

รูปแบบสมการโครงสร้างของสมรรถนะทางวัฒนธรรมของพยาบาลไทย A Structural Equation Modeling of Cultural Competence among Thai Nurses

นิพนธ์ฉบับ

Original Article

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บทคัดย่อ

วัตถุประสงค์: เพื่อทดสอบรูปแบบสมการโครงสร้างเกี่ยวกับปัจจัยที่เกี่ยวข้องของสมรรถนะทางวัฒนธรรมของพยาบาลไทย ได้แก่ การได้รับการสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กร ทัศนคติพันธุ์ ประสพการณ์ความหลากหลายทางวัฒนธรรม และการปรับตัวของพยาบาล **วิธีการศึกษา:** การวิจัยแบบทดสอบรูปแบบมีกลุ่มตัวอย่างคือพยาบาลวิชาชีพที่มีประสบการณ์การทำงานอย่างน้อย 6 เดือนจำนวน 470 คน อายุเฉลี่ย 34.6 ปี คัดเลือกโดยการสุ่มแบบหลายขั้นตอนจากโรงพยาบาล 8 แห่ง ทั้งภาครัฐและเอกชน ใน 4 จังหวัดที่มีผู้ป่วยชาวต่างชาติเข้ารับบริการ ระยะเวลาการเก็บข้อมูลตั้งแต่เดือนกรกฎาคม - ธันวาคม พ.ศ. 2563 เครื่องมือวิจัยประกอบด้วย แบบวัดสมรรถนะทางวัฒนธรรมของพยาบาล แบบวัดทัศนคติพันธุ์ แบบวัดประสพการณ์ความหลากหลายทางวัฒนธรรม แบบวัดการได้รับการสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กร และแบบวัดการปรับตัวของพยาบาล ใช้การวิเคราะห์สมการโมเดลโครงสร้าง **ผลการศึกษา:** สมการโครงสร้างที่ปรับปรุงแล้วเข้าได้กับข้อมูลที่ปรากฏ ($\chi^2 = 32.860$, $df = 21$, P -value = 0.048, $CMIN/df = 1.565$, $GFI = 0.984$, $CFI = 0.988$ และ $RMSEA = 0.035$) พบว่าปัจจัยทั้ง 4 ร่วมกันอธิบายความแปรปรวนของสมรรถนะทางวัฒนธรรมของพยาบาลไทยได้ร้อยละ 49.0 พบว่าทัศนคติพันธุ์ ประสพการณ์ความหลากหลายทางวัฒนธรรม และการได้รับการสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กรมีอิทธิพลทางอ้อมต่อสมรรถนะทางวัฒนธรรมของพยาบาลผ่านการปรับตัว และพบว่าการได้รับการสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กรและการปรับตัวมีผลทางตรงต่อสมรรถนะทางวัฒนธรรมของพยาบาล **สรุป:** รูปแบบสมการโครงสร้างที่ปรับปรุงแล้วมีความเหมาะสมต่อข้อมูลที่ปรากฏ การได้รับการสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กรและการปรับตัวของพยาบาลควรได้รับการส่งเสริมอย่างต่อเนื่องเพื่อให้เกิดสมรรถนะทางวัฒนธรรมอย่างเต็มของพยาบาลไทยต่อไป

คำสำคัญ: การปรับตัว, ทัศนคติพันธุ์, ประสพการณ์ความหลากหลายทางวัฒนธรรม, สมรรถนะทางวัฒนธรรมของพยาบาล, การสนับสนุนทางสมรรถนะทางวัฒนธรรมขององค์กร

