COMMITMENT TO THE NURSING PROFESSION:
AN EXPLORATION OF FACTORS WHICH MAY EXPLAIN ITS VARIABILITY

BY

SUZANNE C. FLANNERY
B.Sc.N. UNIVERSITY OF OTTAWA, 1975

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Department of Nursing

The University of British Columbia
2075 Wesbrook Place
Vancouver, Canada
V6T 1W5

Date October 23, 1979
ABSTRACT

The purpose of the study was to determine factors which may explain variability in the degree of commitment to their profession among nurses in British Columbia. A common theme in the literature on commitment to nursing is that it is a powerful force which shapes a nurse's career. As such, it is the responsibility of the nursing profession to understand the nature of commitment. This in part can be accomplished by having knowledge about factors which explain variability in the commitment of nurses to their profession. Review of the literature revealed the factors to be personal and work-related.

Based on the work of Alluto and Hrebiniak, a five-part questionnaire was pilot tested, then mailed to a stratified random sample of four hundred nurses living in the Greater Vancouver District. Of this number 256 (64%) were returned. The total number of usable questionnaires following a process of elimination was 217 (54.2%).

Data analysis took place in three stages. The principal findings were as follows. First, an analysis of the sub-tests revealed them to be internally consistent with the exception of the Professional Actions sub-test. The reliability estimates of the five sub-tests ranged from $r = .93$ to $r = .52$. Second, analysis of the demographic data revealed a sample closely resembling the population of interest. Third, a stepwise multiple regression analysis produced an $R^2$ of 23%. Four variables
entered the regression equation. Of these, three were personal variables: professional orientation, marital status and basic education. The fourth, a work-related variable, was work satisfaction.

Thus, it was found that certain personal and work-related variables did explain variability in commitment, accounting for 23% of the total variability. This, however, leaves a large portion of the variability unexplained. Of the 77% remaining, 7% is due to random error (as indicated by the reliability estimate of the Commitment Index $r = .93$). In view of the findings in the present study and similar findings in the studies by Alluto and Hrebinjak, other untested variables which may explain variability in commitment need to be researched. In addition to new variables, a change in methodology using path analysis instead of the linear model is also recommended.
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CHAPTER I: INTRODUCTION

This is an age in which the abilities of health professionals to provide competent and effective care are under increased public scrutiny. As such, society is demanding, among other things, that individuals in professional organizations define and redefine their values. Commitment to the profession is among these values. However, the concept of commitment challenges the thinking as it evolves a new meaning. It is the responsibility of the nursing profession to determine the meaning or values it attaches to the concept of commitment.

Commitment is a powerful force which shapes a nurse's career. Understanding commitment and how to effect it are important tools for nurse educators. They have a major responsibility in molding and shaping the nursing student's values and in promoting the development of commitment to a career in nursing. It is this commitment, among other factors, which should keep a nurse active in the profession after she has finished her formal education and cause her to be responsible and accountable for her actions while nursing. It is this commitment which should cause her to take on a leadership role and devote time and energy to implement changes for better patient care. Finally, commitment to nursing should put a curb on the high attrition rates as more and more nurses choose not to leave nursing out of the sense of commitment kindled during those early years in nursing school. The values the student acquires or develops during these formative years, commitment among them, will see her through her career. Without adequate knowledge and understanding of the concept, nurse
educators will not be as effective in the development of commitment in their students.

As a young profession, nursing is struggling to earn and maintain professional status. If nursing is to achieve this goal it must earn public respect and credibility. Among the many ways of doing this is to impress upon the public that nurses are committed to their profession. However, in view of the high attrition rates, a doubt is cast on the strength and nature of their commitment. Several authors have addressed the issue of high attrition rates. Kramer's work is among the most detailed studies. She spent many years exploring the phenomenon and found that many new graduates experience "reality shock," an inability to cope with the discrepancy between the real world of nursing and the ideal nursing they experienced as students. Thus, there is an increasing trend for nurses to leave their profession and seek other careers. Lamb writes that the average work life of a nurse is between 20 and 21 years. This represents only 48% of a possible 44 years in which a nurse could contribute to her profession. One factor which may explain the high attrition is the well known fact that most nurses are women. Many of these women are married and have a family. Devotion and dedication to being a wife and mother cause them to leave their nursing career, either temporarily or permanently. Riegler, in an analysis of nursing and commitment in Canada, perceives a problem when she writes:
Daily, monthly, and yearly the director of a nursing agency is confronted with staff turnover. At the same time she is aware that in the field of education, the educators of nursing are concerned with percentages of girls entering nursing and the resultant amount of wastage or attrition.4

The high attrition rates within nursing are contrary to public expectations. It is essential therefore for the nursing profession to work toward decreasing these. Nurse educators, head nurses, nursing directors and, indeed, nurses at all levels, should have knowledge and understanding of the factors which contribute toward high attrition rates. Among these factors may be the lack of commitment nurses have to their profession.

Finally, the public expects professionals to keep abreast of changes and scientific advancements in their respective disciplines. For nurses to gain respect and credibility as accountable professionals, they must reassure the public that they are keeping abreast of changes in both nursing and medicine. This, however, demands a commitment from nurses as individuals to read the nursing journals, take part in continuing education, and initiate and/or actively support nursing research.

To reiterate, the nursing profession must actively seek to determine the values it attaches to the concept of commitment. Commitment is a very important concept in nursing. It is a powerful force which shapes a nurse's career. Secondly, without commitment from nurses as individuals and collectively as a profession, they will not be able to gain the respect and credibility accorded professionals by the public. However, little is
known about the values nurses attach to commitment. If the nursing profession is to count on commitment from its nurses, it must know more about the concept: it must know who the committed nurse is, how committed she is, and what are the characteristics of the committed individual.

STATEMENT OF THE PROBLEM

The theme of the investigation was the phenomenon of commitment as it pertained to nurses and their commitment to their profession. The purpose of the study was to determine factors which may explain variability in commitment among nurses living in urban British Columbia.

The overriding question to be investigated was as follows: Does commitment to the nursing profession among nurses vary because of differences in personal and work-related factors as suggested in the literature addressing commitment?

For example, are satisfied nurses different than those who are not? Are older nurses different than younger nurses? What effect do educational background or place of work exercise on degree of commitment? Does one's professional orientation or one's opinions about collective bargaining make a difference in the degree of commitment? It was hoped that answers to these and other related questions would provide an indication of why or why not nurses are committed to their profession, thereby enhancing knowledge about commitment.
HYPOTHESIS

The tenability of the following test hypothesis:

\[ H_0: \text{Variability of commitment is not explained by personal and work-related factors,} \]

was tested against its alternative:

\[ H_1: \text{Variability of commitment is explained by personal and work-related factors,} \]

employing multiple regression procedures. In particular, the statistical hypotheses were:

\[ H_0: R^2_{\text{PERSONAL \& WORK RELATED}} = 0 \]

\[ H_1: R^2_{\text{PERSONAL \& WORK RELATED}} > 0, \]

where the resulting equation included at least one personal and one work-related factor.
VARIABLES

The dependent variable was a measure of an individual's degree of commitment to the nursing profession. The independent variables included factors which were considered determinants of professional commitment. These factors were divided into personal and work-related variables. The personal variables, those inherent in an individual's personal make-up or background, included: age, gender, marital status, year of graduation, number of years nursing experience, educational background, professional orientation and collective bargaining orientation. Work-related variables, those associated with the work situation, included: registration status, employment status, employment position, and work satisfaction.

DEFINITION OF TERMS

Attitude

An enduring system of affective reactions based upon a cognitive process which reflects beliefs which have been learned and which are an antecedent to behaviour.\(^5\) Attitude scales measure one dimension of the affective reactions: negative-positive.
Collective Bargaining

Negotiation in good faith between an employer or an employer's organization authorized by the employer and a trade union, regarding provisions as to rates of pay, hours of work, or other conditions of employment.6

Nurses' attitudes towards collective bargaining were measured by Ponak's Collective Bargaining Index.7

Commitment

The motivation, based on conviction and loyalty, to act out a behaviour. Also associated with the behaviour is a deepening involvement in it and with the things representing the behaviour.8

Commitment in the present study was operationally defined as the individual's motivation to remain a member of the nursing profession given an opportunity to leave it for an increase in pay, freedom to be more professionally creative, to have more status or to work with people who are friendlier, as measured by the Alluto and Hrebeniak Commitment Index.9

Employment Status

(a) Regular full-time: Nurses who work 37.5 work hours per week.
(b) Regular part-time: Nurses who work more than 15 hours but less than 37.5 hours per week.

(c) Casual: Nurses who work full shifts or part shifts on an on-call basis whenever there is a shortage of regular full-time or part-time nurses.10

**Professionalism**

The extent to which an individual believes himself to be and/or conducts himself as a member of an occupation requiring specialized knowledge and long intensive preparation as measured by Hall's Professionalism Inventory.11

**Registration Status**

(a) Practicing: Registration status which designates sanction by the RNABC for an individual to actively practice nursing.

(b) Non-practicing: Status which designates membership in the RNABC but which does not sanction active nursing practice.

**Work Satisfaction**

An individual's satisfaction with his job and career as measured by Gross-Hurka Job Satisfaction Scale.12
ORGANIZATION OF REMAINING CHAPTERS

The balance of the thesis is organized in four chapters. In Chapter II, the review of the literature is presented and the dependent variable, commitment, and the independent variables are described. The research design and methodology are described in the third chapter. Chapter IV, data analysis and discussion, is a report of the findings. Finally, in Chapter V, the summary, conclusions, implications, limitations and recommendations for further research are discussed.
CHAPTER II: REVIEW OF THE LITERATURE

INTRODUCTION

The purpose of this chapter is to present a review of the research related to commitment. First, a discussion of the nature of commitment and methods of measuring it are presented. This is followed by a discussion of research in which factors which may influence commitment were investigated.

THE NATURE OF COMMITMENT

Many persons have attempted to define the term commitment. For some it holds a Victorian aura of devotion. For others, it is a popular slogan. It has been described as a philosophy for living by some who give it a more composite meaning. Others have described commitment in terms of behaviour or conduct. The way in which individuals have defined commitment depends largely on their perspective as dictated by their background and set of values.

Authors such as Vaillot, Hughes, Nachmias, Gardner and Tarcher have expressed their understanding of the term as a philosophy for living. Vaillot defines commitment from an existential perspective. She believes commitment is a way of life. Individuals assimilate and integrate their commitment into all their values - spiritual, professional, social, and esthetic. By doing this, Vaillot believes that individuals, and in
particular the nursing students she taught, could strive toward a self-fulfilling way of life.

Hughes, in a discussion of women in professional careers, notes that their commitment must be for a lifetime and that women must assimilate a professional attitude. Such an attitude must reflect a lifetime responsibility or commitment towards a professional career. Hughes states that what distinguishes committed professional nurses from non-committed non-professional nurses is their strong sense of responsibility. This strong sense of responsibility is in essence a philosophy for living that sees them through their career. An example to demonstrate the distinction between the professional nurse and the non-professional is that the professional nurse continues to improve nursing skills after her formal education. Nachmias also believes that women committed to their career must have a similar responsible attitude. It requires that they have a serious interest in the discipline, be willing to undertake the necessary training for its study and have a desire to contribute to its continuation and development. This interest, in essence, becomes a part of their individual being.

Gardner believes that man strives to give meaning to his life. He does this by asking questions such as: "To what must I commit myself?"; "What must I live up to?"; and "What are my obligations?" Through this questioning, a philosophy for living will evolve. Along similar lines, Tarcher believes that moving toward commitment suggests pursuit of
significant purposes and that devotion to these purposes becomes a way of life.\textsuperscript{17}

To summarize, Vaillot views commitment as a fulfillment of a person's being; Hughes views it as a lifetime responsibility; Nachmias views it as an almost total life involvement; Gardner and Tarcher view it as a pursuit of significant purposes. In short, these authors view commitment as a way of life: a philosophy for living.

On the other hand, there are those who view commitment from a behavioural perspective as opposed to a philosophical-existental perspective. The way an individual behaves, as opposed to the way he thinks, becomes the criterion. Two authors, Kiesler and Becker, have expressed the nature of commitment in this manner.

