI = 0.97, (χ^2/df) = 3.35 and therefore it could be concluded that the causal model of cultural care behavior was in accordance with the empirical data.

In Table 3, the results show that the cultural competence had a direct effect on cultural care behavior, while cultural attitudes and cross-cultural experience had an indirect effect on cultural care behavior. Perceived organization support had a direct effect on cultural care behavior. These variables were explained by a cultural care behavior coefficient (R^2) of 0.84, while cultural attitude and cross-cultural experience had a direct effect on cultural competence. These variables explained the cultural competence coefficient (R^2) of 0.50.

Table 3

Standardized direct, indirect and total effects of the model (n=451)

Exogenous variables	Endogenous variables					
	Cultural competence			Cultural care behavior		
	DE	IE	TE	DE	IE	TE
Cross-cultural experience	0.22	-	0.22	-	0.14	0.14
Cultural attitudes	0.88	-	0.88	-	0.55	0.55
Perceived organization support	-	-	-	0.11	-	0.11
Cultural competence	-	-	-	0.63	-	0.63
R^2	0.50			0.84		

Note. DE = Direct effect, IE = Indirect effect, TE = Total effect.

Table 1

Intercorrelations between observed variables (N= 451)

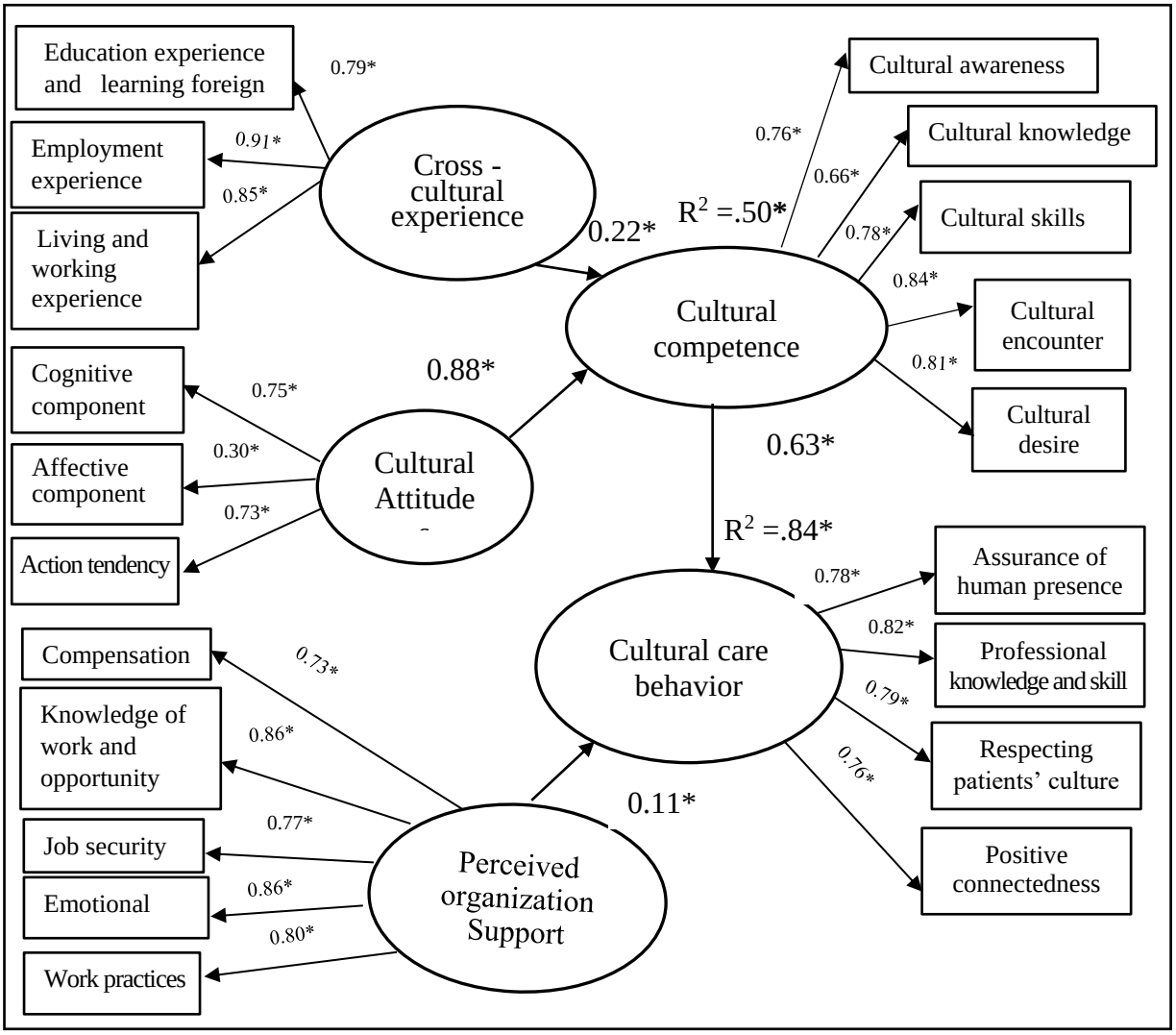
Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	**1**																			
2	0.67**	1																		
3	0.62**	0.74**	1																	
4	0.59**	0.63**	0.62**	1																
5	0.45**	0.44**	0.55**	0.45**	1															
6	0.41**	0.43**	0.44**	0.49**	0.58**	1														
7	0.43**	0.49**	0.48**	0.48**	0.71**	0.65**	1													
8	0.45**	0.40**	0.39**	0.36**	0.65**	0.49**	0.62**	1												
9	0.34**	0.29**	0.37**	0.28**	0.62**	0.49**	0.62**	0.76**	1											
10	0.20**	0.25**	0.14**	0.35**	0.12**	0.21**	0.26**	0.12**	0.06*	1										
11	0.15**	0.27**	0.19**	0.31**	0.085**	0.15**	0.21**	0.06**	0.01	0.70**	1									
12	0.23**	0.25**	0.17**	0.31**	0.06**	0.16**	0.20**	0.09**	0.03**	0.63	0.74**	1								
13	0.29**	0.26**	0.30**	0.24**	0.50**	0.45**	0.49**	0.57**	0.62**	0.09**	0.01	0.04	1							
14	0.006	-0.02	0.01	-0.10*	0.13**	0.03	0.09*	0.18**	0.24**	-0.32**	-0.39**	-0.32**	0.20**	1						
15	0.31**	0.32**	0.31**	0.28**	0.42**	0.39**	0.47**	0.56**	0.57**	0.05*	0.066*	0.016	0.53**	0.06	1					
16	0.16**	0.19**	0.16**	0.16**	0.21**	0.16**	0.16**	0.11**	0.12**	0.11**	0.20**	0.13**	0.17**	-0.03	0.173**	1				
17	0.29**	0.23**	0.18**	0.24**	0.22**	0.23**	0.19**	0.26**	0.21**	0.19**	0.23**	0.22**	0.28**	0.01	0.26**	0.61**	1			
18	0.25**	0.28**	0.23**	0.28**	0.31**	0.24**	0.30**	0.30**	0.27**	0.14**	0.26**	0.17**	0.25**	0.014	0.25**	0.65**	0.66**	1		
19	0.24**	0.18**	0.14**	0.24**	0.23**	0.25**	0.25**	0.27**	0.25**	0.18**	0.20**	0.19**	0.24**	0.025	0.26**	0.61**	0.63**	0.78**	1	
20	0.35**	0.27**	0.24**	0.32**	0.31**	0.31**	0.35**	0.38**	0.37**	0.17**	0.15**	0.18**	0.33**	0.13**	0.30**	0.52**	0.63**	0.65**	0.74**	1

