



Faculty of Medicine and Health Sciences

**CRITICAL THINKING AND CARING BEHAVIOURS AMONG
UNIMAS UNDERGRADUATE NURSING STUDENTS.**

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72073

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ABSTRACT

Background: The changes in the healthcare services with an advanced technologies and knowledges have forced the nurses and nursing students to prepare themselves to have an excellence critical thinking skills and caring behaviours. Liu et al., (2019) stipulated that both critical thinking and caring behaviours are the crucial elements in professional nursing education. Some studies shown that both nurses and nursing students were struggling with their critical thinking skills (Akca & Selen, 2015) and (Lee et al., 2020). This indicated that the quality of care and the effectiveness of the services will be affected by the lack of critical thinking skills (Arli et al., 2017), and caring behaviours. **Objective:** To assess the level of critical thinking among UNIMAS undergraduate nursing students, to identify the perceived caring behaviours among UNIMAS undergraduate nursing students and to examine the relationships between critical thinking and caring behaviours among UNIMAS undergraduate nursing students. **Method:** Cross sectional research design with a quantitative approach was utilised in which a total of 133 of UNIMAS undergraduate nursing students were selected using the simple random sampling. **Result:** The findings of this study showed that the UNIMAS undergraduate nursing students possessed a moderate critical thinking and caring behaviours with the total mean scores of 69.54 (SD=7.749) and 121.46 (SD=18.804) respectively. There was a weak and statistically significant positive correlation between the critical thinking and caring behaviours ($r=0.331$, $n=133$, $p<0.001$). **Conclusion:** This study could act as a medium in generating the awareness regarding the importance of the critical thinking and caring behaviours and the consequences of lacking in both variables.

Keywords: Critical thinking, caring behaviours, nursing students, nurses, nursing education

ABSTRAK

Latar belakang: Perubahan dalam perkhidmatan penjagaan kesihatan dengan pengetahuan dan teknologi yang maju telah memaksa jururawat dan pelajar kejururawatan untuk menyediakan diri mereka untuk memiliki kemahiran pemikiran kritis yang cemerlang dan tingkah laku penyayang. Liu et al., (2019) menyatakan bahawa kedua-dua pemikiran kritis dan tingkah laku penyayang adalah elemen penting dalam pendidikan kejururawatan professional. Beberapa kajian menunjukkan bahawa kedua-dua jururawat dan pelajar kejururawatan bergelut dengan kemahiran berfikir kritis mereka (Akca & Selen, 2015) dan (Lee et al., 2020). Ini menunjukkan bahawa kualiti penjagaan dan keberkesanan perkhidmatan akan terjejas oleh kekurangan kemahiran berfikir kritis (Arlı et al., 2017), dan tingkah laku penyayang.

Objektif: Untuk menilai tahap pemikiran kritis dalam kalangan pelajar sarjana muda kejururawatan UNIMAS, untuk mengenal pasti tingkah laku penyayang di kalangan pelajar sarjana muda kejururawatan UNIMAS dan untuk mengkaji hubungan antara pemikiran kritis dan tingkah laku penyayang dalam kalangan pelajar sarjana muda kejururawatan UNIMAS.

Kaedah: Reka bentuk penyelidikan keratan rentas dengan pendekatan kuantitatif telah digunakan di mana seramai 133 pelajar sarjana muda kejururawatan UNIMAS telah dipilih menggunakan pensampelan secara rawak. **Keputusan:** Kajian ini menunjukkan pelajar sarjana muda kejururawatan UNIMAS mempunyai pemikiran kritis dan tingkah laku penyayang yang sederhana dengan jumlah skor purata masing masing 69.54 ($SD=7.749$) dan 121.46 ($SD=18.804$). Terdapat hubungan positif antara pemikiran kritis dan tingkah laku penyayang ($r=0.331$, $n=133$, $p<0.001$). **Kesimpulan:** Kajian ini boleh menjadi medium dalam menjana kesedaran tentang kepentingan pemikiran kritis dan tingkah laku penyayang serta akibat kekurangan kedua-dua ini.

Kata kunci: Pemikiran kritikal, tingkah laku penyayang, pelajar kejururawatan, jururawat, pendidikan kejururawatan.