Kiesler, in research linking behaviour and belief, studied the psychology of commitment in terms of specific behaviours.\textsuperscript{18} He was not concerned with the thought process behind the behaviour but merely analyzed discrete actions. He defined commitment as the pledging or binding of the individual to behavioural acts. He further distinguished personal commitment from behavioural commitment. He defined personal commitment as the "dedication to completion of a line of action," and behavioural commitment consisted of "factors which constrain one to continue a line of action."\textsuperscript{19} The latter is partialed into social commitment: expectations and norms which affect continuation of a line of action, and cost commitment: how costly it is to change a line of action. Behaviour is the
focus of Kiesler's research; commitment is measured by the observation of actions which reflect changes in attitude.

Becker has evolved a definition of commitment which closely parallels Kiesler's cost commitment. He introduced the notion of "side-bets" and suggested that a person invests in his organization or occupation - places side-bets - by staking something he values in it. The more side-bets at stake, the greater becomes the commitment. Commitment is, therefore, a matter of "accrued investment." The more one invests of himself, the more committed he becomes. As with Kiesler, these investments are measured by the activities and behaviours the individual displays.

There are commonalities and distinct differences between the several definitions of commitment which have been presented. The commonalities are seen among the authors who believe that in searching for a meaningful and responsible life, a philosophy for living will evolve. The distinction becomes apparent when you compare this point of view with that of the behaviourist. It moves away from the abstract philosophical perspective to a more concrete perspective; that of observables.

From among these definitions, a description of who the committed individual is does not become apparent. Having knowledge about the characteristics of a committed person would provide a better understanding of the concept and would contribute toward the evolution of a theory of commitment.
LITERATURE RELATED TO MEASURING COMMITMENT

Commitment can be measured from as many different perspectives as there are definitions. Choosing one single definition depends on the perspective of the investigator measuring commitment. For example, if one wishes to study the "state" of commitment of individuals, one could use an existentially perceived definition. The individual is in a state of becoming where, as Vaillot describes, "this ever-continuous passage from existence to being is effected through commitment."21

Vaillot's research is embedded in existential philosophy. The purpose of her study was to describe and compare the professional worlds of student nurses in collegiate, diploma and practical nursing schools. In doing so she examined commitment among the students. She did not consider discrete actions by nurses which would reveal commitment but rather the pattern of identification making the students' professional world. She postulated that some patterns would favour or reveal commitment while others would hinder it. For example, if a student identifies with nursing as a permanent career it is likely she is more committed. Vaillot believed that:

...the actions of the committed nurse cease to be a succession of discrete tasks, requiring her attention while they last, but to be ticked off into a dead past once they are terminated. Her actions fall in place in the total pattern of her life, of her being.22
This total pattern of her life, her existence, is in part the situation in which the nurse finds herself. This situation has been identified by Vaillot as the professional world of the student and it is this that is described in the study. In describing this world it was intended that patterns of identification would emerge which would demonstrate self-fulfillment effected through commitment to nursing.

Vaillot's measurement of commitment consisted of observing nursing students for behavioural patterns which would reveal commitment. It was hoped that patterns of behaviour would emerge which would demonstrate self-fulfillment effected through commitment to nursing. The study was successful in providing insight into the students' professional world. It was possible to see the differences and similarities among the three types of nursing students. However, conclusions about the students' commitment were absent. There was no direct hypothesis in reference to commitment; therefore, no conclusions were drawn.

A second approach taken to the study of commitment was psychological in tone and hinged on the definition given by Kiesler. Commitment was defined as "the pledging or binding of the individual to behavioural acts." Commitment was interpreted as a behavioural phenomenon which effectively froze attitudes or made them resistant to change.

The numerous experiments by Kiesler and his colleagues focused on one aspect of commitment, that is, the effect commitment had on attitudes and
behaviour. Research consisted of experiments to study the interactive
effects of commitment and dissonance, commitment and resistance to attack
on one's beliefs, commitment and forewarning of an impending attack upon
one's beliefs, commitment and interaction with others and, finally,
commitment and self-attribution (definition of self).

Kiesler described seven experiments conducted under very tightly
controlled conditions. The design was established so there was always an
experimental group and a control group. Only the variable commitment was
manipulated. The methodology generally followed the same format for each
experiment. Attitudes towards a certain issue were measured either through
a pencil and paper pretest or an interview. A counter-attack on the
subject's beliefs was conducted. This was then followed by a post-test to
determine if there had been any change in attitude or behaviour. The
dependent variable was the amount of attitude change that each subject
showed as a result of the counter-attack. Some of the significant findings
were as follows:

(1) Commitment determined the effects of dissonant behaviour and
dissonance had no effect on commitment when subjects were highly
committed.24

(2) Under conditions of high commitment, subjects were more resistant to
attack on their beliefs and became more behaviourally extreme than
they were before the attack.25
(3) The response to forewarning of attack on one's beliefs was determined by previous commitment (i.e., the response of individuals with low commitment was to partially abandon their beliefs while those who had a high commitment became more extreme in their opinions).26

(4) On the basis that commitment to future interaction with others has implications for subsequent events that may occur in the group, it was hypothesized that the greater the commitment to the group, the greater the attitude change when attacked from within the group.27

Kiesler and his colleagues presented a well-documented case on the psychology of commitment. In doing so, however, they maintained a narrow perspective of what is a very complicated concept with many connotations and applications. In maintaining this narrow perspective they examined the concept of commitment in isolation; i.e., "greenhouse method." This represented a weakness in their research. Commitment cannot be viewed in isolation as there are so many intruding variables. The significant findings listed earlier addressed specific variables only. What of the other contributing factors which affected, for example, dissonance or group loyalty at a particular point in time or under certain circumstances?

Looking at commitment in isolation, as Kiesler and his colleagues did, limited the generalizability of their findings to the "real" world, to real situations where intruding variables would be acting to influence behaviour. No provision was made to look at a multiplicity of interacting variables simultaneously.

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In turning to the literature outside the realms of nursing and psychology, it is evident that much has been written by researchers in organizational management on the development of occupational identification and career commitment among professional employees. From this research evolved the Commitment Index, a reliable instrument for measuring commitment to one's profession.

The Commitment Index was first developed by sociologists Ritzer and Trice\(^28\) in a study designed to test empirically a theory of commitment developed by Becker. A high score indicated high commitment and a low score, low commitment. The Index was developed over an eleven-month period. After 100 interview pretests, a second pretest was mailed to a random sample of 623 personnel managers living in the United States. A response rate of 66.2% was obtained. Although the researchers did not go into detail about how they tested the Index for reliability and validity, they claimed a test re-test reliability "ranging from .83 to 1.0."\(^29\)

The Commitment Index developed by Ritzer and Trice was later questioned by Alluto and Hrebiniak,\(^30\) researchers in organization management. They argued that the Index was not sufficiently sensitive. Following some modifications to improve the utility of the Index, Alluto and Hrebiniak conducted a second study to test it empirically. The subjects in the study consisted of 318 teachers and 398 nurses living in western New York State. The mailed questionnaires yielded response rates of 71% and 81%, respectively. Statistical analysis of the Index went
beyond the analysis of the Ritzer-Trice study. Rather than just summing the twelve items in the Index, tests to determine item reliability and utility were performed. Interitem correlations consisted of a zero-order correlation and an internal criterion test of item reliability where each item was correlated with the summation of remaining eleven items. It was found that of the twelve items the most reliable were the four "slight increase" items. The correlations between the "slight increase" items and the total score were 0.69, 0.65, 0.71 and 0.71. In view of this, Alluto and Hrebiniak based the final Commitment Index on the four "slight increase" items. They obtained a Spearman-Brown reliability estimate for the four-item scale of 0.79.

This four item questionnaire was tested in a subsequent study, involving managers graduating from Engineering and M.B.A. programs. The purpose of this study was to determine if the Index retained its validity and reliability when administered to a different population. The authors concluded that the study yielded similar results. Although a reliability estimate was not given, the correlations between each item and total score were 0.61, 0.70, 0.71, 0.58.

Having determined the reliability estimate for the Index and having concluded that it provided a reliable method for measuring commitment, Alluto and Hrebiniak proceeded with the second step. Using personal and work-related information on each subject, the relationship between this information and the subject's commitment level was explored. Having
conducted a simple correlational analysis, a more complicated multiple regression approach was performed to determine the relationship between the subject's commitment level and the interactive effects of the personal and work-related variables.

Based on the findings from the review of the literature, Alluto and Hrebeniak believed that commitment to the profession appeared to be a function of personal and work-related issues. Variables such as sex, socio-economic background, religion, and years of professional experience were categorized as personal factors. Job tension, employing organization, and perceptions of role conflict were categorized as work-related factors. Based on the findings of their study, Alluto and Hrebeniak concluded that differing commitment levels among their subjects could be explained by the differences in personal and work-related variables of each of the subjects.

FACTORs WHICH MAY INFLUENCE COMMITMENT

A series of studies investigating factors which may influence commitment revealed that the factors could be divided into two subsets: (A) personal factors, and (B) work-related factors. The personal factors were further divided into (1) demographic factors, (2) professional orientation, and (3) collective bargaining orientation. Work-related factors were similarly divided into (1) demographic factors and (2) job satisfaction.
A. Personal Factors

1. Demographic

Among the many factors which may influence commitment some are categorized as personal factors: those factors which are inherent in the individual's personal make-up or background. Included are demographic factors such as gender, age, marital status, year of graduation, number of years working experience, and educational background. These are clear-cut and easily elicited data.

2. Professional Orientation

Also included among the personal factors may be the individual's beliefs and attitudes toward professionalism. Since these are not so clear-cut and easily elicited, a measurement instrument must be used. A test used to determine professional orientation is the Hall Professionalism Inventory.34 The Inventory measures the extent to which an individual believes himself to be and acts as a professional. The Professionalism Inventory was designed by sociologist Hall and was first tested on 328 subjects representing eleven occupational groups (physicians, nurses, accountants, teachers, lawyers, social workers, stock brokers, librarians, engineers, personnel managers and advertising executives). The Inventory produced a Kuder-Richardson Formula 20 reliability of 0.86.35 The
original inventory consisted of fifty items measuring five dimensions in professionalism:

(1) using the professional organization as a major referent
(2) belief in public service
(3) belief in self-regulation
(4) sense of calling to the field, and
(5) feelings of autonomy

Snizek, also a sociologist, undertook to shorten the Inventory by eliminating weak items. He administered the Inventory to 566 subjects from four occupational groups (aeronautical, nuclear and chemical engineers, physicists and chemists). Using both his own and Hall's data, he used factor analytic procedures to determine the empirical fit of the items to the five dimensions listed above. He found that approximately half of the items had "less than acceptable factor loadings" (a loading factor of less than .30) on their appropriate theoretical dimensions. By reducing the item numbers from 50 to 25 so that there are five items in each dimension instead of ten, the scale item overlap is diminished. For example, the correlation between dimension one and three dropped from 0.377 to 0.161 in Hall's data and from 0.334 to 0.179 in Snizek's data. In reducing the number of items, the Inventory's reliability decreased slightly; 0.86 to 0.84 for Hall's data, and from 0.80 to 0.79 for Snizek's.36
3. Collective Bargaining Orientation

Because collective bargaining is part of union activities and because the labour relations division of the RNABC plays a significant role in articulating work-related ideas and objectives held by many nurses, it was thought that an individual's orientation to collective bargaining may influence commitment.

An instrument was developed in a study by Ponak to measure orientation toward collective bargaining. The study had two objectives. The first was to assess the importance nurses attached to professional or union goals that were subject matter for collective bargaining. The second objective was to identify determinants of the importance attached to the goals. Opinions about collective bargaining was one of these determinants. The instrument was developed by Ponak because of the absence of an already existing one which was valid, reliable and appropriate for nurses. Fifteen statements relating to unionism and collective bargaining were drawn from nursing journals and from two union attitude surveys, one for blue collar workers and one for nurses. These statements were administered in questionnaire form to a sample of 85 nurses living in Wisconsin. Responses were factor analyzed. Two theoretical dimensions emerged: (1) general union attitudes, and (2) militancy attitude.

