Nursing Students Self-Efficacy and Motivation in a Case-Based Learning Program

A dissertation submitted to the Faculty of Social Science

University of Natal- Durban

In partial fulfillment of the requirements for the degree

Masters in Nursing (Education)

BY

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DEDICATION

To my husband and my two children Elie and Maria Christina,

Your love and inspiration made this project possible.

This final triumph is yours.

"There are three things to remember about education.

The first one is motivation. The second one is motivation.

The third one is motivation."

Terrell H. Bell.

ACKNOWLEDGEMENTS

I extend my special thanks and appreciation to all those who helped in the accomplishment of this project.

To Professor Gwele my supervisor, thank you for believing that I can do it, even when I didn't. Your wisdom, ongoing support and invaluable suggestions gave me the incentive to achieve this project.

To all the colleagues who gave valuable suggestions in reviewing the questionnaire, I am deeply grateful.

To my colleague and special friend in Al Ain Institute, I extend my warmest thanks for her priceless help in distributing and collecting the data for the chosen sample on campus.

To all the students, I truly thank your honest and willing participation for accepting to be part of this research and for answering the distributed questionnaire sincerely.

To the director of the Institutes of Nursing, I am grateful for your support and for allowing the data collection to be conducted among the students of the institutes.

Finally, my warmest thanks to all my family and friends for their continuous encouragements and support throughout this project.

To my Husband, you just know....

DECLARATION

Except for the referenced citations in text,

this is the researcher's original work.

Mireille Maalouf

ABSTRACT

In 1998 the Institutes of Nursing in the United Arab Emirates adopted a new approach of Case-Based learning in their three year nursing program. This categorical change created a need to examine the development of nursing students' self-efficacy and motivation under this new curriculum. The aims of this study were to investigate whether the students in the final year of the program will evidence higher levels of motivation and self-efficacy compared to those in the second and first year of the program, and to demonstrate that the higher the level of self-efficacy, the more internal, unstable and controllable the attributions for success and/or failure.

This study was based on Bandura's theory of self-efficacy. A randomly selected cross-sectional survey involving nursing students in the three-year diploma nursing program of Abu-Dhabi and Al Ain Institutes was studied (N= 178). The participants of this study involved a total of 86 (48.3%) enrolled in year one diploma, 51 (28.7%) enrolled in year two and 41 (23.0%) in year three diploma. On the whole the participants' levels of motivation and self-efficacy were high, but both ANOVA and Kruskall Wallis tests did not support any level increase by year of education as was expected. However, the Spearman's rho (r) test yielded low but positive and significant correlations between the levels of self-efficacy and students attribution for success and/or failure.

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CHAPTER ONE

INTRODUCTION

"I had rather not enumerate the instances, which I have known where a little ingenuity, and a great deal of perseverance, might, in all probability, have averted the results" (Nightingale, cited in Ellis & Harley, 1995).

Problem Statement

Unforgotten moments always happen on the studying benches. These moments mark the future nurse's knowledge and performance for a long time after graduation.

Motivation is a subject that intrigues teachers since they realize, both professionally and intuitively, that here is a topic that can mean the difference between success and failure in the classroom and later in the professional life. Bandura (1993) attests that, "Self-beliefs of efficacy play a key role in self-regulation of motivation. Most human motivation is cognitively generated. People motivate themselves and guide their actions anticipatorily by the exercise of forethought. They form beliefs about what they can do. They anticipate likely outcomes of prospective actions" (p.128)

Among the literature available on motivation, Kosier and Erb (1998) as well as Cobuild (1995) described the meaning of the word motivation as the reason that causes a person to behave in a particular way, the desire to learn for example. Two types of motivation were also identified by Kosier and Erb (1998), internal and external. Internal motivation arises from within the individual, and the external motivation comes from the surroundings of the person. Furthermore, Whitman, Graham, Gleit and Boyd (1986) claimed that:

> Motivation is a primary prerequisite for learning. If an individual does not desire to learn, the potential is diminished. ... Motivation to learn can be increased by helping the learner sees [sic] the applicability of the learning to life and the improvement in meeting needs and developing interest in health (p.141).

Many theorists and educational psychologists (Bandura, 1993; Maslow, [in Marquis & Huston, 1996]; Weiner, 1984) tackled the influence of motivation on learning. For instance, according to Marquis and Huston, Maslow classified the human needs from simple to complex, from physiological needs to reach the self-esteem. He believed that "people seek a higher need only when the lower needs have been predominantly met" (p.295). On the other hand, Bandura (1993) stated that " Self-efficacy beliefs contribute to motivation in several ways: They determine the goals people set for themselves, how much effort they expend, how long they persevere in the face of difficulties, and their resilience to failure"(p.131). He also believed that it is how students perceive their own ability to perform successfully that influences their motivation.

Case-based learning is one of the teaching/ learning approaches that is supposed to help students become self-directed learners and therefore increase their motivational level. Barrows (1986) conceptualized a taxonomy on problem-based learning, of which case-based learning is a part, he claimed that, in the case-based approach sequential management problems are used, in which students have to direct an inquiry and decide which informational and management options to follow. Student-centered learning is one of the cornerstones of case-based learning. On the student-centered learning, as

emphasized by the case-based learning, Barrows and Tamblyn (1980) clearly stated:

> Perhaps one of the most important advantages of student-centered learning is that the student is motivated by the internal rewards of learning and not only by the artificial or external rewards of grades. ... In addition, their learning is motivated by personal satisfaction, which will always be present, even when grades and passing exams are no longer an issue (p.16).

Empirically, very little is known regarding the influence of case-based learning on students' motivation in non-traditional nursing education programs that purport to increase students' motivation to learn as well as their ability to regulate their own learning. A number of questions remain unanswered: (a) does case-based learning increase students' motivation including their judgments about their own capabilities to succeed, and (b) is there a relationship between students' levels of self-efficacy and their attributions for success and failure?

Background and Significance

Since 1986 the Institutes of Nursing in the UAE used the traditional lecture-based teaching/learning process in an undergraduate nursing diploma program. In such a program according to Barrows and Tamblyn (1980) "the teacher is solely responsible for what the student is expected to learn. The teacher decides what information and skills the student should learn, how it is to be learned, in what sequence, and at what pace" (p.7).

In 1998 the Institutes adopted a new approach for the education of their nursing students; this change was studied and implemented to go hand in

hand with the dynamic educational strategies around the world. "The process of educating students has changed dramatically in the last decade. Traditional methods of professor-centered learning have been replaced by strategies that promote active student involvement and participation in the learning process" (Glendon & Ulrich, 1997, p.15). The new curriculum used by the Institutes, adopted a self-directed learning approach and is based on the belief that the nursing students should be active learners to monitor their own learning and performance as well as identify their own areas of weaknesses and strengths. Christensen and Hansen (1987) stated that "the active intellectual and emotional involvement allows students to grow, and is inherently motivating" (p.30).

Stage (1996) claimed that, "Self-efficacy is linked to other behaviors through motivation, in turn, is influenced by expectations regarding outcomes of behavior and the value of those outcomes" (p.230). Among other things the case-based curriculum was supposed to facilitate the development of student's ability to regulate their own learning and therefore their motivation to learn. Shin (1998) based on Bandura's work explained that, for learners to be self-regulated and to participate in their learning, they should demonstrate among other qualities a belief in their self-efficacy. To build the students' self-efficacy, she suggested the method of modeling. Modeling involves four levels of developmental paths toward self-regulation: (1) observational level; (2) imitative level; (3) self-controlled level; and (4) self-regulated level. He/she stated that, "at the self-regulated level of an academic skill, the highest level of self-functioning learners can regulate their own learning by initiating use of strategies displaying motivation through self-efficacy perceptions" (p.41).

In view of these observations, it is interesting to know how the newly implemented case-based curriculum has influenced the learners' motivation. This study is therefore undertaken as a first step to examine the success of the new curriculum in increasing the level of motivation and self-efficacy among students. Knowing that there is no available research done in the UAE on this subject, this research is of interest mainly for the university nursing departments and institutes of nursing, and especially for the Institutes of Nursing in the UAE, because it should increase the knowledge of the nursing educators on students' attributions of success and/or failure as well as their levels of self-efficacy. Furthermore, research on non-traditional educational programs has focused mainly on problem-based learning. Very little has been done in the way of empirical evidence to support the advocates' (Barrows, 1986; Gwele, 1999; Uys, 1999) views on the influence of case-based learning on students' motivation. It is well documented, however, that PBL is more resource driven compared to CBL (Uys, 1999). The results of this study will therefore, facilitate curricula decision making in situations where choices have to be made based on administrative, educational and financial reasons.

Purpose Statement

The purposes of this research are to (a) measure the development of students' motivation and levels of self-efficacy, (b) examine the relationship between students' levels of self-efficacy and the way they attribute their successes and failures in a three-year case-based learning program in nursing.

Objectives

- To measure the development of students' level of self-efficacy and motivation in a case-based learning program.
- To examine the relationship between levels of self-efficacy and attributions for success and/or failure.

Hypotheses

The hypotheses upon which this research is based are:

1. Students in the final year of the program will evidence higher levels of motivation compared to those in the second and first year of the program.
2. Students in the final year of the program will evidence higher levels of self-efficacy compared to those in the second and first year of the program.
3. The higher the level of self-efficacy, the more internal, unstable and controllable the attributions for success and/or failure.

Definition of Terms

1. The Case-based learning program is a student-centered approach, it uses simulated cases or stories that are similar to the real life faced situations. These cases are analyzed by the students who should use their problem-solving skills and look for the proper solution or explanation to the situation, with the help of a facilitator who guides the whole learning process. According to Lynn, Jr. (1999) " a teaching case is a story, describing or based on actual

events and circumstances, that is told with a definite teaching purpose in mind and that rewards careful study and analysis" (p. 2).

2. Students motivation naturally has to do with students desire to participate in the learning process, but it also concerns the reasons and goals that underlie their involvement in academic activities. Although students may be equally motivated to perform a task, the sources of their motivation may differ. In this study motivation will refer to both the students' attribution of their successes or failures as well their self-efficacy beliefs.

3. The attribution of success and/or failure: is defined as the reason that makes a person behave in a particular way. The way a person attributes success or failure, and the way he/she overcomes the external environmental influences towards meeting higher needs. Highly motivated students will refer to those students who attribute their successes or failures to internal, unstable and controllable factors. McCown, Driscoll and Roop (1996) " the explanations, reasons, or excuses that students give for succeeding or failing at tasks are called attributions" (p. 290).

4. Attributional theory: The theory presented by Weiner on attribution stated that, the perceived causes of a person's successes and failures on academic tasks are affected by that person's ability, effort, and the task difficulty according to Weiner (cited in Manning 1991). He utilized a coding scheme in his taxonomy including internality, stability, and controllability.

5. The Self-efficacy: is the way a person perceives himself/herself as self-efficient when faced with a problem to solve or a task to achieve. The higher the level of self-efficacy, the more a person can accept challenges and achieve the desired outcome. Kazdin (2000) " Perceived self-efficacy is

people's beliefs in their capabilities to perform in ways that give them control over events that affect their lives" (p. 212).

6. Self-efficacy theory: as presented by Bandura, "involves the degree of confidence individuals possess about their own capabilities. Low self-efficacy beliefs cause a person to give up when presented with a challenging task" (Manning, 1991 p. 48).

CHAPTER TWO

LITERATURE REVIEW

Introduction

The literature review in this study will attempt to look at all the aspects of interest for the problem under research and its underpinnings. The chapter will tackle mainly: (a) conceptualizations of motivation, (b) motivation theories, (c) motivation in learning (d) self-efficacy and its relationship to motivation to learn, (e) attribution of failure and/or success in learning and (f) the case-based learning methodology and how it relates to motivation in the learning process.

Conceptualizations of Motivation

There is no single agreed-upon definition that captures the essence of motivation. Nevertheless, as has been explained by Kazdin (2000) "an analysis of motivation involves the creation of principles to explain why people and animals initiate, choose, or persist in specific actions in specific circumstances. Motivational formulations thus include statements about the needs and goals of the person as well as the incentives in the environment" (p.314). Thus for Kazdin an analysis of motivation must take into cognizance both intrinsic needs and goals as well as external incentives to work on fulfilling personal needs and goals.

Accordingly we must differentiate between the external and the internal motivation. External motivation occurs when a person works on a task for an external award or reason; such as money, grades or power (Kazdin, 2000; McCown, Driscoll & Roop, 1996). Strong, Silver and Robinson (1998)

maintained that "Extrinsic motivation – a motivator that is external to the student or task at hand- has long been perceived as the bad boy of motivational theory" (p. 189). According to these authors, Kohn (cited in Strong et. al) bemoaned that over reliance on external motivators "consistently fails to produce any deep and long lasting commitment to learning" (p. 189).

In contrast, internal motivation is undertaking an activity "for its own sake, for the enjoyment it provides, the learning it permits, or the feelings of accomplishment it evokes" (Lepper, 1988). Strong and colleagues (1998) posited similar views in stating that "intrinsic motivation ... comes from within, and is generally considered more durable and self-enhancing" (p. 189) compared to extrinsic motivation.

Evidence exists, however, that teachers believe that intrinsic motivation leads to better achievement in learning compared to extrinsic motivation. For instance, Sweet, Guthrie and Ng (1998) examined the way tutors perceived students' intrinsic motivation for reading from the perspective of self-determination development and reading achievement. The participants (n = 68) were teachers randomly selected to rate 374 students on motivation for six different aspects of motivation for reading. The problem was approached with both quantitative questionnaires and qualitative interviews. The results showed that teachers perceived higher achievers to have high intrinsic motivation for reading. In contrast lower achievers were perceived to be more extrinsically motivated for reading.

Notwithstanding the above, both intrinsic motivation and extrinsic motivation has had its proponents and critics (Kohn in Strong et. al, 1998). Lamenting on the dichotomy forced by researchers and theorists between

extrinsic and intrinsic motivation, Sternberg and Lubart (cited in Strong et al., 1998) asserted that "any in depth examination of the work of highly creative people reveals a blend of both types of motivation "(p. 189).

Motivation Theories

Motivational theories widely recognized motivation as having an important influence on behavior in general and on learning in particular.

Trends in the development of motivation theories. According to Deci and Ryan (1985), in a historical review of the earliest theories that focused on motivation, Woodworth (1918) probably was the first to propose a behavior-primacy theory that addressed the issue of intrinsically motivated behaviors. He suggested that a primary behavior is generally aimed at producing an effect on the environment. Since this behavior is continuous, drives such as hunger must break into its flow in order to achieve satisfaction. These authors maintained, however, that Woodward's theory did not receive an important attention at that time.

In 1943 Hull (cited in Deci & Ryan, 1985) claimed in his 'Drive theory' that all behaviors are based on four drives which are hunger, thirst, sex and avoidance of pain. According to the proponents of this view (Hebb, 1955), drives provide the energy for the behavior. Many limitations to this theory such as those reported by Berlyne (1955), Welker (1956), Montgomery (1955) which demonstrated repetitively that the animals under experiment were interested in discovering new spaces and objects even with the presence of thirst, hunger or any of the previously stated drives. Harlow (1953) demonstrated that monkeys performed certain problem-solving activities better when intrinsically motivated than when extrinsically rewarded. That led

eventually to distinguish drives from intrinsic motivation. That was the suggestion made by Koch (1956) who asserted that motivation theories need to be completely revised to give full consideration to non-drive-based sources of motivation. Consequently, White (1959) as an opponent to the drive theory proposed the concept of effectance motivation, which he described as an innate, intrinsic energy source that motivates a wide variety of behaviors and is central to much of an individual's development. This suggestion required a complete rewriting of the motivation theory. White demonstrated that the inclusion of effectance motivation would provide a more satisfactory account of the individual's striving to master each of the critical conflicts in his/her life. It is concluded that the concept of intrinsic motivation emerged originally from the drive theory.