Abstract

Objective: To examine the hypothesized structural equation modeling (SEM) of cultural competence with 4 factors including ethnocentric attitude, multicultural experience, organizational cultural competence support, and adaptation among Thai nurses. **Method:** In this model-testing study, a multi-stage random sampling was used to recruit participants from 8 hospitals, with 4 governmental and private hospitals each, serving a large number of foreign clients. The participants were 470 registered nurses with at least 6 months of working experiences with a mean age of 34.6 years. Data were collected from July to December 2020 using the Cultural Competence scale for Clinical Nurses, the Generalized Ethnocentrism scale, the Multicultural Experiences questionnaire, a subscale of the Cultural Competence Assessment, and the Goal Adjustment scale. SEM analysis was conducted. **Results:** The modification of the hypothesized model fitted the data well ($\chi^2 = 32.860$, $df = 21$, P -value = 0.048, $CMIN/df = 1.565$, $GFI = 0.984$, $CFI = 0.988$ and $RMSEA = 0.035$). All 4 factors accounted for 49.0% of variance of nurses' cultural competence. Ethnocentric attitude, multicultural experience, and organizational cultural competence support had indirect effects on cultural competence through adaptation. In addition, organizational cultural competence support and adaptation had direct effects on cultural competence. **Conclusion:** The findings suggest that this SEM of nurses' cultural competence fitted the empirical data. An intervention to promote organizational cultural competence support and adaptation should be developed and implemented for Thai nurses to achieve an optimal cultural competence.

Key words: adaptation, ethnocentric attitude, multicultural experience, nurses' cultural competence, organizational cultural competence support

Editorial note

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Introduction

Globalization is originally interactions of economic process and associated with background, cultural and social aspects of each country, particularly in developing countries such as Thailand.¹ One aspect of Thailand's policy has been

encouraging the other countries in Thai business and a well-known tourist destination for many decades, as well as a medical tourism which has become well known in the present decade.² Thailand also allows foreign workers and hosts for

tourist business from around the world. In 2017, the report showed that there was a total number of 24,500,616 foreign workers in Thailand.^{3,4} The groups of foreigners visiting Thailand included tourists (60%), ASEAN Economic Community (AEC) workers (30%), multi-countries workers (5%), and others (5%).⁴ From these numbers, it was approximately 3,400,000 and 1,200,000 foreigners visiting public hospitals (33.4 %) and private hospitals (22%)⁵, respectively. According to the statistics of hospital visits by foreigners, these numbers should remind the health care organizations in promoting and preparing resources for healthcare services including facilities and healthcare workers especially nurses who comprise the biggest proportion of health service providers that provide care directly for clients from across cultures.⁶

To provide a better nursing care, cultural competence is needed. Nurse's cultural competence is the personal ability to provide nursing practice and communication effectively and appropriately for people from different backgrounds and cultures.⁷ The important components of cultural competence consist of cultural awareness, cultural sensitivity, cultural knowledge and cultural skills. Cultural awareness is the transformation of the consciousness of nurses to the different beliefs, norms, values and lifestyles of people. Cultural sensitivity refers to nurses' perception, comfort and respect for the clients from different cultures. Cultural knowledge is nurses' attainment of a sound educational base about various cultural groups to a better understanding of the different values, beliefs and the manner of clients. Cultural skills are the competence to perform the cultural assessment to collect the cultural data on a client's present illness.^{7,8} Moreover, nurses should be aware and make sense of different situations to understand nurses' cultural competence to promote good nursing practice resulting in good care outcomes.⁹

According to the transcultural nursing immersion experience model¹⁰ and related literatures, several factors have influenced nurses' cultural competence. This model proposes the convergence of a multifactor which continue to identify the requirement to educate nurses for performing culturally focused and appropriate care with understanding of diverse and universal cultural-based care factors.¹¹ This is described as the process of nurses' perception and the matrix of personal and professional growth through a transcultural immersion experience in the outcomes of nurses' cultural competence. The major components comprise of ethnocentric

attitude, multicultural experience, organizational cultural competence support, and adaptation.

An ethnocentric attitude is a person's belief that describes how individuals judge others based on their personal cultural standards which are believed to be better than others.¹¹ This attitude has influenced nurses' cognition and may undermine the capability of nursing staff to provide appropriately care services.^{11,12} A negative attitude toward a certain culture may lead to a poor nursing care, affecting the care outcomes. The previous study has reported that prejudice against minorities' social belief and racist attitudes can lead to negative effects on one's cultural competence and ethnocentric attitudes.^{13,14}