Only ten items loaded significantly on the two dimensions, the remaining five were discarded. A pretest, using the ten item questionnaire, was given to a sample of the population outlined in the study. The
responses were factor analyzed. The results again showed two dimensions emerging. The ten item questionnaire was then used in the study. The responses were factor analyzed and for the third time the two dimensions emerged. Coefficients of reliability were calculated, as follows: general attitudes 0.79; militancy 0.63.38

B. Work-Related Factors

1. Demographic

In addition to investigating personal factors, the relation of work-related factors to commitment has also been examined. These consist of factors inherent in the work situation or that are directly related to the work situation. This includes information such as registration status: whether practicing or non-practicing; employment status: whether full-time or part-time; and employment position: whether hospital staff nurse, public health nurse, instructor, administrator or other.

2. Job Satisfaction

Another work-related factor, job satisfaction, was determined by using a brief questionnaire which measures the respondent's satisfaction with his work and career. An instrument was developed for this purpose and used by Gross in a study of school superintendents exploring problems of consensus of role definition, conformity to expectations and role conflict-resolution.39 The work satisfaction questionnaire in the Gross study
was broken down into a job satisfaction scale and a career satisfaction scale. Reliability estimates of .99 and .98, respectively, were obtained in this study. The questionnaire was later adapted and modified by Hurka in his doctoral dissertation to study perceived role orientations among nurses in the state of Washington. The questionnaire was shortened to five items and the items themselves were reworded so as to be appropriate for nurses. Following a pretest and revisions, the instrument was administered to a sample of nurses. Although the reliability coefficients of the revised shortened version were not indicated in the study, Hurka described the instrument as valid and reliable.

In summary, factors which are thought to influence commitment can be divided into two categories: personal factors and work-related factors. Personal factors are those inherent in the individual's personal make-up or background. Work-related factors are those considered inherent in the work situation or that are directly related to the work situation. The demographic factors (for example, gender, age, employment status) are elicited by using a checklist or fill-in-the-blank format. The beliefs and attitude factors (professionalism orientation, collective bargaining orientation and job satisfaction) are elicited by using paper and pencil instruments, developed for that purpose.
SUMMARY AND CONCLUSION

A review of the existing literature related to the concept of commitment has focused on three major areas. The first concentrated on describing how the concept had been defined by various authors. No conclusive definition was derived; it was found that a different perspective of the concept inspired diverse definitions. Furthermore, it was found that these definitions did not describe the characteristics or qualities attributed to a committed person.

The second area concerned the measurement of commitment. Measurement of commitment in the studies discussed in the preceding pages hinged on the way in which it was defined. In the first study, it was defined by Vaillot from an existentialist perspective. Commitment was indirectly measured by observing behavioural patterns of nursing students which would reveal commitment. Because Vaillot had no criteria for identifying behaviours which would reveal commitment, it could not be empirically measured. Furthermore, no hypotheses regarding commitment were formulated at the outset of her study, therefore no conclusions in reference to commitment could be drawn. The study, however, was successful in providing insight into the student's professional world. Of particular significance, an attempt was made to operationalize a philosophical definition of commitment.

The second study, that of Keisler, defined commitment from a psychological/behavioural perspective. In an effort to study the
psychology of commitment, it was measured behaviourally under very rigidly
controlled experimental conditions. In maintaining this narrow perspective,
the concept of commitment was examined in isolation. This represented a
weakness in the research. Commitment cannot be viewed in isolation as
there are so many intruding variables. The significant findings listed
earlier addressed specific variables only. What of the other contributing
factors which affected, for example, dissonance or group loyalty at a
particular point in time or under certain circumstances?

Looking at commitment in isolation, as Kiesler and his colleagues did,
limited the generalizability of their findings to the "real" world, to real
situations where intruding variables would be acting to influence
behaviour. The intent of Kiesler's research was to study the effect
commitment had on behaviour and attitudes. The way one behaves depends on
a multiplicity of variables at any one point in time. What was needed
therefore was not to look at commitment in isolation, nor to look at
behaviours as a measure of commitment attitude, but rather to study
commitment with respect to its interaction with a multiplicity of
variables.

The final study cited (Alluto and Hrebiniak) defined commitment from
an attitudinal perspective. Measurement was based on the hypothesis that
commitment was affected by the interactive effect of personal and
work-related variables, some of which were attitudinal in nature. Of the
studies discussed, Alluto and Hrebiniak's was the most empirically sound.
They successfully developed a reliable Commitment Index which allowed
operationalization of the concept. Furthermore, their original findings were supported when the study was replicated.

Having produced a reliable instrument, the next phase of their study was to determine from among the many factors which may influence commitment which of these factors could actually be considered predictors (or characteristics) of a committed person. The methodology of this study overcame the weakness of Kiesler's study. It provided an opportunity to study commitment with respect to its interaction with a multiplicity of variables.

This led to the third area of concern reviewed; the factors thought to influence commitment. These factors were divided into two categories: personal and work-related.

A review of the literature related to nursing in British Columbia reveals that there has been no research investigating commitment among nurses living in the province. Knowledge about the phenomenon of commitment with respect to this population of nurses could have implications for practicing nurses, their employing agencies, nurse educators, and nursing researchers. An expansion of the existing research by Alluto and Hrebeniak to determine the level of commitment among nurses, as well as some of the characteristics attributed to the committed nurse could be useful to the nursing profession in efforts to determine the values it attaches to the concept of commitment.
The present study was an attempt to replicate the work of Alluto and Hrebeniak. The theme of their investigation was to study the relationship of personal and work-related variables to commitment. Using procedures similar to those of Alluto and Hrebeniak, a sample of nurses living in urban British Columbia was tested to determine the relationship of these variables to commitment.
CHAPTER III: RESEARCH DESIGN

INTRODUCTION

The purpose of the present study was to explore factors which may explain variability in the degree of commitment nurses have to their profession. The review of the literature indicated that commitment was a likely function of two types of factors: personal and work-related. This led to the hypothesis that the variability in commitment to the nursing profession may be explained by such factors. This hypothesis was addressed using correlational procedures. A structured questionnaire was developed to measure the respondents' commitment level and to collect personal and work-related data. The questionnaire was then mailed to a sample of nurses living in a metropolitan area.

The first section of the chapter summarizes the personal and work-related factors used in the present study. Also included is a description of the questionnaire and a description of the pilot study conducted to determine the reliability of the instrument. Sample selection, data collection and the scoring procedure and data analyses for the present study, are described in the second section.
A. Background

The dependent variable used in the present study was a measure of an individual's commitment level. The personal independent variables included the following: age, gender, marital status, year of graduation, number of years working experience, educational background, professional orientation and collective bargaining orientation. The work-related variables included: registration status, employment status, employment position, and work satisfaction. Many of these variables were further subdivided to form several "sub" variables. For example, marital status consisted of four categories - single, married, widowed, and other. Each sub-category was considered a single variable for statistical analysis. A complete list of the independent variables used in this study is presented in Table I.

Chapter II discussed to some extent the reason the independent variables listed in Table I were chosen. Bearing in mind that the purpose of this study was to explore variables which may have explained variability in the degree of commitment nurses had to their profession, variables thought to have some influence on commitment were selected. Research on commitment suggested the importance of a wide variety of personal and work-related influencing factors.
<table>
<thead>
<tr>
<th>PERSONAL</th>
<th>WORK-RELATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Registration Status:</td>
</tr>
<tr>
<td>Gender:</td>
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</tr>
<tr>
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</tr>
<tr>
<td></td>
<td>Public Health Nurse</td>
</tr>
<tr>
<td>Year of Graduation</td>
<td>Instructor</td>
</tr>
<tr>
<td>Number of Years Work Experience</td>
<td>Administrative</td>
</tr>
<tr>
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<td>Other</td>
</tr>
<tr>
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<td>Work Satisfaction</td>
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<tr>
<td>Continuing Education</td>
<td></td>
</tr>
<tr>
<td>Professional Orientation:</td>
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</tr>
<tr>
<td>Professional Beliefs</td>
<td></td>
</tr>
<tr>
<td>Professional Actions</td>
<td></td>
</tr>
<tr>
<td>Collective Bargaining Orientation</td>
<td></td>
</tr>
</tbody>
</table>
B. Questionnaire

The data gathering questionnaire consisted of five sections: a commitment index; a professionalism inventory; background information; a collective bargaining scale; and a job satisfaction scale. Four of the five sections were adapted instruments which had previously been developed and tested in other studies. A description of each of these instruments is found in Chapter II. The modifications introduced for the present study are described below:

1. Commitment Index

The Commitment Index developed by Alluto and Hrebeniak was used without modification in the present study (Appendix A).

2. Professionalism Inventory

The Professionalism Inventory used was initially the same as the one developed by Hall. Some minor rewording of weak items was done based upon the results of the item analysis of the present study's pilot test (refer to Appendix A and Appendix B for comparison). Also, in the present study, the Inventory was divided into two parts. Part One consisted of those items which dealt with the respondent's professional beliefs and Part Two of items which dealt with the respondent's professional actions. They were subtitled "Professional Beliefs" and "Professional Actions," respectively.
Negatively worded items were appropriately weighted (e.g., on a scale of one to five, a weight of five is given if the respondent circles one, a weight of one if she circles five). The purpose of using the negatively worded items throughout the sub-tests was to help break "response patterns," a phenomenon often found in multiple choice questionnaires in the affective area. Items which had a negative weight were the following: one, two, three, four, five, eight, eleven, twelve, thirteen, fourteen, fifteen, seventeen, nineteen, twenty, twenty-one and twenty-five.

3. Background Information

The section for background information was designed specifically for this study. The purpose of this section was to gather demographic data readily available and thought to be related to commitment.

4. Collective Bargaining Scale

The Collective Bargaining Scale used was developed by Ponak. It also used negatively worded items which included items two, three, five, seven and ten.

5. Work Satisfaction

The Job Satisfaction Scale was altered in order to elicit more specific answers. For example, item three of the original scale was expanded from "How satisfied are you with your job when you compare it to
other jobs?" to include part A "which you have held before," and B, "that are available to nurses."

A comparison of the original instruments with modified versions can be made by reference to Appendix A and Appendix B.

C. Pilot Test

The questionnaire was pilot tested with a sample of 25 registered nurses living in the Greater Vancouver area. The sample consisted of nurses who had returned to university to do their master's degree, nurses teaching nursing in a community college, and thirdly, public health nurses.

The responses to the four sub-tests were coded, keypunched and analyzed. Using the LERTAP program to analyse the responses, an item analysis of each item was performed. In addition to item analysis, the program produced an internal consistency estimate for each of the four sub-tests.

Item analysis revealed the weaker items. Those which had a low correlation with the sub-test were considered weak and were reworded for clarity. For example, item number one in the Professionalism Inventory was changed from "I think my profession more than any other profession is essential to society" to "I think that my profession more than most other professions is essential for society." Item four demonstrated another example. It was changed from "The importance of my profession is sometimes
overstressed” to “The importance of my profession is sometimes understressed.” These are only two changes. For further detail, a comparison of the pilot test and the actual questionnaire used in the study can be made by referring to Appendices A and B.

The reliability estimates, the second part of the analysis, indicated that three of the five sub-tests were each internally consistent. The Hoyt estimates of reliability were as follows: Commitment Index: \( r = .88 \); Professionalism Inventory, Part A (professional beliefs): \( r = .69 \); Part B (professional actions): \( r = .70 \); Collective Bargaining Index \( r = .59 \); Job Satisfaction Index \( r = .81 \). The Professionalism Inventory, Part A (\( r = .69 \)) and the Collective Bargaining Scale (\( r = .59 \)) were considered satisfactory given the small number of items and the fact that the analysis was conducted at the group level as opposed to the individual level.

Having reworded weaker items and having made alterations in the questionnaire format as suggested by respondents, thesis committee members and colleagues, the final draft of the questionnaire was produced. One of the major alterations in the final version of the questionnaire was colour coding. Each of the five sub-tests was printed on a separate page and on different colour paper in order to help differentiate one section from the next.
A. Sample Selection

Permission was granted by the Registered Nurses Association of BC (RNABC) to select a sample of nurses living in Association Chapters 16, 18, and 55 (Vancouver, New Westminster and North Shore, respectively). With the assistance of the RNABC and their affiliates at the UBC Division of Health Services Research and Development, a random sample was drawn using computerized information housed at the UBC Computer Center. The random selection procedure followed a series of steps.