Several authors such as Hebb (1955), Maslow (1954) and Skinner (1971) have attempted to explain intrinsically motivated behavior. Hebb (1955) for instance, stated that there is a need for physical arousal to stimulate a more efficient functioning. Though his/her theory focused mainly on the physical aspect, he/she did address briefly the psychological arousal suggesting that "threat and puzzle have a positive motivating value" (p. 250). Hebb's theory of motivation bears some similarities to that conceptualized by Maslow (1954) and Fiske and Maddi (1961).

Maslow (1943) outlined a theory of motivation utilizing a concept that he referred to as self-actualization. All individuals, according to Maslow, seek to actualize their unique potentials and to become autonomous. He identified a hierarchy of needs that motivate humans; whereby he stated that the needs at one level must be accomplished so that an individual can be motivated to

satisfy higher levels of needs to reach self-actualization. For example motivation energizes the learner and directs activity towards the accomplishment of a goal. The concept of self-actualization emphasizes the importance of choice and other self-related constructs.

On the other hand, Skinner (1971) believed that motivated behavior results from the consequences of previous behaviors. If students obtain reinforcement for a certain behavior they tend to repeat it with vigor. If they don't, students tend to lose their interest and this affects their performance.

Kagan (1972) proposed that many behaviors are motivated by the human need to reduce uncertainty. He also included in his formulation a type of exploration that people use to induce or reduce uncertainty in order to avoid painful events that might happen in the future.

Berlyne (1971) distinguished between two types of exploratory behaviors, specific and diversive explorations. The specific exploration is derived from the experience when dealing with uncertainty which creates a behavior that is lacking in stimulation and desire to know. While a diversive exploration according to Berlyne is insufficient to stimulation which leads to explore and manipulate.

The concept of incongruity and stimulation formed the basis of Berlyne theory in the intrinsic motivation literature. Berlyne (1971) stressed that maintaining an optimal level of stimulation is necessary for effective functioning.

To sum up, intrinsically motivated behaviors engage approaching strange and uncertain stimuli then working to minimize the incongruity. According to Deci and Ryan (1985) "the major problem with these theories is that they, like

most cognitive theories, fail to postulate about the human needs. As such they are able to explain the direction of behavior but not the energization of behavior"(p.26)

However, this notion is somehow discrepant to the real essence of intrinsic motivation. An intrinsically motivated individual tends to be energetic, risk taker that never ducks in the face of challenge. On the contrary, he/she most of the time emerges swinging and fighting rather than trying to reduce uncertainty. According to Deci and Ryan (1985), Berlyne considered needs in physiological rather than psychological terms, so his theory failed to give complete explanation of the intrinsically motivated behavior.

On the other hand, some theorists focused on affects and emotions. Izard (1977), for instance, concentrated on the interest-excitement emotion without undermining the influence of other human emotions. This theorist considered that intrinsically motivated behavior sprung out of the interest excitement emotion. This emotion according to Izard plays a non-comparable role in the amplification and orientation of attention. Therefore, he/she advocates that many types of investigatory or manipulative behaviors can be activated by this particular emotion. Izard (cited in Deci & Ryan, 1985) "thus recognized the centrality of interest-excitement in the adaptation, development and coordination of human behavior, and even labeled interest the fundamental behaviour" (p.29).

Typically, Csikszentmihalyi (1975) based his theory on emotions but focused instead on the enjoyment instead. Unlike Izard, Csikszentmihalyi claimed that the reward is the ongoing experience of enjoying the activity, which accompanies a "flow" of dynamic, engulfing and holistic sensation that

makes the person move harmonically from one moment to the next totally espousing the activity to become one with it. Nonetheless, this phenomenon can only be achieved under an optimal challenging condition with respect to one's capacity. Csikszentmihalyi believed that any activity that is below or above the optimal challenging level of people can lead to boredom or anxiety respectively, and thereby disrupting this peculiar flow.

There is no doubt that interest and excitement are important pillars in the intrinsic motivation. However, emotions alone are not sufficient enough to define the intrinsic motivation theory. Human beings are subjected to a humongous amount of intrinsically motivated behaviors. Some of these behaviors are not driven by rewards, be it internal or external, neither are they driven by physiological arousal nor psychological incongruity. People just rise and do certain things because they choose to do so. They take challenges and risks and never expect any rewards, simply because they are energetic and self motivated. (Deci & Ryan, 1985)

Bruner (1960) stated that any attempt to improve education inevitably begins with the motives for learning. McCown, Driscoll and Roop (1996) maintained, "discovery learning is highly motivational" (p.376). Bruner advocated the theory of discovery learning, he claimed that discovery learning occurs when students are presented with problems that require the discovery of the underlying the problem. Discovery learning according to Bruner supports active learning strategies and achievement of considerable gratification from personally coping with problems. He argued that discovery is rearranging or transforming evidence so that one goes beyond the evidence to form new insight. However teachers found this method time consuming,

costly and complex to implement. Friedl (cited in McCown, Driscoll & Roop, 1996) found that "process without content did not produce results" (p. 376).

In summary this brief review attempted to tackle some of the various approaches to motivation along with the primary component with each approach. It started with the drive theory, the physiological proponents, the effectance role, the emotions importance and finished by the importance of discovery learning in explaining the intrinsic motivation of human beings. Although these aspects are not directly the target for this current study, it is extremely valuable to bring to mind the progression of thoughts and theories that lead to the current views about motivation and its relation to learning in particular.

Motivation in Learning

The preceding introduction leads us eventually to discuss the importance of motivation in learning, which could be considered the center concept of this study.

Based on a comprehensive review of the history of motivational research in education, Weiner (1998) observed that "emphasis on drive and drive reduction seem to have little relevance in classroom contexts" (p. 179). Consequently, according to him/her what remains as the focus of contemporary motivational research and theory are various cognitive approaches to motivation, including theories based on "interrelated cognitions of causal ascriptions, efficacy and control beliefs, helplessness and thoughts about the goals for which one is striving" (p. 179), and that achievement motivation has remained the focus of those interested in educational research.

Hence, the remainder of this section of the review will deal with motivation only as it relates to student learning.

McDonald (1996) affirmed that "identifying their own motivators can assist students to develop and maintain the initiative needed to engage in self-directed activities...Understanding individual motivators can enable participants to anticipate and adjust to stress and anxiety that sometimes accompanies self-directed learning" (p.35).

McCombs (1991) suggested several key characteristics of motivation and lifelong learning. The biggest challenge, she claimed, was to uncover the natural motivation and the intrinsic desire to learn for a positive and enjoyable self-development: "learning and motivation to learn are natural human capacities in social contexts and relationships supportive of the learner and in content domains perceived as personally meaningful and relevant" (p. 120). Similarly, Deci and Ryan (1985) stated on motivation to learn, " When the educational environment provides optimal challenges, rich sources of stimulation, and a context of autonomy, this motivational wellspring of learning is likely to flourish" (p. 245). Nevertheless "Students reveal motivation to learn when they attend to lessons or assignments, strive to get the initial benefits, understand and remember what they are supposed to learn" (Brophy, 1986, p. 16).

According to Malone (1981) intrinsically motivating activities provide learners with a broad range of challenge, concrete feedback, and clear-cut criteria for performance. Ames and Ames (1989) also claimed that motivation serves to create intentions and goal-seeking acts. Corno (cited in Manning, 1991) claimed that a person's motivation to accomplish a task is specific and

personal. This motivation is also affected by the way the task or assignment is perceived. These perceptions include beliefs that a task is easy, difficult, boring, overwhelming, or totally irrelevant to a person's life.

An extensive literature search on using both electronic and text-based databases yielded very little in the way of empirical research involving nursing students and motivation to learn. The only study (Dowswell, Hewison, & Hinds, 1998) that was identified, dealt with motivation to participate in postgraduate studies. Hence this section of the review draws heavily on general education rather than nursing students. It is believed however, that the concept motivation to learn is not peculiar to either general education or nursing education students.

Many studies support the importance of motivation in students' learning. Persual of these studies revealed that for a number of them, the variables of interest in the study of motivation were (a) self-regulation in learning, academic achievement (Wolters, 1998); (b) academic achievement in relation to extrinsic and intrinsic motivation (Sweet, Guthrie, & Ng, 1998); and (c) performance orientation and motivation (Colquitt & Simmering, 1998; Sankaran, 2001). These studies report positive results regarding the relationship between motivation and academic achievement. None however, dealt with the teaching/learning process as a factor in student's motivation and therefore their academic achievement.

For instance Wolters (1998) researched the strategies that students use to regulate their motivation, the context of use of these strategies and the relationship between motivation, self-regulated learning and achievement. A sample of (N=115) college students taking a psychology course participated in

Wolters' study. He/she conducted a survey using a self-report questionnaire to measure goal orientation and strategy use. The findings showed significance of the students' self-regulation in learning and the use of motivational strategies among others.

Colquitt and Simmering (1998) conducted a study where conscientiousness and goal orientation were examined as predictors of motivation to learn and moderators of reactions to performance levels during the learning process. Learners (N=103) participated in a six weeks course with a performance at midcourse and in which an objective performance goal was assigned. An Expectancy multiplied by Valence framework was used to allow the assessment of expectancy, valence, motivation to learn, goal orientation, and goal commitment. Results indicated that conscientiousness and goal orientation were positively related to motivation to learn both initially and after performance feedback was given, whereas performance orientation was negatively related to motivation to learn by means of expectancy. In addition, learning and performance orientation moderated the relationships between performance levels during the learning process and subsequent expectancy and valence. It can be concluded from this study that intrinsic motivation as it is considered by the authors under conscientiousness and efficacy beliefs and as tested by goal orientation were strongly significant, while the performance orientation was not.

An experimental study was conducted by Marsh (1984) to examine the effect of various forms of incentives on examination performance. The participants (N =416) university students were showed a videotaped lecture and then completed an objective examination based upon the lecture. The

lecture was experimentally manipulated to vary in content coverage and the expressiveness with which it was delivered. The first groups (n = 205) were not given any incentive to learn, while a second group (n = 104) were given an incentive to learn and perform (they were told before the lecture that money will be given) and a third group (n = 107) were given an incentive to perform (they were told that they will be given money only before the examination). The significant difference between the two incentives given suggests that the group with the added incentive had separate effect on the motivation to learn and to do well on the tests. Students who were told of the added incentive just before the examination appeared to have more performance effects over the non-incentive students, while the groups that were told of the added incentive before the lecture had their improved performance related to better learning as well as their motivation to perform well. However, this difference would have been larger if there had been a longer delay between the lecture and the examination. The findings suggest as well that lecturer expressiveness has a substantial impact when extrinsic motivation is low.

Cock and Halvari (1999) researched the relations among achievement motives, autonomy, performance in mathematics, and satisfaction of students in elementary school. The researcher constructed a model of motivation with dispositional achievement motives at the global level, relative autonomy at the context specific level, and performance and satisfaction in school at the criterion level. The participants were (N=110) elementary school students; they were assessed utilizing four different scales to measure all the proposed constructs. The results showed that (a) the motive to achieve success correlated positively with the relative autonomy at school and the motive to

avoid failure correlated negatively with the relative autonomy at school as well. (b) The motive to avoid failure correlated negatively with performance in mathematics. (c) Satisfaction in school correlated positively with the motive to achieve success, relative autonomy, and performance. As it can be deduce even at early age the concept of autonomy, satisfaction and self-direction is related positively to motivation for success and good performance.

Coffin and MacIntyre (1999) conducted a research on, motivational influences on computer-related affective states. They examined the effect of motivation on learning how to use computers, and previous experience with computers on 3 computer-related affective states: anxiety, attitudes and self-efficacy. The participants included 59 male and 52 female university and college students enrolled in introductory computer programming and fundamental courses. The results supported the theoretical model, with some modifications. Gender differences were negligible. The students were grouped according to reasons for taking the course: intrinsic, extrinsic or both. Significant differences among the 3 groups were found, in all cases favoring an intrinsic motivational orientation.

Abouserie (1995) examined student's self-esteem and achievement motivation, and their relationship with approaches to studying and levels of processing. The sample consisted of a total (N=135) females and males, following a BA degree program in the school of education at the University of Wales. The results revealed that students self-esteem and achievement motivation have significant correlation with various subscales of two learning styles inventories. Self-esteem had a positive contribution to students' scores, achievement motivation contributed positively as well to students' scores on

achieving orientation and methodical study. Therefore the study results suggest that students' personality in general and their self-esteem and motivation in particular, have an obvious influence on their approaches to study and to levels processing.

Self-Efficacy and its Relationship to Motivation to Learn

When a student is interested in learning a certain topic, he /she will try to find the internal belief of capability to undergo the necessary tasks for the achievement of the learning experience. According to Kadzin (2000) Self-efficacy beliefs along with the intrinsic motivation to learn are considered currently among the most important constructs in the study of achievement motivation, he clearly stated, "unless people believe that they can produce results by their actions, they have little incentive to act" (p. 212), furthermore "self-efficacy is an ability-related construct referring to beliefs about one's ability to perform a task. The stronger the belief in personal ability, the more intense and persistent motivated behavior is expected to be" (p. 315-316). Self-efficacy has emerged lately as a highly effective predictor of student's motivation to learn, Zimmerman (2000) in his study about self-efficacy as an essential motive to learn, deduced that self-efficacy beliefs were sensitive to subtle changes in student's performance context, to interact with self-regulated learning processes, and to mediate students academic achievement.

Viewing motivation and efficacy as interacting mechanisms has important theoretical and practical implications for educators. As noted by Schunk (1990) "A sense of efficacy for performing well in school may lead students to expend effort and persist at tasks, which promotes learning. As students

perceive their learning progress, their initial sense of efficacy is substantiated, which sustains motivation" (p.33). Furthermore, Nicholls (1984) emphasized the importance of the students age in relation to the awareness of personal capabilities, he/she declared that "motivational problems in students with low attainment and low perceived ability can become more extreme in early adolescence when the conception of ability as capacity is established" (p.66).

Self-efficacy plays a big role in the process of achieving one's set goals. The way students perceive their capacities will have a weighing impact on the way and the progress of achieving their goals, as well as the cycle of self-regulation, adjustment and reevaluation. McCown, Driscoll and Roop (1996) pointed out that "student's beliefs about their own ability to perform successfully influence their motivation" (p. 289). This self-efficacy belief evolves from the students' observation of their own success and failure in the academic setting. According to the same authors learners are physically, emotionally or cognitively challenged in some way. These obstacles and challenges will be overcome "if a student has expectations of efficacy, if a student believes he or she is capable of accomplishing a particular goal, the belief will serve as motivation...learners who persist, learners who believe in their abilities under certain conditions and learners who exert an extraordinary amount of effort in pursuit of particular academic goal are motivated by their sense of self efficacy" (p. 289-290). Shin (1998) defined self-efficacy as being "individual's belief that he or she can successfully execute the behavior required to produce a certain outcome" (p. 38). The author related self-efficacy to three behavior patterns; choice, effort and persistence. He/she claimed that Bandura's self efficacy theory "provides a self regulation

mechanism through which people demonstrate control over their own motivation and behavior" (p. 38). The author stated in addition that, learners developed their own capabilities to regulate learning situations and strengthen their beliefs in their own competence and abilities through the experiences they faced in order to perform a given assignment or mission by interacting with other individuals in their environment.