** p <.01

Note. 1= Assurance of human presence 2= Professional knowledge and skill 3= Respecting patients' culture 4 = Positive connectedness
5= Culture awareness 6= Cultural knowledge **7**= Culture skill 8= Cultural encounter 9= Cultural desire 10= Education experience/Learning foreign lan2) 11= Employed Experience 12=Living or Working 13= Cognitive 14= Affective 15= Action tendency 16= compensation 17= knowledge of work and opportunities; 18= job security 19= emotional 20=work practices

Figure 3

Cultural care Behavior model based on cultural competence and perceived organization support



*Note. *p < .05*

Discussion

The main purpose of this study was to examine the causal model and to identify the important causal variables that could affect cultural competence and cultural care behavior among professional nurses according to the empirical data. The path coefficient of the final model was evaluated. It was found that cultural competence had a direct effect on cultural care behavior, while cultural attitude and cross-cultural experience had a direct effect on cultural competence, which provided evidence to support the view that nurses who take care of patients need to be culturally competent, which would result in them developing cultural care behaviors. These findings therefore confirmed the previous model of cultural competence as well as the previous findings that cultural attitude and cross-cultural experience have a direct effect on cultural competence, whereby increased cultural competence would lead nurses to show respect, knowledge, and skills to form positive relationships and provide good nursing care.