In order to have a clear description of the population of interest, in this case urban based nurses, the first step was to obtain information which would describe this population. Percentage distributions for the following characteristics were obtained for each of the three chapters: age, marital status by gender, registration, basic education, continuing education, employment status, and employment position. This information provided a description of, for example, the age spread, whether more of the nurses in these chapters were married than single, widowed or other, and whether most had a practicing as opposed to non-practicing registration. Based upon the percentage distributions three characteristics were selected for stratification purposes: age, registration status and basic education.

To have a better perspective of how these characteristics were distributed a three-way cross-tabulation - basic education by registration
status by age group - was obtained for each chapter (see Figures 1, 2, 3).

Basic education was divided into two categories: diploma and baccalaureate degree. Registration status was divided into practicing and non-practicing categories. For the third characteristic, six age groups were formed: 21 to 27; 28 to 32; 33 to 37; 38 to 43; 44 to 51; and 52 to 73. For example, as shown in Figure 1, there was a total of 4,311 nurses in the Vancouver chapter. Of this total, 3,842 received a diploma and 469 received a baccalaureate degree for their basic nursing education. Within the diploma category, 3,046 held a practicing status while 796 held a non-practicing status. The baccalaureate category had 389 practicing and 80 non-practicing nurses.

Finally, with regard to age, there were 809 nurses who had a diploma who were actively practicing and who were between the ages of 21 and 27. Likewise, there were 141 nurses who had a baccalaureate degree who were actively practicing and who were between the ages of 21 and 27.

The next step in the selection of the sample was to determine the sample size for each stratum. This consisted of determining how many subjects from among the desired total sample size of four hundred would be included in each of the different categories. The purpose of this step was to ensure that the three characteristics of interest were proportionately represented in the sample. Figures 4, 5 and 6 provide the breakdown for the sample.
FIGURE 1
POPULATION CROSS TABULATION: VANCOUVER CHAPTER
BY BASIC EDUCATION BY EMPLOYMENT STATUS BY AGE

VANCOUVER: 4,311 (64.1%)

DIPLOMA: 3,842 (57.1%)
BACCALAUREATE: 469 (70%)

PRACTICING: 3,046 (45.3%) NON-PRACTICING: 796 (11.8%)

PRACTICING: 389 (5.8%) NON-PRACTICING: 80 (1.2%)

AGE
A1: 21 - 27
A2: 28 - 32
A3: 33 - 37
A4: 38 - 43
A5: 44 - 51
A6: 52 - 73
FIGURE 2
POPULATION CROSS TABULATION: NEW WESTMINSTER
BY BASIC EDUCATION BY EMPLOYMENT STATUS BY AGE

NEW WESTMINSTER: 1,108 (16.5%)

- DIPLOMA: 1,052 (15.6%)
  - PRACTICING: 835 (12.4%)
  - NON-PRACTICING: 217 (3.2%)

- BACCALAUREATE: 56 (0.8%)
  - PRACTICING: 40 (0.6%)
  - NON-PRACTICING: 16 (0.2%)

AGE
A1: 21 - 27
A2: 28 - 32
A3: 33 - 37
A4: 38 - 43
A5: 44 - 51
A6: 52 - 73
FIGURE 3
POPULATION CROSS TABULATION: NORTH SHORE
BY BASIC EDUCATION BY EMPLOYMENT STATUS BY AGE

NORTH SHORE: 1,308 (19.5%)

DIPLOMA: 1,210 (17.9%)

PRACTICING: 912 (13.6%)

NON-PRACTICING: 298 (4.4%)

BACCALAUREATE: 90 (1.3%)

EDUCATION

PRACTICING: 75 (1.1%)

NON-PRACTICING: 23 (0.3%)

REGISTRATION

AGE

A1: 21 – 27
A2: 28 – 32
A3: 33 – 37
A4: 38 – 43
A5: 44 – 51
A6: 52 – 73
FIGURE 4
SAMPLE CROSS TABULATION: VANCOUVER CHAPTER
BY BASIC EDUCATION BY REGISTRATION STATUS BY AGE

VANCOUVER: 256 (64.0%) — CHAPTER

DIPLOMA: 228 (57.0%) — EDUCATION

BACCALAUREATE: 28 (7.0%) — STATUS

PRACTICING: 181 (45.3%) — REGISTRATION

NON-PRACTICING: 47 (11.8%)

PRACTICING: 23 (5.8%)

NON-PRACTICING: 5 (1.3%)

AGE

A1: 21 - 27
A2: 28 - 32
A3: 33 - 37
A4: 38 - 43
A5: 44 - 51
A6: 52 - 73
FIGURE 5
SAMPLE CROSS TABULATION: NEW WESTMINSTER
BY BASIC EDUCATION BY REGISTRATION STATUS BY AGE

NEW WESTMINSTER: 66 (16.5%)

DIPLOMA: 63 (15.8%)

PRACTICING: 50 (12.5%)

NON-PRACTICING: 13 (3.3%)

BACCALAUREATE: 3 (0.8%)

PRACTICING: 2 (0.5%)

NON-PRACTICING: 1 (0.3%)

AGE
A1: 21 - 27
A2: 28 - 32
A3: 33 - 37
A4: 38 - 43
A5: 44 - 51
A6: 52 - 73
FIGURE 6
SAMPLE CROSS TABULATION: NORTH SHORE
BY BASIC EDUCATION BY REGISTRATION STATUS BY AGE

NORTH SHORE: 78 (19.5%)

DIPLOMA: 72 (18.0%)

BACCALAUREATE: 6 (1.5%)

PRACTICING: 54 (13.5%)

NON-PRACTICING: 18 (4.5%)

PRACTICING: 5 (1.3%)

NON-PRACTICING: 1 (0.3%)

AGE
A1: 21 - 27
A2: 28 - 32
A3: 33 - 37
A4: 38 - 43
A5: 44 - 51
A6: 52 - 73
For example, of the total sample to be selected, 256 subjects (64.0%) had to be members of the Vancouver Chapter. Of this number, 228 subjects (57.0%) were to have received diplomas and 28 (7.0%) their baccalaureate degree. Within the diploma category 181 (45.3%) of the subjects had to be practicing and 47 (11.8%) had to be non-practicing. The baccalaureate category had to have 23 (5.8%) subjects with practicing status and 5 (1.3%) with non-practicing status. Finally, with regard to age, 48 subjects (0.12%) had to have a diploma, have a practicing status and be between the ages of 21 and 27, while 8 subjects (0.02%) had to have a baccalaureate degree, have a paracticing status and be between the ages of 21 and 27.

The final step in the procedure consisted of setting up a computer program which randomly selected the desired number of subjects from each substratum.

B. Data Collection

A questionnaire accompanied by a covering letter was mailed to the four hundred selected subjects early in June 1978. A graphic account was kept to monitor daily returns. When the graph indicated a declining return rate, eleven days after the multi-mailing, a follow-up letter was mailed (refer to Appendix B for covering and follow-up letters). By the end of June most of the questionnaires that were to be returned had arrived. Several arrived sporadically throughout the month of July. However, the cut-off date was the end of June.
C. Data Analysis

The data analysis took place in three stages. The first was an item analysis of each of the four sub-tests: the Commitment Index, the Professionalism Inventory, the Collective Bargaining Index, and the Job Satisfaction Index. In the second stage, the demographic data were analyzed. Thirdly, multiple regression analysis was performed to determine which of the variables were significant predictors of commitment.

When the return of the questionnaires appeared to be complete, the responses for each of the sub-tests were transcribed directly as they appeared onto coding sheets. Demographic information was altered slightly in order to facilitate analysis and was also coded. This was then keypunched through the university keypunch services with one hundred percent verification. However, as an extra precaution, a second verification was performed. For the demographic data, the computer records for twenty percent of the sample were verified against the actual questionnaire and for each sub-test, the computer records for one hundred percent of the sample were verified.

Subjects who did not complete all of the four sub-tests were omitted from further analysis. Missing data in the demographic area were not considered as serious a threat to statistical analysis. Therefore, questionnaires with missing data in the demographic section were not eliminated. Following this process of verification, the total number of usable questionnaires was 217 (54% of the total sample).
1. Demographic Information

The intent of this stage of analysis was to provide a description of the sample. Simple frequency counts and several cross-tabulations were made. Because of missing data, the number of subjects varied. For example, the number of subjects counted under "gender" was 217 while for "age" the number of subjects was 210.

Also included in this analysis was a comparison of the proportions of various classes within the sample with the corresponding proportions in the population.

2. Sub-test Analysis

Using the LERTAP program, an item analysis of each item in every sub-test was performed. Again the results were surveyed for weak items. The analysis also provided the means, standard deviations and reliability estimates for each sub-test.

3. Multiple Regression

First, the zero-order correlations of the independent variables, personal and work-related, with the dependent variable, commitment, were calculated. Second, a stepwise multiple regression was performed to determine which of the independent variables formed the best set of predictors. In light of insufficient knowledge, designating an order of
entry of each of the variables would have pre-biased the results. It was
more appropriate to allow statistical selection, by stepwise regression, to
identify the more powerful determinants of commitment. The probability of
a Type I error for inclusion or deletion was set at .05.

The analysis of data was conducted using the University of British
Columbia T.R.P. (Triangular Regression Package), a program maintained at
the UBC Computer Centre. Also, for verification, a second program BMD-02R,
was used. Finally, scattergrams were performed in order to rule out the
possibility of non-linear relationships between the dependent and
independent variables.

Several alterations were necessary to facilitate the statistical
analysis. Variables which had such a low frequency as to be insignificant
for regression analysis, were excluded. This occurred for two variables:
gender and widowed. Another alteration occurred where three variables were
subsumed under one. Head nurse, assistant supervisor and supervisor were
subsumed under the variable administration. Also, for the continuing
education variable, each respondent was rated on a scale of one to three.
One - not taken any continuing education; two - one or two extra courses;
and three - more than two, or had taken two and planned to continue. This
was then coded under the variable EXTRA for diploma nurses and EXTRA I for
baccalaureate degree nurses.
CHAPTER IV: DATA ANALYSIS AND DISCUSSION OF FINDINGS

INTRODUCTION

The purpose of the study was to explore factors which might explain variability in nursing commitment. It was therefore necessary to determine which factors correlated significantly with commitment and could then be considered predictors of commitment.

A stepwise multiple regression analysis was used to determine which of the factors, when considered simultaneously, contributed significantly (p<.05) to the prediction of commitment. The regression analysis is discussed in the latter part of the chapter. This, however, is preceded by a discussion of the response rate, the demographic results and the analysis of the sub-tests in the questionnaire.

RESPONSE RATE

Of the four hundred questionnaires mailed, 256 (64.0%) were returned. Of these, ten were returned blank. Thus, of the total number mailed out, 61.5% were potentially useful. Questionnaires were returned unanswered for one of two reasons: the respondents indicated they were not qualified to answer (e.g., they were retired or they were non-practicing) or respondents no longer lived at the address listed. Questionnaires with missing responses in any of the sub-tests were omitted. This occurred most frequently in sub-test two of the Professionalism Inventory. It appeared
that several respondents were not aware that the Inventory continued on the back side of the paper. Questionnaires with missing data in the demographic section were not omitted. The total number of usable questionnaires following the process of elimination was 217, which represented 84.8% of the potentially usable questionnaires returned (246) and 54.2% of the total mailed.

ANALYSIS OF DEMOGRAPHIC DATA

The demographic characteristics of the sample are summarized in Table II. Also included are corresponding percentages for the population, thereby permitting comparison of the sample with the population. Although the sample consisted of 217 respondents, missing data have caused a different N to appear for many of the variables listed.

