

ASSESSING THE DISPOSITION OF THE UNDERGRADUATE
UNIVERSITY NURSING STUDENTS TOWARD CRITICAL
THINKING AT FACULTY OF NURSING, MINIA UNIVERSITY

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Submitted in partial fulfillment of the requirements of the Master Degree in
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critical thinking at Faculty of Nursing-El Minia University

Abstract

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This study aimed to assess critical thinking dispositions of the four academic year's undergraduate nursing students. A cross sectional descriptive design was utilized in this study. Sample of 347 nursing students were examined at the beginning and at the end of each academic year who were completing 1st, 2nd, 3rd, 4th year of baccalaureate nursing programme, Faculty of Nursing, El Minia University. The California Critical Thinking Dispositions Inventory (CCTDI) by Facione (1992) was used after translation into Arabic to measure the key theoretical aspects of the overall dispositional dimension of critical thinking. Results of this study revealed that, in the majority of sub-scales of CCTDI students showed an ambivalent disposition toward critical thinking, a statistical significant difference was found in relation to all dispositional level characteristics; this difference was low at the end of academic year than at the beginning of academic year, the third academic year students have the highest mean score in the dispositional level characteristics "truth-seeking", the first academic year have the highest mean score regarding to all dispositional level characteristics except in "truth-seeking" while the fourth academic year have the lowest mean scores in all dispositional level characteristics and the females nursing students have a slight increase in mean scores in all dispositional level characteristics than males nursing students. In conclusion of the study finding the need for critical thinking in nursing has been accentuated in response to the rapidly changing health care environment. Nurses must think critically to provide effective care whilst coping with the expansion in role associated with the complexities of current health care systems. It is considered recommended that nurse educators must try new teaching approaches and to establish those teaching strategies that are most effective in promoting critical thinking (CT) among students and nursing teacher should modeling positive critical thinking dispositions as well as students nurse could act as role models for each others.

Key words: critical thinking, critical disposition, nursing education, nursing practice.

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Assessing the dispositions of the undergraduate nursing students toward critical thinking at Faculty of Nursing -El Minia University

تقييم استعداد طالبات التمريض في مرحلة البكالوريوس للتفكير النقدي بكلية التمريض جامعة المنيا

Thesis proposal submitted for partial fulfillment of the requirements of the Master Degree in Nursing Administration

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Introduction

In recent years critical thinking has received considerable attention as an essential component of educational programs and of nursing practice and there is a need for higher order thinking as the complicity of our world increases (Nicklin & Kenworthy 2000). Thinking is essential to living it include reasoning, recalling, remembering and encompasses beliefs, opinions and judgments, Thinking is a term for the organized cognitive process, which is target oriented and actively done to understand the current situation (Ellis & Hunt, 1993).

Critical thinking is the intellectually disciplined process of actively and disposition fully conceptualizing, applying, synthesizing, and/ or evaluating information, reflection, communication as a guide to belief and action (Paul and Elder, 2001). In addition, critical thinking is essential to a safe, competent, skillful nursing practice. It helps nurses to identify options from which to choose solutions in client care situations (Neufeldt, 1991). The growing complicity of health care demands the use of critical thinking for effective, creative and efficient nursing care (Miller & Babcock, 1996). Furthermore, Both the American Association of Colleges of nursing (AANC, 1986) and the National League for Nursing (NLN, 1991) have identified the development of critical thinking as an essential component of baccalaureate nursing education (Angeli, 1997)

Robert Ennis(1994), has been involved in the thinking movement since its inception, recognized the important of the critical thinking dispositions, Ennis defines a thinking disposition as a tendency to do some thing given certain conditions. In a similar spirit, Peter and Noreen Facione, authors of the California Critical Thinking Disposition inventory, define a thinking disposition

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as a constellation of attitudes, intellectual virtues and habits of mind (Facion ,Sanchez, Facion ,1995)

Humans are conditioned from birth authority figures and not to question their pronouncements, such conditioning is done by parents and teachers using a wide variety of positive and negative reinforcement techniques. Most individuals reach adulthood in this conditioned form. The result of such conditioning is the antithesis of scientific investigation and critical thinking, individual lack both curiosity and the skills to perform independent inquiry to discover reliable knowledge (Steven, 1991). Furthermore the author added that Individuals who think critically can think for themselves: they can identify problems, gather relevant information, analyze information in a proper way, and come to reliable conclusions by themselves, without relying on others to do this for them (Steven, 1991).

