2001

Importance and effectiveness of peer feedback as perceived by three domains of nursing practice.

Katharine Ann. Hungerford

University of Windsor

Follow this and additional works at: https://scholar.uwindsor.ca/etd

Recommended Citation
https://scholar.uwindsor.ca/etd/2399

This online database contains the full-text of PhD dissertations and Masters' theses of University of Windsor students from 1954 forward. These documents are made available for personal study and research purposes only, in accordance with the Canadian Copyright Act and the Creative Commons license—CC BY-NC-ND (Attribution, Non-Commercial, No Derivative Works). Under this license, works must always be attributed to the copyright holder (original author), cannot be used for any commercial purposes, and may not be altered. Any other use would require the permission of the copyright holder. Students may inquire about withdrawing their dissertation and/or thesis from this database. For additional inquiries, please contact the repository administrator via email (scholarship@uwindsor.ca) or by telephone at 519-253-3000ext. 3208.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®
IMPORTANCE AND EFFECTIVENESS OF PEER FEEDBACK AS PERCEIVED BY THREE DOMAINS OF NURSING PRACTICE

by

Katharine A. Hungerford

A Thesis
Submitted to the Faculty of Graduate Studies and Research through the Faculty of Education
in Partial Fulfilment of the Requirements for the Degree of Master of Education at the University of Windsor

Windsor, Ontario, Canada
2001

© Katharine Hungerford
The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L’auteur conserve la propriété du droit d’auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-62222-3
ABSTRACT

The importance of peer feedback as a method of improving the quality of nursing practice is described by many nursing researchers, but less clear is the effectiveness of peer feedback as perceived by members of the nursing profession. Many nurses report apprehension in being required to hear their peer’s opinion, while others express a lack of confidence in their peer’s ability to evaluate them effectively. While peer feedback is described as important, these concerns may make peer feedback somewhat ineffective and diminish its value to the profession.

This study compared the importance and effectiveness of peer feedback as perceived by nurses in three domains of practice. A 21-item instrument called the Peer Feedback Importance and Effectiveness Inventory was used to test the results of the nurses in the study (N=236). A secondary objective of the study was to investigate if there was a significant difference in the findings among nurses working in direct practice, education, or administration. Results showed that when significant differences between importance and effectiveness were found, importance was judged higher than effectiveness in every case (p≥0.01). Completing a Chi-square analysis with df=2, further results showed that when significant differences were found among groups direct practitioners scored the lowest value.

The need for nurses to clearly articulate their practice is essential and peer feedback provides a forum for them to measure their practice against accepted standards. This study supports the importance of peer feedback and identifies methods that will assist nurses to make the feedback process effective.
Dedication

This manuscript is dedicated to the memory of my mother, Katharine.

I have missed her for a very long time.

And to the memory of my mother-in-law, Miriam.

The mother of my adult years.
Acknowledgments

Loving gratitude is expressed to my husband, Peter. His years of support contributed to the completion of this work. Someday I hope you too will be required to complete a paper using the American Psychological Association format. Appreciation and thanks are extended to our sons, Sean and Ian. I can only hope that observing this effort provided a positive example of commitment to lifelong learning. A lesson that is a gift. My parents provided an environment where I was taught that higher education was a privilege to be treasured. My father continues to support me in this belief.

Beth Lambie’s quiet command to do whatever was necessary is the only reason this work was ever completed. Many thanks to Eloise Tardif, Tim Felsky, Nora Boyd, and Debbie Heaton for their enthusiastic support. Dr. David Noer’s dispatch and glad willingness to share his work provided this research study with the necessary instrumentation.

I have clearly understood the privilege of sharing the time that my professors have given to me. It is very humbling. Thank you to Dr. Michael Dufresne for your excellent questions and for the time you spent reviewing the work. Special thanks to Dr. Linda McKay and Dr. Erika Kuendiger; whose separate strengths were gifts to me. Women need strong role models, and you are both excellent examples. I thank God for my many Blessings.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. iii

DEDICATION ................................................................................................................ iv

ACKNOWLEDGEMENTS ............................................................................................... v

LIST OF TABLES .......................................................................................................... viii

CHAPTER

I. INTRODUCTION
   A. General Statement of the Problem ................................................................. 1
   B. Definition of Terms ......................................................................................... 3
   C. Research Questions and Hypotheses ............................................................. 5
   D. Significance of the Proposed Study ............................................................... 6

II. REVIEW OF LITERATURE
   A. Introduction and Background ........................................................................ 8
   B. Description of Peer Feedback ....................................................................... 10
   C. Peer Feedback and the Direct Practitioner ............................................... 13
   D. Peer Feedback and the Educator ................................................................. 20
   E. Peer Feedback and the Administrator ....................................................... 24
   F. Peer Feedback in Non Nursing Literature ................................................. 26
   G. Importance and Effectiveness ..................................................................... 31

III. DESIGN AND METHODOLOGY
   A. Subjects ........................................................................................................ 34
   B. Instrumentation ............................................................................................. 36
   C. Design and Procedures ................................................................................ 43
   D. Limitations of the Design ........................................................................... 45

IV. ANALYSIS OF RESULTS
   A. Quantitative Analysis of Demographic Questionnaire ............................. 47
   B. Quantitative Analysis of Importance (I) Versus Effectiveness (E) .......... 49
   C. Quantitative Analysis of the Three Domains of Practice Among each Item 53
   D. Qualitative Findings ...................................................................................... 55
V. DISCUSSION
   A. Importance and Effectiveness of Peer Feedback ....................... 65
   B. Perception Differences Among Practitioners, Educators and Administrators . 67
   C. Opportunities for Future Research .................................. 69
   D. Recommendations ....................................................... 70

VI. REFERENCES ........................................................................ 73

VII. APPENDIXES
   A. Letter of Consent to Participants ......................................... 80
   B. Demographic Questionnaire ............................................... 81
   C. Participant Instructions and Survey Questionnaire .................. 82
   D. Faculty of Education Thesis Approval .................................... 90
   E. Letter of Permission to the University Ethics Committee .......... 91
   F. University Ethics Committee Approval ................................... 92
   G. Letter of Information, Chief Executive Officer, Lambton Hospitals Group .. 93
   H. Letter of Permission, Lambton Hospitals Group ...................... 94
   I. Letter of Comment to the Hospital Ethics Committee ................ 95
   J. Letter of Permission, Lambton Hospitals Group, Ethics Committee .... 96
   K. Letter of Permission for Instrument Use ................................. 97
   L. Letter of Information to the College of Nurses of Ontario ........... 98
   M. Results of the Pair Wise Comparison using the Kolmogorov-Smirnov Two
      Sample Test ........................................................................ 99

VIII. VITA AUCTORIS ............................................................... 102
# LIST OF TABLES

1. College of Nurses of Ontario - 1999 Statistics for RNs and RPNs ........................................ 35
2. Sub-Scales of Questionnaire: Importance (I) and Effectiveness (E) ........................................ 40
3. Provincial Population Compared to Study Sample ................................................................. 50
4. Participation in Peer Feedback Results ..................................................................................... 51
5A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Depth ................................................................. 56
5B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) ................ 56
6A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Listening ........................................................................ 57
6B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) .............. 57
7A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Content ........................................................................ 58
7B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) .............. 58
8A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Feedback ........................................................................ 59
8B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) .............. 59
9A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Satisfaction ........................................................................ 60
9B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) .............. 60
10A. Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Learning Plans ........................................................................ 61
10B. Difference Among Direct Practitioners (DP), Educators (Ed) and Administrators (Ad) .............. 61
CHAPTER 1

INTRODUCTION

A. General Statement of the Problem

The nursing profession is emerging as an influential entity in the new health care system. Establishing peer feedback as a component of a Quality Assurance Program (QAP) for professional nurses in the Province of Ontario is an exciting challenge. Issues of confidentiality make it difficult to gather empirical evidence on the effectiveness of peer feedback. Qualitative data indicates that feedback from peers produces positive changes in nursing practice and improves nurses' self-image. Anecdotal responses indicate perceptions of fear about artificially inflated evaluations, possible threats to working relationships, and the excessive time involved in completing the process.

Today's nurse practices in a changing environment with new roles, new care providers, and increasing responsibilities. Within this environment professional nursing supports the concepts of autonomy, accountability, and self-regulation. The College of Nurses of Ontario (CNO) has a mandate to protect the public, and to regulate the practice of nursing. In 1993, legislation passed by the government of the Province of Ontario required all of the Regulated Health Profession's Colleges in the province to implement a QAP for their registrants. The QAP offers an opportunity for nurses to show the public and each other that they remain professionally accountable.

The program developed by the CNO designed to meet the QAP requirements consists of several components. All registrants are required on an annual basis to complete a process of self-assessment of their professional practice, procure feedback from a peer, develop a learning plan, implement the learning, and evaluate the effectiveness of the learning. The program is
designed to be flexible, assisting nurses to meet their individual needs. The QAP is built on the concept that reflecting on their practice and seeking peer feedback helps nurses to identify not only personal and professional strengths, but also opportunities for improvement.

Nursing in Ontario is divided into four domains of practice: direct practitioner, educator, administrator and researcher. Direct practitioners work directly with patients caring for them either in the hospital, the community, in private practice, or in long term care facilities. Nurse educators work in many roles teaching nursing students either in community colleges and university settings, or teaching continuing nursing education in practice settings where nurses work. Nursing educators may also work in a practice setting where their exclusive role is to educate patients in topics such as diabetes, birth control, sexually transmitted diseases, newborn health, or women’s health. Nurse administrators are responsible for managing budgets, hiring, disciplining, and firing. They are responsible for leading and directing nurses and other professional groups in their practice settings. The flexibility inherent in the QAP allows for its applicability of use in any of these domains. To date, nurses in the province of Ontario have completed this QAP process four times.