Nurses' multicultural experience is a context-specific interpersonal process characterized by nursing practice, interpersonal sensitivity, and intimate relationships with clients from different cultures.¹⁵ Furthermore, it has a high influence over both direct and indirect on nurses' cultural competence. By definition, multicultural experience is defined as the time spent in different cultural zones, attitudes toward people who have been in different cultural backgrounds and interaction with them.^{16,17} The nurses' experience in caring for clients who have different culture is demanding and challenging because it consists of constant tension among barriers, cultural manifestations and the ethical responsibility of care, incipiently revealing all of cultural competency.¹⁸ Nurses' multicultural experience can be beneficial to nurses since they are able to make their own essential contribution for multicultural approaching in delivering appropriate nursing care and other healthcare services and offer the extensive knowledge and skills base on the myriad cultural specifics.¹⁹ Responding and understanding in a multicultural environment in healthcare organization is very important for nurse-client relationship which can improve the standard of care and the job satisfaction.

Organizational cultural competence is a set of principles and values that associated with demonstration, attitudes, and behaviors.²⁰ The policies and structures launched by an organizational level can be effective on work across cultures from organizational service plan. The organization must focus on the diversity, conduct self-assessment, manage the trend of difference, and acquire and institutionalize cultural knowledge that lean and adapt to the difference culture, and the value contexts of the communities it serves. To provide care with cultural competence systematically, nurses need supports from their organization including appropriate

knowledge of different cultures and adaptation to achieve their cultural competence.^{20,21} Moreover, organizational climate and culture have directly influenced nurses' cultural competence. Organizational support plays an important part in encouraging nurses' engagement in their workplace. Once they are engaged to the workplace, their job satisfaction could be increased and this would be powerful in improving the nurses' cultural competence.²⁰

Additionally, nurses who work in providing care for clients with multicultural aspect may have to deal with conflict due to their culture and belief which is different from clients'. Cultural competence may help the nurse to adapt and cope with such situation resulting in reduced anxiety and feeling of uncertainty. Thus, nurses who have been well trained in cultural competence may adapt and cope easily to unplanned situations related to cultural differences and contribute to a good quality in nursing care.²¹

Adaptation is a factor of an individual's conceptualizations for improving and performing when facing any situations. It is a set of personal interrelated systems including biological, psychological, and social parts in which an individual strives to maintain a balance between all systems that strive to live within a unique band in which they can cope and adapt adequately.²² Nurses' adaptation depends on a personal possession of understanding, knowledge, and skills about cultural differences and the adaption helps the nurse providing healthcare services with appropriate cultural care. Nurses' adaptation is described as a principle of effective nurse's work in a given assignment. It is used when the nurses provide care for a client individually as well as in a community.²³ While providing care for foreigner clients, nurses' adaptation consists of the goal adjustment that includes the disengagement adjustment and reengagement adjustment.²⁴ The adjustment is particularly essential for nurses' adaptation because they can learn to perform their professional duty. In addition, to perform social duties involving clients with cultural differences is associated with nurses' cultural competence.²⁵

Nurses' cultural competence is important in today's healthcare service where cultural value has an essential impact on caring process, medical treatment choices, quality of nursing care, and other aspects of the clients care.²⁶ Although nurses' cultural competence has been studied for more than 30 years around the world, previous studies have rarely found evidence in the Thai context that directly describe Thai nurses' cultural competence when providing care for

foreigner clients especially the tourists. To the best of our knowledge, a study that describes structural equation modeling of factors including ethnocentric attitude, multicultural experience, organizational cultural competence support and adaptation would show how the factors affect nurses' cultural competence. Moreover, the findings could be used as a guidance for nursing school curriculum in preparing nursing students to work in the clinical setting and for healthcare service organizations that provide care and treatment for foreigner clients. In addition, health policy related to nursing practice with appropriate cultural competence could be suggested.

Based on our literature reviews, relationships of cultural competence with study factors among Thai nurses based on the transcultural nursing immersion experience model was hypothesized using the structural equation modeling (SEM) (Figure 1).¹⁰ The objective of this study was to examine the hypothesized relationships between cultural competence and its related factors using the structural equation modeling. The examined hypotheses were: H1) Ethnocentric attitude had a negative, direct, and indirect effect on cultural competence through multicultural experience, organizational cultural competence, and adaptation, H2) Multicultural experience had a positive, direct, and indirect effect on cultural competence through adaptation, H3) Organizational cultural competence support had a positive, direct, and indirect effect on cultural competence through adaptation, H4) Adaptation had a positive, direct effect on cultural competence, and H5) Ethnocentric attitude, multicultural experience, organizational cultural competence support, and adaptation had influence on cultural competence among Thai nurses.