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LIST OF ACRONYMS

TsCT Total score Critical Thinking

TsCB Total score Caring Behaviours

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CHAPTER 1: INTRODUCTION

1.0 Introduction

The study is aimed to investigate the relationship between critical thinking and caring behaviours among UNIMAS undergraduate nursing students. Section 1.1 introduced the background of the study, Section 1.2 introduced the problem statement, Section 1.3 introduced the research questions and Section 1.4 introduced the research aim. This chapter then continued with Section 1.5 which showed research objectives while Section 1.6 showed the significance of the study and Section 1.7 showed the conceptual framework. The separate section which was Section 1.8 was made to describe and define the terms used in this study. The end of this chapter was Section 1.9 which presented the summary.

1.1 Background of the study

Nursing profession is the key part in healthcare workforce. According to Santy-Tomlinson et al., (2018), nursing is surrounds with the autonomous and collaborative care of individuals of all ages which includes the one that are sick or well. Nursing also comprises the prevention of illness, promotion of health and the care of disabled, ill, and dying individuals (Santy-Tomlinson et al., 2018). International Council of Nurses have come out with the strategic plan 2019-2023 that consists of four goals which are global impact, membership empowerment, innovative growth, and strategic leadership (International council of Nurses, 2019). These strategic plans have the mission which are to acts as a representative of nursing worldwide and the advocator for health in all policies, and to advance the development of nursing profession and to promote the wellbeing of the nurses (International council of Nurses, 2019). This shows that the nurses are the most crucial in healthcare setting as the nurses provide almost 80% of the hands-on care and make up nearly half of the world's healthcare workforce (UHC 2030,

2019). Besides that, the nurses also act as the first-line accessor for the patients and often the earliest healthcare staff to interact with patients. They perform a lot of other key roles such as administer medications, assist in surgeries, giving the mental support, treat patients beyond the initial diagnosis and others.

However, the nurses nowadays have faced challenges as there are dramatic changes in technologies and knowledges which have been happened in the healthcare services (Arli et al, 2017). Because of the improvement of the technologies itself, people demand to get a better and high quality of healthcare services with affordable and shorter period of hospital stay has been increased (Seada & Etway, 2016). The nurses need to prepare themselves to think critically when performing the decision making to give a high quality of care to the patients (Arli et al, 2017) and need to establish more deepen caring behaviour within them as numerous studies have shown that the respondents, both nurses and nursing students were struggling with their critical thinking skills (Akca & Selen, 2015) and (Lee et al., 2020).

1.2 Problem Statement

Critical thinking and caring behaviours are the fundamental units in professional nursing education (Liu et al., 2019). According to Arli et al., (2017), the quality of care and the effectiveness of the services will be affected by the lack of critical thinking skills. However, being a critical thinker only is not enough as nursing students must have caring behaviours embedded in them. According to Pai & Eng, (2013), caring behaviour can help to assure that ideas have been understood and fairly considered and can make a person a good critical thinker. Arli et al., (2017) also stated that when caring for patients, critical thinking enables the nurses to reflect on the basic nursing training that has been received. This has shown that both critical thinking and caring behaviours are intercorrelated with each other.

Furthermore, low critical thinking and caring behaviours among nursing students will result in negligence and malpractice when conducting nursing practice for patients. The number of incidents between 2016 and 2018 involving patient falls, transfusion and medication errors have increased in both public and private hospitals as shown by the Health Ministry of Malaysia's official figures (Zainuddin, 2022). The medication errors rose from 3,104 cases to 3,741 cases while transfusion errors jumped from 40 cases to 47 cases over the three years (Zainuddin, 2022). From 2,374 cases to 3,547 cases, patient falls involving adult patients recorded the highest increase while the patient falls involving children elevated from 441 cases to 696 cases (Zainuddin, 2022). As a result, the number of incident cases will be expected to elevate in the future as the trends from the three-year periods have shown a rise in the number of cases. To prevent this from happening, nursing students need to be aware of the significance of critical thinking and caring behaviours in nursing education.