Peer feedback encourages nurses to gain a greater awareness of their practice. Typically, a nurse would choose a colleague that will provide the most useful feedback, and then asks that colleague to identify practices that they do well, and some that they could do even better. The nurse is then responsible for developing a learning plan that is based on learning needs identified from their self-assessment and peer feedback. The plan describes how this learning will be used to improve the nurse’s practice, identifies when the learning will occur, and evaluates the effectiveness of the learning.
The purpose of this study is to compare the perception of how important and effective registrants believe certain aspects of receiving peer feedback to be. The data will be collected from direct practitioners, educators, and administrators. This supports a further comparison of importance versus effectiveness among these three groups of registrants. The research domain was not included in the study due to difficulties in identification and access to a large enough sample.

B. Definition of Terms

In this paper, and for the purpose of this research study, the following terms have been defined as:

**Accountability**: personal responsibility for outcomes of patient care based on established nursing practice standards (CNO, 1995).

**Autonomy**: personal freedom to practice, be independent, and make decisions as a nurse, and the ability to self-govern (CNO, 1995).

**Clinical Ladder**: a process of advancement used generally in the United States that supports and encourages nurses to continue education and to assume leadership and education roles.

**Domains of Nursing Practice**: considered to have four areas of practice: the direct practitioner; the educator; the administrator; and the researcher. This study is concerned with the first three domains (CNO, 1995).

**Effectiveness**: the capacity to produce some positive change or improvement in the practice of a registrant through the peer feedback process.

**Importance**: the relevance, value, or significance of certain aspects of the peer feedback process.

**Peer Feedback**: a vital part of quality assurance and a way to improve nursing skills and promote
ownership of nursing practice by sharing information with colleagues practising in similar roles. A colleague is able to compare actual practice to established standards (CNO, 1996).

Pervasive Change: changes, such as downsizing and mergers, that occur in health care that stop the forward progression of an organization (Roper and Russell, 1997).

Quality Assurance: for the practice of nursing in Ontario, is the responsibility of the College of Nurses, mandated by legislation. Quality assurance assures that nurses practice competently, according to standards, engaging in reflective practice and ongoing learning, providing appropriate, effective and ethical care that contributes to the best possible outcome for their client (CNO, 1996).

Regional Education Model: an educational model developed by the College of Nurses of Ontario to facilitate the education of Ontario nurses about the Quality Assurance Program. It divides the Province of Ontario into ten regions. Each region has one education co-ordinator and several local facilitators that are responsible for providing education and assistance about the quality assurance program to their own regional peer groups. (CNO, 1996).

Registrants: a term used by the College of Nurses to define the two categories of members, registered nurses (RN) and registered practical nurses (RPN) that have successfully completed the entrance to practice requirements, follow quality assurance requirements, submit annual fee requirements, and remain in good standing.

Regulated Health Professions Act (RHPA): legislation enacted in 1993 by the Ontario Legislature to replace the Health Discipline’s Act. It defines the scope of practice for all health practitioners in the Province of Ontario.

Standards: performance criteria against which all registered nurses and registered practical nurses
may be compared to by consumers, employers, colleagues, and themselves (CNO, 1993).

C. Research Questions and Hypotheses

For the purpose of this research project, the research questions are as follows:

Question One: Is there a significant difference among the importance (I) and effectiveness (E) of peer feedback as perceived by the three domains of practice?

Because the data was collected from three different groups; direct practitioners (DP), educators (Ed), and administrators (Ad) these further questions were asked:

Question Two: Is there a significant difference among importance and effectiveness of peer feedback as perceived by direct practitioners?

Question Three: Is there a significant difference among importance and effectiveness of peer feedback as perceived by educators?

Question Four: Is there a significant difference among importance and effectiveness of peer feedback as perceived by administrators?

The following hypotheses are stated in the null:

Hypothesis One: There will be no significant difference in the perception of importance versus effectiveness of peer feedback among the three domains of practice.

Hypothesis Two: There will be no significant difference between the importance and effectiveness of peer feedback as perceived by direct practitioners.

Hypothesis Three: There will be no significant difference between the importance and effectiveness of peer feedback as perceived by educators.

Hypothesis Four: There will be no significant difference between the importance and effectiveness of peer feedback as perceived by administrators.
D. Significance of the Proposed Study

Introducing the quality assurance program assists nurses to examine more carefully what they do, and helps them to articulate their value to society. It is essential that nurses maintain quality practice and have systems available to monitor competency. Research must be conducted to substantiate the efficacy of the QAP. “Peer review is designed to weed out those who dare to violate self-regulatory prerogatives” (Peplau, 1984).

There is an opportunity for many to benefit from this research. The public relies on nurses to be competent, employers grant responsibility to nurses for patient care, the College of Nurses of Ontario mandates nurses to maintain quality in their practice, and nurses want to provide the best possible care to patients. By conducting quantitative research these factors can be consistently predicted.

The results of this study may contribute to an awareness of nurses’ perception of important and effective peer feedback is in the practice of nursing. While peer review is considered important in the literature, it will only be helpful in improving quality practice if nurses find the feedback effective. The research will determine if there is a difference between how effective versus how important nurses believe peer feedback to be. This research could act as a guide for improving the effectiveness of peer feedback.

Peer feedback is a requirement of all Regulated Health Professionals in the Province of Ontario. Nursing has the largest membership, therefore, the greatest resources. Activities undertaken by the CNO are often influential in producing change with the other Regulated Health Colleges. An effective peer feedback process could be beneficial to all of the colleges.

Anecdotal evidence gathered from nurses during a workshop held by the CNO (1999)
implies that peer feedback is effective. For example, an Intensive Care Unit Nurse (ICU) related the following practice story. She believes she is the best practitioner to have available during cardiac arrests. She knows the emergency drugs, understands how to read the rhythms, and always remains calm. She explains that peer feedback is not helpful for her; she is already the best, so it is a waste of her time. After telling her story, several of her colleagues said, “but where are you when the patient dies?” Reflecting on this feedback, the ICU nurse realized that she did avoid death and dying because she knew very little about it and death made her uncomfortable. She developed a learning plan to address her knowledge gap. Six months later she reported that she now remains with families and colleagues when a death occurs. She described the difference in her practice that peer feedback had provided and the impact it had made on people’s lives.

Completing this research study provides an opportunity to go beyond anecdotal evidence about peer feedback. It will investigate quantitatively the perception of the importance versus effectiveness of peer feedback. The results may be of relevance to other professions working with a quality assurance program requiring peer review.
CHAPTER II

REVIEW OF THE LITERATURE

A. Introduction and Background

The literature reviewed was found in the Cumulative Index to Nursing and Allied Health Literature (CINAHL), indexed in the social sciences, or cited in articles written between 1973 and the present. Literature pertinent to nursing peer review programs showed descriptions of program implementations, the impact of peer review on student nurse educators, and the importance of having a well developed theoretical framework in place before initiating peer feedback. One article from the social sciences described the use of psychometric testing and was of particular interest to this researcher. Another article about student teachers learning peer feedback techniques was helpful in describing the importance of carefully worded questions for the feedback process. An article on motivating nurses through peer feedback was reviewed.

Williams (1999), President of the Registered Nurses Association of Ontario, wrote that the key concept in scholarship was peer review, or opening oneself and one’s practice, one’s scholarship to review by others. Peer feedback enhanced quality and increased the likelihood that excellence in nursing practice would occur.

Joel (1984) described peer review as the foundation on which nursing’s self governance had to be established. The author identified a common theme in the nursing literature that nursing had to regulate itself effectively or others would take over the regulatory responsibility for nursing. The author’s findings supported the CNO’s mission statement of protecting the public and supporting the practice of nursing. The American Nurses Association (1988) defined peer feedback as the process by which registered nurses, actively engaged in the practice of nursing,
appraised the quality of nursing in a given situation in accordance with established standards of practice.

An article on peer feedback by Anderson and Davis (1987) described the establishment of a peer feedback program in a large Michigan teaching hospital. The authors provided a brief historical view of initial attempts at a peer feedback system. A specific process was developed by the researchers that focused on task-oriented nursing processes such as observing others doing patient interviews, checking of electrical equipment, wearing of protective devices, and the completion of the nursing assessment. Anderson and Davis reported initiating, and having success with the project. Limitations to the study included uncorroborated statements about the improved professional standards at their institution. The authors implied that the use of the tool had increased awareness of each nurse’s professional accountability because nurses were reported to be speaking frankly to one another about clinical issues. Anderson and Davis said that the process had assisted nurses to set their own professional standards. The authors did not indicate how any of these assumptions were measured.

In a short article by Reali and Poirier (1991) peer feedback was described as having two purposes. First, completing evaluations increased personal growth both individually and within the community. Second, publishing the results of peer review programs provided an understanding of how nurses advanced their knowledge in practice. Nurses’ personal stories describing clinical situations became an important part of their practice influencing those around them. Morrison (1978) described feedback as not a one-way process, but a mutually interactive activity. The process had to be shared equally between the sender and the receiver.

An article by Parks and Lindstrom (1995) described the peer review process at Johns
Hopkins Hospital, Baltimore. The authors described the process as improving communication
skills and trust, distributing power more effectively and increasing the staff sense of ownership for
their practice. These positive attributes were only identified after the system of peer review was
remodelled by the professional practice department at the hospital. The authors identified that
although some positive outcomes had been recognized, peer review could also be viewed as
unwelcome and that the fear of punishment was a strong restraining force to staff participation.
The importance of front-line decision making in the implementation of peer review was
underscored by the authors as the single most important factor to be considered prior to the
initiation of this project. Peer review was identified as achieving three functions: monitoring
compliance with standards of care, furthering the professional development of participants, and
improving team communication. In addition to individual accomplishments the authors noted that
a major benefit of the peer review process was the development of a common philosophy of
practice for the nursing department.

Auberdene and Naisbett (1992) wrote that nursing was representative of the female
dominated professions in health care. They also asserted that women had more difficulty self-
actualizing than men. Littlejohn (1989) indicated that women were discouraged from participating
in either self-reflection or in positive collegial review, which dissuade opportunities for personal
growth.