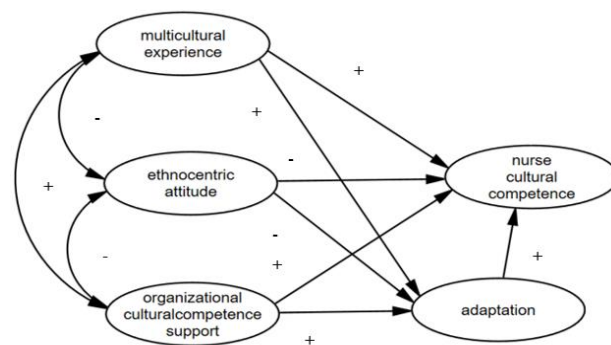


Figure 1 The hypothesized model of cultural competence among Thai nurses.

Methods

A cross-sectional model-testing study design was used in this study. The target population was registered nurses (RNs) working in a tertiary hospital, and a multi-stage random sampling was used to select the participants (Figure 2). Firstly, a convenience selection was done to select the area where a large number of foreigners visited, and four places including Bangkok, Phuket, Pattaya, and Chiangmai were chosen. Secondly, one governmental hospital under the Ministry of Public Health of Thailand and one private hospital of each setting was randomly selected into a cluster. A total of eight tertiary hospitals (4 governmental hospitals and 4 private hospitals) were recruited. Thirdly, 60 RNs who met the inclusion criteria from each hospital were randomly selected. They were total 30 RNs from emergency department (ED) and out-patient department (OPD) and 30 RNs from in-patient department (IPD). Finally, a total number of 470 participants including RNs, practicing nurses, and nurse administrators who had at least 6 months of work experiences, were randomly sampled into in this study. To collect the data, the head nurse of each target hospital was asked for the permission before the data collection started and he/she was asked to assist in the data collecting procedure.

A proper sample size for structural equation modeling often requires 30 cases per estimate parameter.²⁷ With 13 estimate parameters, a total of 390 cases were needed. To compensate for a 20% incomplete data²⁸, a total of 468 participants were required. At the end of the study, 470 participants were recruited.

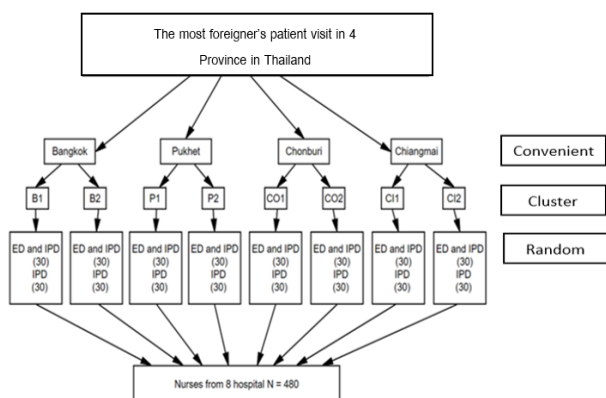


Figure 2 A multi-stage random sampling technique of the study.

Note:

- B1 = A government hospital in Bangkok CO1 = A government hospital in Chonburi
 B2 = A private hospital in Bangkok CO2 = A private hospital in Chonburi
 P1 = A government hospital in Phuket CI1 = A government hospital in Chiangmai
 P2 = A private hospital in Phuket CI2 = A private hospital in Chiangmai

Research instruments

Five existing research instruments were used in this study. The permission to translate and use the instruments was obtained from the developers. The details of each research instrument were as follows. The first section was developed by the researchers to collect the participant's demographic characteristics including gender, age, marital status, education, monthly income, working ward, general work experience and experience working with clients from different cultures.