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>SAMPLE NUMBER</th>
<th>SAMPLE PERCENTAGE</th>
<th>POPULATION PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GENDER</td>
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<tr>
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<td>213</td>
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<td>98.2</td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
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<td>1.8</td>
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<tr>
<td>2. MARITAL STATUS</td>
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<tr>
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<tr>
<td>Other</td>
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<td>3. AGE</td>
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-50-
TABLE II (continued)

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4. BASIC EDUCATION

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5. CONTINUING EDUCATION

A. Diploma in Nursing

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</tr>
<tr>
<td>Bachelor of Arts</td>
<td>8</td>
<td>4.2</td>
<td>-</td>
</tr>
<tr>
<td>Master of Science in Nursing</td>
<td>1</td>
<td>0.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Master of Arts</td>
<td>1</td>
<td>0.5</td>
<td>-</td>
</tr>
<tr>
<td>Other Courses</td>
<td>5</td>
<td>2.8</td>
<td>8.2</td>
</tr>
<tr>
<td>Intend to continue education</td>
<td>92</td>
<td>50.8</td>
<td>-</td>
</tr>
</tbody>
</table>

B. Baccalaureate Degree

<table>
<thead>
<tr>
<th>None</th>
<th>N=36</th>
<th>27.8</th>
<th>19.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma/Certificate</td>
<td>1</td>
<td>2.8</td>
<td>0.9</td>
</tr>
<tr>
<td>University Credits</td>
<td>5</td>
<td>13.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Master's Degree</td>
<td>4</td>
<td>11.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Other Courses</td>
<td>15</td>
<td>41.7</td>
<td>4.2</td>
</tr>
<tr>
<td>Intend to continue education</td>
<td>9</td>
<td>25.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Registration Status

<table>
<thead>
<tr>
<th>Practicing</th>
<th>N=212</th>
<th>88.7</th>
<th>78.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Practicing</td>
<td>24</td>
<td>11.3</td>
<td>21.1</td>
</tr>
</tbody>
</table>

Employment Status

<table>
<thead>
<tr>
<th>Regular</th>
<th>N=188</th>
<th>84.6</th>
<th>81.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Casual</td>
<td>29</td>
<td>15.4</td>
<td>18.7</td>
</tr>
</tbody>
</table>

Employing Agency

<table>
<thead>
<tr>
<th>Hospital</th>
<th>N=197</th>
<th>67.9</th>
<th>64.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Health</td>
<td>27</td>
<td>12.8</td>
<td>8.8</td>
</tr>
<tr>
<td>Educational Institute</td>
<td>8</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Other</td>
<td>18</td>
<td>8.5</td>
<td>10.5</td>
</tr>
</tbody>
</table>
### TABLE II (continued)

<table>
<thead>
<tr>
<th>Employment Position</th>
<th>Sample Number</th>
<th>Sample Percentage</th>
<th>Population Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Nurse - Hospital</td>
<td>118</td>
<td>61.8</td>
<td>71.9</td>
</tr>
<tr>
<td>Public Health Nurse</td>
<td>20</td>
<td>10.5</td>
<td>-a</td>
</tr>
<tr>
<td>Instructor</td>
<td>11</td>
<td>5.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Head Nurse</td>
<td>17</td>
<td>8.9</td>
<td>5.2b</td>
</tr>
<tr>
<td>Assistant Supervisor</td>
<td>3</td>
<td>1.6</td>
<td>1.1b</td>
</tr>
<tr>
<td>Supervisor</td>
<td>10</td>
<td>5.2</td>
<td>2.9b</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>6.3</td>
<td>7.6</td>
</tr>
</tbody>
</table>

* This statistic was not available in the RNABC computer data
* These variables have been subsumed under one variable, "administration" for purposes of statistical analysis

The percentage distributions of the respondents generally matched the distributions of the population. Any discrepancies noted are minor and could be due to non-responses or changes that have occurred between the time the population data were collected (January 1978) and the time the respondent completed the questionnaire (June 1978). It can be said therefore that the respondents are representative of the population of nurses registered in Chapters 16, 18 and 55 of the RNABC.
1. Gender

The majority of respondents were female. All males selected in the sample did respond, however, one questionnaire had to be deleted, leaving four as the total number of male respondents. The percentages in the sample match exactly those percentages in the population. Since there were so few males in the sample, this variable was not included in multiple regression analysis.

2. Marital Status

More than half of the respondents were married (58.5%), while almost a third were single (32.3%). The percentage of those married was only slightly more in the population (58.5% as opposed to 54.6%). Since only 1.4% were widowed, this variable was not used in the regression analysis. The category "other" consisted of nurses who were separated, divorced or, in some cases as specified by the respondents, living common-law.

3. Age

In contrast to the population, the distribution of nurses in the different age groups was uneven. Whereas in the population the number of nurses declined as the age group increased, the sample deviated slightly in the older age groups. Almost half of the respondents were under the age of 33 (46%). Of the remaining four age groups, the next two age groups (33-37; 38-43) demonstrated a declining number of nurses in each group.
Beyond age 43, there was a slight increase; from 10.8% to 13.6% (44-51), and 13.1% (51>). However, the discrepancy between the sample and population was only slight.

4. Basic Education

As in the population, there were more respondents with a diploma in nursing than a baccalaureate degree (83.4% and 16.6%, respectively). However, it should be noted that a greater proportion of the total sample held the baccalaureate degree (16.6%) than the proportion found in the population (9.2%). In this respect, the sample is not truly representative of the population; the sample has a greater proportion of baccalaureate prepared nurses.

5. Continuing Education

Under this variable, an attempt was made to determine how much continuing education the respondents had taken. Part A (see Table II) lists the continuing education taken by diploma nurses, whereas Part B lists that taken by baccalaureate nurses. An overall trend among the diploma nurses was that more in the sample had some form of continuing education than in the population. The reverse was true for the baccalaureate prepared nurses: fewer nurses in the sample had taken continuing education courses than in the population. It is also interesting to note that a large proportion of the respondents indicated
that they intend to continue their education (50.8% of diploma nurses and 25.0% of the baccalaureate nurses).

6. Registration Status

The majority of the respondents (88.7%) held practicing registration while only 11.3% held non-practicing registration. There were almost 10% fewer practicing nurses in the population (78.3%) than in the sample and almost 10% more non-practicing nurses (21.1%) in the population than in the sample. This observed discrepancy between the obtained sample proportion and population proportion suggests that more of the practicing nurses tended to fill in the questionnaire than did the non-practicing.

7. Employment Status

The majority of respondents were employed on a regular basis (84.6%). Again there was a discrepancy, but only slight, between the sample and the population (84.6% and 81.3% respectively). The corresponding proportions of casual employees were 15.4% and 18.7% in the sample and population.

8. Employing Agency and Employment Position

Most of the sample respondents, as in the population, worked in a hospital (67.9% and 64.1% respectively). Following along with this, most of the respondents worked as staff nurses. It is interesting to note the
sample had fewer staff nurses than is generally found in the population (61.8% compared to 71.9%). Correspondingly, more instructors (5.8% as opposed to 3.9%), head nurses (8.9% as opposed to 5.2%), assistant supervisors (1.6% as opposed to 1.1%), and supervisors (5.2% as opposed to 2.9%) were found in the sample than in the population.

9. Year of Graduation and Work Experience

Although these type of data were not available for the population, the year of graduation and number of years of work experience were included in the questionnaire. Tables III and IV indicate the resulting proportions.

<table>
<thead>
<tr>
<th>YEAR OF GRADUATION</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before 1960</td>
<td>63</td>
<td>29.0</td>
</tr>
<tr>
<td>1961-1969</td>
<td>67</td>
<td>30.9</td>
</tr>
<tr>
<td>1970-1978</td>
<td>87</td>
<td>40.1</td>
</tr>
</tbody>
</table>

In keeping with the fact that the majority of respondents were in the younger age groups, Table III demonstrates that the greatest number of respondents had graduated in 1970 and later.
TABLE IV  
FREQUENCIES AND PERCENTAGES BY NUMBER OF YEARS WORK EXPERIENCE  n=197  

<table>
<thead>
<tr>
<th>NUMBER OF YEARS WORK EXPERIENCE</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2 years</td>
<td>22</td>
<td>11.2</td>
</tr>
<tr>
<td>2 - 5 years</td>
<td>50</td>
<td>25.4</td>
</tr>
<tr>
<td>6 - 7 years</td>
<td>29</td>
<td>14.7</td>
</tr>
<tr>
<td>8 - 10 years</td>
<td>34</td>
<td>17.3</td>
</tr>
<tr>
<td>11 - 15 years</td>
<td>29</td>
<td>14.7</td>
</tr>
<tr>
<td>16 - 20 years</td>
<td>20</td>
<td>10.2</td>
</tr>
<tr>
<td>Over 20 years</td>
<td>13</td>
<td>6.6</td>
</tr>
</tbody>
</table>

As shown in Table IV, slightly more than 50% of the respondents reported that they had worked between one and ten years. The greatest number of nurses had worked between two and five years.

Based on 217 questionnaires, the demographic data provided information which described the sample. The sample consisted predominantly of married females in the younger age categories. Most of them had received a diploma in nursing, had taken some form of continuing education and/or intended to continue their education and were regularly employed practicing staff nurses in a hospital. Furthermore, the sample closely paralleled the population of nurses registered in Chapters 16, 18 and 55 of the RNABC.

SUB-TEST ANALYSIS

As with the pilot test, the sub-test analysis consisted of two parts: the item analysis and the analysis of psychometric properties. Suffice it to say that in the item analysis, almost all item correlations improved
when compared to the pilot test. Of the five sub-tests, the Professional Beliefs sub-test of the Professionalism Inventory appeared to have the greatest number of items whose correlation decreased. Note, however, that it also had a low reliability estimate in both the pilot test and actual study.

A summary of some of the psychometric properties is provided in Table V.

<table>
<thead>
<tr>
<th>SUB-TEST</th>
<th>MEAN</th>
<th>PERCENT</th>
<th>S.D.</th>
<th>PERCENT</th>
<th>HOYT'S ESTIMATE OF RELIABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment Index</td>
<td>25.30</td>
<td>70.2</td>
<td>6.87</td>
<td>19.1</td>
<td>r=.93</td>
</tr>
<tr>
<td>Professional Beliefs</td>
<td>64.46</td>
<td>67.8</td>
<td>7.96</td>
<td>8.4</td>
<td>r=.65</td>
</tr>
<tr>
<td>Professional Actions</td>
<td>18.38</td>
<td>61.3</td>
<td>4.03</td>
<td>13.4</td>
<td>r=.52</td>
</tr>
<tr>
<td>Collective Bargaining</td>
<td>35.84</td>
<td>71.7</td>
<td>7.56</td>
<td>15.1</td>
<td>r=.86</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>21.91</td>
<td>78.3</td>
<td>5.13</td>
<td>18.3</td>
<td>r=.78</td>
</tr>
</tbody>
</table>

Overall the reliability estimates of each section revealed internally consistent data gathering instruments with the exception of the Professionalism Inventory sub-test (Professional Action). Many of the respondents said they found this section of the Professionalism Inventory difficult to answer because of the differences in the polarities of items. In order to prevent "patterned" responses, both positively and negatively worded items were used (see Chapter III). Some of the respondents noted on their questionnaires that this tended to confuse them. But the intention
was to break the positive response pattern which would hopefully assure carefully thought out responses.

In addition, examination of the Professionalism Inventory reveals it to be an affective test. Measurement experts, such as Tuckman, contend that people have a tendency to be more sensitive about disclosing what they feel than what they know and that many adults tend to overreact to or be defensive about measurement of feelings. As such, measurement of the affective domain has a greater potential for being unreliable than do tests which measure the cognitive domain. Although all the sub-tests were affective, the Professional Action sub-test seemed to be the most susceptible to this weakness.

Generally, the trend among the respondents was to have a positive attitude toward commitment, professionalism, collective bargaining and job satisfaction. To illustrate, if it is assumed that 50% is the midpoint, a mean of 25.3 on the Commitment Index is greater than the midpoint (18) of a possible 36 points. A total of 83.4% of the sample scored above the midpoint (18) - indicating a positive attitude. As shown in Figure 7, the number of respondents who had a score of 25.3 or more (107) is greater than those who scored lower than 25.3 (100).

Similar trends are noted with the other sub-tests (see Figures 8, 9, 10 and 11 in Appendix C).
The highest mean expressed as a percentage was found on the Job Satisfaction Index (78.3%). In general, it seems, the sample respondents are satisfied with their work.
In summary, sub-test analysis revealed three internally consistent data gathering instruments. The Professionalism Inventory did not have as strong a reliability estimate as the others. This was explained, in part, by the difficulty the respondents had interpreting and answering the items. The general trend among the respondents was a positive attitude toward commitment, professionalism, collective bargaining and work satisfaction.

MULTIPLE REGRESSION ANALYSES AND FINDINGS

(1) A stepwise multiple regression analysis was performed to test whether any of the independent variables were significant predictors of commitment. The initial list of independent variables (Table I, page 32) was altered by deleting the "widow" category and omitting "gender" because of small frequencies. The means and standard deviations for remaining variables are presented in Table VI. Age, year of graduation, number of years working experience, professionalism, employment status, opinions about collective bargaining, and work satisfaction were continuous variables while the categories associated with marital status, educational background, registration status, and employment position were scored dichotomously.

