

Critical Thinking Dispositions and Self-esteem among Nursing Students

HNG SH¹, BRENDA BJ², NGU ZL³

¹Department of Nursing, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Jalan Jasmin, 43400 Serdang, Selangor, Malaysia

²National Heart Institute, 145, Jalan Tun Razak, 50400, Kuala Lumpur, Malaysia

³Department of Nursing, Faculty of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Jalan Yaacob Latif, Bandar Tun Razak, 56000 Cheras, Kuala Lumpur, Malaysia

ABSTRAK

Kemahiran pemikiran kritikal adalah satu kemahiran yang penting bagi para jururawat membuat keputusan klinikal yang lebih baik untuk memberi jagarawatan yang selamat. Seseorang mesti mempunyai kecenderungan awal untuk berfikir kritis bagi pembangunan kemahiran pemikiran kritikal. Pembentukan kecenderungan pemikiran kritis disokong oleh harga diri yang mencukupi. Kajian ini bertujuan untuk mengukur tahap kecenderungan pemikiran kritis dan harga diri di kalangan pelajar ijazah sarjana muda kejururawatan di sebuah universiti awam Malaysia. Kajian keratan rentas ini telah dijalankan di universiti melibatkan 99 orang pelajar. Data dikumpul dengan responden menjawab sendiri borang soal selidik. Data yang diperolehi kemudiannya dianalisa secara kuantitatif. Sejumlah 97% pelajar kejururawatan mempunyai tahap yang tinggi untuk mempunyai kecenderungan pemikiran kritis. Hampir 3/4 daripada pelajar kejururawatan mempunyai tahap sederhana bagi tanggapan harga diri (74.7%). Kecenderungan pemikiran kritis didapati signifikan berkait dengan tanggapan harga diri ($\rho = 0.203$, $p < 0.044$). Secara keseluruhannya, melalui kajian ini pelajar kejururawatan mempunyai kecenderungan pemikiran kritis yang tinggi dan tanggapan harga diri yang sederhana. Kedua-dua elemen ini adalah sangat penting untuk mereka menjadi seorang jururawat yang baik serta mempunyai kemahiran pemikiran kritikal di masa depan.

Kata kunci: harga diri, kecenderungan pemikiran kritis, pelajar kejururawatan

Address for correspondence and reprint requests: Hng Siew Hong, Department of Nursing, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Jalan Jasmin, 43400 Serdang, Selangor, Malaysia. Tel: +603-9769 2429 Email: hngsiewhong@upm.edu.my

ABSTRACT

Critical thinking skill is an important skill for nurses to make a better clinical decision in providing safe care. Critical thinking dispositions development is supported with sufficient self-esteem. The present study aimed to measure the level of critical thinking disposition and self-esteem among undergraduate nursing students in a public university in Malaysia. A cross-sectional study was carried out in a university involving 99 students. Data were collected by self-report questionnaires and analysed quantitatively. A total of 97% of the nursing student had a high level of critical thinking dispositions. Almost 3/4 of the students had a moderate level of perceived self-esteem (74.7%). The critical thinking dispositions were significantly related to perceived self-esteem ($p < 0.044$). Overall, the nursing student of this study had high critical thinking disposition and moderate self-esteem, which is very important for them to become a good nurse with critical thinking skill in the future.

Keywords: critical thinking dispositions, nursing students, self-esteem

INTRODUCTION

As a first responder in any medical issues, nurses are required to provide prompt services than any other medical care by providing care, which can cause a difference between life and death of the patients (Schottke et al. 2018). Nurses are able to provide a safe, effective and high quality of care with the presence of critical thinking skills (Benner et al. 2008). Nurses equipped with critical thinking skills will have better clinical decision-making skill in assessing and identifying the patient's needs. Therefore, nurses should be a good critical thinker as their job nature required this important skill. Critical thinking refers to interpretation, analysis, evaluation, inference and explanation on information gathered that used in problem-solving and decision-making. In order for a

person adept at critical thinking, she must have a preliminary disposition to think critically (Facione 1990). Individual characteristics are the major influencing factors on the development of critical thinking (Tuden et al. 2013). Sufficient self-esteem is one of the essential criteria in developing critical thinking dispositions (Barkhordary et al. 2009)

Several studies had investigated the critical thinking dispositions among nursing students (Barkhordary et al. 2009; Mohamed & Mohammed 2016; Pilevarzadeh et al. 2014; Salsali et al. 2013; Suliman & Halabi 2007). El-Hessewi et al. (2007) reported that critical thinking dispositions among nursing students were at a moderate level. Salsali and colleagues (2013) documented that Asian nursing students had lower critical thinking dispositions compared to non-

Asian nursing students. Even though there are several studies on critical thinking dispositions among nursing students, only a few studied about its relationship with self-esteem (El-Hessewi et al. 2007; Profetto-McGrath 2003; Salsali et al. 2013). Majority of the studies focused on the relationship between critical thinking dispositions and critical thinking skills (Salsali et al. 2013; Profetto-McGrath 2003). There is a study of critical thinking dispositions among undergraduate students in public university in Malaysia. However, the result of the study did not reflect on nursing student's since it was conducted on the non-medical field students (Ghani & Abdullah 2010). There is a paucity of study that examines the relationship between self-esteem and critical thinking dispositions among nursing students in the local setting. Therefore, this study aimed to measure the level of critical thinking disposition and self-esteem among undergraduate nursing students in a public university in Malaysia. Specific measures can then be taken to improve critical thinking dispositions and to increase the self-esteem level in nursing students.