The second section contained scales measuring cultural competence and related factors. Cultural competence was measured by the Cultural Competence Scale for Clinical Nurses (CCSCN)²⁹. The questionnaire contains 33 items measuring cultural awareness (6 items), cultural knowledge (7 items), cultural skills (8 items) and cultural sensitivity (12 items). The participants were asked to rate on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Each statement was scored, and its total score was calculated by simple addition of the scores for individual items. With a total score range from 33 to 231 points, higher scores represent higher cultural competence. The scale had a high internal consistency reliability with a Cronbach's alpha coefficient of 0.88 for the original English version²⁹, and 0.92 for the Thai version in this present study.

Ethnocentric attitude was measured by the Generalized Ethnocentrism Scale (GES)³⁰ which contains 22 items. The participants were asked to rate on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) (e.g., "I have little respect for the values and customs of other cultures"). A total score range from 22 to 110 points with higher scores indicate higher ethnocentrism. The scale had a high internal consistency reliability with a Cronbach's alpha coefficient of 0.80 for the original English version³⁰, and 0.89 for the GES Thai version in this present study.

Multicultural experience was measured by the Multicultural Experiences Questionnaire (MEQ).³¹ The MEQ contains 15 items with a 6-point rating scale, ranging from 1 (never used) to 6 (used a lot). A total score range from 15 to 90 points with high scores indicate higher multicultural experience (e.g., "I work with people with cultural/racial/ethnic backgrounds different from my own"). This original MEQ had an acceptable internal consistency reliability with Cronbach's alpha coefficients of 0.80.³¹ The Thai MEQ version also had an

acceptable internal consistency reliability in this study (Cronbach's alpha coefficients of 0.84).

Organizational cultural competence support was measured by an 8-item subscale of the Cultural Competence Assessment (CCA).³² With a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), a total score of 8 - 32 points were obtained where higher scores indicate higher organizational cultural competence support. This original subscale had an acceptable internal consistency reliability (Cronbach's alpha coefficient of 0.80).³² In this study, the Thai-version organizational cultural competence support also had an acceptable internal consistency reliability (Cronbach's alpha coefficient of 0.82).

Lastly, adaptation was measured by the Goal Adjustment Scale (GAS) which directly measures nurses' adaptation in cultural adjustment and how they solve uncertain situation in caring for foreigner clients.²⁴ The GAS comprises of 16 items divided into two subscales including the 10-items Goal Disengagement subscale and the 6-items Goal Reengagement subscale. The participants were asked to rate on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) with negative items requiring score reversing before summing up. With a total score of 10 - 50 points, higher scores indicated higher goal adjustment. The original scale has an acceptable internal consistency reliability with a Cronbach's alpha coefficient of 0.80.²⁴ Similar reliability was also found in the Thai version GAS in this study (Cronbach's alpha coefficient of 0.80).

Translation of the research instruments

All five existing instruments including CCSCN, GES, MEQ, CCA, and GAS were originally written in English. After receiving permission to translate and use the instruments, all original English versions were translated into Thai using a back-translation technique as recommended by Cha and colleagues.³³ First, two Thai native bilingual translators independently translated all selected questionnaires from English into Thai. Thereafter, the first Thai version questionnaires were compared and the differences from each translation were resolved. Next, the Thai translated questionnaires were given to another bilingual translator to back-translate from Thai to English without access to the original questionnaires. The back-translated questionnaires were then checked and compared with the original English

versions by all researchers. This process would detect noteworthy discrepancies in the translation process.

Protection of human participants

This study was ethically approved by the Institutional Review Board (IRB) of Burapha University (G-SH 008/2563, March 6th, 2020) and of each target hospital (BMH 8106/0274, May 6, 2020; PKH 8106/0273, June 29, 2020; PH 0306.28/144, May 15, 2020; NPH 09181/190, July 13, 2020; BKH 04-2563, June 25, 2020; VPH REC 016/2020, June 29, 2020; BCM IRB 2020-05-002, June 5, 2020; BKH 8106/0277, June 20, 2020). The permission to conduct the study were obtained from each hospital before data collection started. The participants were assured that their rights of human subjects in research involving human were protected. They were asked to participate in the current study voluntarily and they were then informed verbally and via information sheets regarding the objectives of the study, data collection procedures, voluntary and confidentiality nature of the study, and summary data presentation. The consent form was signed before the data collection started. Moreover, they were also informed that they had the right to refuse to participate in the study and/or withdraw from the study at any time without any effect on their work or promotion opportunities. The questionnaires were completed by the participants during their private time, and it took about 10 - 15 minutes.