The person's own judgment of his confidence or self efficacy determines his ability to complete the task and consequently influence the learner's persistence and the amount of efforts he/she would put. Stage (1996) pointed out that "for students, self-efficacy beliefs shape choices of activities and environments, and thereby shape their lives" (p.230). Perceived self-efficacy is viewed as influencing not only performance of tasks within education, it goes beyond that to influence the choice of educational opportunities, careers and social networks.

On the other hand, some opinions criticized the self-efficacy. For instance Pressley and McCormick (1995) declared that self-efficacy is highly domain specific, they argued that a student might have high grades in mathematics and science for instance, but low efficacy in writhing and leadership. Consequently, this would influence the students' choice of courses and later shape their careers. According to these authors, self efficacy cannot be generalized, therefore there are no self efficient individuals but there are individuals who are self efficient in certain subjects and careers, which at the same time can experience low self efficacy and fail in different subjects and careers.

Even though Deci and Ryan (1985) admitted that the importance of Bandura's theory that was based "on the notion that people behave in an attempt to achieve desired reinforcements" (p.223), they nevertheless, saw it as being lacking in the recognition of "the crucial difference between internally informational and internally controlling regulations," (p.225). They believed that Bandura had overlooked the intrinsic satisfaction. To them not recognizing the intrinsic satisfaction of efficacy is a major problem for Bandura's theory and makes his position very different from theirs.
Byrne and Byrne (1992) suggested that Bandura's theory as many others don't take much into consideration the role of the genetic inheritance in the development of behavior. They claim that "it is likely that neurological impairments arising from genetically endowed biological defects determine at least the potential for and vulnerabilities in behavioural development" (p.21).

Among the identified studies conducted about self-efficacy in education this review starts with some researches conducted in nursing education (Andrew & Vialle, 1998; Ford-Gilboe, Laschinger, Laforet -Fliesser, Ward-Griffin & Foran, 1997; Madorin & Iwasiw, 1999; Rosen, 2000), followed by the researches conducted in the general education field (Brookhart & DeVoge, 1999; Eaton & Dumbo, 1997; Jeffreys, 1998; Longo, Lent & Brown, 1992; Pajares, 1996; Rankin, Bruning, Timme & Katkanant, 1993; Vizek Vidovic, 1999; Wigfield & Guthrie,1997).

Ford-Gilboe et al (1997) researched the effect of a clinical practicum on undergraduate nursing student's self-efficacy for community-based family nursing practice. A collaborative practice model was used to provide family nursing care. The design was a pre-test, post-test design to assess the impact

of a 13-week family nursing clinical practicum on the perceived self-efficacy of two groups of nursing students in three areas: (a) knowledge related to family nursing, (b) home visiting, and (c) collaborative practice. Sixty three students completed the family nursing self-efficacy questionnaire at the beginning of the academic year, 4 month later, and after 8 month to coincide with the timing of the practicum for each group. The student's self-efficacy differed significantly by group and also with time regardless of the groups. The results supported Bandura's theory; students rated actual performance of family nursing skills in clinical setting as the most important source of efficacy information. The results also suggested that students could develop self-efficacy related to collaborative family nursing practice in a relatively short period of time given appropriate learning opportunities.

The study conducted by Andrew and Vialle (1998) discussed the relationship among nursing student's self-efficacy, self-regulated learning and academic performance in science. The targeted population was first year students undergoing science courses for undergraduate nursing programs. Students (N=303) from several universities with a mean age of 21 years old answered written questionnaires, 2 of which developed in Australia and designed specifically to be used with nursing students. Forty students were interviewed by semi-structured telephone interviews. The results were significantly related to overall academic performance in science, with self-efficacy having the strongest correlation, the higher the self-efficacy the higher the academic performance in science. Students who were high achievers described as well using a variety of learning strategies, and the opposite is also true. This study demonstrated that to be successful in a certain topic

study, strong self-efficacy beliefs are needed, as well as employment of a variety of learning strategies, and acknowledgment of the relevance of the topic studied.

The perception of self-efficacy concerning community health nursing competencies was the topic examined by Rosen (2000). A comparative descriptive survey was undertaken to inspect whether final semester associate degree nursing and baccalaureate degree nursing students who experienced community health nursing content perceived themselves as self-efficacious to work as community health nurses with individuals, families, and communities. Additionally, the study examined the variance of perceived self-efficacy accounted for by antecedent variables, performance accomplishments, explicit experience, verbal persuasion, and emotional arousal. Questionnaires were mailed to 21 faculty liaisons, randomly selected from a list of accredited nursing schools in the USA. A total 461 students returned the answered questionnaires. Statistical analysis revealed that the Associate Degree Nurses and BSN final semester students perceived themselves to be equally self-efficacious to work with individuals and families. Significant differences were found, however, between the two groups on perceived self-efficacy to work with communities, showing higher scores for the BSN students. Performance accomplishments and explicit experience contributed positively to a student's perceived self-efficacy to work as a Community Health Nurse.

All the reviewed studies supported the theory proposed by Bandura (1993) about the effect of self-efficacy on the educational outcome. However none of the known studies dealt with nursing students' self-efficacy under a case-

based curriculum. From the studies conducted in the general education field the following were found illustrating the self-efficacy and its relation to learning.

Wigfield and Guthrie (1997) explored different aspects of children's reading motivation and how this motivation related to the amount and breadth of their readings. The motives assessed included self-efficacy, intrinsic motivation, extrinsic motivation and goals as well as social aspect. The participants (N= 105) were children (grade four and five). 'The motivation for reading questionnaire' was used twice during the same year. The results found that children's motivation predicted the amount and breadth of their reading, even when previous amounts of reading were controlled. Intrinsic motivation was found to be strongly significant compared to extrinsic motivation.

A correlational study was conducted by Vizek Vidovic in 1999 in Croatia, entitled: self-referenced cognitions and mathematics grades in secondary school. The researcher investigated correlates of academic success in mathematics from the perspectives of social cognitive theory of self-efficacy and expectancy theory of motivation. The sample consisted of (N=182) eighth grade students (82 males and 93 females). Mathematics grades at the end of semester one were used to measure academic success. Results indicated that math anxiety, perceived math incompetence and math self-efficacy contributed most to the total variance in math grades. Support was also found for the complementary relationship between objective and subjective competence. One could debate that math grades should not be considered the only measure for academic success. But if the results were considered in

terms of motivation, a positive correlation between self-efficacy and variance in the course's grade could be deduced.

Eaton and Dumbo (1997) explored in this survey the differences in motivational beliefs of students from different origins (Asian- American and non-Asian). Two groups of nine graders participated in the investigation: 154 Asian American and 372 non-Asian enrolled in 21 English classes from four high schools. They completed a questionnaire and later responded to a novel task to assess their achievement behavior. Asian-American students reported lower levels of self-efficacy beliefs, yet they outperformed their non-Asian counterparts on the task. The fear of academic failure better explained achievement motivation for Asian Americans than did self-efficacy beliefs. Motivational beliefs seemed to elicit different responses in different cultural ethnic groups.

Rankin, Bruning, Timme and Katkanant (1993) examined relations between self-efficacy and outcome expectancy beliefs and spelling and writing performance in 258 college students. The target was to know if writing is affected by spelling performance and beliefs about spelling. Spelling was measured through a spelling test and writing performance by a holistically scored writing sample. The students were also asked if they could complete a variety of spelling and writing tasks and to rate the importance of such success by achieving academic and vocational goals. The most highly correlated variables included spelling outcome expectancy, and writing outcome expectancy, spelling self-efficacy and writing self-efficacy, and spelling and writing performance. The researchers concluded that spelling performance and beliefs of self-efficacy about spelling performance do affect

writing skills and that the higher the self-efficacy beliefs about spelling the better was the performance.

Research on self-efficacy beliefs in academic settings was examined by Pajares (1996). The review study conducted by Pajares addressed the contribution made by the self-efficacy component of Bandura's (1993) social cognitive theory to the study of self-regulation and motivation in academic settings. The author explained the difference between self-efficacy beliefs and other expectancy constructs a brief overview of problems in self-efficacy research followed. Then he summarized the findings on the relationship between self-efficacy, motivation, and academic performance. These findings demonstrated that, particularized measures of self-efficacy that correspond to the criterial tasks with which they are compared surpass global measures in the explanation and prediction of related outcomes.

Longo, Lent and Brown (1992) applied Bandura's (1993) social cognitive theory to the prediction of client motivation and attrition from counseling. A total of 139 university counseling center clients completed a measure of self-efficacy regarding their ability to negotiate counseling tasks, along with measures of counseling-related outcome expectations, perceived motivation, problem distress level, state anxiety, and self-esteem. Results indicated that (a) self-efficacy and outcome expectations each explained unique variation in motivation, beyond client and counselor background variables; (b) self-efficacy and motivation each contributed to the prediction of client return status after an intake interview; and (c) self-efficacy did not relate to global self-esteem or state anxiety at the intake session. These results suggest that

Bandura's social cognitive theory may help illuminate among other issues, the process whereby clients commit to counseling.

A study using survey, observation, and interview techniques was conducted by Brookhart and DeVoge (1999), to test a theoretical framework describing the role of classroom assessment in student effort and achievement expected positive relations among perceived characteristics of the assessment task, perceived self-efficacy to do the task, amount of effort invested in the task, and achievement for each classroom assessment events within the classroom assessment environment. Furthermore, the classroom assessment environment and the particular assessment events themselves were hypothesized to make a difference. The data were collected from four classroom assessment events from each of two grade three classes. The results showed that in general, the expected relations were found among perceptions of tasks, self-efficacy, effort, and achievement. An exception was that for some assessments, perceived self-efficacy was not correlated with effort. Interview data suggested that extremely high self-efficacy, coupled with an assessment task that posed no challenge to a student, could lead to low perceptions of effort.

Attribution of Failure and/or Success in Learning.

In all events people tend to inquire about the reason behind such and such thing. There is always an attempt to form an attribution that will explain a behavior or an event. This is very applicable when it comes to education, the learner constantly analyses the reason behind success, failure, liking or disliking a certain topic. Stage (1996) described attributions as "the reasons students give for their success or failure at various tasks" (p.231). The

perceived reasons behind succeeding or failing at a task affects motivation and achievement, Kazdin (2000) claimed "ascribing success to oneself increases pride in accomplishment, whereas ascribing one's failure to lack of ability gives rise to shame and withdrawal" (p. 316).

Weiner (1990) pointed out that behavioral theories tend to focus on extrinsic motivation such as rewards, while cognitive theories deal with intrinsic motivators like goals and targets. Further more he stated that even with the need to achieve, students would either succeed or fail. As they do, they search for reasons for their success or failure in other terms they attribute their performance to a specific cause. Students' attributions then serve as a guide to their expectations for the future success or failure in that subject. McCown, Driscoll and Roop (1996) attested that usually no matter what reasons the students gave for their success and/or failure they sought in their reasoning to maintain a positive self-image.

Attribution theory rests on three basic assumptions. First, people want to know the causes of their own behavior and of others, particularly behavior that is important to them. Second, attribution theory assumes that no one randomly assigns causes to one's behavior. There is a logical explanation for the causes to which we attribute our behavior. Third, the causes that we assign to our behavior influence subsequent behavior. Weiner (1990) believed that when achievement is aroused, students tend to attribute their performance to one of four elements: ability, effort, task difficulty or luck. Once students question their ability for instance, this doubt spreads to other subjects or tasks and eventually it affects their self-efficacy and motivation to accomplish their set goals. Schunk (1985) reported that students enter a

classroom with aptitudes and experiences that affect their self-efficacy for initial learning. When successful, students sense of self-efficacy increases, and in turn, enhance motivation. Students who consistently question their own abilities pose a serious challenge since their history of failure and feelings of incompetence undercut motivation and learning. Students who have little faith in their abilities attribute success to luck, thus short-circuiting the motivational network just described. They tend to attribute their failures to internal and stable reasons such as 'I am dumb, I will always be a failure, and nothing I would do will help'. For this reason attribution training was mentioned by McCown, Driscoll and Roop (1996), Shin (1998) and Schunk (1990) as a way to help students believe that their abilities are not fixed and can be acquired as skills or knowledge. Such a belief can motivate students to continue their efforts to learn and improve. Not surprisingly, stated Pressley and McCormick (1995) attributions for success and failure affects students' motivation to devote effort in a similar assignment in the future.

More and more Nicholls (1984) mentioned that motivational problems of the low achieving students become more serious in the age of adolescence because it is at this age that the concepts of ability and capabilities are established. This can constitute a more serious threat to self-esteem.

Nevertheless the attribution theory and its postulates were criticized on certain concepts. Zimmermann (2000) for instance mentioned that usually people tend to take credit for their own successes, but deny responsibility for their failures. "This bias is functionally important because it serves to maintain positive affect and self-esteem" (p.323). McCown, Driscoll and Roop (1996) stated as well that when attribution theory is used to estimate the student's

motivation cultural differences should be taken into account. Some cultures might not consider luck as important, while other s would give it a considerable emphasis.

Among the variety of research findings reviewed, most of them focused on attribution and general learning. Since nothing was available on nursing education, the following review highlights the impact of attribution of success and failure on learning for non-nursing students.

Flett, Hewitt, Blanstein and Pickering (1998), examined the association between dimensions of perfectionism and attributions for success and failure. A sample of 124 university students, males and females completed two multidimensional scales on perfectionism and attribution. The scales measured: self-oriented perfectionism, other-oriented perfectionism, socially prescribed perfectionism, internal attribution and external attribution for positive and negative outcomes. The main finding was that socially prescribed perfectionism was associated with a general tendency to attribute outcomes to external causes. This external attribution pattern was obtained for successes and failures in both achievement and interpersonal spheres. Overall, the results suggest that socially prescribed perfectionism is associated with perception of learned helplessness.

A series of three experiments were conducted by Arnkelsson and Smith, (2000) who studied the impact of stable and unstable attributes on ability assessment in social comparison. Social comparison theory assumes that people rely on the multiple sufficient causes of attributional schema for ability assessment. When standing on performance-related attributes differs between two individuals, ability judgments should be low in confidence to the

extent that performance differences are consistent with the attribute differences and high in confidence when the two are inconsistent. The authors argue that this holds true for standing on unstable attributes such as practice but not for stable attributes such as education. Stable attributes serve as cues to ability rather than alternative interpretations of performance differences. One hundred and fifty eight (158) undergraduate students participated in the experiments. The results showed that the participants' ability judgments were more confident when performance was consistent with their standing on stable attributes such as education or occupation, but less confident when consistent with standing on an unstable attribute such as practice.

The Case-Based Learning Methodology and How It Relates to Motivation in the Learning Process

The use of cases in learning is not a new methodology in teaching and learning, it could be considered as old as storytelling. Introduced in the1970s by Harvard law school faculty and adapted for use by other disciplines, the case method of teaching and learning could be described as utilizing stories or scenarios concerning situations that need decision making or problem solving. The learner works to identify the problem and relate the links. The instructor encourages the exploration of the case in order to allow careful study and analysis of the proposed situation (Dailey, 1992; Barnes, Christensen & Hansen, 1994).