B. Description of Peer Feedback

The Registered Nurses Association of British Columbia (1996) in their guide for members
working to meet quality assurance competencies used the following definition to describe
feedback. Consider the parts of the word ‘feed’ and ‘back.’ The word ‘feed’ meant to nourish,
meet another’s needs. ‘Back,’ in this context meant returning something. In this sense, feedback was a gift to nourish another’s practice.

Casey (1998) pointed out that peer review was an essential skill for nurses to develop. Nurses witnessed their colleague’s strengths and weaknesses, which placed them in the best position to evaluate each other. Performance appraisals were required to deliver quality care and conform to accreditation standards; peer reviews were necessary to improve individual’s clinical practice and the whole practice of nursing. Casey described the implementation of a peer feedback program at York County Hospital, Newmarket. Two of the reasons identified by the agency for implementing the program were major organizational changes and an unstable work environment. More than 1,200 nurses participated in the peer review process. As in much of the literature, Casey identified administrative commitment and financial support as basic requirements prior to the implementation of the process. Education was provided to all participants. Nurses specified that a cohesive, trusting group, with an understanding of each other’s job, and a commitment to making the process work were essential to the success of the process.

Obtaining peer feedback that was meaningful to nurses was essential if the process was intended to improve the quality of professional practice. Fletcher (2000) described obtaining peer feedback that the practitioner wanted and needed and explained how feedback was different from a performance appraisal, which was an employer’s responsibility. Peer feedback enhanced the practitioner’s insight into what they did well. It also identified opportunities to improve. Fletcher suggested that writing a contract with your peer might assist in obtaining constructive and appropriate feedback. Some of the other ideas Fletcher encouraged were reviewing case studies, participating in informal conversations and sharing stories by electronic mail (e-mail). By
reviewing and thinking about the information shared by your peer, and by reflecting on your practice, a nurse could establish a learning plan that was appropriate and beneficial to their own practice needs. The CNO process of peer feedback was designed to allow nurses to choose their own peer, determine what part of their practice the nurse wanted reviewed and assisted with deciding the content of their learning plan.

Mullins, Colavecchio, and Tescher (1979) in their article about peer review and professional accountability described an experience in a large university hospital implementing peer review for a number of purposes including promotion and evaluation. The nurses used a process of self-appraisal and then colleague validation according to an externally defined set of standards. This review process differed from others as it attempted to identify nursing behaviours that related to patient outcomes. Extensive education was completed with participants, including staff and committee orientations. The authors concluded that peer review was generally perceived as positive, but the reality of the process often produced anxiety and conflict. The issues of accountability, autonomy, and authority evoked some degree of anxiety in everyone, regardless of previous experience with peer feedback. Establishment of the peer review process had significant impact on both individuals and the organization. They also indicated that the benefits of peer review must be substantiated through cost-benefit analysis and human impact studies before an organization embarked on such a process. Mullins et al. suggested that based on this experience, nursing organizations considering the implementation of such a peer review system evaluate the following implications: what risks are attached to initiating an unknown process; once the process is initiated what are the alternatives if it doesn’t work; what issues about confidentiality needed to be considered; and what reactions could be expected from non-nursing professionals?
C. Peer Feedback and the Direct Practitioner

Jambunathan (1992) conducted a qualitative study that surveyed nurses’ perceptions of peer feedback before the initiation of a peer review project. The study was completed at a mid-sized American hospital with a sample of 130 nurses (N=130) which represented a response rate of 45 per cent. Fifty per cent of the sample were diploma prepared nurses, thirty-five per cent were baccalaureate prepared nurses and three per cent were prepared at the graduate level. Data was collected using a questionnaire that the author indicated had content validity, but lacked reliability testing. Endorsement of positively worded statements and non endorsement of negatively worded statements were assigned higher scores. These reversals were essential so that higher scores consistently reflected positive attitudes. A maximum of fifty and a minimum of ten were determined for the scoring. The concluding score for ninety-five per cent of respondents was ≥ 30 points. There were no significant differences in the findings among the domains of nursing practice. The survey indicated positive perceptions of peer review both before and after the program. The nurses involved in the study indicated a liking for the peer feedback process. They felt it had helped their professional growth and stimulated plans for continued unit based education. Nurses felt the quality of care improved, accountability increased, and self-awareness was enhanced. By the end of the study the staff indicated that peer review, as a quality assurance method, helped to protect the health and welfare of patients. They identified the impact on friendships, inflation of evaluations, and the time involved in completing peer feedback as negative concerns.

A peer feedback program initiated in a 14 bed ICU at Alta Bates Hospital, Berkeley, California is described by authors, Richardson and Sebilia (1982). The article indicated that
growing dissatisfaction with the existing evaluation system encouraged a change in the process. A committee was established to develop a system that would be useful for critical care nurses. The committee developed Standards of Practice from current literature and through focus group discussions with staff nurses. These standards were utilized to develop questions. Likert satisfaction scales were assigned to each question. The tools were tested by staff over a one year period with very positive results. The authors based their findings on the qualitative data submitted by the nurses. Initially, the program used an anonymous process which had caused fear among the staff. It became evident to the participants that by keeping the evaluative criteria very controlled, little opportunity was available for subjective opinion. This generated an improvement in the use of the tool. A year later the process continued and satisfaction questionnaires indicated an improvement in both perception of peer evaluations and in staff morale. An additional outcome of improved communication was also identified.

Hotko and Van Dyke (1998) described a model of peer review developed and evaluated at the Somerville Medical Centre, New Jersey. The peer review process was structured to conform to the hospital’s Clinical Ladder review schedule. To maintain Clinical Ladder status it was decided that a nurse must serve on hospital committees, conduct unit quality studies, review policies and procedures, and participate in community education programs. Every Clinical Ladder RN was required to identify a peer reviewer prior to their annual performance appraisal. A standard Clinical Ladder Evaluation Tool was used to facilitate objectivity. During the first peer review, the manager participated in the process by supporting both the reviewer and the nurse being reviewed, to nurture change and to evaluate. This ensured that the evaluation was conducted fairly and effectively. Ninety-five per cent of the nurses reported an improvement in
professional leadership and autonomy. RN's participating in the project recognized themselves as role models, resource persons and leaders. As the process evolved it became evident that peer review was replacing the formal performance appraisal system. It was identified as effective, providing a greater influence on professional and clinical practice.

Fedor, Bettenhausen, and Davis (1999) conducted a large research study that investigated the dual roles of nurse rater and recipient. This circumstance was caused when a 464 bed non-profit metropolitan hospital, in Pennsylvania, implemented a nursing peer feedback program. This acute care hospital employed 460 full time and part time registered nurses. The majority (98.7%) were female. The processes had been introduced with poor results four years previous to this study. Peer reviews were to be completed annually, but non-compliance was common.

The purpose of this study was to identify nursing reaction to the peer rating system. The authors perceived that peer ratings were not without concerns. Behaviours such as process blocking, refusing to participate, inaccurate reviews, and time delays were common among nursing staff. Existing research demonstrated that peer feedback could be accurate and reliable, but little investigation had been done to identify nurse's thoughts and feelings about the peer review process.

The few studies that were completed identified a low level of tolerance or acceptance of peer feedback. Five studies (Barclay and Harland, 1995; Farh, Cannella, and Bedeian, 1991; Fedor and Bettenhausen, 1989; Love, 1981; McEvoy and Buller, 1987) were found that investigated the affective and cognitive impact of peer review. Three of them concluded that significant blocks interfered with program effectiveness. These blocks included time commitment, lack of subjectivity, and demographic differences. The McEvoy and Buller study indicated that
peer feedback was the least effective when used for any purpose other than professional
development.

In their literature search, Fedor et al. indicated that supervisor only evaluations were
lacking in relevance. With the changes experienced by health care over the past decade, managers
had a limited perspective on what was occurring on nursing units, and only saw a small part of the
contributions that employees made. The article described how it was common for nurse managers
to go for weeks without seeing many of the nurses that worked on their units. Organizations had
moved into work teams, where the manager had a very small piece of responsibility making peer
feedback an increasingly valuable tool. Wexley and Klimoski (1984) summarized the value of peer
rating in their research by saying peer ratings were potentially the most accurate judgement of
employee behaviour available.

Fedor et al. investigated if the positive acceptance of a peer review program depended on
the perception among nurses that it was for professional development only and not a mechanism
leading to performance appraisal. They asked a further question, if allowing nurses input into the
development of the feedback process provided more positive outcomes for both the recipient and
the rater. The last question asked in this study was if job tenure, age, or past experience could be
expected to relate negatively to the acceptance of a peer review system.

In an effort to increase knowledge about peer feedback systems, the authors developed
both a quantitative and qualitative questionnaire. Sub-scales were developed and analyzed using
an internal consistency coefficient, Cronbach’s Alpha. Five point Likert scales and open ended
qualitative questions were used. The sub-scales included demographics, perceived purpose of peer
feedback, variables related to role of the receiver, and variables related to the role of the rater.
There were 81 co-relational responses of quantitative data analyzed, using a two tailed $t$-test with $p \leq .01$. The first research question was supported by both quantitative and qualitative results. The results supported past research that demonstrated registrants perceived a positive purpose for peer feedback when it related to professional development. The second question, which related to rater/recipient input was supported by the quantitative results. This finding supported the literature indicating that staff involvement reduced the defensive dialogue that often occurred during feedback. Qualitative data indicated that providing staff with education about effective communication skills enhanced the quality of feedback sessions. The last question regarding tenure, age and experience received no support in the quantitative data. The researchers suggested this was a positive finding. The older, more highly tenured workers did not systematically report different responses than their younger, less experienced peers. This suggested that there were more important factors involved in peer feedback than age and tenure. Fedor et al. concluded their study by advocating for the establishment of peer review systems. The researchers advised that expecting raters or recipients to ‘just do it’ would be costly. They recommended long term planning and staged implementation.