Schneider & Shoenberg. (1998), reported that teaching for thinking has always been central to the very concept of a profession university education. So the educated person is one who has learned how to draw together knowledge from many different disciplines and makes good judgments about what to believe or what to do, and they are free to think, not just the sense of having been given permission

Becoming a critical thinker involves more than developing a set of skills. It involves nurturing the disposition toward critical thinking to ensure the use of critical thinking skills outside of a structured setting. Seven aspects of critical thinking disposition, which are constituents of an over all disposition toward critical thinking were identified namely: Inquisitiveness, Systematicity, Analyticity, Truth seeking, Open-mindedness, Self- confidence, cognitive Maturity. (Facione, et .al, 1995). According to Simpson and Courtney (2002),

in their review of the literature on critical thinking identified the characteristics that a critical thinker may possess, these include: Open mindedness, having the ability to appreciate alternative perspectives and different opinions; being inquisitive, having a desire to investigate new things to gain knowledge and understanding; truth seeking, sufficiently inquiring to gain new insights; analytical in ones approach to critiquing evidence and their inferences that can be drawn from the evidence; uses an organized and meticulous approach to problem solving; self-confident with self awareness of own individual ability to utilize and critique available scientific evidence to inform decisions .

Walsh and Hardy (1999) stated that the disposition toward critical thinking is important to insure the use of critical thinking skills outside the narrow instructional setting and there is a one to one correlation between skills and dispositions. For nurses to develop critical thinking skills, the process must being early in their nursing education and practice (Beck, 1992). Meanwhile, nurses who practice critical thinking learn how to solve problems and seek new information, they maintain an open-minded and questioning attitude, they realize that knowing the process of solving problems is important, than having all the answers (Facione, et al., 1995).

Studies done in U.S.A by Walsh and Hardy (1999), investigated the dispositional differences in critical thinking related to gender and academic major and revealed that the female scores in both practice and non practice disciplines were higher than males on open-mindedness and maturity. Moreover Kokdemir (2003), examined the problem solving and decision making strategies of Turkish university students under uncertainty. These studies have another two purpose first; examine the quality and quantity of the relationship between critical thinking and decision making. The second purposes, the effects of critical thinking training on the students critical thinking skills.

showed that not for all but probability related problems, subjects those who were high in critical thinking disposition prefer more rational solutions. In addition, Elam (2001), aimed to find out the critical thinking power of the students and their tendencies towards critical thinking amongst the students who are in the first and third grades. The research was conducted amongst the students who are attending a vocational high school. According to the research, there was a statistically significant difference between the critical thinking tendencies and the grades of the students. In the same line a study was done in Egypt by Samir G, (2001), assessing the dispositions of the undergraduate university nursing student toward critical thinking, results of this study revealed that nursing student in the majority of the dispositional characteristics regardless of their academic years showed ambivalent disposition toward critical thinking.

College is a time for undergraduate to expand their knowledge (facts, principles, theories, concepts), to improve their basic academic success skills, to sharpen their thinking skills, to learn new thinking skills, to learn how to learn effectively, to improve their communication skills, and to become self – directed learners. So assessing the disposition of undergraduate nursing student toward critical thinking will help nursing educational administrators as well as the teaching staff to develop critical thinking of their nursing students in the classroom and clinically in order to become good critical thinker to meet challenges of a complex health care environment (Simpson& Countneary, 2002). So the aim of this study is to assess the dispositions of the undergraduate nursing students toward critical thinking at Faculty of Nursing, El-Minia University.