Data analysis

Descriptive statistics including mean with standard deviation and range, and frequency and percentage were used to describe demographic information of the participants and the study variables. The relationships between all variables and the hypothesized model of direct and indirect effects were tested with SEM using AMOS program. To confirm the data's structure fit, five standard goodness-of-fit indices and cut-off values were set including χ^2 (CMIN *P*-value > 0.05), χ^2/df (CMIN/df < 2), Goodness of Fit Index (GFI 0.90 - 1.00), Adjusted Goodness of Fit Index (AGFI 0.90 - 1.00), Root Mean Square Error of Approximation (RMSEA < 0.05 - 0.08).²⁸ Assumptions underlying SEM analysis were tested including normality, outliers, linearity, and multicollinearity. Statistical significance was set at a type I error of 5%.

Results

A total of participants were 470 registered nurses from seven hospitals with 60 for each, and 50 for a southern private hospital. Most of them were female (96.6%) with the age range of 22 - 60 years old (mean = 34.68 ± 9.52). The majority was single (61.1%) and most of them had education level of Bachelor's degree in nursing (93.0%). Average year in nursing experience was 11.53 ± 9.43 years ranging from 1 - 35 years. About one half of them had been working in the IPD (48.5%), followed by the OPD (31.3%), and the ED (20.2%).

A univariate outlier was examined for each variable to confirm being free of data outliers. A standard scored and a multivariate outlier was also examined by using Mahalanobis distance and the results revealed that there were 15 outliers. Therefore, a total number of 455 samples were used for data analyses in SEM.

With the results of the overall model fit of $\chi^2 = 31.641$, CMIN = 31.641, df = 19, *P*-value = 0.034, CMIN/df = 1.665, GFI = 0.985, NFI = 0.970, TLI = 0.977, CFI = 0.988, RMSEA = 0.038, and RMR = 0.134, the hypothesized model did not fit with the empirical data (Table 1). After model modifications, the indices for goodness-of-fit were $\chi^2 = 32.860$, df = 21, *P*-value = 0.048. CMIN/df = 1.565, GFI = 0.984, NFI = 0.969, TLI = 0.980, CFI = 0.988, RMSEA = 0.035, RMR = 0.113 (Tables 1 and 2, Figure 3). Despite a borderline significance of *P*-value of 0.048, the CMIN/df of the modified model which is the most important index for goodness-of-fit was less than the criterion value of 2.³⁴ Therefore, the modified model had an acceptable adequacy of the goodness-of-fit of the causal model.

Table 1 Statistics of model fit index between the hypothesized model and modified model (N = 455).

Model fit criteria	Acceptable value	Hypothesized model	Modified model
CMIN	<i>P</i> -value > 0.05	$\chi^2 = 31.641$, <i>P</i> -value = 0.034 (df = 19)	$\chi^2 = 32.860$, <i>P</i> -value = 0.048 (df = 21)
CMIN/df	< 2	1.665	1.565
GFI	0.95 - 1.00	.985	.984
CFI	0.95 - 1.00	.988	.988
RMSEA	< 0.03	.134	.035

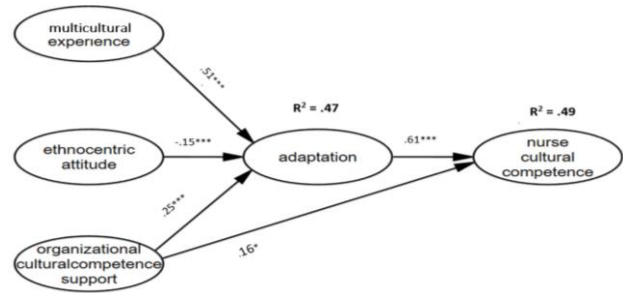


Figure 3 The modified model of nurse cultural competence.