In an article that described the relevance and impact of peer review on clinical nurses, Roper and Russell (1997) considered literature from several sources, including health care, business, the social sciences, and education. They concluded that peer review was often assumed to improve accountability and autonomy, but there was little formal research to support these hypotheses. The article reviewed the process of implementing a peer feedback program on a 31-bed inpatient haematology/oncology unit at Brigham and Women’s Hospital, Boston. A committee of volunteers established six evaluation elements, with operational definitions, to be
scored on a five-point Likert scale. This research demonstrated a common technique of using control questions to investigate expanded issues. Space was allotted for anecdotal comments on each question. Nine senior nurse administrators initiated the project by participating in a pilot project of the document. Following this step, volunteers were evaluated by the following: their nurse manager, a randomly selected staff member, a colleague of their choosing, and themselves. The tool was approved for hospital-wide use. Unfortunately, it could not be implemented due to pervasive changes at the institution. The researchers indicated that once stability returned to the agency, the program would begin. The article was written retrospectively and one year later the program had still not been initiated.

Cohen, Berube, and Turrentine (1996) discussed how peer review was conducted in the past, why a new way was needed, and how successful the introduced changes were in their University of Virginia Health Centre. Nurses were dissatisfied with the previous method of peer review because feedback was not objective; there was a ‘halo or horns’ effect, nurses were either all good or all bad; feedback was anonymous, it was only gathered after instruction from a supervisor, and the feedback was not given in a timely manner. The project committee at this health centre realized that peer feedback was more than just the words, it included a philosophy, a process, and a definition. The group used an affinity diagram to identify the important elements that nurses described. They defined peer review as a mechanism to provide individual nurses with the feedback they needed to plan and pursue their professional growth and improve the care they provided. Nurses were encouraged to solicit both written and spoken feedback on an ongoing basis. The authors described the process as a success at the University of Virginia Health Centre, but their vision was to have it become an everyday process for practising nurses.
An article by Micheli and Modest (1995) described the implementation of another peer feedback program. Similar to the previously described literature this was a detailed and collaborative process developed by direct practitioners, administrators and facilitators to be a process that positively influenced nursing practice. One difference in this project was the development that occurred creating specific standards and guidelines for each speciality area within nursing. This method was believed to reduce subjectivity by peers having performed the feedback. The authors believed that as the profession grew, nurses would become more empowered to share and review their practice. This could result in positive benefits on patient outcomes. The article finished with the suggestion that as the process developed and nurses became more comfortable, other health care professionals would demonstrate an interest in establishing a collaborative peer feedback network.

Dancer, Johnson, Zauner, and Burch (1997) described the peer review project initiated at Providence Portland Medical Centre, Oregon. The hospital implemented a peer feedback program to promote professional accountability. An additional objective of this program was to make the exercise comfortable, fair, and accurate for everyone. Initially, nurses described the reviews as too general and superficial to be effective for making changes in practice. This resulted in staff gradually stopping participation. Time consumption and lack of importance were cited as reasons for non-participation. Dancer et al. were assigned the responsibility of improving the process. They revised the peer evaluation form to include newly defined standards of practice. Staff were given time to complete peer evaluations at work, with adequate staffing provided for patient care. It was identified that nurses rushed to complete activities when they believed their patients might not be receiving adequate care or that their colleagues had an additional burden placed on them.
With experience some staff reported becoming more sensitive to giving peer feedback, while others found the process too stressful or not their responsibility. Overcoming negative responses proved to be one of the greatest challenges to the implementation team. As cited in other literature collegial trust was paramount to a successful outcome. Dancer et al. identified that staff grew more comfortable with the process when they realized they were both giving and receiving feedback. As the feedback became more open and honest, comments focused more on specific opportunities for improvement in clinical performance and improved patient outcomes.

D. Peer Feedback and the Educator

Dennis, Woodtlil, Hatcher, and Hilton (1983) described the implementation of peer review among a nursing faculty. In their planning process, they showed that peer review was a means to professional growth, and they identified the purpose of peer evaluation as increasing professional self-development. They devised an evaluation tool. The results were considered to be owned by the individual being evaluated and could only be shared at the owners’ discretion. These researchers, and the nursing professors they sampled, have provided researchers with findings that could be used for continued investigation into the value of peer review. They suggested that quantitative investigation proving the value of this type of review was necessary.

In an effort to assist nurses learning to become educators Heinrich and Scherr (1994) introduced a framework called Peer Mentoring for Reflective Teaching. They believed the framework enhanced teaching skills through peer mentoring and improved presentation skills of first time educators. These researchers used Kolb’s (1984), Experiential Learning Cycle and Cognitive Coaching, described by Costa and Garmston (1989) to develop a method that helped new nursing presenters gain confidence through peer mentoring. Heinrich and Scherr also
reviewed the feminist perspective on the term ‘coaching relationships’ changing the term to the more feminine form of ‘mentoring relationships.’ Baker-Miller (1991), Eichenbaum and Orbach (1988), Gilligan (1982) and Surrey’s (1991) work on feminist perspectives (as cited in Heinrich and Scherr) indicated relationships are linked to women’s sense of self, and in a profession represented by 97 per cent females, it was essential to use acceptable terminology for peer feedback processes. These feminist researchers said that senior women in traditionally female groups did not necessarily see themselves as, or assumed the role of mentor. For this reason, it was essential to develop an effective peer mentoring process. The authors concluded that the versatile model they had developed was a very effective tool to improve new educators presentation skills.

Patterson (1996) reported that recent nursing literature demonstrated an increasing interest in the use of peer assessment in nursing education programs. A closer look at this type of assessment revealed that the way in which it was analysed and applied by the educational facility was dependent on the philosophy or theoretical framework that directed the institution. The researcher examined peer feedback from the perspective of its usefulness in the development of professional nurses and the possible influence it could have. Students (N=74), from the Faculty of Nursing and Health Sciences, Griffith University, Australia were used as a sample of convenience for the study. The research questionnaire asked students to describe their understanding of peer feedback and how it could be utilized in nursing practice. The researcher analysed the findings based on the three paradigms of empirical, interpretive, and critical perspectives. The paper suggested that the purpose of peer feedback and the particular interest it served must be carefully identified and explained before the process was initiated. For example, if peer review was to be
used in the empirical paradigm then its use would be more technical, focussing on prediction and controls. This could be useful for nurses working in technical fields like the operating room or intensive care. If peer review was used for interpretive purposes then the goal would be more practical, useful for nurses searching for enlightenment. Peer assessment in the critical perspective would be focussed on action, and the concern for emancipation. Educators of nurses have been challenged by this perspective for several decades now, trying to move nursing toward accountability and autonomy.

Nurse educators have long relied on the evaluative feedback provided by students to assess their effectiveness in the clinical setting and in the classroom. The authors, Page and Loeper (1978) suggested that peer review would be a more effective tool to assess behaviour and to provide feedback in a timely manner. Peer feedback promoted teacher effectiveness by providing specific information on valued behaviours. The authors indicated that effective teachers facilitated the acquisition of knowledge among their students. The authors believed that the advantages of increased communication and opportunities for growth and development were a lasting result of this peer feedback program. The authors also suggested that the process of peer review would be most effective if it was program-directed rather than teacher-oriented. The authors emphasized that the rules of timeliness, objectivity, and non-directiveness must be established for peer feedback to support long term change.

Harwood and Olsen (1988) described the implementation of a peer feedback program at the Faculty of Nursing, University of Western Ontario for faculty members. Faculty developed this program as a method of demonstrating professional accountability and teaching effectiveness. Historically, professors had relied on mandatory student evaluations for feedback. These were felt
to be limiting in their ability to make any improvement in teaching practice. A stumbling block to the initiation of the project was quickly identified, there was a lack of available peer feedback instruments. A review of the literature revealed reasons why peer reviews were not readily accepted. The faculty were already committed to heavy teaching loads and demanding scholarly outputs. They found the peer review process to be time consuming and emotionally demanding (de Tornyay, 1984). The authors found that Mullins et al. indicated that in the abstract peer evaluation is considered highly valuable, but in reality it produced anxiety and conflict. Faculty members expressed many concerns about subjectivity and the reduction of often complex assignments into standardized measures. Brannigan and Burnson (1983) identified that anxiety about peer reviews increased when the potential for the results influencing job security, career goals, and self esteem were established. They also stated that most faculty were already aware of their limitations and faults. This awareness could lead to defensiveness amongst colleagues undertaking peer evaluation. Harwood and Olsen identified that a consistent definition of peer evaluation was mandatory. They also suggested that an agreement among the faculty about the peer evaluation processes, it’s outcomes, and a willingness to trust were required elements for successful implementation. Initiation of the actual process included an agreement that faculty could implement the peer feedback process in a way that was the most effective for them. This included a decision to incorporate the results as part of their performance outcomes for the year. It was also decided that peers could be self-chosen and goals established before pre-arranged visits occurred.

An evaluation of the process one year later established that faculty peer evaluation was one method that demonstrated achievement of performance objectives and teaching effectiveness.
Knowing that classroom teaching and clinical time occupied the greatest proportion of most professor's time, it was essential that the effectiveness of these endeavours was thoroughly documented. The participants indicated that they considered the process to be more effective than other methods of evaluation, but it remained time consuming.

Andrusyszyn (1989) strongly supported these findings in a study completed with the Faculty of Nursing at Brandon University, Manitoba. The author suggested that despite numerous positive characteristics inherent in peer evaluation it was not greeted with enthusiasm. It was accepted with reluctance and was feared as possibly infringing on academic freedom and future tenure. The author concluded that faculty evaluations were complex processes and must be approached with caution. The peer feedback instrument implemented with this faculty had limitations that were strictly adhered to, allowing for confidentiality and freedom of choice in sharing of information.

E. Peer Feedback and the Administrator

Finding a quantitative study about peer review for administrators in the nursing literature was a challenge. One reliability tested study completed on peer feedback was conducted by Boyer and Avery (1981). They compared peer review results with performance appraisals completed by the nurse's manager on two acute care units in a mid-size United States teaching hospital. The t-test for comparison of the main difference in scores was non-significant (p = 0.3). This study was conducted at University Hospital, Oregon. It explored the feasibility and effectiveness of a peer review program, and concluded that a perspective concerning the nurse's own practice stimulated individual growth and strengthened professionalism. Qualitative data gathered during the study reported performance anxiety on the part of the evaluator that was relieved following
education sessions.