Besides, in the study conducted by Azizi-Fini et al. (2015) has shown that the nursing students have low critical thinking skills, and it did not change throughout their nursing degrees. This situation indicates that the nursing education needs to be improved in order to ensure the nursing students will manifest the critical thinking after they graduated later, thus enhancing the quality of care as Jahromi et al., (2018) has proposed that the quality of care will be increased as the nursing education programs improve. However, studies on critical thinking and caring behaviours among nursing students in Malaysia still lacking, especially in UNIMAS. As a consequence of that, this study is interested in critical thinking and caring behaviours among UNIMAS undergraduate nursing students.

1.3 Research Questions

The research questions of this study are:

- a) What is the level of critical thinking among UNIMAS undergraduate nursing students?
- b) What are the perceived caring behaviours among UNIMAS undergraduate nursing students?
- c) Are there any relationships between critical thinking and caring behaviours among UNIMAS undergraduate nursing students?

1.4 Research Aim

The aim of this study is to examine the relationships between critical thinking and caring behaviours among UNIMAS undergraduate nursing students.

1.5 Research Objectives

The following are the objectives of this study:

- a) To assess the level of critical thinking among UNIMAS undergraduate nursing students.
- b) To identify the perceived caring behaviours among UNIMAS undergraduate nursing students.
- c) To examine the relationships between critical thinking and caring behaviours among UNIMAS undergraduate nursing students.

1.6 Significance of the study

This significance of the study is presented in the three perspectives which are:

- a) The significance of the study to the nursing students.

The findings from this study can generate awareness among UNIMAS undergraduate nursing students about the importance of critical thinking and caring behaviours within themselves. As the nursing students are aware of the significance of these variables, it can encourage them to implement critical thinking and caring behaviours in the clinical postings which later can enhance their competency while conducting nursing practices. By being competent, it can promote the quality of services in healthcare services and can boost the effectiveness of nursing care to the clients (Arlin et al., 2017).

- b) The significance of the study to the nursing institution.

Besides that, from the results of this study itself, it can enable the academic systems in Malaysia to improve the systems by adding the syllabus or courses that require nursing students to think critically and promote caring behaviours among them. Tong et al. (2023) has stated that the critical thinking skills and caring behaviours can be developed as these are not inherent. As being stated there, this showed that both these variables can be polished in the nursing students to meet the current standards and current demands of healthcare services.

c) The significance of the study to the nursing research.

As there is a minimal study that conducts research regarding the critical thinking and caring behaviours among undergraduate nursing students in Malaysia, this study can act as a reference for future studies.

1.7 Conceptual Framework

The conceptual framework serves as the representative of the expected relationship between the variables that will be studied (Swaen & George, 2022). It can be illustrated in a written or visual format which explains the relevant objectives for the research (Swaen & George, 2022). Diagrammatically, the relationship between the variables is presented in figure 1.