Kaufman (1998), Lynn Jr. (1999), and Husock (2000), defined teaching cases also known as case studies as narratives designed to serve as the

basis for classroom discussion. Cases don't offer their own analysis. Instead, they are meant to test the ability of the students to apply the theory they've learned to a real world situation. The case studies present a dilemma, or puzzle, that will elicit very different responses and suggestions for action.

As educational theorist has begun to emphasize the importance of actively involving learners in instruction that is situated in meaningful contexts, the use of case method is increasingly being recommended (Paris & Newman, 1990; Tishman, Perkins & Jay, 1995; Williams, 1992). In fact, the literature is replete with claims of the benefits for students who participate in the case method: knowledge and skills acquisition, attitude change, and development of judgment and wisdom (Wolfe, 1993); increase in professional reasoning, critical thinking, problem solving, and reflective thinking (Barrell, 1995), integration of theory and practice (Kagan, 1993), group cooperation, recognition of multiple viewpoints as well as increased interest and motivation (Shulman, 1992; Wassermann, 1994).

Furthermore (Barrows, 1986) argued that case method teaching has advantages over the traditional methodology of teaching by enhancing motivation and psychological involvement, and fostering self-direction in learning. It is more interactive and more indirect (Husock, 2000). This interaction and involvement that the case method enhance "allows students to grow, and is inherently motivating" (Uys & Roos, 1996). The main characteristic of case teaching is the intellectual and emotional involvement of the student (Barnes, Christensen & Hansen, 1994). Consequently for a student to be productively involved in the learning process, motivation is a must.

"Adults are more motivated to learn when their own learning needs and experience provide the starting point for learning, and when the focus of their learning is on immediate application to relevant life situations. They also are motivated to learn when their personal experience is used as a resource..." (Kaufman, 1998, p.2).

McKeachie (1994) claimed that teaching methods based on discussion had advantage over the traditional modalities in teaching, especially in the improvement of the way students think and relate information. It showed in particular behavioral changes and increased motivation to learn compared to other teaching methods. Harrington (cited in Yost, 2000) supported McKeachie regarding discussion teaching when he/she stated "dialogue allows students to be aware of what they share in common, as well as the uniqueness of each of them as individuals" (p.41).

McCombs (1991) recommended as preparation for the 21st century educational psychologists the development of learner-centered teaching methodologies, which will result in promoting motivation and lifelong learning. While Bevis (1989) confirmed that the essence of nursing curriculum relied on the quality of the relationship between the tutors and the students since the classroom and the clinical activities would develop the learner's understanding of learning through the use of intellectual abilities and skills.

Grow (1991) described college students as belonging to an intermediate self-direction level, he claimed that they are ready at this level to be participants in their own learning, they are supposed to be ready for fruitful collaborative work much more than earlier stages. It is at that stage that they learn to create lifelong learning situations for themselves.

Forbes and La Trobe (2000) in a comparative study concerning nursing students studying under a traditional versus a self-directed learning approach concluded that "learners who accept responsibility for their own learning by being actively involved in exploring the literature, sharing information and contributing to group discussion, are more likely to feel satisfaction with their approach and knowledge development..." (p. 8).

Shulman (1992) advocated that the general implication in the literature was that students found cases motivating. However several educators (Candy, 1991; Cossom, 1991; Lynn Jr., 1999; McCown, Driscoll & Roop, 1996) rejected this claim such as. Candy for instance, claimed that there were certain skills and bodies of knowledge which were best and most easily mastered under the tutelage of an expert. Similarly, Cossom cautioned that not all students are capable of independent learning and, when required to change their approach to study, become more anxious and resistant. In line with Candy (1991) and Cossom (1991), McCown, Driscoll and Roop asserted, "many low-achieving students lack the motivation and confidence necessary for effective independent work. Some of these students lack reading and other basic skills and have not developed the kind of self-monitoring and organizational skills that would allow them to benefit from seat work" (p. 404).

Lynn Jr. (1999) went further claiming that not only students could face the problem of motivation, this could happen to teachers of the case method as well: "they want students who are intrinsically motivated. Indeed, students profess this value as well. But the institution of formal education depends on extrinsic motivators...and may motivate no more than compliant behavior. Thus, even in case classrooms, students and teachers may collude. Teachers

may succumb to temptation to curry favor or win popularity" (p. 38). This dilemma is confusing for the students and is intensely demotivating, their feelings of insecurity are exacerbated as a consequence.

From this review of literature regarding the case methods of teaching, the importance of this methodology in enhancing motivation and producing behavioral changes is highlighted. Nevertheless some opinions are not to be neglected reflecting the possible shortcomings of this learning methodology.

Although the literature is abounding with claims on the benefits of case-based instructions, an extensive search on using both electronic and text-based databases yielded very little in the way of empirical research involving students and the use of case-based learning and its relationship with motivation. Two researches (Barise, 2000; Ertmer & Dillon, 1999) have examined how students respond to and approach learning from this instructional method. None was found in the domain of proving the effectiveness of this methodology in motivating nursing students to learn.

On the purpose of comparing the effectiveness of case-based instruction and lecture-based instruction and lecture-discussion in enhancing student's competence and their reflective self-regulation to learn multicultural social work, Barise (2000) conducted a randomized pretest posttest control group design, which involved undergraduate social work students enrolled in a multicultural social work practice course. It was composed of two classes, the Special Bachelor of Social Work (SBSW) and the Regular Bachelor of Social Work (RBSW). Each of these classes was divided into two sections. Participants were randomly selected to these two sections in which case-based instruction in a section (n=20 for the SBSW class; n=19 for the RBSW),

and lecture-discussions in the other section (n=20 for the SBSW class; n=19 for the RBSW) were used to teach the same course content. To measure levels of students' self-regulated learning in relation to the course, the Motivated Strategies for Learning Questionnaire was used. Case analyses scored through Cross-Cultural Counseling Inventory-Revised and student self-reports using the Multicultural Counseling Inventory were used to measure multicultural social work competence. The same data were collected both at the beginning and at the end of the study. The study was done over eight weeks. Results indicated significantly higher overall multicultural knowledge and learning motivation for the case-based section in the SBSW, but not in the RBSW class. No significant interaction was found between self-regulated learning and method of instruction. There was no significant difference between the two groups in terms of increase in skills in self-regulation. The results of this study prove the previously mentioned literature that case-based learning is motivating but might not work for all learners.

Ertmer and Dillon (1999) undertook a phenomenological study in order to support and extend the knowledge gained from the Barise's (2000) study on the responses and approaches of a freshman's class of veterinary students (n=9) introduced to case-based instruction. The goal was to highlight the contrasting experiences of two students enrolled in a case-based biochemistry laboratory course. Using a constant comparative analysis method, three common themes were identified: student's perceptions of and responses to case-based instruction; types of goals and regulatory strategies used to approach case-based instruction; changes in the responses and /or strategies that occur with increased experience with case-based instruction. The

selection of the site and participants was made for the following reasons: The instructor was well known for extensive use of case studies, the biochemistry lab was situated within a lecture-based curriculum, by consequence the students were exposed simultaneously to the two approaches. The participants' choice was based on the scores of pre-semester self-reports and self-regulated learning inventory. The final interview included five high and four low achievers, the data drawn from two of them was presented in this article. The data were collected using: (a) two self-reports on self-regulation (SRLI), (b) The Motivated Strategies for Learning Questionnaire (MSLO), and (c) three semi-structured interviews were conducted during the semester after each case analysis.

The results of this study described the case-based learning from the learner's point of view, it suggested that cases may not be automatically motivating for all learners; they may not perceive or experience the benefits of such an approach. It highlighted as well that perceived value, learning focus, and reflective monitoring strategies may play potential roles in shaping students' approach in a case-based course. The most noticeable difference stated as well between the two participants was their ability and motivation to use reflective monitoring strategies when faced with difficult cases. On the other hand they displayed similar patterns of strategy use relating to the goals they adopted. The student who valued the case method as useful emphasized learning the analysis process and directed his/her effort toward mastering the approach. As for the student who did not perceive the relevance of this method, he/she tended to emphasize the biochemical facts that should be learned and focused his/her efforts on appearing competent and on getting

the right diagnosis, furthermore he/she did not seem to enjoy challenge as for the other participant. The results received from these two students were similar to those reported in the study by Barise (2000). Finally the researchers noticed that what was the most encouraging about the results of this study was that promising changes were noted in many students' responses over the course of the semester. This implied that "given more time, more school and instructor support... greater changes may be possible" (Ertmer & Dillon, 1999, p.16). The importance of this study lies in the individual point of views of the participants and the richness it adds to the theoretical knowledge available on the motivation with case based instruction

Finally, and as a brief conclusion for this review, motivation and self-efficacy were and will remain at the core of learning, the pounding heart that blows life into education and carries the learner that extra mile needed to achieve one's goals. They are the pillars that independent and self-directed learning is founded on. Both motivation and self-efficacy compliment the case-based methodology as they all combine to boost each others role in enhancing the learner's education. Lynn Jr. (1999) is worth quoting as he/she acknowledged "Ideally, motivation will be intrinsic. Your students will be in your class because they want to be there ....With such participants, if you do your part, they will do theirs" (p.69).

CHAPTER THREE

FRAME OF REFERENCE

One of the reasons for introducing this curriculum in the UAE institutes of nursing, was to help the students find intrinsic motivation to learn, and develop their self- efficacy through exploring their personal talents and ways of learning. Two theories will be used to guide this study, Bandura's (1993) self-efficacy theory and Weiner's (1984) attribution theory. The reason for this choice is that while the latter theory places emphasis on causal attributions and goal expectancy, the former while recognizing the place of causal attributions and goal expectancy in determining how much effort students will expend on their academic work, adds another dimension, that is, self-efficacy beliefs. It is believed therefore, that a theoretical framework integrating these two motivational theories is appropriate for this study because the advocates of the case-based learning (Barrows, 1986; Gwele, 1999) contend that it enhances students' self-directed skills as well as their motivation to learn.

Bandura's Self-Efficacy Theory

According to Bandura (1993) "the students' beliefs in their self-efficacy to regulate their own learning and to master academic activities determine their aspirations, level of motivation, and academic accomplishments" (p.117). He tackles the theory of perceived self-efficacy in cognitive development and functioning from the point of view that what people believe they are able to do, actually controls their performances and actions and strongly affects their lives. According to Bandura, self-efficacy is driven by four major processes: motivational, cognitive, affective and selection processes.

This research mainly concentrates on the motivational processes of Bandura's theory, primarily because "self beliefs of efficacy play a major role in self regulation of motivation" (p. 129). An attempt is made however, to include all the dimensions of self-efficacy as conceptualized by Bandura, only in so far as they relate to student motivation. As mentioned by (Bandura, 1991, cited in Bandura 1993) people control their actions and motivate themselves voluntarily through thinking and setting goals and planning to realize a desired outcome. Planning for the future triggers people to set valued targets for themselves and creates a stimulus that drives them to attain their goals through well-planned actions in a cognitively generated motivation.

Motivational processes. Bandura (1993) in his theory of self-efficacy, integrates three different, albeit, complimentary theories of cognitive motivation. These include (a) attribution theory, (b) expectancy-value theory, and (c) goal theory. According to him, self-efficacy beliefs play a major role in each of these three theories.

1. The **attribution theory** is based in this study on Weiner's (1984) theory, which will be discussed in the following section of this chapter. Bandura (1993) asserted that people with high self-efficacy attribute their failure to insufficient efforts while ones with low self-efficacy attribute their failure to incompetence. He further maintained that persons with a high sense of self-efficacy think, feel and act differently from those who perceive themselves as inefficacious. They view difficult tasks as challenges instead of threats. Even failure is attributed to insufficient effort and more energy is expended to overcome setbacks, stressors etc. Thus according to Bandura there is a close relationship between self-efficacy and how

people attribute their successes and/or failures. For instance he stated that, "People with high self-efficacy approach difficult tasks as challenges to be mastered rather than threats to be avoided.... They attribute failure to insufficient effort or deficient knowledge and skills that are acquirable" (p.144).

2. From the perspective of the **expectancy-value theory**, people set a goal expecting to generate an outcome by realizing it. However, self-efficacy determines whether their goal is attainable through believing in their capability to achieve it. "there are countless attractive options people do not pursue because they judge they lack the capabilities for them" (Bandura, 1993, p.130).
3. In the **cognized goal theory**, self-influence is a major factor. People by setting personal challenges, exercise self- influence to be motivated and reach their goal. Their self-satisfaction is tied to their achievement. Their persistence to overcome difficulties is derived from a creative incentive and a guided behavior until they attain their goal. By evaluating their reactions they are set to increase their efforts intensively to spring back up from unsatisfactory performances; "motivation based on goals or standards is governed by three types of self influences. They include affective reactions to one's performances, perceived self-efficacy for goal attainment, and readjustment of personal goals based on one's progress" (p.130-131).

For Bandura (1993) therefore, self-efficacy beliefs are the engine that drives people to set goals for themselves, determines the magnitude of efforts they exert for reaching their goal and empowers them with the force to sustain

difficulties and overcome setbacks. When self-efficacy is high, people tend to persevere when encountered with bumpy and tough roads; they double and triple their efforts in order not to fail. But people who doubt their own abilities and have low esteem of their self-efficacy fall back and duck in the face of challenges. The discrepancy between performance and the set goal can be reduced by the utilization of sources of self-influences. "Self-motivation, thus, involves a dual control process of motivating discrepancy production followed by discrepancy reduction" (p.132).

Cognitive processes. The higher the level of self-efficacy the more people are committed to their challenges and goals, claims Bandura (1993). The higher the sense of self-efficacy he explains, the more success is foreseen. The opposite brings the opposite results. A person with a certain knowledge background could perform differently according to the level of his self-efficacy. This is mainly due to self-observation, observation of others, encouragement of others and emotional arousal. In other words students characterized by self-efficacy observe their previous achievements to find the motivation for future goals; they might also observe other people's success and take it as an incentive. The encouragement of colleagues and peers as well as the personal challenges trigger them to try and succeed. The combination of these sources together gives a person a high sense of perceived self-efficacy.

The affective processes. These processes explain how the perceived self-efficacy by a person affects the level of stress and anxiety experienced while facing a problematic situation or a difficult task. When people feel that they have a good control over a situation or a problem being faced, they can

perform efficiently and properly without panicking or experiencing any feeling of anxiety. In contrary, when the problem seems to be out of control, stress and anxiety will overpower them and throw them off tracks.

The affective processes work usually through:

1- Efficacy to control disturbing thoughts, which is a major factor in reducing or rather regulating stresses and anxiety.

2- Coping efficacy and achievement anxiety: perceived self-efficacy is affected by past performances. Academically for instance, students that experienced previous failures tend to have a weakened sense of self–efficacy and become anxious about their academic performances. However, if they are immune to failure they will cope better. Students that believe in their own capabilities will regulate their level of anxiety to the point that it will have no bearing or relationship to their academic performances.

3- Self-efficacy and depression: a low perceived self-efficacy leads to anxiety and depression through three ways: (a) unfulfilled aspirations due to unreachability; (b) low sense of social efficacy by perceiving self as socially inefficacious; and (c) depressive situations are generated by the inability to control defective thoughts.