Gold, Jackson, Sachs, and Van Meter (1973) outlined the implementation of a peer feedback program among a group of clinical nurse specialists (CNS) at a large University teaching hospital in Michigan. The CNS nurses worked across every medical speciality and functioned as leaders in their specified field. This group of graduate prepared nurses realized that peer review was increasingly becoming a measure for accountability and self regulation. Gold et al. recognized that the practice of the CNS needed critical examination and further role development. An experimental study to address these issues was designed. Self evaluation and peer feedback were the fundamental components of the study. Shortly after the initiation of the study, negative reactions occurred. The CNS group agreed that nurses did not like to judge their colleagues. They believed that possible repercussions could result from subjective reviews and jeopardize working relationships. Anecdotally, the nurses reported feeling threatened by competition, role comparisons, fear of failure, and personal depletion.

The process was reexamined and revisions implemented. The study identified three criteria that needed to be addressed to safeguard personal practice. Peer review criteria was established by consensus. Self evaluation according to the criteria was completed, and a group review of the process was completed. Recommendations suggested that the need for well-defined methodologies, objectivity guidelines, and manageability were imperative prior to the implementation of the program. The CNS group also agreed that issues of trust must be addressed before establishing peer feedback programs.

An article by Deckert (1990) described the introduction of a peer review process for nursing leaders. Included in this group at Lutheran Hospital in Lacrosse, Wisconsin were
administrators, supervisory teachers, and clinical managers. The team recognized that there were no established guidelines to meet or exceed for leaders in their agency. During extensive dialogue the group decided that nursing had many commonalities no matter what domain the nurse practiced in. Every nurse had to be actively participating in determining the quality of patient care and be accountable for the practice decisions they made. The nurses in the group were no more immune to the misgivings and inhibitions of peer review than any other professional group. All of the participants agreed that it was much safer to exchange compliments or criticisms with colleagues that didn’t practice with them than it was to speak face-to-face with a co-worker that practiced with them directly. An evaluation of the program was conducted and it concluded that peer support could mean the difference between simply acting the part of the leader and really becoming a leader. Deckert believed that establishing standards for peer feedback including firm schedules were vital steps in the pursuit of nursing excellence.

F. Peer Feedback in Non Nursing Literature

An article by Frid, Redden, and Reading (1998) described the need for teachers to have effective mechanisms by which ongoing improvement of teaching could be identified and measured. A seminar that was conducted for pre service teachers on current issues in mathematics was described in this article. Throughout the seminar peer and self-assessment process activities were used to assist these new teachers in understanding the challenges of being responsive to the public on a personal and a professional basis. Research conclusions gathered from seminar materials indicated that although the students participated in peer feedback, their comments were brief and shallow. The authors concluded that it would be necessary to improve the teaching curriculum to teach feedback techniques. The researchers raised some issues at the end of their
study for further consideration. They indicated that time as well as student experiences both
affected feedback techniques. The authors also indicated that the students appeared to lack the
capacity to complete valuable self-reflection. Frid et al. suggested peer feedback was so important
that future curriculums must be developed that included peer review. They also suggested that
time be spent assisting learning teachers to develop this skill.

A research study by Kolar, Funder, and Colvin (1996) compared the accuracy of
personality judgements assessed by oneself and then by knowledgeable others. This paper, taken
from social science research, proved a valuable source for identifying instruments of psychometric
testing for perceptions and attitude. A sample of 140 undergraduate students at Harvard
University (70 males and 70 females) participated in the study. Each student was provided with a
personality assessment called the California Q-sort (Block, 1978). After completion of the
personality scale each student was videotaped in three laboratory situations at time one, time two,
and at a debate. Time one demonstrated the participant being introduced to a person of the
opposite sex and being required to talk for five minutes. Time two occurred several weeks later
and repeated the same process with another person. The third videotape recorded all participants
involved in a debate on capital punishment. Behaviours were then coded using pre-assigned
behaviour codes.

Kolar et al. completed two correlational studies, one concerned the validity of a single
peer response, the other examined the validity of several peer responses. Correlational co-
efficients were used to statistically analyse this study. Some of the threats to the validity of the
study were subject characteristic (past experience with peer evaluation), questionnaire
(subjectivity), and regression (had an event occurred to annoy the peer evaluator). The authors
concluded that results slightly favoured the predictive validity of personality judgements made by single acquaintances over self-judgements, and significantly favoured the aggregated personality judgements of two acquaintances over self-judgement. The results indicated that individuals were not necessarily the best judges of their own performance.

The movement into team managed organizations stimulated Dominick, Reilly and McGourty (1997) to look at behavioural feedback programs. They believed that team and work group effectiveness depended on interpersonal relationship skills. To improve organizational skills a behavioural feedback program was implemented. The primary purpose of this study by Dominick et al. was to examine the effects of behavioural based peer feedback on the later behaviour of team member tasks. Quasi-experimental research completed previously (Reilly, Smither, and Vasilopoulos, 1996) suggested that actual feedback might not be as important a variable for producing change as simply exposing employees to the peer review instruments.

Dominick et al. designed a four dimensional research model to examine effects of peer feedback on subsequent team member behaviour. Three hypotheses were developed for the study. Participants who gave and received behavioural peer feedback would demonstrate effective behaviour more often then those not participating. Employees who gave feedback, but didn’t receive feedback will demonstrate improved behaviour more often than non participants. Participants who gave and received feedback would not differ from those that gave feedback only. Seventy-five graduate and undergraduate students studying organizational behaviour were used in the study. The participants included 54 males and 23 females. They were randomly organized into teams of four or five. The students were assigned, at random, to one of the following three groups: feedback, exposure, or control. Chi-square testing showed no significant difference in the
subject assignments. Participants in the feedback group were assigned feedback tasks to complete, and feedback was provided following task completion. Participants in the exposure group completed the same tasks as the feedback group and were told feedback would be done later. Participants in the control group completed a placebo instrument that did not expose them to peer feedback.

Inter-correlational, internal consistency, reliability, and standard deviations were completed on the data. All of the hypotheses were supported. The ANOVA for overall team behaviour indicated a significant difference between conditions ($F = 47.87, p < .01$). A post hoc comparison of means indicated a significant difference between the feedback and control groups ($p < .05$), but no significant difference between the exposure and feedback groups.

Dominick et al. suggested that peer feedback could be a useful approach for helping team members improve their interpersonal relationships. The results also suggested that it was not just the feedback that influenced change, but knowing about the feedback process encouraged change. The authors indicated that team members exposed to the feedback instrument had a frame of reference to use that measured their own behaviour. They also suggested that introducing the instrument, but not using feedback, demonstrated to participants what behaviours were valued, thus producing change. The study concluded by introducing the concept that merely identifying acceptable behaviours to employees might produce behaviour changes. Reilly et al. identified that these findings strengthened an earlier study they had conducted which concluded it was the actual behaviour that changed and not merely a change in the perception of participants. They identified two reasons for this, knowing that behaviours were being measured caused employees to think more carefully about their actions especially when feedback would actually follow. This was
enough to produce some change. Second, the repeated introduction to and administration of feedback tools appeared to result in long-lasting change. Reilly et al. suggested if the feedback never occurred these results would diminish. Dominick et al. suggested replication of their study would be useful to strengthen the test results.

A further article on the impact of peer review on work teams was written by Thompson (1991). The author suggested that it was essential to establish peer review systems as self-directed work teams became a more prominent organizational management style. Team members knew and understood performance standards, therefore, colleague's feedback was timely, credible, and powerful. Thompson stated peer reviews revealed the true nature of a situation more quickly. This provided employees with immediate information on their performance. Many large corporations in the United States, such as Quaker Oats and Westinghouse, have used peer review for twenty and thirty years as a method of planning, organizing, directing, and evaluating. Empowering workers to this extent was seen as a threat to managers as the hierarchical flow of power and autonomy was toppled. Thompson contended that an improvement in the bottom line from single to double digits had made the often painful process worthwhile. The article outlined some imperative steps required when considering peer review: a clear understanding of the consequences to the employee if peer review was not effective; the identification of clear criteria; maintenance of modest expectations; and support for first line supervisors in every way as their power positions changed.

Greenblatt (1971), in an article about physician peer review, suggested that misuse of peer evaluation was kept to a minimum only by constant vigilance and reliance on strict adherence to due process and the rights of individuals. Physician peer reviews could be accomplished by a
complaint system, or a vigilance system. This system allowed for either an ethical or medical
problem to be brought forward, or a system of constant review of hospital activities and patient
charts be established. No matter which method was used it must be understood that professional
jealousies, self-importance, power-seeking traits, personality conflicts, bigotry, and prejudice did
not disappear because a person became a physician. The author believed that the most important
part of peer review was the preservation of professional reputations. Gossip and broken pledges
of confidentiality could render peer review ineffective, in fact, it became an activity to be feared.
Physicians were afraid that punitive powers would be given to colleagues that practice
disrespectful behaviours. The article recommended that very specific guidelines be drafted and
adhered to during the peer review process. Only strict adherence to the recommendations would
allow a continuance of effective physician review.

G. Importance and Effectiveness

Noer, (1979) indicated that as a result of research the Effectiveness and Importance
Inventory Tool could be a diagnostic tool used to relate importance and effectiveness in the
future. The information gathered from the instrument could be used for diagnosis and action
planning and could be a powerful tool for data gathering and feedback.

A research paper, presented by Hezlett and Ronnkvist (1996), examined if there was a
change in the effectiveness of managers (N=43) following the introduction of a feedback program.
The feedback program was discussed with supervisors, managers, and subordinates. The
examined measures used were personal skill development, supervision capability, and change
management leadership. Two hypothesis were established for the research, the first, that managers
who had identified skills that needed improvement would be more effective in improving their
skills compared to managers that could not identify skills that needed improvement. The second hypothesis stated that managers with the same boss and in the same job would do better on the study the second time it was administered than those that had changed managers or jobs.