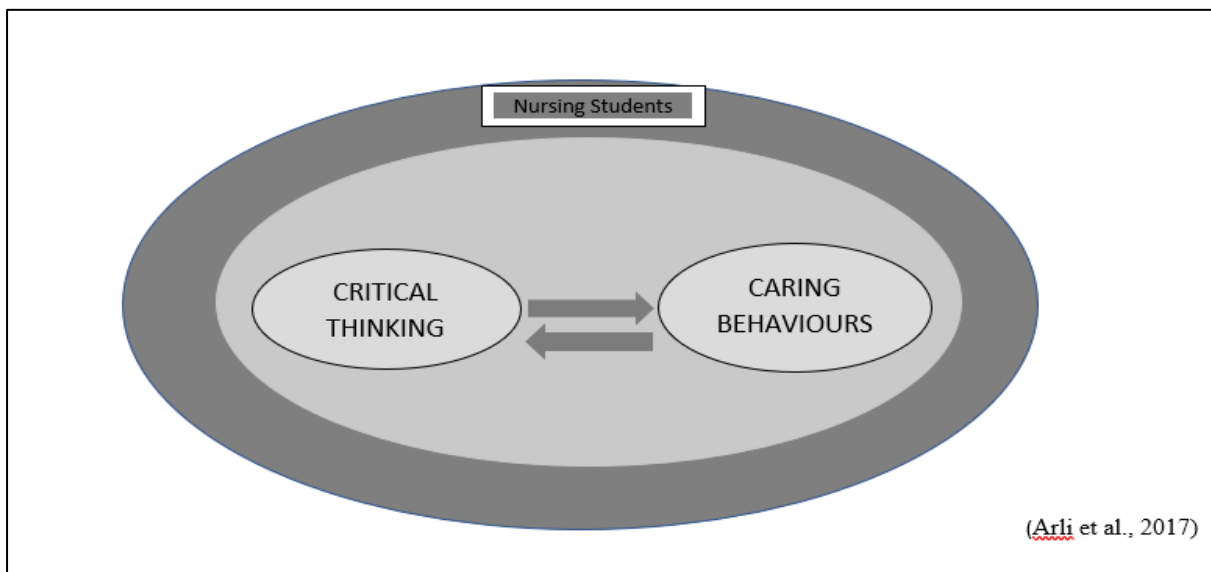


Figure 1: The conceptual framework

1.8 Operational definitions

To enhanced in the better understanding of this study, the following of the terms are described as below:

a) Undergraduate nursing students

A person who has enrolled in a school for licensed practical nurses which meets the standard established by the Board of Nursing but has not completed the examination yet (Student Nurse Definition, n.d.). For instance, UNIMAS undergraduate nursing students.

b) Critical thinking

The acts of thinking delicately about an idea or a subject without letting any opinions or feeling affecting you (Cambridge Dictionary, 2019). The types of critical thinking skills nursing students have used the Critical Thinking Ability Scale for College Students (Geok et al., 2019).

c) Caring behaviours

An action that is cared with the well -being of a patient such as comforting, honesty, sensitivity, attentive listening, and non-judgmental acceptance (Salimi & Azimpour, 2013). Defined as the types of caring behaviours that nursing students implement in taking care of the patients. Measure using the Caring Behaviour Inventory (CBI-24) (Labrague et al., 2015).

1.9 Summary

This study is focused on the critical thinking and caring behaviours among UNIMAS undergraduate nursing students as these two variables play a crucial part in professional nursing education. There are three research objectives that act as a guidance in completing the study. Operational definitions of each term that will be used are displayed to ensure the better understanding of this study.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

This literature review presented the critical thinking and caring behaviours among nurses and nursing students. It comprises of three sections whereby; Section 2.1 described the critical thinking while Section 2.2 displayed the caring behaviours. This literature review then proceeded with Section 2.3 that showed relationships between critical thinking and caring behaviours and ended with Section 2.4 that showed the summary. Apart from that, all the papers that were reviewed in this literature review was using the credible resources such as NCBI (National Center for Biotechnology Information), PubMed and ResearchGate. The papers also were retrieved from 2013 until 2022 and were filtered using PRISM checklist 2020 (Page et al., 2021). The key words of critical thinking, caring behaviours, nursing students and nurses were entered when searching the relevant papers.

2.1 Critical thinking

Critical thinking is one of the crucial parts of nursing education (Azizi-Fini et al., 2015). Aliakbari et al., (2015) has stated that critical thinking is related to the involvement of the learning process through knowledge, which comprises behavioural, daily social cognitive, employee training, education activities, contemporary health care programme, structure, and the last nursing students' experience. Critical thinking enables nursing students to make a quick judgement regarding certain events which later will help in decision-making. These critical thinking skills should be implemented in the various ways of nursing education to prevent the incompetence of nursing students when they are working later.

Interestingly, a study by Akca & Selen, (2015) in Turkey has shown that most of the respondents which were 90% of the respondents displayed low level of critical thinking skills. The California Critical Thinking Dispositions Inventory (CCTDI) was used in this study with four out of six CCTDI sub scales shows low critical thinking level which were “Searching for the truth”, “Systematicity”, “Self-confidence” and “Curiosity” while the other two CCTDI sub scales which were open-mindedness and analyticity displayed the medium level of critical thinking with the results of 48% and 56.7% respectively. Lee et al., (2020) and Azizi-Fini et al., (2015) also agreed with Akca & Selen, (2015) as the findings from both studies presented low level of critical thinking.

Lee et al., (2020) used Health Sciences Reasoning Test (HSRT) as the study instrument with an overall score of 57.9% of the participants failed to display critical thinking skills. For the five domains of HSRT, 82.1% of the respondents failed to demonstrate “deduction” while 57.4% of the respondents failed to demonstrate “analysis skills” and the majority of the respondents scored moderately in the other three domains which were “Inference”, “Induction”, and “Evaluation” with the cut scores of 3 to 4 respectively.