Note: $\chi^2 = 32.860$, df = 21, *P*-value = 0.048, CMIN/df = 1.565, GFI = 0.984, NFI = 0.969, TLI = 0.980, CFI = 0.988, RMSEA = 0.035, and RMR = 0.113.

Table 2 Parameter estimates of the direct (DE), indirect (IE), and total (TE) effects of the modified model of nurse cultural competence.

Variables	ADAP			NCC		
	DE	IE	TE	DE	IE	TE
ETHNO	-0.151*	-	-0.151*	-	-0.093*	-0.093
MUC	0.509†	-	0.509†	-	0.312*	0.312*
ORC	0.249†	-	0.240†	0.158*	0.153*	0.310*
ADAP	-	-	-	0.614†	-	0.614†
	<i>R</i> ² = 0.47			<i>R</i> ² = 0.49		

* *P*-value < 0.05, † *P*-value < 0.001.

Note: ETHNO = Ethnocentric attitude, MUC = Multicultural experience, ORC = Organizational cultural competence support, ADAP = Adaptation, NCC = Nurse cultural competence.

Based on the modified model (Figure 3 and Table 2), relationships between nurse cultural competence and its influencing factors were as follows. With no direct effect of ethnocentric attitude on nurse cultural competence, it was found that ethnocentric attitude passed its negative, indirect effect on nurse cultural competence through adaptation ($\beta = -0.093$, *P*-value = 0.005). Like ethnocentric attitude, multicultural experience also had its positive, indirect effect on nurse cultural competence through adaptation ($\beta = 0.312$, *P*-value < 0.001) with no direct effect. The organizational cultural competence support was found to have both direct, positive effect ($\beta = 0.158$, *P*-value < 0.05) and indirect, positive effect on nurse cultural competence ($\beta = 0.153$, *P*-value < 0.05) through adaptation ($\beta = 0.249$, *P*-value < 0.001). Adaptation had solely direct, positive effect on nurse cultural competence ($\beta = 0.614$, *P*-value < 0.001). Finally, ethnocentric attitude, multicultural experience, organizational cultural competence support, and adaptation explained 49% of the variance of Thai nurse cultural competence ($R^2 = 0.49$).

Discussions and Conclusion

Ethnocentric attitude is a basic attitude expressing the belief that one's own ethnic group or one's own culture is superior to other ethnic groups or cultures, and that one's cultural standards can be applied in a universal manner. It is closely related to other attitudinal indicators for racism, xenophobia, prejudice, mental closure, and, more generally, an authoritarian personality structure.¹¹ The study results showed that ethnocentric attitude had no direct effect on cultural competence among nurse participants. This could be explained that the Thai nurse context affects the Thai nurses' attitude regarding equality. Likewise, the Thai nurse context is congruent with at a present of the global nursing context, a trend of equity among diversity is globally accepted. In addition, 44% of the participants were with the age of 20 - 30 years which is in the age group of new generation that seems to respect equity. Moreover, this study focused on nurses who worked in the hospitals located in tourist areas including Bangkok, Chiang Mai, Chon Buri and Phuket. The nurses who work in such areas may have more experiences to provide care for clients from abroad such as US, UK, EU, Australia, and Japan. Consequently, it is possible that these nurses may have no thoughts that their own culture is superior to others and may have no negative attitude against the foreign clients and provide care for them equally as for the locals. Thus, we did not find direct, negative effect of ethnocentric attitude on nurse cultural competence.

Thai nurses may have appropriate professional adaptation and they are polite based on their Thai cultural perspective. Although they may have thoughts about differences in cultural practices of the clients, their cultural background and professional adaptation leads them to take responsibilities in providing a good care to achieve a good quality of care and satisfactions for foreign clients.³⁵ Subsequently, this can be concluded that Thai nurses showed a proper cultural competence in providing nursing care for foreign clients.

Multicultural experience did not have a significant direct effect on nurse cultural competence in this study. This is because multicultural experience is an individual experience that is retrieved from one's live experience in different environment and culture. However, we found that multicultural experience had indirect effect on Thai cultural competence through adaptation. This finding can be described that Thai nurses perform self-learning well so they could adapt

themselves to care for clients with different culture. Adaptation to other cultures could be easy for young individuals as 44% of participants in our study were in their 20 – 30 years of age.