Selection processes. Finally, beliefs of efficacy influence people's choice of activities and environment. They undertake tasks that they believe they can accomplish and avoid activities that exceed their capabilities. An example of that is the choice of a career or of taking an important decision. By the

decision people make, they sculpt their capabilities, interact with their environment and develop interests, friends and/or enemies.

These processes (motivational, cognitive, affective and selection) play a major role in the individual's day-to-day decisions, academic achievements and career improvement. There are three principal ways on which perceived efficacy operates in academic development as mentioned by Bandura: (a) the teachers beliefs in their efficacy to motivate and promote learning in their students, (b) the staff's collective sense of efficacy that their institution can accomplish significant academic progress, (c) the students belief in their efficacy to regulate their own learning, which is the focus of this study.

In regard to the students' belief in their efficacy, Bandura states that there are three modes of influence that strengthen the students' self belief of their ability to control their self-development:

1- Self-efficacy in self-regulated cognitive development: self-regulation of students' own learning through out lifetime is a very important goal of the formal educational process followed by the recent educational methodologies. Bandura claims that "the higher the students self-regulatory efficacy, the more assured they were in their efficacy to master academic subjects" (p.137). High achievers are those with high self-efficacy, which allows success by direct effect and by rising up the students' personal goals so that they won't see the target in mind as very far and unreachable.

2- Impact of cognitive self-efficacy on developmental trajectories: learners with high sense of academic self-efficacy are more sociable and adaptable and experience less rejection from their peers, than learners

with doubts about their academic efficacy. In other words self-beliefs of academic self-efficacy can have a tremendous effect on the development of the students' way beyond the academic domains.

3- Sociocognitive instructional strategies: the self-efficacy theory is based on the belief that ability is changeable and can be controlled. Guided mastery is utilized until the children's competencies are expanded. Then self-directed mastery experiences are employed to strengthen the students' self-beliefs and ability to control their own development.

Weiner's Attribution Theory

Weiner (1984) dwelt more in depth and developed an attribution theory that emphasized the importance of looking for the causes behind a fact such as failing a course or loosing a football game. Three casual dimensions representing five casual distinctions were considered the piles in the development of this attribution theory. The first dimension labeled locus of control differentiated between internal causes located within the person such as personality and intelligence, and external causes located in the environment such as difficulty of a task or luck.

This dimension led to the second dimension referred to as constancy. It represented two causal distinctions: temporal stability and globality. The temporal stability refers to things that could be considered stable or always present such as ability and beauty, while globality or cross-situational aspect is concerned with aspects like intelligence and aptitude.

Controllability and intentionality are two causal distinctions classified under the common category of responsibility. Under this category individuals are

held responsible for how hard they try and the amount of effort they put. But some aspects in the human being cannot be controlled such as illness and capabilities, while patience, tolerance and anger are usually considered controllable.

These distinguished categories allowed the understanding of the causes behind certain facts and attributions in life and especially in education. Students always look for a reason (internal or external) to rationalize their success and/or failure.

This understanding leads to discuss **the consequences** of these described dimensions. It mainly concerns **the goal expectancies** and **the emotional reactions**.

Weiner describes **the goal expectancy** according to its magnitude and direction. Weiner (1984) claims "expectancy shifts after attainment or non-attainment of a goal are dependent on the perceived constancy or invariance or the cause of the prior outcome" (p. 25). In other terms if success or failure is attributed to a constant reason, it is assumed that this previous outcome will be most probably repeated. A success in school attributed to high abilities results in higher future expectancies than success due to luck or easy task.

Attribution and Emotions

Weiner's attribution theory lays a proper emphasis on the role of emotions in human motivation. Weiner (1984) states that research investigations have definitively documented that "there are multiple sources of affect following success and failure" (p.28). One determinant of feelings is the outcome of an action, for example success is followed by happiness regardless of the cause of success whether it is luck or extra-effort.

Sometimes emotional reactions can be more complicated, unrelated or opposing to success or failure. An important number of emotions were related to the causal dimensions such as pride, guilt, relaxation and pity. Weiner argues that these felt emotions influence the actions that follow them. Gratitude would be followed by the purchase of a gift while anger can be followed by aggressive behavior. "Thoughts give rise to feelings, and feelings guide behavior" (p. 32). In other words, feelings play a role in guiding the attribution process and therefore have indirect motivational significance.

This brief description of the self-efficacy theory and the attribution theory tries to shed a light on the choice of this framework for the study on hand. The close relationship between the students' motivation to learn, their self regulation capabilities for learning and their beliefs of self-efficacy explains the presence or lack of their motivation to learn and the way they attribute their success and/or failure.

the first year of case-based curriculum, 215 students for the second year and 165 students for the third year diploma are enrolled in the four institutes of nursing. Two Institutes were selected purposefully 'Abu Dhabi and Al Ain campuses for the close distance between them as compared to the long distances that separates the others, the big number of students enrolled compared to other campuses, as well as the tendency to enroll applicants with higher high school grade averages and better English proficiency (the teaching–learning process is in English) than the students of the other institutes. The total number of the Diploma One students in the selected campuses was 185, 116 students in the Diploma Two, and 96 students in the Diploma Three. Fifty percent (50%) were randomly selected from each group, resulting in a total of 199 potential participants. The stratified random sampling technique was used to select the participants in this study. According to Burns and Grove (1997) "Stratification ensures that all levels of the identified variables will be adequately represented in the sample. ... Sampling error is decreased, data collection time is reduced, and the cost of the study is lower using stratification" (p. 300). The stratum used for selection was year of study, That is, students were supposed to be:

- Registered in the third year of the diploma program and following the case-based curriculum for group one.
- Registered in the second year of the diploma program and following the case-based curriculum for the second group.
- Registered in the first year of the diploma program and the case-based curriculum for the third group.

It is worth noting here that all the participants of the study were Arabs and females, being the admission criteria of the Institutes of Nursing in the UAE.

Instrumentation

The information needed for the research was collected by the use of a researcher-developed structured questionnaire (appendix 1) on the levels of self-efficacy and reasons for success and failure as expressed by the participants. It was developed based on the theoretical framework and the purpose and objectives of the study.

The questionnaire has three sections, consisting of a total number of 37 items, 32 of which are self-completing 4-point Likert scale statements. The questionnaire's three sections dealt with: Motivation processes (section A), Cognitive processes (section B), Affective processes (section C). Twenty-seven items of which dealt with the students' self-efficacy beliefs (1 to 12 and 18 to 32), and the remaining five (13, 14, 15, 16, 17) dealt with the way they attributed their failures and successes. Five demographic data items separately numbered were included at the beginning of the questionnaire. The questionnaire was translated into Arabic to ensure that language does not disadvantage the year one group.

The grading used for the positive statements in the questionnaire gave the highest score to the strongly agree (strongly agree =4, agree =3, disagree =2, strongly disagree =1), this was reversed for the negative statements (1, 2, 4, 9, 11, 13, 15, 16, 17, 22, 24, 26) where the highest score was given to the strongly disagree (strongly agree =1, agree =2, disagree =3, strongly disagree =4), the purpose was to enable the easy measurement of the participants' level of self-efficacy. The closer the mean is to four, the higher is the level of

self-efficacy. According to the hypothesis number three of this study the statistics should prove that the higher the level of self-efficacy the more the internal, unstable and controllable the attributions of successes and/or failures should be. In other words item 14 should be agreed upon by the self-efficacious students, while items 13, 15, 16 and 17 shouldn't be adopted by those students. Details on each of the attribution items scores will be described one by one in the discussion of the results chapter.

Validity, Reliability and Feasibility

The following mentioned tests were followed to test the instrument's reliability and validity: the instrument was designed based on the literature available on the variables studied, as well as the frame of reference of this study. The number of items was considered carefully so that it measures the variables, but at the same time should not take more than 20 minutes to fill.

The instrument was tested for face and content validity by a group of five colleagues chosen for having a background in educational psychology; they could recommend the elimination, rewording and /or the addition of dimensions or items. These same judges were asked to insure the interrater-reliability. This was done by grading each item independently as follows: (+1, relevant), (0, can not decide), (-1, irrelevant). The questionnaire was originally 37 items, based on the judges' feedback five items that were scored (0, can not decide), (-1, irrelevant) were deleted. Around ten items were reworded for more clarity and direction. The scale was adjusted according to the recommendations given to 4-point Likert scale instead of five, some changes in the format and phrasing of the tool's items was performed as well.

The test for homogeneity of all the items in the instrument was done to determine its internal reliability. This consisted of conducting Cronbach's aplha correlations reliability to examine the extent to which all the items of the instrument measure the same construct. "It's a test of internal consistency" (Burns & Grove 1997).

The test was performed on 178 usable cases; cases were eliminated from analysis if seven items were unanswered. The tool was split into two groups one consisting of the odd numbered items and the other containing the even numbered items. The overall Cronbach's alpha was = .7408. The reliability scores were acceptable without the deletion of any item.

Pilot Study

A pilot study on 10 students (5%) was conducted in order to test the feasibility of the instrument. They were chosen from each level of study at a different campus having similar criteria to those of the participants. This pilot study was done after translation of the questionnaire to Arabic, it preceded the real collection of data, and the responses were consistent among the ten students. A personal interview was done with each one separately. They were asked to give a feedback on: (a) the format of the questionnaire, (b) the language complexity, (c) the suggested modifications and (d) the perceived applicability on their situation. The items were answered and the questionnaire according to their answers did not pose any problem as for understandability. The feedback suggested some minor changes. Modifications to the instrument were effected based on the following comments given:

- Three of the pilot participants identified some typing mistakes in the scale that were corrected accordingly.
- They questioned the meaning of one item, accordingly it was rephrased.

The data given was not analyzed with the responses given by the chosen subjects.

Data Collection

The researcher and one assistant from Al Ain Nursing Institute distributed a total number of 199 translated questionnaires for the randomly selected students in each class. Arrangements were made with the academic coordinator of the two chosen institutes to allow the students participation in the collection of data. The data collection lasted for a week including mailing time, distribution and collection of the questionnaire. The researcher and assistant personally distributed the questionnaire to the chosen participants, explained clearly the objectives and nature of the study and emphasized the participants right to refuse or withdraw her participation at any stage of the research (as mentioned in the ethical consideration). A cover letter (Appendix1) was distributed along with the questionnaire to each participant clearly stating the purpose of this study and seeking their signature. The questionnaire took between 10 and 20 minutes of time to be completed. The participants were asked to fill the answers simultaneously.

A total of 186 questionnaires (93.46%) were returned and useable. Seven to nine items were left unanswered by eight of the participants, by consequence they were disregarded from the analysis.

Measures and Data Entry

Motivation level, the main outcome variable, was assessed in this study using the tool described in the previous section of this chapter.

The data were entered on the Statistical Package for Social Sciences (SPSS version11.0). Frequencies were done for all the variables as well as crosstabulations. The ANOVA, Kruskal-wallis and chi-square were used in measuring the level of motivation per year of education as well as level of self-efficacy per year of education. Spearman's rho (p) was used to test the existence of a relationship between the level of self-efficacy and the attribution of success and/or failure.

Ethical Considerations

The research as planned does not harm the participants or the Institutes in any way. However, the researcher followed a number of procedures to insure the protection of the participant's rights:

(a) Anonymity and confidentiality were protected by keeping the questionnaires anonymous. That was made clear to the respondents before data collection by oral simple explanation and by means of an informed consent form distributed and signed by all chosen respondents (appendix 2).

The elements of the informed consent were:

- The title and the purpose of the conducted study.
- A clarification on the benefit of the study for the nursing students and nursing institute.

- A clarification regarding confidentiality and anonymity, with specification regarding the inaccessibility of the raw data.
- The right to withdraw at any point of the research was clearly stated as well.
- The voluntary (deliberate) participation in the study.
- The researcher's contact numbers for further information or for the inquiry about the results.
- The participants' signature.

(b) The informed consent was translated to Arabic along with the questionnaire to insure the clarity for all the participants.

(c) The approval of the Institute's director was sought at the beginning of the research project by disclosure of the research plan and proposal, authorization was given to proceed with the planned study.

Limitations of the Study

- The study was conducted in the Nursing Institutes of the UAE, and does not involve any other nursing schools or universities in the region. Access to other institutions for research purposes was difficult if not impossible. However the nursing institutes are considered currently as the biggest nursing schools in the UAE considering the number of branches and graduates.
- Two out of four institutes were chosen because of the homogeneity of the students in these two institutes compared to the other two institutes. But the sample consisted of students from the same nationalities and the same characteristics as those of the remaining

institutes. The sample was (25.37%) of the total population which is considered acceptable for a random sample.

- The absence of the males in this research is considered a limitation. Usually with affective variables such as motivation, a noticeable difference is noted between genders. This exclusion was obligatory due to the situation in the institutes, and the absence of a nursing school for males in the UAE.
- The use of one research assistant in Al Ain institute of nursing. Knowing that the questionnaire is a self-completing one, same instructions and same process were followed. The absence of the researcher did not cause any problem.
- The cross-sectional design was used rather than a longitudinal design (which is usually chosen for similar topics) due to time restriction considering the purpose of finishing the degree on time. The main disadvantage that could be related to the usage of a cross-sectional design in this study is that, the changes that might be detected by the distributed questionnaire could have an alternative explanation such as maturity of the second and third group rather than increase in the self-efficacy as a result of the teaching-learning methodology.

CHAPTER FIVE

RESULTS

Participants Profile

A total number of (N = 199) students were initially selected to participate in this study. However, 186 questionnaires were returned and 178 were considered analyzable. Questionnaires with seven or more unanswered items were not included in the analysis of data.

Participants Description

The participants of this study aged between 17 years and 32 years with a mean of 19.68 and a standard deviation of 1.85. A total of 86 (48.3%) enrolled in year one diploma, 51 (28.7%) enrolled in year two and 41 (23.0%) in year three diploma (figure 1).

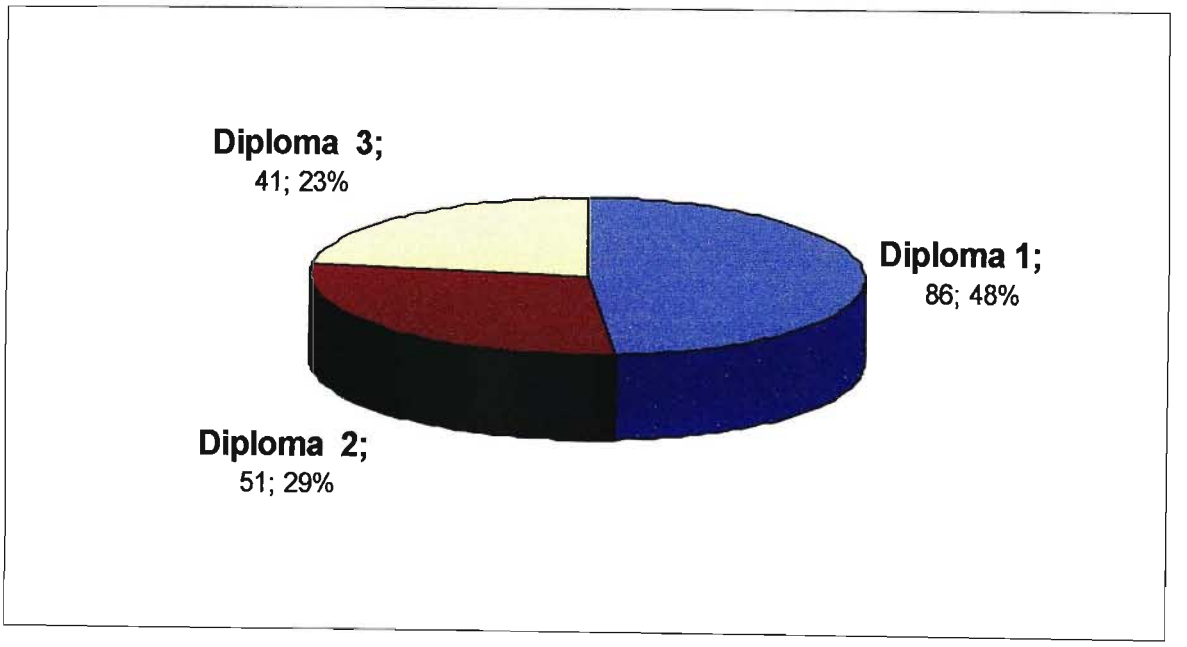

Figure 1: Number of Students in Each Diploma Level

The distribution of the participants per campus was: 101 (56.7%) in Abu Dhabi, and 77 (43.3%) participants in Al Ain campus (figure 2).