Both hypotheses were measured retrospectively twice during the study. Time one was measured shortly after the first feedback was completed. Time two was measured six months later. Managers were encouraged, after receiving feedback, to develop a learning plan and to implement different leadership behaviours. The questionnaire examined the effectiveness of the feedback process. The results concluded that on average, and based on the measurements used in the study, the manager's skills improved after completion of the feedback approach. The second hypothesis was accepted, as the study demonstrated that managers in the same job and with the same boss improved slightly between test time one and test time two.

The researchers suggested that several methodological limitations were present in the study. First, not all of the managers completed all ten items required in the questionnaire. Second, the feedback tool was modified between time one and time two of the study. A larger sample would have increased the power of the research. Some implications for further research were suggested. It appeared that participants focussed on whether there was a difference between 'time one' and 'time two' questionnaires. Managers felt that an improved result meant they were more effective. The researchers suggested that the whole process had to be reviewed to draw that conclusion. A more important finding and pertinent to this research study was that hypothesis one was not accepted. The researchers concluded that feedback alone was not enough to change the manager's effectiveness. They also suggested that learning plans alone did not improve effectiveness. Hezlett and Ronnkvist advocated that the whole process of management
effectiveness must be reviewed and not isolated to separate steps before a generalized improvement could be observed.

An anecdotal study by Ackerman (1991) following implementation of peer feedback at the Sloan-Kettering Cancer Centre, New York reported improvement in staff performance. The nurses described that peer feedback had been effective in improving the performance of the Clinical Ladder Nurses. This led to improved practice for the whole unit. The initial step in the process involved setting standards and expectations for annual feedback. This included the development of a well-defined instrument and the involvement of the nurse managers. Having the manager involved assisted in keeping the feedback effective and the discussions constructive. The planning took one year to complete. Initially, nurses reported being stung by criticism they received. As time passed anecdotal evaluations demonstrated increased maturity and growth which positively impacted on the care delivered by all of the nursing staff. Qualitative findings indicated that peer feedback was both important to the improvement of patient outcomes and effective in actually generating changed practice with this nursing group.

An article written by Argyris (1973), identified that a key skill to making feedback effective was the sender's ability to give appropriate feedback. Two reasons why feedback should be non-evaluative were indicated. First, it reduced the probability of making the receiver defensive and therefore, resulted in increased listening. Second, minimally evaluative information allowed the receiver to reflect on their performance and make decisions to improve without feeling threatened.
CHAPTER III

DESIGN AND METHODOLOGY

A. Subjects

The population of interest in this research study were all nurses in Ontario working as direct practitioners, educators, and administrators who have participated in the peer feedback process. Statistics were gathered annually through the registration process by the CNO (Table 1). This process required registrants to complete demographic information, employment history, and levels of education. It also necessitated registrants to declare their participation in the Quality Assurance Program requirements, including peer feedback. Participation was mandatory to maintain registration status. There were 139,072 Registered Nurses (RN) and Registered Practical Nurses (RPN) in the Province of Ontario in the year 1999. Ninety-five per cent of the nurses were female. The RPN population represented thirty-one per cent of the total nursing population. The average age of nurses in the province was 47.7 years. Seventy-three per cent of RN’s were prepared at the diploma level, while eighty-nine per cent of RPNs were prepared at the diploma level. The majority of direct practitioners worked in hospitals, long term care facilities, or community agencies, such as the Victorian Order of Nurses. Direct practitioners accounted for 90 per cent of the nurses in Ontario. The majority of nurse educators worked in hospitals, colleges, or universities. The majority of nurse administrators worked in hospitals, long term care facilities, community agencies, or colleges and universities. Provincial statistical results were important to review as they provided information on the whole population considered in this research. The research sample consisted of two purposive, non-random samples and one convenience, non-random sample selected from three different populations. The direct practitioners were a
Table 1
College of Nurses of Ontario - 1999 Statistics for RNs and RPNs

<table>
<thead>
<tr>
<th>Categories of Registrants</th>
<th>Number of RN’s</th>
<th>69 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of RPN’s</td>
<td>31 %</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>Diploma Prepared</th>
<th>RN - 73.6 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>RPN - 89.6 %</td>
</tr>
<tr>
<td>Baccalaureate Prepared</td>
<td>RN - 17.3 %</td>
<td>RPN - 0.7 %</td>
</tr>
<tr>
<td>Graduate Degrees</td>
<td>RN - 3.4 %</td>
<td>RPN - 0.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domains of Practice</th>
<th>Direct Practitioners</th>
<th>RN - 86 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RPN - 94 %</td>
<td></td>
</tr>
<tr>
<td>Educators</td>
<td>RN - 3.0 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RPN - 1.0 %</td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td>RN - 5.0 %</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RPN - 1.0 %</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>Average Age</th>
<th>47.7 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>95.6 %</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>4.4 %</td>
</tr>
</tbody>
</table>
non-random, convenience sample drawn from the Lambton Hospitals Group (N= 87), and the Lambton Victorian Order of Nurses Branch (N=16), as they provided geographic convenience for the researcher. They consisted of both Registered Nurses and Registered Practical Nurses. The total number of direct practitioners in the study were (N=103). The educator group was a non-random, purposive sample selected from the Regional Education Network at the College of Nurses of Ontario (N=60). The administrator group was a non-random, purposive sample drawn from the Lambton Hospitals Group (N=20), the Infection Control Nurses of Ontario (N=35) and staff of the College of Nurses of Ontario (N=18). The total number of administrators in the study were (N=73). All participants received a consent to participate (Appendix A). The consent outlined that participation was voluntary and confidentiality was guaranteed.

B. Instrumentation

A demographics questionnaire (Appendix B) developed by the researcher, was incorporated at the beginning of the survey. This was used to gather descriptive statistical information about the sample. Questions were asked about age, gender, years in nursing practice, level of education, the principal domain of practice, and the number of times the participant had participated in peer feedback.

A Peer Feedback Importance and Effectiveness Questionnaire was designed, based on a research study completed by Noer (1979). The study was originally conducted to investigate the possibility of improving the importance and effectiveness of performance appraisals. In the research, Noer designed two instruments called the Performance Appraisal Importance Inventory and the Performance Appraisal Effectiveness Inventory. They were developed as a correlational study to measure the respondent’s perception of the importance of certain aspects of performance
appraisals and to measure the perception of effectiveness respondents felt performance appraisals gave. The instruments consisted of twenty-five statements. Each statement was assigned to a sub-scale. There were five sub-scales that related to performance appraisal topics: depth, listening, content, feedback, and satisfaction. Each sub-scale contained five questions. First respondents indicated how important they perceived various aspects of performance appraisals to be, then how effective the respondents perceived these aspects were in improving their performance. Respondents were instructed to rate importance on one questionnaire and effectiveness on the other questionnaire.

Noer indicated that the research had yielded a number of dimensions that could be incorporated into performance appraisals. These were distilled into categories that were appropriate to helping oriented appraisals and were specified in behavioural terms through questions. These questions were supported by research outlined by Pfeiffer (1976), which described developmental sequences of instrument design. Pfeiffer indicated that traits to be measured could be defined and then written as an item in a questionnaire. The scales and questions were reviewed by five personnel development professionals with extensive experience in performance appraisals. A pilot test of the tool was completed. Revisions were implemented following the pilot test. The revised and tested tool was then reviewed by six additional personnel specialists. Several further recommendations were incorporated into the instrument and it was tested on a small group of line managers. No changes resulted from this test. The completed instrument was pilot tested a further time to check for clear language and a correct frame of reference. This supported recommendations that the more definitive the statements, the more reliable the results were considered to be (Isaac and Michael, 1977). This pilot resulted in
language simplification of two questions.

A modified, revised version of the original instrument was designed (Appendix C) by the researcher. Noer's instruments were adjusted to account for the change in topic from performance appraisal to peer feedback and to account for the practice of nursing, rather than industry. Noer used two questionnaires containing twenty-five questions or statements that the respondents were instructed to rate on the Likert Scale. No change was made in the measurement of the Likert Scale. As in the original questionnaire one remained not important, two remained somewhat important, three remained important, four remained very important, and five remained extremely important. A pilot study was conducted and is discussed in the design and procedures section of this paper.

In the original research, each instrument was divided into five sub scales to measure performance appraisal. The term was changed to peer feedback for the purposes of this research. The five scales remained the same: depth, listening, content, feedback, and satisfaction (Table 2). Instead of five questions within each scale, one of the original questions was deleted from each scale, leaving four questions per scale. Questions one, six, eleven, and sixteen measure depth. Questions two, seven, twelve, and seventeen measure listening. Questions three, eight, thirteen, and twenty measure content. Questions four, nine, fourteen, and nineteen measure feedback. Questions five, ten, fifteen, and twenty-one measure satisfaction. One random question, number eighteen stands alone. This question was specific to the quality assurance program for nurses. It asked the respondent to indicate the importance and effectiveness of a peer suggesting a learning plan that could be used to assist the registrant in fulfilling suggestions made during peer feedback.

As indicated previously, one question or statement was removed from each of the original
sub-scales. From the first sub-scale depth, question eleven asked how important it was for the performance appraisals to go beyond a discussion of salary. Since peer feedback had no monetary implications the question was removed. From the second sub-scale listening, and the third sub-scale content, a question asked how important was it for the employee to be satisfied with their performance appraisal, and how important it is for the employee to be satisfied with the quality of their performance appraisal. In an effort to reduce the time required to complete the questionnaire and because these questions were very similar in nature question twenty was deleted from the content sub-scale. In the sub-scale of feedback question twenty-two asked if the employer thought it was important to incorporate the employees viewpoint into changing their department. Since peer feedback only has implications to change the practice of nursing by individual improvement, not departmental, this question was removed from the feedback sub scale. Question twenty-five from the satisfaction sub-scale was similar to a question asked in the content sub-scale so was removed to balance the categories.