The young generation Thai nurse need to adapt themselves to the working environment, technology, and working system. Such adaptations help them achieve their cultural competence in the workplace and full potential happiness.^{35,36} Even though some Thai nurses had less multicultural experience, they learned the differences of cultural content by self-learning technique. Self-learning can be done in many ways and the easiest one is learning from online sources and social medias including television and online platforms such as Line™, Instagram™, and Facebook™. Nurses are able to learn how people work, create, contact, and exchange information and cognition in virtual communities through their cultural perspective. Thai nurses reported having internet connection through their mobile phone at dormitory and home. The most reported reason of media use was internet surfing and entertainment. Nurses spent 12 hours for online communication and less than 1 hour for online entertainment and online study/homework assignment.³⁶

The positive results of organizational cultural competence support were also mentioned. To ensure cultural competence, the organizations must ensure the availability of supports including assets, necessary supplies, staffing, linkages, and technology.³⁷ Kumra has determined whether an association exists between perceptions of organizational cultural competence and teamwork climate among employees in a health system, but senior leaders of healthcare systems should consider investment in cultural competence as a contributor toward team effectiveness.³⁸ Furthermore, organizations may help support cultural competence by committing resources for developing a comprehensive plan that addresses patients' cultural needs, recruiting and retaining a diverse staff and leadership, collaborating with the community, recognizing and rewarding care that meets patients' cultural needs, and providing adequate diversity training. To apply this matter from our results, we suggest that a director or manager should consider facilitating an organization's transformation towards cultural competence, and the organization's own culture and context must be considered to identify challenges and inform more effective change strategies.

Thai nurses' adaptation is considered a key to change and modify nursing procedure to become more appropriate for several situations and clients who have difference in cultural background based on organizations and healthcare policies. Thai nurses' adaptation has been cultivated since they graduated.³⁹ It is a strength of nursing quality and contributes to nurse cultural competence. Garneau and Pepin found that when nurses and student nurses were confronted with cultural differences, they adapted appropriate nursing care for such patients so that they could provide effective and quality care.⁴⁰ Nurses' positive cultural attitude had effects on their cultural competence because they were willing to care for culturally diverse patients. All of these can lead Thai nurses to make their own brands and maintain identity and strength in nursing profession.

This present study had certain limitations. A cross-sectional study with only four selected settings may limit generalizability to other settings. The participants had mainly experienced of care on tourist clients (mostly Westerns and East Asians). Their experiences may influence the results and cannot be used to describe the nurses who work with other multi-countries workers or AEC workers, or CLMV workers from Cambodia, Laos, Myanmar, and Vietnam. The research instruments were originally developed from western culture that was translated into Thai. Therefore, meaning of some items may not appropriate for Thai culture.

Implications based on our findings could be suggested. For nursing practice, cultural competence influences not only healthcare practices, but also how the nurse and the patient perceive illnesses and needs. Nurses should be aware of adaptation to the rules of interactions with specific cultural groups, such as communication patterns and customs, division of roles in the family unit, and spirituality. This finding would help nurses to gain a better understanding and change their attitudes to provide care for patients from different culture which can lead to a good quality of healthcare service. For public health policy, findings could be included in the nursing educational curriculum or organizational policy that provide a cultural competence practice for undergraduate and graduate nurses. The determination of cultural caring skill from nursing faculty is very important because it can be an important key for adaptation in Thai nursing standard.

The organizational cultural competence support is a significant factor that directly influences Thai nurse cultural competence. The health care center service in Thailand

should determine the policy for enhancing Thai nursing skill for caring foreigner patients including policy for a short course training for transcultural nursing and providing technological resources such as computer translation, communication signs, and document in several languages which are appropriate for foreign patients.

The future research regarding Thai nursing competence needs to focus on nurses who have experiences working with clients from neighbor countries such as Cambodia, Laos, Myanmar and Vietnam, since a number of workers from these countries have been increasing. A longitudinal study with more variety of settings and cultural backgrounds of clients should be further conducted to fulfill the understanding of Thai nurse cultural competence.

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