MATERIALS AND METHODS

This study was a cross-sectional survey involving all undergraduate students in the nursing programme of a public university in Malaysia. It was a population-based study with total number of 110 respondents. The study population comprised of both male and female students with age ranging between 20 to 24 years. Students

who were on leave or postponed their studies, had working experience as nurses, and emotionally unstable were excluded from the study. All the students were selected from the students' name list which was given by the programme coordinators after approval obtained from head of department of nursing.

Data was collected by using a self-reported questionnaire which consisted of three parts. The first part of the survey consisted of only one socio-demographic question, which was the academic year. The second part measures the critical thinking disposition with a tool adopted from Malay translation of Short Form Critical Thinking Disposition Inventory Chinese Version (SF-CTDI-CV). It was translated into Malay version by Ruslan (Ludin 2018) and consisted of 18 items along with a six-point Likert scale with total score ranged from 18 to 108. The total score was categorised into a high and low level. Respondents' critical thinking levels were measured using the cut-off point of 50% from the total maximum scores obtained as reported by Facione and Facione (1997). The Cronbach's alpha coefficient for SF-CTDI-CV was 0.74. The third part of the questionnaire was the Malay version of Rosenberg Self-Esteem Scale (SES) (Jamil 2016), consisting of ten items with a five-point Likert scale. The total score ranged from 10 to 50 and was further categorized into three levels: high, moderate and low. Scores below 20 were considered as low-level self-esteem, 21 to 40 were moderate level and score above 40 were high level (Yusoff et al. 2016).

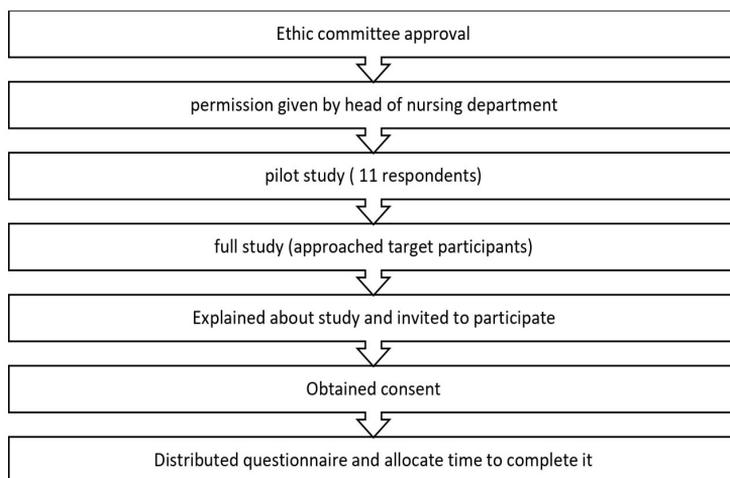


Figure 1: Flow chart for data collection process

The Cronbach’s alpha for the scale was 0.80. Data was collected after the approval was obtained from the Universiti Kebangsaan Malaysia Research Ethics Committee and Head of Nursing Department (FF-2019-184).

A pilot study was carried out on ten percent of the study population (11 respondents). The respondents involved in the pilot study were excluded from the actual study. Therefore, the total respondents for this study were 99. Both study instruments (Malay version of SF-CTDI-CV & SES) were tested again for reliability as it was used for different setting and population. The instruments were validated by two nursing lecturers. The Cronbach alpha value of 0.70 was obtained for Malay translation of the SF-CTDI-CV and 0.753 for Malay version of SES from the pilot study.

First, the researchers approached students from each academic year and identified those who met the inclusion and exclusion criteria of this study. The students, who were

eligible for this study, were explained about the research and given the study information sheet to read. The researchers emphasised to them that their participation in this research was voluntary and they had their right to withdraw from the study at any time and for any reason without any form of penalty. They were given adequate time to decide on the participation of this study. Those who agreed to participate were required to complete the informed consent form along with the questionnaire sheet. Both consent form and questionnaire were collected and checked by the researchers upon completion. The participants were asked to complete the consent form and the unanswered question or to clarify the errors if there were any. After it was completed, the consent form was kept separately, and the questionnaire was kept in an envelope and sealed as shown in Figure 1. All data collected was labelled with numbers without indication of the participant’s names in order to keep them anonymous and to

Table 1: Relationship between year of study and critical thinking dispositions of nursing students

Variables		Critical thinking dispositions				
		N	Mean Rank	Median	U value	p-value
Categories	Junior	50	201.07	65.00	1153.50	0.850
	Senior	49	195.40	66.50		

Note: $p \leq 0.05$

ensure their confidentiality.