Noer's two questionnaires asked the same questions. The first questionnaire asked the respondent to rate importance and the second questionnaire asked for a rating of effectiveness. The revised questionnaire incorporated the two instruments into one. This adjustment was made to simplify the process for the respondent, to use less paper, and to reduce the time required to complete the questions. In the revised questionnaire, the respondents were asked to answer two parts to each question or statement. The first part of each question or statement ranked importance, and the second part of each question or statement ranked effectiveness. Many of the questions or statements in the original questionnaire used the words 'performance appraisal.' In the revised questionnaire the words were changed to 'peer feedback.' In Noer's questionnaire
<table>
<thead>
<tr>
<th>Importance (I)</th>
<th>Effectiveness (E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask yourself: How important is this factor to me when receiving peer feedback?</td>
<td>Ask yourself: How effective was my peer on this factor when giving feedback?</td>
</tr>
<tr>
<td>“1” means not important</td>
<td>“1” means not effective</td>
</tr>
<tr>
<td>“2” means somewhat important</td>
<td>“2” means somewhat effective</td>
</tr>
<tr>
<td>“3” means important</td>
<td>“3” means effective</td>
</tr>
<tr>
<td>“4” means very important</td>
<td>“4” means very effective</td>
</tr>
<tr>
<td>“5” means extremely important</td>
<td>“5” means extremely effective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depth Scale</th>
<th>Depth Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. complete peer feedback when scheduled</td>
<td>1. completes peer feedback when scheduled</td>
</tr>
<tr>
<td>6. exceeds what is required on the form</td>
<td>6. exceeds what is required on the form</td>
</tr>
<tr>
<td>11. to go beyond a superficial discussion</td>
<td>11. goes beyond a superficial discussion</td>
</tr>
<tr>
<td>16. more than 15 minutes in a discussion</td>
<td>16. more than 15 minutes in a discussion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Listening Scale</th>
<th>Listening Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. to listen to what your peer has to say</td>
<td>2. listening to what I had to say</td>
</tr>
<tr>
<td>7. express your thoughts &amp; feelings</td>
<td>7. expressed my thoughts &amp; feelings</td>
</tr>
<tr>
<td>12. not to cut off or interrupt your peer</td>
<td>12. not to cut off or interrupt</td>
</tr>
<tr>
<td>17. read non verbal communications</td>
<td>17. read non verbal communications</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Content Scale</th>
<th>Content Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. assessed in your practice setting</td>
<td>3. assessed in your practice setting</td>
</tr>
<tr>
<td>8. suggests ideas to improve practice</td>
<td>8. suggests ideas to improve practice</td>
</tr>
<tr>
<td>13. communicate important practice aspects</td>
<td>13. communicate important practice aspects</td>
</tr>
<tr>
<td>20. your strengths and weaknesses discussed</td>
<td>20. strengths and weaknesses discussed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feedback Scale</th>
<th>Feedback Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. your peer uses examples during feedback</td>
<td>4. in using examples during feedback</td>
</tr>
<tr>
<td>9. not making you feel defensive</td>
<td>9. not making you feel defensive</td>
</tr>
<tr>
<td>14. that your peer was honest</td>
<td>14. your peer is being honest</td>
</tr>
<tr>
<td>19. that feedback was descriptive, not judging</td>
<td>19. that feedback is descriptive, not judging</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Satisfaction Scale</th>
<th>Satisfaction Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. conducts helpful feedback sessions</td>
<td>5. conducting helpful feedback sessions</td>
</tr>
<tr>
<td>10. feel satisfied with your practice</td>
<td>10. leaving you satisfied with your practice</td>
</tr>
<tr>
<td>15. the quality of the feedback discussion</td>
<td>15. the quality of the feedback discussion</td>
</tr>
<tr>
<td>21. focus on my practice issues only</td>
<td>21. focuses on my practice issues only</td>
</tr>
</tbody>
</table>
the word employee is used. In the revised questionnaire the word was changed to peer or colleague. The term job performance in Noer’s questionnaire was changed to practice in the revised questionnaire.

Specific changes to questions occurred as follows. In Noer’s questionnaire one, question one asked how important was it to conduct performance appraisals when scheduled? In questionnaire two, question one asks how effective was your manager in conducting your performance appraisal when scheduled? In the revised questionnaire, question one, part (a) reads how important was it to conduct peer feedback when scheduled? and question one, part (b) reads how effective was your peer in completing your feedback when scheduled?

In questionnaire one, question two, Noer asks, when conducting performance appraisals how important was it to listen to what the employee had to say? In Questionnaire two, question two, Noer asks, how effective was I in listening to what my employee had to say? In the revised questionnaire, question two, part (a) reads, how important is it to listen to what your peer had to say and question two, part (b) reads how effective was I in listening to what my peer had to say?

In questionnaire one, question three, Noer asks, how important was it to see on-the-job performance? In questionnaire two, question three, Noer asks, how effective was my manager in assessing on-the-job performance? In the revised questionnaire, question three, part (a) reads how important was it that your peer assesses you in your practice setting? Part (b) reads how effective was your peer in assessing you in your practice setting?

In questionnaire one, question four, Noer asks, how important was it to use examples when discussing performance? In questionnaire two, question four, Noer asks how effective was my manager in using examples when discussing performance? In the revised questionnaire,
question four, part (a) reads how important was it that your peer used examples during feedback sessions? and part (b) reads how effective was your peer in using examples during your feedback session?

In Questionnaire one, question fourteen, Noer asks, how important is it to level with the employee? In Questionnaire two, question fourteen, Noer asks, how effective was I at levelling with the employee? In the revised questionnaire, question fourteen, part (a) reads, how important is it that your peer was honest? and part (b) reads how effective do you feel your peer was in being honest? The revised questionnaire was pilot tested on thirty-four, non randomly selected, direct practitioner nurses from the counties of Lambton, Huron and Grey/Bruce. This was a convenience sample distributed during a College of Nurses education session. This pilot test assisted in determining if the revisions were appropriate for the nursing profession and if the questions captured the respondents perception of importance and effectiveness of the peer feedback process accurately. Feedback from this group indicated that the two questionnaires should be combined into one to reduce completion time and to improve understanding of the process. One respondent stated, “this would have been easier to complete if importance and effectiveness were rated together, that way I could have thought about them at the same time.” Another wrote, “I don’t want to take more than ten minutes to fill out any questionnaire, try to shorten this.” The questionnaire was revised to contain (a) measuring importance and (b) measuring effectiveness in each question. Following this revision another pilot test was completed with thirty-nine questionnaires using a non random convenience sample of educators and administrators. These were distributed during a College of Nurses education network meeting in Toronto. No further changes occurred from this pilot. Some comments from this pilot were, “this
was an interesting survey, easy and to the point” and “the results of this research would be interesting to read.” An open ended request for comments was included at the end of the questionnaire. The results of these comments were assigned to common themes and described in the questionnaire findings.

The instrument has not been tested for validity and reliability. Noer stated that care was taken to relate the instruments to skills, and the design was reviewed by pilot groups but no validity or reliability studies were attempted outside of this original project. It was concluded from the research that further use of the tools outside the original purpose would promote validity and reliability. Although this revised questionnaire was pilot tested twice during the research study no validity or reliability studies were completed.

C. Design and Procedure

Three groups of nurses: direct practitioners, educators, and administrators participated in the study. A questionnaire containing twenty-one items divided into five sub-scales and one individual question was utilized. The sub-scales were: depth, listening, content, feedback, and satisfaction. For each item participants had to judge both its importance and effectiveness. This made it possible to statistically compare the answers between importance and effectiveness and among the domains of practice. Respondents used a five-point Likert scale to assign their answers. Likert scales are ordinal measures (Spatz and Johnson, 1989). For descriptive purposes results of mean and standard deviation are reported in the tables. Differences between importance and effectiveness were tested using Wilcoxon tests. A significant level of 1% was used throughout the analysis. A qualitative analysis of an open-ended question was also incorporated into the research methodology. Chi-square analyses were conducted to test between group differences. If
the overall result was significant at the 1% level, then Kolmogorov-Smirnov Tests for pair-wise comparisons were conducted to find the source of the overall significant effect.

A letter seeking approval, with an attached research proposal, was submitted to the Faculty of Education Graduate Committee prior to beginning this study. After receiving approval (Appendix C), a letter requesting an ethical review of the proposed research was sent to the Faculty of Education Ethics Committee (Appendix D). Approval was received recommending four changes to the participant consent (Appendix E). The first change was to strengthen participant awareness that participation was voluntary. The second change was to guarantee confidentiality on the cover page of the questionnaire. The third change was to invite participants to make concerns of an ethical nature known to the Chair of the Ethics Committee of the university. The last change was to inform participants of the approximate length of time the questionnaire would take. The changes were incorporated and returned to the ethics committee.

A letter of permission was sent to the Lambton Hospitals Group, Chief Executive Officer (CEO) (Appendix F). Permission was granted (Appendix G). A letter of permission was sent to the Lambton Hospitals Group, Ethic’s Committee (Appendix H). Permission was granted (Appendix I). Permission was requested and granted by Noer Consulting for use of the Importance and Effectiveness Inventory Scale and Questionnaire (Appendix J). A letter of information was sent to the Executive Director of the College of Nurses of Ontario (Appendix K). An e-mail encouraging the research to continue was received from the Executive Director.

A letter of consent with a guarantee of confidentiality was included with every questionnaire, and participants were requested to complete the consent and return it separately to the researcher. The consents were retained and are available for review. A participant letter that
contained clear, completion instructions was attached to the front of the questionnaire.

A total of 300 questionnaires to nurses working in the direct practice domain were distributed to the Lambton Hospitals Group through inter-hospital mail in October and to the Lambton Victorian Order of Nurses at an education session in October. Verbal permission to use inter-hospital mail was granted by the CEO. Three weeks were allowed for the return of these questionnaires. One hundred and fifty questionnaires were mailed in November, 2000 to the educators participating in the CNO’s educational network across the province of Ontario. Each questionnaire included a stamped self-addressed envelope. Three weeks were allowed for return of these questionnaires. Ninety questionnaires were distributed to the administrators group in November, 2000. These were sent through inter-hospital mail or mailed with a stamped self-addressed envelope. Three weeks were allowed for return of these questionnaires. All respondents were encouraged to include comments on the peer feedback process.