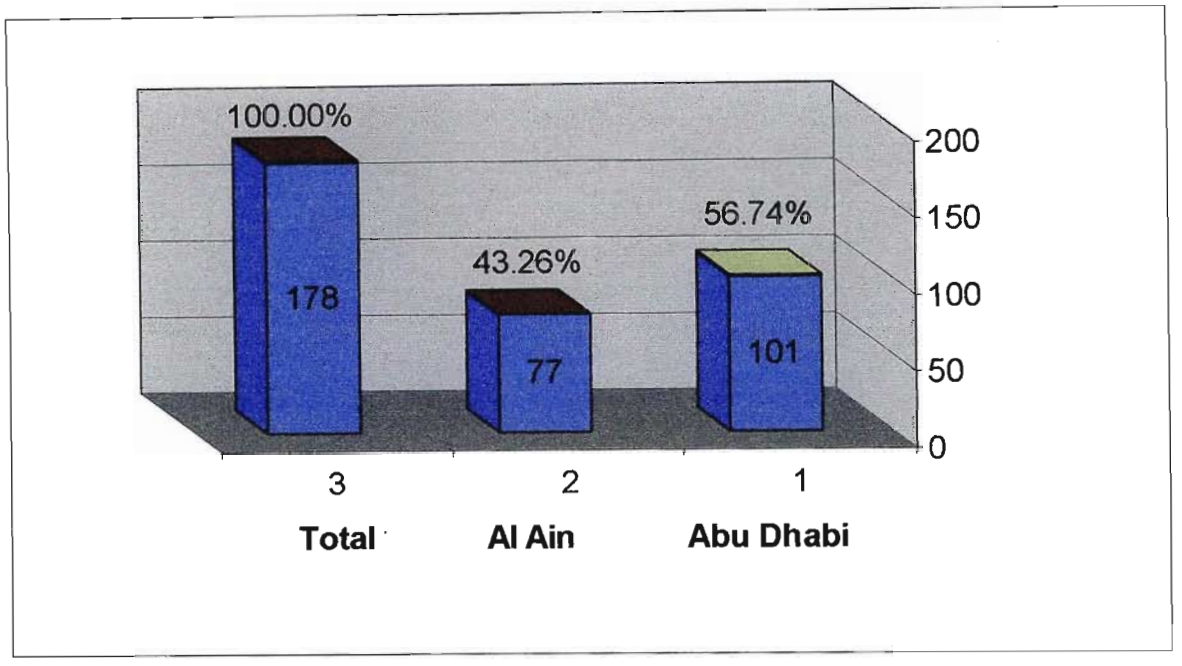

Figure 2: Number of Students Participating from Each Campus

Levels of Motivation

On the whole the participants' level of motivation was high, with overall mean score on motivation of 3.13 (SD = .27). These data appear in Table 1. It was expected that levels of motivation would increase by year of education as suggested in hypothesis one of this study. The results of this study, however, did not support this hypothesis. ANOVA ($F = 1.12$, $p = .33$) and Kruskall Wallis (Chi-square = 3.07, df = 2 and $p = .22$) yielded no significant differences on levels of motivation on analysis of data. In fact Diploma 1 students seemed to be more motivated than the other groups of students. Data on students' ratings of individual items appear in Appendix 1.

Table 1- Levels of Motivation Between Groups

Means and Standard Deviations		
Year of Education (n)	Mean	SD
Diploma 1 (86)	3.16	.26
Diploma 2 (51)	3.10	.30
Diploma 3 (41)	3.10	.25
Overall Group (178)	3.13	.27

ANOVA				
	Sum of Squares	Df	F	Sig.
Between Groups	.16	2	1.12	.33
Within Groups	12.59	175		
Total	12.75	177		

Levels of Self-Efficacy

The participants' level of Self-efficacy was high, with overall mean score on Self-efficacy of 3.1 (SD = .27). These data appear in Table 2. It was mentioned in hypothesis 2 of this study that level of Self-efficacy would increase by year of education. The results of this study, however, did not support this claim. ANOVA (F = .88, p = .42) and Kruskall Wallis (Chi-square (X^2) = 2.08, df = 2 and p = .35) yielded no significant differences on levels of Self-efficacy by diploma level. In fact Diploma 1 ((M= 3.22) students seemed to be more self-efficacious than the other groups of students.

Table 2- Levels of Self-Efficacy between Groups

Means and Standard Deviations		
Year of Education (n)	Mean	SD
Diploma 1 (86)	3.22	.26
Diploma 2 (51)	3.17	.32
Diploma 3 (41)	3.16	.25
Overall Group (178)	3.19	.27

ANOVA				
	Sum of Squares	df	F	Sig.
Between Groups	.13	2	.88	.42
Within Groups	13.16	175		
Total	13.29	177		

Students' Attributions of Success and/or Failure

Overall the data on students' attributions for success and/or failure (items-13-17) revealed that students generally tended to attribute their success to hard work (internal and controllable locus) rather than luck (external and uncontrollable locus). The majority of the participants did not agree with the item that associated failure with lack of personal capabilities. See Table 3.

Table 3. Frequency of Attributions Data

Attributions for Success and Failure	Strongly Agree	Agree	Disagree	Strongly Disagree	Total
Item 13: Success is a matter of luck	13 (7.3%)	33 (18.5%)	58 (32.6%)	74 (41.6%)	178 (100%)
Item 14: Study and preparation are the key to success	96 (54.5%)	63 (35.8%)	16 (9.1%)	1 (0.6%)	176 (100%)
Item 15: You pass because the test or the examination was easy	27 (15.4%)	49 (28%)	74 (42.3%)	25 (14.3%)	175 (100%)
Item 16: Teachers are very strict in marking	68 (39.3%)	63 (36.4%)	35 (20.2%)	7 (4.1%)	173 (100)
Item 17: You never do well because you are just not clever	7 (4%)	34 (19.5%)	77 (44.3%)	56 (32.2%)	174 (100)

Of the 178 students who responded to item 13, 132 (74.2%) did not agree that luck was the key to success, and another 90.3% agreed that study and preparation was the key to success. Similarly, a large number of students (n = 133; 76.5%) stated that they did not agree with the statement that said, "You never do well because you are just not clever".

In contrast, just more than half of the students did not believe that they usually passed because the exam was easy. Yet, another 75.7% believed that the teachers were strict in their marking.

Relationship Between Self-Efficacy and Attributions for Success and/or Failure

The Spearman's rho (r) test yielded low but positive and significant correlations between the levels of self-efficacy and items 13, 14 and 17. These data appear in Table 4. For item 13 (success is a matter of luck) the correlation coefficient was .20 with a p value of .007. For item 14 (study and preparation is the key for success) the correlation coefficient was .25 and the p value was .001. The correlation coefficient for item 17 (you never do well because you are just not clever) was .21 (p = .006). The high self-efficacy level of the students (mean = 3.1, SD = .27) comes in sync with the way the majority of the students attributed their success to study and preparation and not for luck, while they disagreed to attribute failure to not being clever. These results support the third hypothesis raised in this study, which stated that levels of self-efficacy would correlate with attributions for success and failure. It was expected that high self-efficacy would correlate positively with unstable and controllable attributions of success and/or failure.

On the other hand, since 75.7 % of the students attributed failure to teachers' strict marking, the correlation between the statement and levels of self-efficacy was negative at –0.09 (p =. 27). Furthermore, despite of 56.6 % of the students not agreeing with the statement that they pass because the test or the examination was easy, a negative correlation (r = -0.05, p = .52) was found between levels of self-efficacy and students' ratings for this item.

Table 4- Correlation Between Self-Efficacy and Attribution of Success and/or Failure

		Item13-Success is a matter of luck	Item 14-Study and preparation is the key for success	Item 15-You pass because the test or the examination was easy	Item 16-Teachers are very strict in marking	Item17-You never do well because you are just not clever
Self-Efficacy	Correlation coefficient	.20**	.25**	-.05	-.09	.21**
	Sig. (2-tailed)	.007	.001	.522	.267	.006
	N	178	176	175	173	174

**. Correlation is significant at the .01 level (2-tailed)

Additional Results

Data were further analyzed by examining differences between groups in responding to the individual questions contained in the questionnaire using frequency distributions. See Appendix 3. Generally, students' responses to most items were positive and the three groups of students rated very few items significantly different.

Whereas students' generally disagreed that they waited for the teacher's instruction when faced with a difficult assignment, this seemed to be more true for the first year students (94.2%) compared to the other two groups of learners. On the other hand, diploma three students generally thought they were able to master a difficult assignment on their own (75.0%) more than the other two levels and also seemed the most confident when faced with such a situation (88.9%).

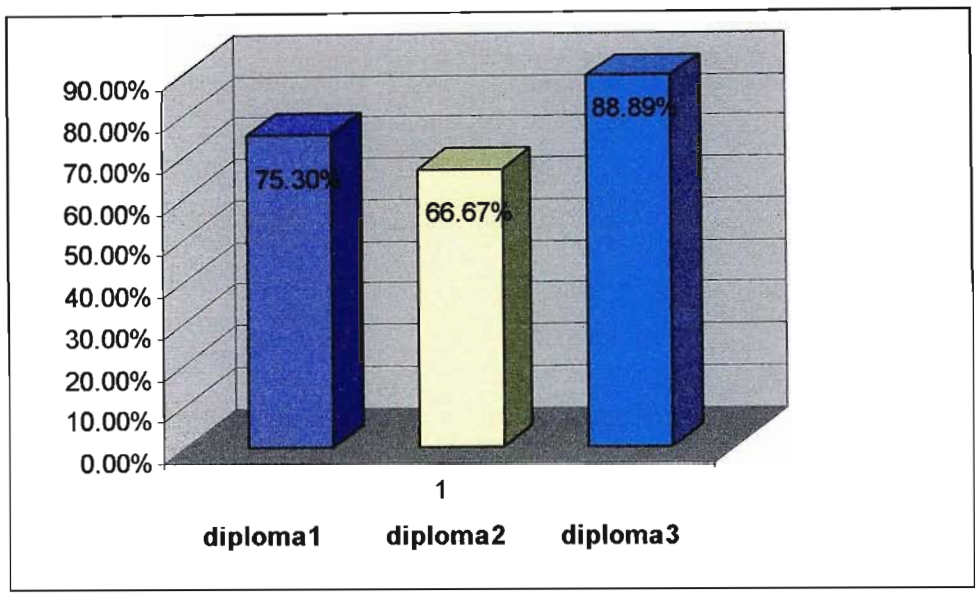

Figure 3: Students Confident To Master a Difficult Task on Their Own

While the three groups mostly agreed that they would keep working hard until they were satisfied that they had done their best, this appeared more evident for diploma one (96.5%) than the others.

It was interesting to know, that after being faced with a setback the learners generally felt disappointed but more determined to try even harder, this determination was more apparent for diploma three students (97.6%) who were the most among the groups in disagreement to set for themselves goals that would be easy to attain (90.0%), in other words, lower their expectations of themselves.

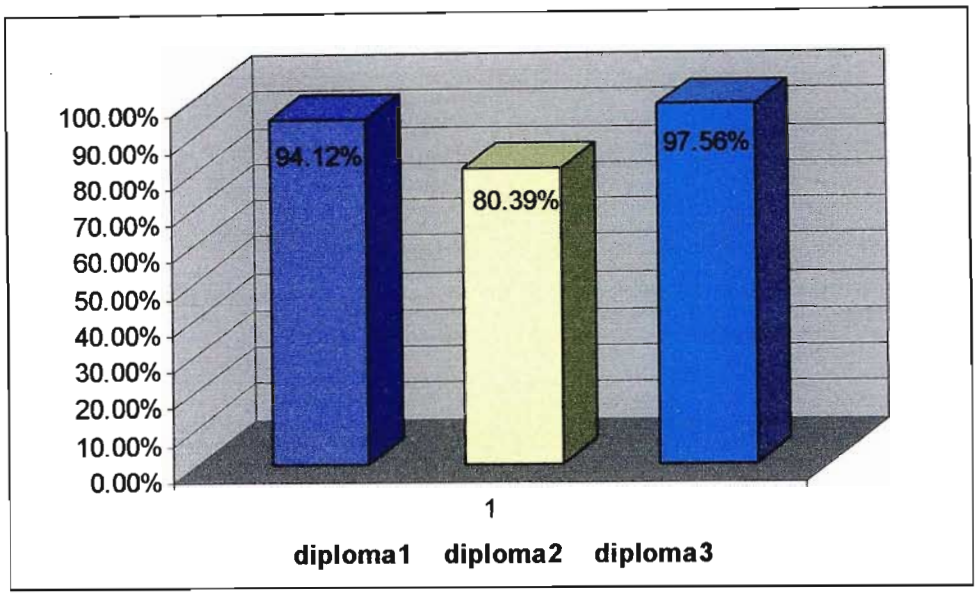

Figure 4: Students Determined to Try Even Harder After a Setback

Encouragements of parents, tutors and friends were highly rated among the three groups who generally agreed that they would increase their determination to succeed. Nonetheless, a modest majority agreed that failing an examination or a test generated a worry that they would fail again; this was reflected at a higher rate with the students of Diploma three (68.3%). About half of the students agreed that they would be scared of tests and examinations because of previous failure, Diploma three students appeared to be the least scared of the groups (45.0%).