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Significance of the study

Nurses in clinical practice continually make judgment and decisions based on the assessment and diagnosis of patient needs. Moreover, there has been growing concern in nursing as a result of the recent changes in the health care environment which have become increasingly complex as evidenced by factors as expanded technology, decreased length of hospital stay, increased patient acuity and reimbursement practices. In nursing practice, it is valuable for nurses to use their critical thinking skills in a variety of ways. Critical thinking skills help the professional nurse to make important decisions after collection and interpretation of the information needed to make decisions. The undergraduate nurse should be enabled to be critical thinker through the acquisition of specialized skills in critical thinking. Assessing the disposition of the undergraduate university nursing student toward critical thinking provides essential information about how student's attitude toward CT develops in relation to their experience and also to identify which dimensions of critical thinking students shows strengths and which dimensions they are lacking.

In future it is hoped that finds of this study might help and guide in the improvement of students skills for critical thinking and better decision making and further more in improving their practice in clinical area and professional life.

Aim of the study

This study will be carried out to assess critical thinking dispositions of the four years undergraduate nursing students.

Research questions

1-What is the overall profile of the disposition toward CT of student?

1a - What are the differences between initial dispositions through the four years undergraduate nursing students?

1b- Is there curriculum help in promoting CT?

Subjects and Methods

Research Design

Cross-sectional descriptive design will be used to assess nursing student disposition toward critical thinking.

Operational definition

-Dispositions: cluster of preference, attitudes, and intentions, plus a set of capabilities that allow the preference to become realized in a particular way.

Setting

The study will be conducted at Faculty of Nursing, El-Minia University.

Subjects

A total of nursing students of the four academic years will be the sample of the study, with total (400) students.

Tool

1- Socio-demographic data about the subjects, such as age, sex, years of study, previous education.

2- The California Critical Thinking Disposition Inventory questionnaires (CCTDI), Developed by Facione and Facione(1992) will be a tool for this study. It consists of 75 items measured in a 5-point Likert scale.

(11 items), (d) systematicity (11 items), (e) self-confidence (9) items, (f) inquisitiveness (10 items) and (g) cognitive maturity (10 items).

The responses will be measured in a 6-point – likert scale ranging from “strongly agree” to “strongly disagree”.

Reliability of CCTDI questionnaires is Alpha reliabilities for the seven individual scales in the initial CCTDI pilot ranged from .71 to .80. The alpha reliability for the overall instrument, measuring the overall disposition toward CT, was .91. Later in 1992 and early in 1993 the publication version of the CCTDI was administered to two additional samples totaling 1019 freshmen college students. The alpha levels ranged from .60 to .78 on the scales and .90 overall.

Validity of CCTDI questionnaires is 1- content validity : responses are recorded using a six- point likert scale ranging from " strongly agree" to " strongly disagree" thus , respondents agree or disagree with each item prompt. For each item, to agree or disagree is consonant a recognized CT dispositional attribute. 2- face validity : college instructors have taken the CCTDI are quick to volunteer that the item prompts strike them as appropriate to the target dispositions.

Scoring system: The CCTDI total score is the sum of the scores for each of the seven sub-scales. The total score indicate whether a person is generally disposed to think critically- whether the individual habitually characteristics of an ideal critical thinker.

- The total score ranges from: 70 to 420
- Score > 210: negatively disposed.
- Between 210 and 280: ambivalently disposed.
- < 280: positively disposed

- scores >30: negatively disposed
- Scores between 30 and 40: ambivalently disposed.
- Scores < 40: positively disposed to each of the characteristics.

Pilot study:

To test the understanding of the translated questionnaires 10% from the total sample will be a pilot for this study, The translated tool will be submitted to a jury of 7 faculty members (3 from Cairo university & 4 from El-Minia University) to determine its applicability and content validity.

Procedure

A written approval will be obtained from the (Dean) of Faculty of Nursing, El Minia University and from the participants to collect the necessary data. Once permission is granted in with the proposed study, the questionnaire will be distributed to all undergraduate nursing students to determine critical thinking dispositions among them. The questionnaires will be translated into Arabic for better understanding and the questionnaires will be distributed at the beginning of the academic year and also at the end of the academic year. The purpose and nature of the study will be explained to the students to establish rapport.

Data analysis

Upon completion of data, data will be coded, analyzed, tabulated and proper statistical tests of significance will be used to assess the disposition of the undergraduate university nursing students toward critical thinking.

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