(2) The means and standard deviations listed in Table VI were verified by comparing, where possible, these findings with the background frequency and the analysis of the sub-test. The mean age, for example, seems reasonable in view of the fact the majority of respondents were under the age of 37 years. A mean of 0.323 for the "single" category is correct in that 32.3
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STANDARD DEVIATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>36.291</td>
<td>11.375</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Single</td>
<td>0.323</td>
<td>0.468</td>
</tr>
<tr>
<td>b) Married</td>
<td>0.585</td>
<td>0.494</td>
</tr>
<tr>
<td>c) Other</td>
<td>0.078</td>
<td>0.269</td>
</tr>
<tr>
<td>Year of Graduation</td>
<td>1.888</td>
<td>0.821</td>
</tr>
<tr>
<td>Years of Experience</td>
<td>3.719</td>
<td>1.929</td>
</tr>
<tr>
<td>Education Background</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Basic (diploma)</td>
<td>0.834</td>
<td>0.373</td>
</tr>
<tr>
<td>b) Continuing</td>
<td>2.237</td>
<td>0.784</td>
</tr>
<tr>
<td>Professional Beliefs</td>
<td>64.493</td>
<td>7.923</td>
</tr>
<tr>
<td>Professional Action</td>
<td>18.397</td>
<td>4.014</td>
</tr>
<tr>
<td>Collective Bargaining</td>
<td>35.972</td>
<td>7.203</td>
</tr>
<tr>
<td>Registration Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Practicing</td>
<td>0.887</td>
<td>0.318</td>
</tr>
<tr>
<td>Employment Status</td>
<td>2.548</td>
<td>0.768</td>
</tr>
<tr>
<td>Employment Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Staff nurse - Hospital</td>
<td>0.605</td>
<td>0.490</td>
</tr>
<tr>
<td>b) Public health</td>
<td>0.103</td>
<td>0.304</td>
</tr>
<tr>
<td>c) Instructor</td>
<td>0.056</td>
<td>0.231</td>
</tr>
<tr>
<td>d) Administrative</td>
<td>0.138</td>
<td>0.346</td>
</tr>
<tr>
<td>e) Other</td>
<td>0.062</td>
<td>0.241</td>
</tr>
<tr>
<td>Commitment</td>
<td>25.359</td>
<td>6.724</td>
</tr>
</tbody>
</table>
(3) The zero-order correlation matrix (Appendix D) revealed low correlations between each independent variable and the dependent variable. The highest correlation was only $r = 0.36$, thus illustrating that the degree of association between each independent variable and the dependent variable was not very strong. This was later confirmed in the third phase of the analysis, stepwise multiple linear regression. A summary table showing the order of entry and significance ($p < .05$) of the variables is provided in Table VII. A detailed presentation, including values of partial correlation and corresponding partial F's, is provided in Appendix E.

<table>
<thead>
<tr>
<th>VARIABLES ENTERED</th>
<th>PARTIAL CORRELATION$^a$</th>
<th>MULTIPLE $R^2$</th>
<th>INCREASE IN $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Satisfaction</td>
<td>0.36</td>
<td>0.129</td>
<td>0.129</td>
</tr>
<tr>
<td>Professional Beliefs</td>
<td>0.25</td>
<td>0.186</td>
<td>0.057</td>
</tr>
<tr>
<td>Separated/Divorced</td>
<td>-0.19</td>
<td>0.214</td>
<td>0.028</td>
</tr>
<tr>
<td>Diploma Nurse</td>
<td>-0.15</td>
<td>0.234</td>
<td>0.020</td>
</tr>
</tbody>
</table>

Note: The four variables are listed in their order of entry. The remaining variables did not add significantly ($p < .05$) to the proportion of variance explained.

$^a$ at time of entry

(4) The most powerful predictor was work satisfaction ($r = 0.36$). This variable alone accounted for 12 percent of the total variance. The procedure followed through three more steps bringing in three more variables: professional beliefs, marital status (separated/divorced), and basic education (diploma nurse). Thus, the four variables listed in Table...
VII account for or explain 23 percent of the variability of the dependent variable. In other words, 23 percent of an individual's commitment score is explained or predicted by the individual's scores on these four variables.

(5) Scatter plots of the dependent variable against the independent variables were obtained in order to check for curvilinear relationships. The scatter plots did not reveal curvilinear relationship between commitment and any of the independent variables. It is therefore safe to assume linearity had not been violated.

(6) The use of scatter plots is not the best method of testing the dependent variable against dichotomous independent variables for curvilinear relationships. Scatter plots are best used with continuous variables. Therefore, to have a more reliable indicator of the relationship between the dependent variable and the dichotomous independent variables, an analysis of variance was performed. The analysis revealed that the significance for each of the variables listed was greater than the .05 level of significance. Therefore, none of the dichotomous independent variables had a significant relationship with the dependent variable, commitment.

(7) It is known that with a stepwise multiple regression procedure, the dominating predictor variables will be so powerful that they will not allow other weaker but significant variables to enter the equation. To assure that this was not happening, a second stepwise analysis was performed using
only the background data variables. Thus, the scores on the four sub-tests, "professional beliefs," "professional action," "collective bargaining" and "work satisfaction" were left out. The results, however, only confirmed what the first analysis had shown. The two variables which entered the equation were the same two which had entered the first equation. None of the other variables used in the second analysis was strong enough to enter. Therefore, it is concluded that the two dominant variables in the first equation, "work satisfaction" and "professional beliefs" were not overpowering weaker demographic variables.

(8) Multiple regression analysis revealed that commitment does vary because of differences in personal and work-related variables. Thus, the null hypothesis was not supported. The stepwise multiple regression analysis indicated that for this sample 23 percent of the variance in commitment was explained by the extent of an individual's work satisfaction, her professional beliefs, by whether or not she was separated/divorced, and by whether or not she was a diploma nurse. The analysis indicated, therefore, that there was a tendency for nurses who were satisfied in their work, who had strong professional beliefs, who were not separated/divorced, and who were baccalaureate graduates, to have a higher commitment level than those who were not satisfied, had weak professional beliefs, who were separated/divorced or diploma graduates. In summary, it could be said that the commitment level of satisfied nurses could tend to differ from those nurses who were not; that an individual's professional orientation did tend to make a difference in her commitment level; that the commitment level of single and married nurses did tend to
differ from that of separated/divorced nurses; and that an individual's basic education did tend to have a bearing on her level of commitment.

(9) However, it must be remembered that these four variables accounted for only 23% of the total variance. Thus 77% of the variance was not accounted for. Of this 77%, 7% can never be explained. As indicated by the reliability of the Commitment Index ($r = .93$), .7 or 7% of the variance is attributed to random error. The 70% remaining may be explained by other untested factors which could have far greater predictability.

There were a number of similarities between the findings of this study and those of the Alluto and Hrebiniak. Although the variables were not identical to those which proved significant in the Alluto and Hrebiniak studies, they were similar in that they were categorized as personal or work-related variables. A second similarity found between this study and the Alluto and Hrebiniak studies was that the work-related variables were almost always the strongest predictors and therefore entered the regression equations first. In the present study, "work satisfaction" entered first.

A final similarity noted between this study and the Alluto and Hrebiniak studies was the percentage of the variability which is accounted for by the independent variables. In their first study, Alluto and Hrebiniak document that 12 percent of the variance was accounted for by the personal and work-related variables. In their second study they found an $R^2$ of .21. Although these two figures were derived from studies designed to account for variability in commitment to an organization, as
opposed to a profession, they serve to illustrate the following point. When compared with the $R^2$ of .234 obtained in the present study, it becomes evident that, in all three studies, personal and work-related variables did not account for a large percentage of explained variance. This strongly supports the need to re-examine the structural model of the commitment phenomenon.

Another important fact to note in the present study was the predominance of low correlations between the dependent variable and the independent variables and the independent variables among themselves. For example, the highest correlation between the dependent variable and the independent variables was $r=.36$. The correlations between the independent variables were also low.
SUMMARY

The purpose of the study was to determine whether variability in the degree of commitment nurses had to their profession was explained by personal and work-related factors. Commitment is a powerful force which shapes a nurse's career and as such it is the responsibility of nurses, as professionals, to understand the nature of commitment and the values attached to the concept. The values the profession attaches to the phenomenon of commitment are in part expressed by the level of commitment of individual nurses. Further, having knowledge about the factors which explain variability in the commitment of nurses would provide a better understanding of the phenomenon and would contribute toward the evolution of a theory of commitment. In a review of the literature, it was concluded that commitment should be studied with respect to its interaction with a multiplicity of variables. This gave direction for an empirical study using a multiple regression research design.

Based on the work of Alluto and Hrebiniax, a five-part questionnaire was first pilot-tested, then mailed to a stratified random sample of four hundred nurses living in the Greater Vancouver District. Data analysis took place in three stages. First an item analysis for each of the subtests was performed. The demographic data were then analyzed. Finally,
A multiple regression analysis was performed to determine which of the variables were significant predictors of commitment.

Analysis of the sub-tests used to measure commitment, professionalism, opinions about collective bargaining and work satisfaction revealed internally consistent sub-tests, with the exception of the Professional Action sub-test.

Analysis of the demographic data revealed a sample closely resembling the population of interest. Overall, the sample consisted of females who were predominantly married practicing diploma nurses with a mean age of 36 years. Most of them worked as staff nurses in a hospital on a regular basis. The majority had taken some form of continuing education and intended to continue their education.

A stepwise multiple regression analysis produced an $R^2$ of 23%. Four variables entered the regression equation. Of these, three were personal variables (marital status, basic education, professionalism) and one a work-related variable (work satisfaction). The latter was the strongest predictor of commitment accounting for slightly more than half of the explained variability. Even when the two strongest predictors, work satisfaction and professional beliefs, were removed from the analysis, the same two variables which had already entered the equation, marital status and basic education, entered again. All other variables remained out. Thus, to relate back to the hypothesis, it was found that personal and
work-related factors did explain some of the variability in commitment, accounting for 23% of the total variability.

Verification procedures assured linearity of the relationship between the dependent variable and continuous independent variables. Analysis of variance also assured non-significant relationships between the dependent variable and the dichotomous independent variables.

CONCLUSIONS

The present study was carried out to provide a better understanding of the phenomenon of commitment by investigating factors which were thought to influence it. The following conclusions were made:

(1) The study revealed correlational, not cause-effect relationships. As such, the interpretation of the results had to consider that the independent variable did not necessarily cause the dependent variable. In other words, job satisfaction, strong professional beliefs, being single or married and being a baccalaureate degree nurse, did not necessarily cause the respondents to have a stronger commitment to the profession of nursing. It could only be said that respondents with these characteristics also had a high commitment level.

(2) Although the study demonstrated that commitment is explained by personal and work-related factors at a .05 level of significance, a large part (70%) of the variance remains unexplained. This supports
the need to re-examine the structural model of the commitment phenomenon.

A suggestion in this direction would be to move away from a "simple" linear model to a path model incorporating various branches or paths. Perhaps commitment is not due to one variable added to a second variable added to a third and fourth variable, as the linear model assumes. It may be that one or two variables may affect commitment indirectly through another variable which affects commitment directly. In addition to a new model, incorporation of different variables, which would better measure commitment, would be a second suggestion.

(3) Lack of construct validity for all or some of the sub-tests may, in part, also account for the large unexplained variance (70%). Although the sub-tests were each considered internally consistent (with the exception of the Professional Action sub-test), construct validity is not assured. The sub-tests may have been measuring something altogether different. For example, although the reliability estimate of the Commitment Index was $r = .93$, it could be that in reality the Index was measuring something other than commitment.