All data were computerised and analysed using statistical package for social sciences (SPSS) version (IBM SPSS version 25.0 for Windows). Mann-Whitney U test was used to compare the total score of critical thinking dispositions among nursing students in the study setting for junior (year 1 and 2) and senior (year 3 and 4). Spearman Rank Order Correlation was used to determine the relationship between self-esteem and critical thinking dispositions among nursing students.

RESULTS AND DISCUSSION

This study successfully retrieved a total of 99 questionnaires, which gave a 100% response rate. There were 41.4% (n=41), 18.2% (n=18), 36.4% (n=36) and 4% (n=4) participants from year 1, year 2, year 3 and year 4 of study, respectively. The respondents were categorised into two categories consisting of junior (59.6%, n=59) and senior (40.4%, n=40).

The mean score for the total score of critical thinking dispositions among nursing students was 66.25 (SD=7.75). There were 97.0% (n=96) of the respondents' scored high level of critical thinking dispositions, and

only 3.0% (n = 3) of them scored low level of critical thinking dispositions. This result showed that most of the nursing students had high-level critical thinking dispositions which could be attributed to the implementation of active learning strategies such as problem-based learning and case-based learning among the students. This finding coincides with several previous studies. High level of critical thinking dispositions were reported among nursing students in China (Wu et al. 2017), among newly graduated nurses in Norway (Wangensteen et al. 2010) as well as first and the fourth year of nursing students in Jordan (Suliman & Halabi 2007).

Regarding the result of self-esteem among nursing students, the mean score was 36.35 (SD=5.59). A total of 24.2% (n=24) had a high level of self-esteem, while the majority of them, 74.7% (n=74), had a moderate level of self-esteem. There was only 1% (n=1) who had low level of self-esteem. This result clearly showed most of the nursing students had a moderate level of self-esteem. It is very likely that the activities such as team building, mentor-mentee and buddy system which have been implemented in the University's programme played a role to help in building up their self-esteem. Previous

studies had also revealed that most of the students show positive perception about their self-esteem (Ibrahim 2015), while nursing students had higher self-esteem compared to students in health vocational high school (Duruk 2017). Furthermore, a study showed that both Thailand and United Kingdom nursing students were having a high level of self-esteem (Sasat et al. 2002).

There was no significant difference in the total score of critical thinking dispositions for junior (mean = 66.34, SD = 8.44) and senior (mean = 66.13, SD = 6.69); $t(99) = 0.134$, $p = 0.123$, two-tailed (Table 1). This results indicated that there was no significant relationship between year of study and critical thinking dispositions of nursing students which could be due to similar teaching methods were used in both junior and senior year. This finding revealed that senior students had a similar level of critical thinking dispositions with junior students. However, the students need to have continuous development in critical thinking disposition, especially fourth-year nursing students as they would be graduating soon and become a registered nurse. Thus, different teaching method such as experience-based learning and real situation learning should be implemented to enhance critical thinking disposition among senior year students. Action needs to be taken in order to produce passionate, intellectual and competent nurses in the future. A study by Pilervarzadeh et al. (2014) also showed that no significant difference in the critical thinking dispositions between first-year and fourth-year nursing

students. El-Hessewi et al. (2007) reported similar findings whereby majority of the students showed a moderate score towards critical thinking dispositions regardless of their year of study.

The Spearman Rank Order Correlation analysis revealed a significant relationship between self-esteem and critical thinking dispositions ($r=0.203$, $p<0.005$) among the nursing students recruited in this study. The relationship was positive, indicating that higher the respondents' self-esteem, the higher was their critical thinking disposition. The reason for the significant positive correlation could be explained by sufficient self-esteem was essential and important for the development of critical thinking, proper judgement and decision making under different clinical conditions for students (Kowalczyk 2011). Similarly, Pilervarzadeh et al. (2014) and Barkhordary's (2009) also reported a positive relationship between self-esteem and critical thinking dispositions in their study.

CONCLUSION

This study showed that critical thinking and constructive criticism are very important skill and should be taught formally and learning system should not be memory-based. It is necessary to use active learning strategies in developing the students' critical thinking. Faculty members should pay attention to the opinions of students, ask higher-order and divergent questions, encourage students' participation in problem-solving discussion, increase student's

confidence with encouragement and emphasis on students' self-esteem. Seminar or workshop for teaching staff on teaching-learning strategy to enhance critical thinking dispositions among students should be organised by university. Nurse educator should be knowledgeable about critical thinking dispositions and strategies to assess their students. Such knowledge can help faculty members to use activities and strategies suitable for students to enhance critical dispositions that promote ideal critical thinker. This study could be expanded to a larger scale involving multiple universities students across the country in order to generalise the result to all nursing student in this country. A longitudinal design is recommended for future studies to examine the causal relationship.

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