Azizi-Fini et al., (2015) performed a comparison of the critical thinking skills of freshman and senior nursing students in Iran to determine the effectiveness of the current nursing education program on students’ critical thinking skills and the findings showed that both freshman and senior nursing students presented low critical thinking skills with the mean of 11.79 ± 4.80 and 11.21 ± 3.17 respectively. Azizi-Fini et al., (2015) has utilized California Critical Thinking Skills Test as the measurement tool and the lowest sub scales for both freshman and senior students were “Analysis” with the mean of 2.72 ± 1.09 and 3.06 ± 1.58 respectively while the

highest sub scale for both students were “Deductive reasoning” with the mean of 5.29 ± 2.25 and 5.26 ± 1.87 respectively.

In addition, the study investigated by Geok et al., (2019) has found that the nursing students manifested high critical thinking ability with an overall mean score of 70.6 ± 6.98 which contradicted with the previous studies (Akca & Selen, 2015; Lee et al., 2020; Azizi-Fini et al., 2015). This study used Critical Ability Scale for College Students and the sub scale mean score for “Intellectual, health skepticism and eagerness” was 3.63 ± 0.50 , for “Intellectual honesty” was 3.63 ± 0.42 , for “Prudence” was 3.61 ± 0.41 and for “Objectivity” was 2.68 ± 0.64 (Geok et al., 2019). Based on these results, it showed that the nursing students manifest high critical thinking in “Intellectual, health skepticism and eagerness” sub scales as these sub scales became the highest mean scores among the other sub scales (Geok et al., 2019).

The highest ranked of Critical Ability Scale for College Students items was “I listen and pay attention to what the others say in a discussion” (4.37 ± 0.73) which was a part of “Intellectual honesty” and followed by item “I enjoy intellectual discussions” (4.10 ± 0.73) which was the part of “Intellectual, health skepticism abilities and eagerness” sub scales (Geok et al., 2019). “I accept ideas or statement that contradicts with my own as long as there are sufficient sources supporting it” item was the third highest mean score of the items (4.10 ± 0.70) which was also a part of “Intellectual honesty” sub scale (Geok et al., 2019). Based on these items, it showed that the students were listening and paying attention to the others word in a discussion and actually like to have a knowledgeable discussion (Geok et al., 2019).

The students also able to accept any opinions that were contrast with their own, but it must have an evidence to support the opinions (Geok et al., 2019). Meanwhile, the lowest ranked of Critical Ability Scale for College Students items was “I tend to think carelessly and make hasty decisions” (2.42 ± 1.11) which was a part of “Prudence” sub scale (Geok et al., 2019). This displayed that the students were likely to think carefully before decisions making and this can put the critical thinking skills into effect as the students must consider other factors before coming out with the decisions. “I tend to fall into difficult situations due to my overly subjective judgements or decisions” was the second lowest ranked item (2.49 ± 0.91) which was a part of “Objectivity” sub scale (Geok et al., 2019).

Furthermore, Azizi-Fini et al., (2015) has revealed that the ineffectiveness of the nursing education program may have an impact on students’ critical thinking skills as Azizi-Fini et al., (2015) displayed that there was no significant correlation found between critical thinking skills scores and the GPA, gender, age and passion in the nursing profession while Akca & Selen, (2015) has found that the maternal education level has become one of the factors in the low critical thinking level of the students as the majority of the students’ mothers were primarily graduated (208.98 ± 20.090). Besides, the total number of read books per year also have an impact on the critical thinking skills as the students who read 6-20 books per year have a high CCTDI point average of “Searching for the truth” ($p\text{-value} = 0.011$), “Open-mindedness” ($p\text{-value} = 0.012$) and “Curiosity” ($p\text{-value} = 0.003$) sub scales as compared to those who did not read any book (Akca & Selen, 2015).

Moreover, the research conducted by Lee et al., (2020) has found that the educational level of the nurses was related to their critical thinking skills ($p\text{-value} = 0.003$). Nurses with a degree and above have higher critical thinking scores as compared to those with a post-basic or