(4) In an attempt to speculate on the cause of the low correlations and their ambiguous nature, a discussion of a trend developing within the
nursing profession may be useful. The trend, labelled by many as an "identity crisis," has for the past decade become more and more evident. Recent events at the Vancouver General Hospital have, in particular, brought this "identity crisis" to the forefront. A dispute between the nurses and the administration over inadequate practice conditions began in the summer of 1977. The dispute erupted in June 1978. What was at stake in this dispute was "how much control the (nursing) profession should exercise over its practice..."45 The nurses contended that "if they are expected to give safe, competent care, they must have control over the setting in which they deliver that care."46 This assertive stand for more decision-making authority on issues which affected the delivery of nursing care was of historic significance. It reflected the transition or evolution of the nurses as the passive follower of physicians' orders and administrative decisions to the active decision-maker, striving to be responsible and accountable for her actions. The transition which is prevalent throughout many parts of British Columbia, the rest of Canada and indeed North America has, as with any change process, caused uncertainty and unrest among nurses. It is this uncertainty and unrest which has been labelled an "identity crisis."

The questionnaire was distributed one week following the eruption at the Vancouver General Hospital and some of the findings may reflect the inner turmoil or "identity crisis" being experienced by the nurses. Although it is not possible to predict precisely how or to what extent the events at the Vancouver General Hospital may have
affected the responses of the nurses, one can speculate that they may very likely have been affected. This may, in part, explain the low, unexpected correlations found in this study.

IMPLICATIONS

In this study of commitment, it was found that three personal and one work-related variable accounted for 23% of the variance. Although an explained variance of 23% is not very large, several implications for practicing nurses, employing agencies, the professional association, nurse educators and nursing researchers do arise.

Of the four variables, two in particular have implications. The first is job satisfaction. It was concluded that there was a trend among nurses who were committed to their profession to also be satisfied in their jobs. Practicing nurses and their employing agencies should both be aware of this and strive to cultivate a fulfilling, cohesive working environment. Nurse educators should continue efforts to sensitize students to the realities of the work world. They should also encourage and foster ways and means of creating a satisfying working environment. Introduction to the change process would be useful with a follow-up assignment using the process in the clinical setting. Nursing researchers should address themselves to the question of what it is that makes nurses satisfied or dissatisfied in their jobs.
The second variable of interest is professional beliefs. Nurses in the sample who had a strong commitment to nursing also tended to have strong professional beliefs. The implications of this finding primarily rest with nurse educators. As indicated in the introduction, nurse educators have the major responsibility in molding and shaping nursing students' values and their professional beliefs. The values the student acquires during these formative years will see her through her career. It is, therefore, a crucial time to develop and nurture a sense of professionalism. Nursing students should be made more aware of the attributes of a profession and professional conduct, as well as the public expectations of a professional. They should be made aware of the importance of reading nursing journals, of the need to continue their own education after graduation and of the value of supporting and participating in nursing research.

The responsibility of cultivating strong professional beliefs rests also with the professional association. Not only must it conduct itself professionally, it must inspire its members to do so. Nurses must be motivated to participate in professional affairs and to become politically aware and more assertive. Examples of other activities which help to promote professional development include the publication of a professional journal, provision of loans or grants for continuing education, conducting and funding nursing research and initiating programs to assure quality of nursing care.
Finally, the implication for nursing researchers rests in the need to determine why nurses have strong beliefs, what helps to develop them or what causes nurses to lose them.

Job satisfaction and strong professional beliefs are two important determinants of commitment. The implications of these findings serve to illustrate that, although the findings of the present study were not strong statistically, they did reveal new knowledge useful to the nursing profession in its effort to determine the values it attaches to the concept of commitment. Furthermore, a foundation from which further studies can develop has been established.

LIMITATIONS

(1) The survey approach used in this study presented several limitations. As with any questionnaire the researcher had no guarantee that the views and attitudes expressed by the respondents were true. Nor could the researcher verify whether or not these attitudes correspond to the way in which the respondent actually behaved. Finally, the survey approach affords no way of eliciting information from the non-respondents unless a special technique such as a follow-up of a sub-sample of non-respondents is used. Results obtained from the respondents may have reflected a bias. Therefore generalizations could only be made to the population of "respondents."

-75-
(2) Generalization of any of the conclusions could only be made to a population of nurses similar to the one used in the study. Therefore, factors found to be significant predictors of commitment could be generalized only to nurses living in a metropolitan area and who had the same demographic characteristics as found in the sample.

(3) Because the questionnaire was distributed one week following the nursing confrontation at the Vancouver General Hospital, the sample subjects may have been biased by emotional, uncertain beliefs and attitudes which may have affected their responses to the questionnaire.

RECOMMENDATIONS FOR FURTHER RESEARCH

As indicated in the conclusion, a large part of the variability in commitment remained unexplained (70%). This may have been due to the lack of construct validity in the Commitment Index, to the use of the "simple" linear model and/or to the use of variables which did not influence commitment. Recommendations for further research to overcome these three weaknesses are as follows:

(1) A study to improve the construct validity of the Commitment Index. This would serve to reassure that the phenomenon which was being measured by the Index truly was commitment.
(2) It was suggested in the conclusion that a more complex model than the "simple" linear model be used for analysis. As commitment is a very complicated concept, it may well be that in order to analyze it through research, an equally complex methodology must be used.

(3) In an effort to determine whether the respondents in the present study were any different than the non-respondents, a sub-sample of non-respondents could be selected for study. Comparing the findings of the sub-sample with the responding sample for significant differences might provide more insight into the phenomenon of commitment.

(4) In comparing the present study with the Hrebeniak and Alluto studies, it was found that, although the personal and work-related variables did explain variability in commitment, in all three studies the $R^2$ was less than 25%. In view of this fact, it is possible that other as yet unstudied variables may have a greater influence on commitment. The fourth recommendation for further research consists of seeking out these variables. Interviewing nurses to determine factors which the respondents felt would most likely influence commitment would be one possible methodology.

Having established a new set of variables and the construct validity of the Commitment Index, the study could then be repeated using a path analysis procedure. Following this, the study could be replicated on a sample of nurses not living in an urban area such as the Greater Vancouver
District. If the findings are similar, they could be generalized to the population of nurses living in British Columbia. If the findings were not similar, the research could expand to determine if there is any significant difference between the two samples. This in turn could lead to further research to explore the characteristics which explain the difference in the commitment of nurses living in an urban setting with the commitment of those living in rural British Columbia.
FOOTNOTES


4. N. Riegler, "Commitment and Nursing" (Master's Degree, School of Public Health, University of Michigan, 1967): 3


-79-

19 Ibid


21 Sister M. Vaillot, op cit: 204

22 Ibid

23 C. Kiesler, op cit: 142

24 C. Kiesler, ibid: 63

25 C. Kiesler, ibid: 88

26 C. Kiesler, ibid: 107

27 C. Kiesler, ibid: 125


29 Ibid: 476

30 L. Hrebiniak and J. Alluto, "Personal and Role-Related Factors in the Development of Organizational Commitment," *Administrative Science Quarterly* 17 (December 1972): 555

31 Ibid

32 Ibid: 570


36 Ibid: 112


38 Ibid: 92


-80-
40 N. Gross, ibid


42 Hrebiniak and Alluto, "Personal and Role-Related Factors in the Development of Organizational Commitment": 569

43 Alluto and Hrebiniak, "Preliminary Findings on a Study of Managers Graduating from Engineering and MBA Programs."


46 Ibid
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UNIVERSITY OF BRITISH COLUMBIA
DEPARTMENT OF NURSING

The questionnaire has been divided into five sections. Instructions for each section vary. Please read the instructions carefully before responding to the items.

I.

Please indicate by circling the number which corresponds to the way in which you feel in response to the following question:

Suppose you were offered a job not in nursing. Would you leave nursing under any of the following conditions?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Y.D.</th>
<th>U.</th>
<th>N.D.N.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) With no increase in pay</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2) With a slight increase in pay</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3) With a large increase in pay</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4) With no more freedom to be professionally creative</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5) With slightly more freedom to be professionally creative</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6) With much more freedom to be professionally creative</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7) With no more status</td>
<td>1</td>
<td>2</td>
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<tr>
<td>8) With slightly more status</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>9) With much more status</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>10) To work with people who are no friendlier</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11) To work with people who are slightly more friendly</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12) To work with people who are much friendlier</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

II.

The following items should be answered in light of the way you yourself both feel and behave as a member of the nursing professional.

There are five possible responses to each item. If, for example, the item describes very well (V.W.) your own attitude or behaviour circle the number corresponding to that response. If it corresponds well (W.), poorly (P.) or very poorly (V.P.) circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

Remember, answer each item according to the way in which you both feel and behave as a member of the nursing profession, i.e.: how you actually feel and behave.

<table>
<thead>
<tr>
<th>Response</th>
<th>Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - very well</td>
<td>V.W.</td>
</tr>
<tr>
<td>2 - well</td>
<td>W.</td>
</tr>
<tr>
<td>3 - (?) uncertain</td>
<td>?</td>
</tr>
<tr>
<td>4 - poor</td>
<td>P.</td>
</tr>
<tr>
<td>5 - very poor</td>
<td>V.P.</td>
</tr>
</tbody>
</table>
1) I think that my profession more than any other profession is essential for society.

2) My colleagues have a pretty good idea about each other's competence.

3) People in this profession have a real "calling" for their work.

4) The importance of my profession is sometimes overstressed.

5) I believe the professional organization should be supported.

6) Some other occupations are actually more important to society than mine is.

7) A problem in this profession is that no one really knows what his colleagues are doing.

8) It is encouraging to see the high level of idealism which is maintained by people in nursing.

9) The professional organization doesn't really do too much for the average member.

10) We really have no way of judging each other's competence.

11) Most people would stay in the profession even if their incomes were reduced.

12) If ever an occupation is indispensible, it is this one.

13) My colleagues pretty well know how well we all do in our work.

14) There are really very few who don't really believe in their work.

15) I am my own boss in almost every work-related situation.

16) There is not much opportunity to judge how my colleagues do their work.

17) My own decisions are subject to review.

18) Although I would like to I don't really read the journals often.

19) I make my own decisions in regard to what is to be done in my work.

20) I regularly attend meetings at the local level.

21) I regularly read the professional journals.

22) I don't have much opportunity to exercise my own judgement.

23) Most of my decisions are reviewed by other people.

24) Other professions are actually more vital to society than mine.

25) The dedication of people in this field is most gratifying.
III. To help in the analysis, some background information about yourself and your work will be of great help. This information will in no way be used to identify any individual and will be kept private and confidential. Please check the box which corresponds to you and your work (or mark in actual numerical value where necessary).

A. SEX:
   - FEMALE
   - MALE

B. MARITAL STATUS:
   - SINGLE
   - MARRIED
   - WIDOWED
   - OTHER

C. AGE: __________ (IN YEARS)

D. YEAR OF GRADUATION: 19__

E. TOTAL NUMBER OF YEARS ACTIVE NURSING PRACTICE SINCE GRADUATION: __________ (IN YEARS)

F. EDUCATION:
   Please check one.
   - RN Diploma
   - Regarding continuing education, check all that apply:
     - None
     - Diploma/Certificate
       - ie: public health
     - University Credits
       - ie: not resulting in B.Sc.N.
     - Bachelor's Degree
       - ie: Nursing
     - Master's Degree
     - Courses other than nursing
     - Intend to seek further education

   OR
   - Bachelor's Degree
   - Regarding continuing education, check all that apply:
     - None
     - Diploma/Certificate
     - University Credits
       - ie: not acquired with degree
     - Master's Degree
     - Courses other than nursing
     - Intend to seek further education

G. REGISTRATION STATUS:
   - PRACTICING
   - NON-PRACTICING

H. EMPLOYMENT STATUS:
   - REGULAR FULL TIME
   - REGULAR PART TIME
   - CASUAL
I. CURRENT EMPLOYMENT

HOSPITAL

CLINIC

PUBLIC HEALTH

EDUCATIONAL INSTITUTION

OTHER

(please specify)

J. EMPLOYMENT POSITION

STAFF NURSE

PUBLIC HEALTH NURSE

INSTRUCTOR

HEAD NURSE

ASSISTANT SUPERVISOR

SUPERVISOR

IV.

Listed below are ten statements about collective bargaining in general and as it pertains to registered nurses. Please circle the number which corresponds to the way you feel about each statement.

For each statement please indicate whether you:

1 - Strongly agree
2 - Agree
3 - Undecided
4 - Disagree
5 - Strongly disagree

S.A. A. U. D. S.D.

1. In the long run, management will do more for employees than will unions.

2. Collective bargaining is vital to nurses in pursuit of their professional goals.

3. Mutual support between nurse associations and unions representing professional nurses is a good idea.

4. Collective bargaining is a negative force for progress in Canadian society.

5. It is preferable to belong to an organization that is willing to go on strike if it feels such action is necessary.

6. Collective bargaining by nurses requires a greater expenditure of time and effort than the potential gain would justify.