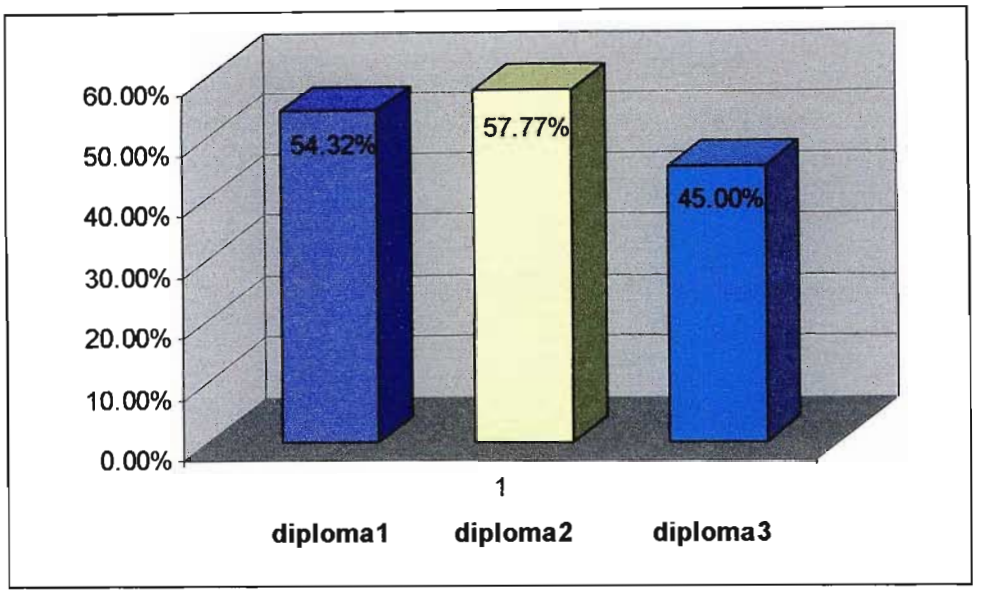

Figure 5: Students Scared of Exams Because of Previous Failure

However, a slight majority disagreed that when a classmate failed a test, they would feel that they might fail the same test as well. Conversely, the learners generally believed that if others could pass, so could they. A notion of guilt for lack of hard work was generally agreed upon among the participants in case of failure to succeed. Even though, a very slim majority disagreed that this failure was transmitted into anger towards the teacher for not marking fairly, in contrast, (52.5%) of diploma three students agreed with this statement.

It was remarkable to note that the students were generally very proud in achieving their academic goals, as they were generally aware of their academic capabilities, as well as what is beyond their capabilities, this seemed truer for the diploma three learners as no one of them disagreed or seemed to doubt this awareness.

CHAPTER SIX

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

Discussion of Findings

This chapter will present a discussion of the data analysis results in an attempt to draw plausible conclusions and recommendations.

The study on hand attempted to demonstrate that nursing students undergoing a case-based learning program would experience high levels of motivation and self-efficacy that increased in magnitude with every level of their study. Additionally it tried to prove that the higher the students level of self-efficacy the more they tended to attribute success and /or failure to internal and controllable reasons rather than external and uncontrollable ones.

Motivation and self-efficacy did not increase significantly according to the level of education. Hypotheses one and two were by consequence rejected. The participants exhibited a high level of self-efficacy in general (M= 3.19) thus supporting and contradicting the reviewed literature. The fact that students studying under case-based learning are self-efficient and highly motivated to learn, as claimed by (Shulman, 1992; Wassermann, 1994; Uys, & Roos, 1996) was clearly evident even though this didn't increase per level.

Probably this motivation was in good part related to what Kaufman (1998) referred to as due to their personal involvement in the learning process with immediate application to their life situations. The results of this study proved that the diploma one students belonged to this category. They came from secondary schools that taught using the traditional methodology and for them

getting involved in the learning process elevated their self-confidence and feelings of self-efficacy.

There are several explanations that could be given for the slight decrease in the motivation for the year two students. The case-based curriculum was implemented recently in the Institutes of Nursing; it was planned in a way that introduced gradually the students to the world of nursing and nursing care (Annex three: courses syllabus). So in the first year the students discovered the normal human being over the span of life. The discovery of diseases, their pathophysiology and the appropriate nursing management was initiated in year two and the more complicated ones were left for the third year. As a consequence, the plausible explanation would be that the students have found the sudden increase in the quantity and the depth of the material to understand, prepare, analyze and implement to be overwhelming, frustrating and demotivating. That was noted by Cossom (1991); McCown, Driscoll and Roop (1996); Lynn, Jr. (1999), that when students are required to change their methods of learning they become more anxious and resistant. Furthermore, as the curriculum was recently implemented the faculty joined the students in their frustration and need for support. The time constraints, the necessity to cover the scheduled content and to master the new teaching learning process in addition to allowing at the same time discussion and debate, caused a dilemma that affected the climate in general. Furthermore, as claimed by Lynn Jr. (1999) the complete shift from the traditional teaching methodologies to facilitating the independent learning of the nursing diploma students is not perceived easily by all teaching faculty. Sometimes faculty tend to forget their

considered it as a minor problem that they could overcome. This could be related as well to the high level of self-efficacy noticed throughout this study.

Recommendations

Overall, what is encouraging about the results of this study is that the Institutes of Nursing students are in general highly motivated under the current teaching and learning methodology used. For that, it is recommended for the all institutes of nursing to consider utilizing active methodologies of teaching and learning. The faculty should be committed to enhance the feelings of self-efficacy since it was significantly correlated with attributing successes or failure to controllable reasons.

Further research Despite the fact that the findings of this research were not conclusive regarding the relationship between the exposure to case-based learning and the increase in the motivation and self-efficacy of the students. The high means that were deduced suggest that perhaps a comparative study between students learning under traditional lecturing methodologies and others exposed to the case-based methodology is important to reveal any valuable difference between the two teaching methodologies. In addition the high levels of self-efficacy that emerged from this study do not conclusively exclude the role of the exposure to case-based program. A longitudinal study to compare between the level of self-efficacy of high-school students and later after enrolment in a case-based program would be extremely valuable to test the same hypotheses suggested in this study.

In addition, since this study is the first one conducted in the region and more specifically in the United Arab Emirates, it is recommendable to conduct

more studies using a larger sample that will serve to support or refute the findings of this study.

Motivation and self-efficacy are probably better explained by the students themselves, their own way to dwell on this topic can be very enriching and beneficial. Consequently, it would be very interesting to conduct a study that includes the qualitative aspect with a large sample that represents the whole region, to highlight the individual differences among the participant's self-efficacy and attribution of success and failure along their years of study.

Conclusion

The case based learning methodology is proclaimed for its positive influence in building and preparing independent and self-efficacious long life learners that would spring out of the education institutions with motivation to face life's challenges. Nursing students who were subjected to a case-based curriculum demonstrated high levels of self efficacy and motivation all throughout their academic levels. It is not conclusive that these findings are solely related to this teaching/learning methodology. The possibility of the influence of other factors remains open to doubt, which raises the need for further studies in order to set the facts straight.

On the other hand, the levels of motivation and self-efficacy did not increase per level of education. It is not really conclusive either that other factors did not contribute to these results, which open the door again for further researches to dwell deeper and consider all different aspects related to this topic.

The most eloquent finding in this study was the significant relationship between self-efficacy and attribution of success and failure. It is of extreme

importance to the case based learning facilitators to identify those learners with low self efficacy who might be in need for more help than others to be directed properly in attributing their successes and failures to the right locus. This should reward them with an increase in the level of their self efficacy and prepare them to be better learners.

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Appendix 1

The questionnaire.

COVER PAGE

Dear student,

I am seeking your support to carry out a study on what makes you motivated to study and learn nursing. Your kind and sincere participation will be of a great help to the study on hand.

You were randomly selected from two nursing institutes in the UAE. You are not required to disclose your identity. Furthermore, I will assure you that the data collection is an anonymous process, and the identity of the participants will not be revealed under any circumstances. Despite all these precautions, all responses shall be treated with utmost confidentiality.

You are free to withdraw from this research at any point in time.

Only the researcher and one assistant will access the raw collected data. The results of the study will be accessible to public upon request.

You may also feel free to contact me for any question or clarification you may require regarding this questionnaire or on future findings and results of this research.

Yours truly,

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Date:

Sign.:

Demographic data:

- ***Personal data***

1- Your age:

2- Campus:

3- Class:

4- Marital status: single__, engaged__, married__.

5- Number of children: _____, none ____.

Questionnaire

Please place a mark (x) next to each statement on the appropriate choice below to illustrate what best fits your point of view. (Please limit your selection to one choice only for each statement).

Please leave the statement unmarked if you feel that it does not apply to you.

A: MOTIVATIONAL PROCESSES **Items 1 – 7): Most of the Time, when you are Faced With a Difficult Task or Question in Your Studies, You:**					
No.	Statement.	Strongly agree	Agree	Disagree	Strongly Disagree
1.	Wait for further instructions from your tutor.				
2.	Immediately think that you cannot master it on your own.				
3.	Are confident that you can master it on your own.				
4.	Do not even try because you know you will never master it anyway.				
5.	Devise your own strategies and goals for tackling the task.				
6	Keep working hard on the task until you are satisfied that you have done your best.				
7	Imagine the joy it will give you to accomplish the task.				
Items (8 – 12) if you failed to achieve the goals you set for yourself for accomplishing a difficult assignment, you would usually:					
8	Feel disappointed but more determined to try even harder.				
9	Feel disappointed and stop trying to do well in difficult assignments.				

10	Revise your goals so that they are more realistic and achievable.				
11	Feel that it does not really matter because it's what you expect of yourself anyway.				
12	Tell yourself that from now on you are going to set yourself goals that will be easy to attain, that is, lower your expectations of yourself.				
When it Comes to Tests and Examinations:					
13	Success is a matter of luck.				
14	Study and preparation is the key for success.				
15	Most of the time you pass because the test or examination was easy.				
16	Teachers are very strict in their marking.				
17	You never do well because you are just not clever.				
B. COGNITIVE PROCESSES					
18	Your tutor's encouragement increases your determination to succeed.				
19	Your parents' encouragement increases your determination to succeed.				
20	Your friends' encouragement helps you to succeed.				
21	Remembering previous successes motivates you to study harder.				
22	When your classmate fails a test, you feel that you may fail the same test as well.				
23	You believe that if others could pass, so can you.				

C. AFFECTIVE PROCESSES AND SELECTION PROCESSES

	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
24	If you failed an examination or test you worry that you most probably would fail again.				
25	If you failed an examination or test you would see this as a minor set back, and would work hard to succeed next time.				

26	Because you have failed before, tests and examinations make you very scared.				
27	Failure to succeed makes you feel guilty that you did not work hard enough.				
28	Failure makes you angry with teachers for not marking fairly.				
29	Achieving your academic goals makes you proud of yourself.				
30	Achieving your academic goals makes you grateful to those who have helped you.				
31	You are well aware of what you are academically capable of, as well as what is well beyond your capabilities.				
32	When faced with choosing between tasks that you know you can master and those that you know you cannot master, you always choose those you know you can master.				

Thank you for taking the time to complete this questionnaire.

Appendix 2:

Descriptive Data on Individual Item Ratings

Table Five:
Descriptive Statistics

	N	Mean	Std. Deviation	Min	Max
M1 – You wait for further instruction	177	3.30	0.62	1	4
You think you cannot master it on your own	174	2.99	0.78	1	4
Are confident that you can master it on your own.	169	2.90	0.65	1	4
Do not even try because you know you will never master it anyway	175	3.39	0.79	1	4
Devise your own strategies and goals for tackling the task	176	3.06	0.67	1	4
Keep working hard on the task until you are satisfied that you have done your best	178	3.37	0.64	1	4
Imagine the joy it will give you to accomplish the task	177	3.69	0.57	1	4
Feel disappointed but more determined to try even harder	177	3.37	0.70	1	4
Feel disappointed and stop trying to do well in difficult assignments	175	3.13	0.84	1	4
Revise your goals so that they are more realistic and achievable	173	3.23	0.56	1	4
Feel that it does not really matter because it's what you expect of yourself anyway	171	2.91	0.93	1	4
Tell yourself that from now on you are going to set yourself goals that will be easy to attain, that is, lower your expectations of yourself	169	3.25	0.75	1	4
Success is a matter of luck	178	3.08	0.94	1	4
Study and preparation is the key for success	176	3.44	0.69	1	4
Most of the time you pass because the test or examination was easy	175	2.55	0.92	1	4
Teachers are very strict in their marking	173	1.89	0.87	1	4
You never do well because you are just not clever	174	3.05	0.82	1	4
Your tutor's encouragement increases your determination to succeed	178	3.71	0.59	1	4
Your parents' encouragement increases your determination to succeed	177	3.77	0.49	1	4

Your friends' encouragement helps you to succeed	177	3.48	0.63	1	4
Remembering previous successes motivates you to study harder	176	3.58	0.60	1	4
When your classmate fails a test, you feel that you may fail the same test as well	178	2.64	0.93	1	4
You believe that if others could pass, so can you	177	3.37	0.73	1	4
If you failed an examination or test you worry that you most probably would fail again	175	2.10	0.94	1	4
If you failed an examination or test you would see this as a minor set-back, and would work hard to succeed next time	173	3.10	0.85	1	4
Because you have failed before, tests and examinations make you very scared.	166	2.44	1.05	1	4
Failure to succeed makes you feel guilty that you did not work hard enough	176	3.13	0.86	1	4
Failure makes you angry with teachers for not marking fairly	169	2.49	1.01	1	4
Achieving your academic goals makes you proud of yourself	174	3.65	0.63	1	4
Achieving your academic goals makes you grateful to those who have helped you	174	3.49	0.65	1	4
You are well aware of what you are academically capable of, as well as what is well beyond your capabilities	173	3.25	0.68	1	4
When faced with choosing between tasks that you know you can master and those that you know you cannot master, you always choose those you know you can master	175	3.34	0.72	1	4

Appendix 3:

Frequency Table of Students Responses by Diploma Level

Item 1		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
You wait for further instruction from the teacher	Strongly agree	2	2.33%	0	0.00%	0	0.00%	2	1.13%
	agree	3	3.49%	3	5.88%	3	7.50%	9	5.08%
	disagree	48	55.81%	24	47.06%	28	70.00%	100	56.50%
	strongly disagree	33	38.37%	24	47.06%	9	22.50%	66	37.29%
Total		86	100.0%	51	100.0%	40	100.0%	177	100.0%
Item 2		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
You think you cannot master it on your own	Strongly agree	3	3.53%	4	8.16%	1	2.50%	8	4.60%
	agree	10	11.76%	10	20.41%	9	22.50%	29	16.67%
	disagree	49	57.65%	27	55.10%	17	42.50%	93	53.45%
	strongly disagree	23	27.06%	8	16.33%	13	32.50%	44	25.29%
Total		85	100.0%	49	100.0%	40	100.0%	174	100.0%
Item 3		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Are confident that you can master it on your own.	Strongly disagree	2	2.35%	0	0.00%	0	0.00%	2	1.18%
	disagree	19	22.35%	16	33.33%	4	11.11%	39	23.08%
	agree	52	61.18%	23	47.92%	27	75.00%	102	60.36%
	strongly agree	12	14.12%	9	18.75%	5	13.89%	26	15.38%
Total		85	100.0%	48	100.0%	36	100.0%	169	100.0%
Item 4		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Do not even try because you know you will never master it anyway	Strongly agree	4	4.76%	2	4.00%	1	2.44%	7	4.00%
	agree	5	5.95%	4	8.00%	3	7.32%	12	6.86%
	disagree	25	29.76%	22	44.00%	15	36.59%	62	35.43%
	strongly disagree	50	59.52%	22	44.00%	22	53.66%	94	53.71%
Total		84	100.0%	50	100.0%	41	100.0%	175	100.0%
Item 5		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Devise your own strategies and goals for tackling the task	Strongly disagree	0	0.00%	2	3.92%	2	4.88%	4	2.27%
	disagree	14	16.67%	5	9.80%	4	9.76%	23	13.07%
	agree	48	57.14%	33	64.71%	27	65.85%	108	61.36%
	strongly agree	22	26.19%	11	21.57%	8	19.51%	41	23.30%
Total		84	100.0%	51	100.0%	41	100.0%	176	100.0%
Item 6		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Keep working hard on the task until you are satisfied that you have done your best	Strongly disagree	0	0.0%	0	0.0%	1	2.4%	1	0.6%
	disagree	3	3.5%	5	9.8%	5	12.2%	13	7.3%
	agree	40	46.5%	26	51.0%	17	41.5%	83	46.6%
	strongly agree	43	50.0%	20	39.2%	18	43.9%	81	45.5%
Total		86	100.0%	51	100.0%	41	100.0%	178	100.0%