This study assessed cross-cultural experience based on education and training, working, and living with a foreigner. The results are in accordance with those of Tavallali et al. (2014), who found that the important factors to develop the cultural competence of nurses were awareness, experience of minority ethnic nursing, language skills, cross-cultural encounters, nursing education, personal attributes, and cultural sensitivity. Moreover, this result is in accordance with the results of Almutairi et al. (2017), who found that cross-cultural experiences have a direct effect on cultural competence; Kardong-Edgren et al. (2005) found that attitude has a correlation with cultural knowledge for caring for patients from different cultures, while Ahn (2017) found that multicultural experience and an ethnocentric attitude had direct and indirect effects on nurses' cultural competence. However, the findings of this study provide evidence of the need to enhance the cultural competence effect on cultural care behavior, which has not been studied in the past.

Additionally, the findings of this study showed that perceived organizational support had no effect on the nurses' cultural competence, which differed from the results found by Ahn (2017), who reported that perceived organization support had a direct effect on cultural competence. However, this study found that perceived organization support did have an effect on the nurses' cultural care behavior, indeed it had a direct effect on cultural care behavior. The finding of this study can be explained by the theoretical social cognitive theory of Bandura (1986), whereby personal factors as one key aspect of cross-cultural experience and cultural attitudes together with environmental factors, such as perceived organization support, influence personal behavior and cultural care behavior. Moreover, the perceived organizational support directly affected the cultural care behavior of the organization around the nurses, by supporting training and through their policies, including by providing patients with information and educational material in foreign languages, as well as by providing interpreters. When nurses encountered and faced their nursing practice in a culturally diverse context, they were initially only aware of their own culture, so they integrated this difference in their relationships, and thus needed cultural awareness and competence to help deal with differences more appropriately. Nurses and student nurses communicate with each other and with patients, and this communication is at the heart of building relationships and interactions with patients that are appropriate for a culturally diverse context. They received support learning from their organizations to build cultural knowledge and to better understand the culturally diverse health beliefs, values, and lifeways of patients. If nurses have cultural competence, then applying action-based cultural care behavior, such as respect and good interactions with patients, could provide them with the knowledge and skills to take care of patients in accordance with cultural diversity. Therefore, if nurses have cultural competence, they will demonstrate cultural care behavior. This study could offer a theoretical basis to develop a training program on cultural competence and cultural care behavior for foreign patient care.

A previous study by Garneau & Pepin (2015) found that when nurses and student nurses were confronted with cultural differences, they adapted appropriate nursing care for such patients so that they could receive effective, quality care. Nurses' positive cultural attitude had effects on their cultural competence because they were willing to care for culturally diverse patients. The study of Tavallali et al. (2014) showed the perception and experience of nurses' cultural competence was important, whereby if a nurse lacked cultural competence, then their patient was more likely to feel frustrated and insecure, which would be different from a patient who has experience with a nurse who has cultural competence, such that they felt respect, understanding, and satisfaction. This study can help anyone develop interventions on how to help nurses improve awareness, communication, and encounters with patients by sharing previous experiences and adjusting their attitudes for improving the outcome of nursing care and patient satisfaction.

Conclusion

This study reviewed a theoretical model designed to explain the cultural competence and cultural care behaviors of nurses with at least one year of previous experience of caring for foreign patients in a private international hospital. The hypothetical model was based on the social cognitive theory of (Bandura, 1986). The model included a review of the literature, revised CFA, and examined the causal models of cultural competence and the cultural care behavior of nurses. Furthermore, the model supported the direct and indirect paths proposed in six out of nine hypotheses tested in the present study. The factors that had a direct and indirect impact on the cultural care behavior of nurses were cultural competence, perceived organizational support, cultural attitude and cross-cultural experience. Furthermore, cultural attitude and cross-cultural experience had a direct impact on cultural competence.

The recommendations for this study are that there is a need to enhance the cultural competence of nurses to improve their cultural care behavior using a development program to improve cultural encounters and cultural desires. The organization should support employees, especially in terms of training and opportunity, compensation, job security, emotional factors, and work practices.

Limitations and Suggestions for Future Research

This study collected data from private international hospitals in Bangkok. Therefore, the research results could not be generalized to all nurses working in all hospital, such as government hospitals, with foreign patients because of the different context.

This study has a suggestion for conducting research, which is to change the study to a qualitative research design to help explain the cause of cultural competence and cultural care behavior in difference contexts.

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