7. Economic issues affecting nurses can be dealt with more effectively through collective bargaining than in any other way.

8. Collective bargaining is not appropriate for professionals.

9. Nurses should be prohibited by law from striking.

10. Collective bargaining by nurses will result in higher quality of patient care.
Please circle the number which indicates your satisfaction or dissatisfaction with corresponding aspects of your present job. If not applicable to you and your work, please circle the number which indicates "not applicable".

1 - Very well satisfied V.S.
2 - Fairly satisfied F.S.
3 - Fairly dissatisfied F.D.
4 - Very dissatisfied V.D.
5 - Not applicable N.A.

V.S.  F.S.  F.D.  V.D.  N.A.

1. On the whole are you satisfied that the administration accepts you as a professional expert to the degree to which you feel you are entitled by reason of your position, training and experience?
2. How satisfied are you with your present job when you consider the expectations you had when you took the job?
3. How satisfied are you with your present job when you compare it to other nursing jobs?

In answering the following questions please consider nursing as a career rather than your present job.
(Note format for answering items has changed slightly)

4. How do you feel nursing compares with other types of work?

1 - The most satisfying career.
2 - One of the most satisfying careers.
3 - As satisfying as most careers.
4 - Less satisfying than most careers.

5. If you had to do it over again would you enter nursing?

1 - Definitely yes.
2 - Probably yes.
3 - Probably no.
4 - Definitely no.

Thank you once again for time and consideration of the questionnaire. If you have any additional comments please feel free to express them. I would be most interested in hearing your views regarding subject matter covered in the questionnaire or regarding the questionnaire itself.
June 9, 1978

Dear Colleague:

I am a graduate student at the University of British Columbia, where, in partial fulfillment of a master's degree in nursing I am carrying out a research project. I would appreciate it very much if you would assist me in my endeavour by completing the enclosed questionnaire which seeks your opinions on different aspects of your work as a registered nurse.

The aim of the study is to determine factors which have an influencing effect on professional nurses. Information obtained from this study will have implications for nursing practice, education and research. Your participation is important. Although the questionnaire appears long, it is designed so that it can be quickly and easily completed. Please take time to complete it, giving an answer to every question and return it in the addressed stamped envelope provided. I would greatly appreciate it if you could give this matter your prompt attention, preferably within the next day or so.

All information will be in strictest confidence. Please do not put your name on the questionnaire. The number written on the top page of each questionnaire is only to aid in monitoring returns so that you will not be bothered by any follow-up letters. Please be assured that at no time will any individual nurse be identified. All information will be aggregated. Results of the study will be available in the Library of the Registered Nurses Association. I welcome any additional comments or concerns you have.

Thank you very much for your participation.

Yours sincerely,

Suzanne Flannery, R.N.
Graduate Student,
University of British Columbia
The questionnaire has been divided into five sections including a section for background information. Instructions for each section vary. Please read the instructions carefully before responding to the items.

I.

Please indicate by circling the number which corresponds to the way in which you feel in response to the following question:

Suppose you were offered a job not in nursing. Would you leave nursing under any of the following conditions?

1 - Yes, Definitely - Y.D.
2 - Uncertain - U.
3 - No, Definitely Not - N.D.N.

Y.D. U. N.D.N.

1) With no increase in pay 1 2 3
2) With a slight increase in pay 1 2 3
3) With a large increase in pay 1 2 3
4) With no more freedom to be professionally creative 1 2 3
5) With slightly more freedom to be professionally creative 1 2 3
6) With much more freedom to be professionally creative 1 2 3
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8) With slightly more status 1 2 3
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There are five possible responses to each item. If, for example the item describes very well (V.W.) your own attitude or behaviour circle the number corresponding to that response. If it corresponds well (W.), poorly (P.) or very poorly (V.P.) circle the appropriate response. The middle category (?) is designed to indicate an essentially neutral opinion about the item.

Remember, answer each item according to the way in which you both feel and behave as a member of the nursing profession, ie. how you actually feel and behave.

1 - Very Well
2 - Well
3 - (?) Uncertain
4 - Poorly
5 - Very Poorly

V.W. W. ? P. V.P.

1) I think that my profession more than most other profession is essential for society. 1 2 3 4 5
2) My colleagues have a pretty good idea about each other's competence. 1 2 3 4 5
3) People in this profession have a real "calling" for their work. 1 2 3 4 5
4) The importance of my profession is sometimes understressed. 1 2 3 4 5
5) I believe the professional organisation should be supported. 1 2 3 4 5
6) Some other professions are actually more important to society than nursing. 1 2 3 4 5
7) A problem in this profession is that no one really knows what is happening with regard to the profession. 1 2 3 4 5
8) It is encouraging to see the high level of idealism which is maintained by people in nursing. 1 2 3 4 5
9) The professional association doesn't really do too much for the average member. 1 2 3 4 5
10) We really have no way of judging each other's competence. 1 2 3 4 5
11) Most people would stay in the profession even if their incomes were reduced. 1 2 3 4 5
12) If ever an occupation is indispensible, it is this one. 1 2 3 4 5
13) My colleagues pretty well know how well we all do in our work. 1 2 3 4 5
14) There are really very few who don't really believe in their work.  
15) I am my own boss in almost every work-related situation.  
16) There is not much opportunity to judge how my colleagues do their work.  
17) My own decisions are subject to review  
18) Although I would like to I don't really read the journals often.  
19) I make my own decisions in regard to what is to be done in my work.  
20) I regularly attend meetings of the local chapter of the R.N.A.B.C.  
21) I regularly read the professional journals.  
22) I don't have much opportunity to exercise my own judgement.  
23) Most of my decisions are reviewed by other people.  
24) Other professions are actually more vital to society than mine.  
25) The dedication of people in this field is most gratifying.
<p>| | | | | |</p>
<table>
<thead>
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<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
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<td>1</td>
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</table>
III. To help in the analysis, some background information about yourself and your work will be of great help. This information will in no way be used to identify any individual and will be kept private and confidential. Please check the box which corresponds to you and your work (or mark in actual numerical value where necessary).

A. SEX:  
- FEMALE □
- MALE □

B. MARITAL STATUS:  
- SINGLE □
- MARRIED □
- WIDOWED □
- OTHER □

C. AGE: ______ (in years)

D. YEAR OF GRADUATION:  
19____

E. TOTAL NUMBER OF YEARS ACTIVE NURSING PRACTICE SINCE GRADUATION: ______ (in years)

F. EDUCATION:

Please check one.

<table>
<thead>
<tr>
<th>RN Diploma</th>
<th>or</th>
<th>Bachelor's Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regarding continuing education, check all that apply:</td>
<td>Regarding continuing education, check all that apply:</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Diploma/Certificate ie. public health</td>
<td>Diploma/Certificate</td>
<td></td>
</tr>
<tr>
<td>University credits ie. not resulting in B.Sc.N.</td>
<td>University credits ie. not acquired with degree</td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree ie. Nursing</td>
<td>Bachelor's Degree Non-Nursing</td>
<td></td>
</tr>
<tr>
<td>Non-Nursing</td>
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-97-
G. REGISTRATION STATUS:

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<tbody>
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H. EMPLOYMENT STATUS:

| REGULAR FULL TIME | □ |
| REGULAR PART TIME | □ |
| CASUAL | □ |

I. CURRENT EMPLOYMENT

| HOSPITAL | □ |
| CLINIC | □ |
| PUBLIC HEALTH | □ |

J. EMPLOYMENT POSITION

| STAFF NURSE | □ |
| PUBLIC HEALTH NURSE | □ |
| INSTRUCTOR | □ |

| HEAD NURSE | □ |
| ASSISTANT SUPERVISOR | □ |
| SUPERVISOR | □ |

EDUCATIONAL INSTITUTION | □

OTHER (please specify) | □
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<th>H. EMPLOYMENT STATUS:</th>
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<td>REGULAR PART TIME □</td>
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<td>CASUAL □</td>
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<td>CLINIC □</td>
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<tr>
<td>PUBLIC HEALTH □</td>
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<table>
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<td>PUBLIC HEALTH NURSE □</td>
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<tr>
<td>INSTRUCTOR □</td>
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<tr>
<td>HEAD NURSE □</td>
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<tr>
<td>ASSISTANT SUPERVISOR □</td>
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<tr>
<td>SUPERVISOR □</td>
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</table>
IV.

Listed below are ten statements about collective bargaining in general and as it pertains to registered nurses. Please circle the number which corresponds to the way you feel about each statement.

For each statement please indicate whether you:

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<thead>
<tr>
<th></th>
<th>S.A.</th>
<th>A.</th>
<th>U.</th>
<th>D.</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the long run, management will do more for employees than will the Labour Relations Division of the R.N.A.B.C.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>2. Collective bargaining is vital to nurses in pursuit of their professional goals.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>3. Mutual support between nurse associations and unions representing professional nurses is a good idea.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>4. Collective bargaining is a negative force for progress in Canadian society.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>5. It is preferable to belong to an organization that is willing to go on strike if it feels such action is necessary.</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>6. Collective bargaining by nurses requires a greater expenditure of time and effort than the potential gain would justify.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>7. Economic issues affecting nurses can be dealt with more effectively through collective bargaining than in any other way.</td>
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<td>8. Collective bargaining is not appropriate for professionals.</td>
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<td>9. Nurses should be prohibited by law from striking.</td>
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<td>3</td>
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<td>10. Collective bargaining by nurses will result in higher quality of patient care.</td>
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</table>
V. Please circle the number which indicates your satisfaction or dissatisfaction with corresponding aspects of your present job. If not applicable to you and your work, please circle the number which indicates "not applicable".

1 - Very satisfied V.S.
2 - Fairly satisfied F.S.
3 - Fairly dissatisfied F.D.
4 - Very dissatisfied V.D.
5 - Not applicable N.A.

1. On the whole are you satisfied that the administration accepts you as a professional expert to the degree to which you feel you are entitled by reason of your position, training and experience? 1 2 3 4 5

2. How satisfied are you with your present job when you consider the expectations you had when you took the job? 1 2 3 4 5

3. How satisfied are you with your job when you compare it to other jobs:
   A. which you have held 1 2 3 4 5
   B. that are available to nurses 1 2 3 4 5

In answering the following questions please consider nursing as a career rather than your present job. (Note format for answering items has changed slightly)

4. How do you feel nursing compares with other types of work? 1 - The most satisfying career.
   2 - One of the most satisfying careers.
   3 - As satisfying as most careers.
   4 - Less satisfying than most careers.

5. If you had to do it over again would you enter nursing? 1 - Definitely yes.
   2 - Probably yes.
   3 - Probably no.
   4 - Definitely no.

Thank you once again for time and consideration of the questionnaire. If you have any additional comments please feel free to express them on the back of the questionnaire or phone me at 688-7351.
FIGURE 8: FREQUENCIES BY SCORES ON PROFESSIONAL BELIEFS INVENTORY

FIGURE 9: FREQUENCIES BY SCORES ON PROFESSIONAL ACTION INVENTORY
FIGURE 10: FREQUENCIES BY SCORES ON COLLECTIVE BARGAINING SCALE

FIGURE 11: FREQUENCIES BY SCORES ON JOB SATISFACTION SCALE
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<th>AGE</th>
<th>DIPLOMA</th>
<th>PRACTICING</th>
<th>STAFF</th>
<th>PUBLIC</th>
<th>NON-</th>
<th>YEAR OF</th>
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**TABLE VIII:** Correlation Matrix of All Variables
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## TABLE IX
**DETAILED SUMMARY OF STEPWISE REGRESSION ANALYSIS OF PROFESSIONAL COMMITMENT N=217**

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<th>VARIABLES NOT IN EQUATION</th>
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<th>F-VALUE TO REMOVE</th>
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Diploma 4.69
Professional Belief 13.28
Work Satisfaction 17.43
Age
Marital Status
a) Single
b) Married
Year of Graduation
Years of Experience
Continuing Education
Professional Action
Collective Bargaining
Registration Status
a) Practicing
Employment Status
Employment Position
a) Staff Nurse
b) Public Health
c) Instructor
d) Administrator
e) Non-Nursing

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