Item 7		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Imagine the joy it will give you to accomplish the task	Strongly agree	0	0.00%	1	1.96%	0	0.00%	1	0.56%
	agree	4	4.71%	1	1.96%	2	4.88%	7	3.95%
	disagree	20	23.53%	7	13.73%	10	24.39%	37	20.90%
	strongly disagree	61	71.76%	42	82.35%	29	70.73%	132	74.58%
Total		86	100.0%	51	100.0%	41	100.0%	178	100.0%

Item 8		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Feel disappointed but more determined to try even harder	Strongly disagree	1	1.18%	1	1.96%	1	2.44%	3	1.69%
	disagree	4	4.71%	9	17.65%	0	0.00%	13	7.34%
	agree	41	48.24%	17	33.33%	18	43.90%	76	42.94%
	strongly agree	39	45.88%	24	47.06%	22	53.66%	85	48.02%
Total		85	100.0%	51	100.0%	41	100.0%	177	100.0%

Item 9		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Feel disappointed and stop trying to do well in difficult assignments	Strongly agree	1	1.20%	3	5.88%	4	9.76%	8	4.57%
	agree	10	12.05%	9	17.65%	8	19.51%	27	15.43%
	disagree	29	34.94%	25	49.02%	20	48.78%	74	42.29%
	strongly disagree	43	51.81%	14	27.45%	9	21.95%	66	37.71%
Total		83	100.0%	51	100.0%	41	100.0%	175	100.0%

Item 10		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Revise your goals so that they are more realistic and achievable	Strongly disagree	1	1.19%	0	0.00%	1	2.44%	2	1.16%
	disagree	3	3.57%	3	6.25%	0	0.00%	6	3.47%
	agree	61	72.62%	27	56.25%	28	68.29%	116	67.05%
	strongly agree	19	22.62%	18	37.50%	12	29.27%	49	28.32%
Total		84	100.0%	48	100.0%	41	100.0%	173	100.0%

Item 11		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Feel that it does not really matter because it's what you expect of yourself anyway	Strongly agree	5	6.17%	7	14.29%	3	7.32%	15	8.77%
	agree	20	24.69%	10	20.41%	8	19.51%	38	22.22%
	disagree	30	37.04%	21	42.86%	15	36.59%	66	38.60%
	strongly disagree	26	32.10%	11	22.45%	15	36.59%	52	30.41%
Total		81	100.0%	49	100.0%	41	100.0%	171	100.0%

Item 12		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Tell yourself that from now on you are going to set yourself goals that will be easy to attain, that is, lower your expectations of yourself	Strongly agree	2	2.47%	1	2.08%	2	5.00%	5	2.96%
	agree	9	11.11%	6	12.50%	2	5.00%	17	10.06%
	disagree	39	48.15%	19	39.58%	20	50.00%	78	46.15%
	strongly disagree	31	38.27%	22	45.83%	16	40.00%	69	40.83%
Total		81	100.0%	48	100.0%	40	100.0%	169	100.0%

Item 13		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Success is a matter of luck	Strongly agree	6	6.98%	5	9.80%	2	4.88%	13	7.30%
	agree	10	11.63%	15	29.41%	8	19.51%	33	18.54%
	disagree	31	36.05%	12	23.53%	15	36.59%	58	32.58%
	strongly disagree	39	45.35%	19	37.25%	16	39.02%	74	41.57%
Total		86	100.0%	51	100.0%	41	100.0%	178	100.0%

Item 14		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Study and preparation is the key for success	Strongly disagree	1	1.16%	0	0.00%	0	0.00%	1	0.57%
	disagree	5	5.81%	7	14.00%	4	10.00%	16	9.09%
	agree	32	37.21%	14	28.00%	17	42.50%	63	35.80%
	strongly agree	48	55.81%	29	58.00%	19	47.50%	96	54.55%
Total		86	100.0%	50	100.0%	40	100.0%	176	100.0%

Item 15		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Most of the time you pass because the test or examination was easy	Strongly disagree	14	16.28%	9	18.00%	4	10.26%	27	15.43%
	disagree	28	32.56%	14	28.00%	7	17.95%	49	28.00%
	agree	36	41.86%	20	40.00%	18	46.15%	74	42.29%
	strongly agree	8	9.30%	7	14.00%	10	25.64%	25	14.29%
Total		86	100.0%	50	100.0%	39	100.0%	175	100.0%

Item 16		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Teachers are very strict in their marking	Strongly agree	29	34.94%	21	42.00%	18	45.00%	68	39.31%
	agree	28	33.73%	17	34.00%	18	45.00%	63	36.42%
	disagree	20	24.10%	11	22.00%	4	10.00%	35	20.23%
	strongly disagree	6	7.23%	1	2.00%	0	0.00%	7	4.05%
Total		83	100.0%	50	100.0%	40	100.0%	173	100.0%

Item 17		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
You never do well because you are just not clever	Strongly agree	3	3.57%	1	1.96%	3	7.69%	7	4.02%
	agree	16	19.05%	10	19.61%	8	20.51%	34	19.54%
	disagree	35	41.67%	23	45.10%	19	48.72%	77	44.25%
	strongly disagree	30	35.71%	17	33.33%	9	23.08%	56	32.18%
Total		84	100.0%	51	100.0%	39	100.0%	174	100.0%

Item 18		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Your tutor's encouragement increases your determination to succeed	Strongly disagree	1	1.2%	2	3.9%	0	0.0%	3	1.7%
	disagree	0	0.0%	2	3.9%	1	2.4%	3	1.7%
	agree	16	18.6%	13	25.5%	8	19.5%	37	20.8%
	strongly agree	69	80.2%	34	66.7%	32	78.0%	135	75.8%
Total		86	100.0%	51	100.0%	41	100.0%	178	100.0%

Item 19		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Your parents' encouragement increases your determination to succeed	Strongly disagree	1	1.16%	0	0.00%	0	0.00%	1	0.56%
	disagree	1	1.16%	1	1.96%	0	0.00%	2	1.13%
	agree	16	18.60%	9	17.65%	9	22.50%	34	19.21%
	strongly agree	68	79.07%	41	80.39%	31	77.50%	140	79.10%
Total		86	100.0%	51	100.0%	40	100.0%	177	100.0%

Item 20		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Your friends' encouragement helps you to succeed	Strongly disagree	0	0.00%	0	0.00%	1	2.50%	1	0.56%
	disagree	2	2.33%	6	11.76%	2	5.00%	10	5.65%
	agree	38	44.19%	17	33.33%	14	35.00%	69	38.98%
	strongly agree	46	53.49%	28	54.90%	23	57.50%	97	54.80%
Total		86	100.0%	51	100.0%	40	100.0%	177	100.0%

Item 21		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
Remembering previous successes motivates you to study harder	Strongly disagree	0	0.00%	1	2.04%	0	0.00%	1	0.57%
	disagree	3	3.49%	1	2.04%	3	7.32%	7	3.98%
	agree	35	40.70%	11	22.45%	11	26.83%	57	32.39%
	strongly agree	48	55.81%	36	73.47%	27	65.85%	111	63.07%
Total		86	100.0%	49	100.0%	41	100.0%	176	100.0%

Item 22		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
When your classmate fails a test, you feel that you may fail the same test as well	Strongly agree	11	12.8%	8	15.7%	4	9.8%	23	12.9%
	agree	21	24.4%	15	29.4%	15	36.6%	51	28.7%
	disagree	41	47.7%	18	35.3%	12	29.3%	71	39.9%
	strongly disagree	13	15.1%	10	19.6%	10	24.4%	33	18.5%
Total		86	100.0%	51	100.0%	41	100.0%	178	100.0%

Item 23		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
You believe that if others could pass, so can you	Strongly disagree	1	1.18%	0	0.00%	1	2.44%	2	1.13%
	disagree	11	12.94%	4	7.84%	5	12.20%	20	11.30%
	agree	30	35.29%	19	37.25%	17	41.46%	66	37.29%
	strongly agree	43	50.59%	28	54.90%	18	43.90%	89	50.28%
Total		85	100.0%	51	100.0%	41	100.0%	177	100.0%

Item 24		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
If you failed an examination or test you worry that you most probably would fail again	Strongly agree	27	31.76%	17	34.69%	14	34.15%	58	33.14%
	agree	25	29.41%	14	28.57%	14	34.15%	53	30.29%
	disagree	25	29.41%	15	30.61%	13	31.71%	53	30.29%
	strongly disagree	8	9.41%	3	6.12%	0	0.00%	11	6.29%
Total		85	100.0%	49	100.0%	41	100.0%	175	100.0%

Item 25		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
If you failed an examination or test you would see this as a minor set back, and would work hard to succeed next time		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly disagree	1	1.20%	5	10.20%	3	7.32%	9	5.20%
	disagree	14	16.87%	8	16.33%	5	12.20%	27	15.61%
	agree	35	42.17%	20	40.82%	20	48.78%	75	43.35%
	strongly agree	33	39.76%	16	32.65%	13	31.71%	62	35.84%
Total		83	100.0%	49	100.0%	41	100.0%	173	100.0%

Item 26		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
Because you have failed before, tests and examinations make you very scared.		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly agree	19	23.46%	11	24.44%	8	20.00%	38	22.89%
	agree	25	30.86%	15	33.33%	10	25.00%	50	30.12%
	disagree	22	27.16%	9	20.00%	14	35.00%	45	27.11%
	strongly disagree	15	18.52%	10	22.22%	8	20.00%	33	19.88%
Total		81	100.0%	45	100.0%	40	100.0%	166	100.0%

Item 27		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
Failure to succeed makes you feel guilty that you did not work hard enough		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly disagree	2	2.35%	6	12.00%	2	4.88%	10	5.68%
	disagree	9	10.59%	10	20.00%	6	14.63%	25	14.20%
	agree	40	47.06%	14	28.00%	19	46.34%	73	41.48%
	strongly agree	34	40.00%	20	40.00%	14	34.15%	68	38.64%
Total		85	100.0%	50	100.0%	41	100.0%	176	100.0%

Item 28		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
Failure makes you angry with teachers for not marking fairly		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly agree	12	14.46%	14	30.43%	11	27.50%	37	21.89%
	agree	20	24.10%	10	21.74%	10	25.00%	40	23.67%
	disagree	32	38.55%	18	39.13%	15	37.50%	65	38.46%
	strongly disagree	19	22.89%	4	8.70%	4	10.00%	27	15.98%
Total		83	100.0%	46	100.0%	40	100.0%	169	100.0%

Item 29		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
Achieving your academic goals makes you proud of yourself		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly disagree	2	2.38%	0	0.00%	2	4.88%	4	2.30%
	disagree	1	1.19%	0	0.00%	1	2.44%	2	1.15%
	agree	21	25.00%	8	16.33%	16	39.02%	45	25.86%
	strongly agree	60	71.43%	41	83.67%	22	53.66%	123	70.69%
Total		84	100.0%	49	100.0%	41	100.0%	174	100.0%

Item 30		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
Achieving your academic goals makes you grateful to those who have helped you		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
	Strongly disagree	2	2.38%	1	2.04%	0	0.00%	3	1.72%
	disagree	3	3.57%	2	4.08%	1	2.44%	6	3.45%
	agree	30	35.71%	20	40.82%	17	41.46%	67	38.51%
	strongly agree	49	58.33%	26	53.06%	23	56.10%	98	56.32%
Total		84	100.0%	49	100.0%	41	100.0%	174	100.0%

Item 31		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
You are well aware of what you are academically capable of, as well as what is well beyond your capabilities	Strongly disagree	2	2.38%	0	0.00%	0	0.00%	2	1.16%
	disagree	12	14.29%	5	10.20%	0	0.00%	17	9.83%
	agree	45	53.57%	23	46.94%	21	52.50%	89	51.45%
	strongly agree	25	29.76%	21	42.86%	19	47.50%	65	37.57%
Total		84	100.0%	49	100.0%	40	100.0%	173	100.0%

Item 32		Year of education						Total	
		Diploma 1		Diploma 2		Diploma 3			
		Freq.	Perct.	Freq.	Perct.	Freq.	Perct.	Freq.	Perct.
When faced with choosing between tasks that you know you can master and those that you know you cannot master, you always choose those you know you can master	Strongly disagree	1	1.19%	1	2.00%	1	2.44%	3	1.71%
	disagree	6	7.14%	3	6.00%	7	17.07%	16	9.14%
	agree	38	45.24%	16	32.00%	20	48.78%	74	42.29%
	strongly agree	39	46.43%	30	60.00%	13	31.71%	82	46.86%
Total		84	100.0%	50	100.0%	41	100.0%	175	100.0%

Appendix 4:

Curriculum of Nursing Institutes in UAE

Institutes of Nursing

United Arab Emirates

CURRICULUM

Effective Academic Year 1998 – 1999

	Sess	Cr		Sess	Cr
FIRST YEAR:			**FIRST YEAR:**		
SEMESTER ONE			**SEMESTER TWO**		
English	20	5	English	13	4
Preventive & Promotive	7	6	Preventive & Promotive	5	4
Nursing I	5	4	Nursing II	7	6
Anatomy & Physiology I	3	1	Anatomy & Physiology I	7	2
Mathematics			Preventive & Promotive	3	2
			nursing- Practicum		
			Introduction to PHC		
TOTAL	**35**	**16**		**35**	**18**
SECOND YEAR:			**SECOND YEAR:**		
SEMESTER ONE			**SEMESTER TWO**		
Nursing Care of Adults I	6	5	Nursing Care of Adults II	7	6
Maternal Child Health Nursing	6	5	Maternal Child Health Nursing	7	3
I.	6	3	II.	7	3
English	3	2	English	7	2
Microbiology	7	2	Nursing Care of Adults II-	7	2
Nursing Care of Adults I –	7	2	Practicum		
Practicum			Maternal Child Health II-		
Maternal Child Health I –			Practicum		
Practicum					
TOTAL	**35**	**19**		**35**	**18**

THIRD YEAR			THIRD YEAR		
SEMESTER ONE			**SEMESTER TWO**		
Nursing Care of Adults III	8	7	High Risk Nursing	7	6
Mental Health Nursing	4	3	Career Preparation	7	6
English	2	1	High Risk Nursing- Practicum	7	2
Nursing Care of Adults III-	14	4	Nursing Care of Adults-	14	4
Practicum	7	2	Practicum IV		
Mental health Nursing- Practicum					
TOTAL	**35**	**17**		**35**	**18**
			• Extended Clinical (3 months) training – supervised On-job training (1 month)	**455** (total)	

Note that:

- Every 3 clinical sessions are equivalent to 1 credit and every 1 theoretical session is equivalent to 1 credit.
- The theory courses tend to have 1 credit less owing to the utilization of 1 session for self-directed learning.