D. Limitations of the Design

Fraenkel and Wallen (1996) indicated that in any study that either described or tested relationships, there was always the possibility that relationships demonstrated in the study were in fact due to or explained by something else. All efforts were made to control extraneous variables that may have threatened the validity of this study. Some limitations may have persisted. Changing the questionnaire to meet the needs of the study may have threatened the internal consistency and reliability of the questions. Every attempt was made to maintain the intent of the original questionnaire, and to this end there was one follow-up discussion with Noer to discuss changes that were made to the questionnaire. Conducting two pilots studies assisted in reducing the impact of this reliability threat. A clearly written cover letter explaining the intent of the research study
supported respondents in completing the questionnaire. Confidentiality was guaranteed, encouraging a high response rate. Any threat from data collector characteristics was controlled by having the same data collector gather all of the data. Threats to data entry validity and authenticity were controlled by having the data checked carefully at entry for accuracy.

Merging and downsizing in the health care sector could have caused a regression threat. Pervasive change in the work life of nurses could have caused a lowering of the score. Having three groups to compare assisted in handling this threat. An environmental threat was considered as nurses may be a unique group of workers, and the places that employ nurses may not be consistent with other work places. Future research could assist in removing this threat. Shift work, heavy patient assignments, increased patient acuity, or anger at the College of Nurses for imposing QA may have caused a subject characteristic or subject attitude threat. Including nurses from many areas of practice within the three domains assisted in reducing this threat. Using sub-scales that asked questions in different ways also assisted in controlling this threat.

There may have been a selection threat since a non-random, convenience sample and a non-random, purposive sample were used for research feasibility. The study design helped to control this selection threat, as nurses from across the province were included from every type of practice setting and their participation was completely voluntary. The amount of information obtained from the sample population also assisted to reduce the impact of this threat. Demographic information was already available from the CNO and was used to compare the sample (Table 3). Nurses know that peer feedback must be completed to maintain their Certificate of Competence and this may have caused a diffusion of treatment threat. Voluntary participation helped to reduce this threat.
CHAPTER IV

ANALYSIS OF RESULTS

Responses to the instrument were analyzed both qualitatively and quantitatively. This enabled the researcher to more fully evaluate participants' perception of peer feedback. Statistical analysis involved first the comparison of data between importance and effectiveness, and then analyzed the data among the three comparative groups: direct practitioners, educators, and administrators. Questionnaires that were incomplete or incorrectly filled out contributed to the percentage of non usable surveys. The number of incomplete or incorrect surveys that could not be used was 2.8%. These surveys were removed before entering the data, making the total number of actual returns 243. The number of questionnaires used from direct practitioners was 103, from educators was 60, and from administrators was 73.

A. Quantitative Analysis of Demographic Data

Respondents' domain of practice, level of education, gender, age, and number of times participation in peer feedback had occurred were solicited with direct questions on the demographic questionnaire. The descriptive, central tendency data of mean converted to percentages was the only procedure performed with this demographic data. The results were then compared to the provincial statistics (Table 3) (CNO, 1999). The demographic findings of the research sample were different from the population of interest. This is not to suggest that the sample is not representative of the population. A possible explanation for the existing differences was that the provincial data contained the whole population and the research data contained non-random, convenience or purposive samples. According to Polit and Hungler (1991), the relevance of mean scores becomes suspect whenever a non-random sample is used. An explanation for
differences in educational findings must also be considered. Completing a comparative study necessitated having three groups of comparable size. According to Fraenkel and Wallen (1996), a sample of at least 50 is deemed necessary for comparative studies. These requirements impacted on the data. Diploma education as entry to practice is the accepted standard in Ontario for all RNs and RPNs. This condition will not change until 2005 when the CNO has mandated baccalaureate preparation for RN (CNO, 1999). This supports an explanation for 72% of RN direct practitioners and 97% RPN direct practitioners indicating diploma preparation. Registrants employed as educators and administrators are generally required by the agencies that employ them to have higher levels of education. With a research sample of 60 educators and 73 administrators, the percentage of nurses in the research study with advanced education was higher as compared to the whole provincial population. The most outstanding difference was that 19.9% of the sample were prepared at the graduate level compared to 3.4% of the population. The mean results of age and gender divisions from the study were similar to the provincial population. It is anticipated that these age and gender findings would be consistent with any sample of nurses in Ontario today.

The question asked of participants concerning the number of times peer feedback had been participated in yielded interesting results (Table 4). Quality assurance requirements, including peer feedback, have been mandated since 1997 (4 years). A result of 100% participation for four years could have been anticipated. As indicated in the table this was not the finding. In fact, 8.1% of the sample indicated that they had never participated in peer feedback. Provincial results for participation in the quality assurance process for 1999 indicated that 4.6% of the population did not participate (CNO, 1999). The confidential nature of this study allowed participants to answer
this question with honesty. It is also important to note that 75% of the participants indicated that they had completed peer review either two or three times.

B. Quantitative Analysis of Importance (I) Versus Effectiveness (E)

Table 5 A) looked at the category related to the depth of peer feedback. Participants indicated that it was important ‘to complete peer feedback when scheduled’, ‘to go beyond what was required in the CNO format’, and ‘to spend more than fifteen minutes doing peer feedback’. The results indicated that they did not perceive their peers to have been effective in achieving these aspects. There were two questions that produced a difference between importance and effectiveness. Administrators and direct practitioners (p=0.000) judged the importance of going beyond a superficial discussion with their peer as higher, therefore, perceiving that their peers were effective in achieving this goal. Educators perceived this aspect as important, but did not perceive their peers were effective in achieving this.

Table 6 A) looked at the category related to listening during peer feedback. In nearly every question the importance of the item was judged to be higher than the effectiveness of the experience. Participants perceived that it was important ‘to listen to their peers’, ‘to allow them to express their thoughts and feelings’, and ‘to not interrupt during the peer feedback process’. The results indicated that they did not perceive their peers to have been effective in achieving these aspects. Only two differences were perceived as not significant. Educators (p=0.595) and administrators (p=0.036) both felt that reading non-verbal communication was important and that their peers had been effective in reading non-verbal communication during the peer feedback process. Direct practitioners perceived this as important, but achieving this aspect with their peer
Table 3

Provincial Population Compared to Study Sample

<table>
<thead>
<tr>
<th>Category of Registrant</th>
<th>Provincial Population N = 139,000</th>
<th>Study Sample N = 236</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN's</td>
<td>69.0 %</td>
<td>78.0 %</td>
</tr>
<tr>
<td>RPN's</td>
<td>31.0 %</td>
<td>22.0 %</td>
</tr>
<tr>
<td>Level of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma Prepared Nurses</td>
<td>RN - 73.6 %</td>
<td>RN - 72.5 %</td>
</tr>
<tr>
<td>RPN - 89.6 %</td>
<td>RPN - 97.9 %</td>
<td></td>
</tr>
<tr>
<td>Baccalaureate Prepared Nurses</td>
<td>RN - 7.3 %</td>
<td>RN - 27.5 %</td>
</tr>
<tr>
<td>RPN - 0.7 %</td>
<td>RPN - 2.1 %</td>
<td></td>
</tr>
<tr>
<td>Graduate Degree Prepared Nurses</td>
<td>3.4 %</td>
<td>19.9 %</td>
</tr>
<tr>
<td>Domains of Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Practitioners</td>
<td>RN - 86 %</td>
<td>RN - 25 %</td>
</tr>
<tr>
<td>RPN - 94 %</td>
<td>RPN - 18.6 %</td>
<td></td>
</tr>
<tr>
<td>Educators</td>
<td>RN - 3.0 %</td>
<td>RN - 24.1 %</td>
</tr>
<tr>
<td>RPN - 1.0 %</td>
<td>RPN - 2.5 %</td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td>RN - 5.0 %</td>
<td>RN - 28.8 %</td>
</tr>
<tr>
<td>RPN - 1.0 %</td>
<td>RPN - 0.9 %</td>
<td></td>
</tr>
<tr>
<td>Demographic Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Age of Registrants</td>
<td>47.7 years</td>
<td>45.1 years</td>
</tr>
<tr>
<td>Gender</td>
<td>Female</td>
<td>95.6 %</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>96.6 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.4 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.4 %</td>
</tr>
</tbody>
</table>
Table 4

Participation in Peer Feedback Results

N=236

| Percentage of registrants indicating the number of times they have participated in peer feedback. |
|-----------------------------------------------|----------------|----------------|----------------|----------------|----------------|
| 0 times                                      | 1 time         | 2 times        | 3 times        | 4 times        | 4+ times       |
| 8.1 %                                        | 4.6 %          | 34.3 %         | 40.8 %         | 9.3 %          | 2.9 %          |

Number of non participants (0 times) indicated in the 1999 CNO registration statistics = 4.6%
had not been effective.

Table 7 A) looked at the category related to the content of peer feedback. In every category except one, participants felt the importance of the questions were significantly higher than the effectiveness. They perceived that ‘suggesting specific ideas for improving practice’, ‘communicating important aspects of a peer’s practice’, and ‘communicating strengths and weaknesses’ were important. The results indicated that they did not perceive their peers to have been effective in achieving these aspects. Only direct practitioners (p=0.078) perceived there to be no significant difference between the importance of being assessed in their practice setting and the effectiveness of their peers in assessing them in their practice setting.

Table 8 A) looked at a sub-scale related to the actual feedback that was shared with the participant’s peer. All three domains of practice perceived the importance of ‘using examples during feedback’, ‘not becoming defensive’, ‘being honest’, and the ‘use of descriptive feedback’ as significantly higher (p= 0.000-0.002) than its effectiveness.

Table 9 A) relates to the sub-scale of satisfaction with the peer feedback process. All domains of practice perceived the importance of every aspect of this category to be significantly higher (p= 0.000-0.002) than its effectiveness. Participants indicated that ‘conducting helpful peer feedback sessions’, ‘leaving feeling satisfied with their practice’, ‘feeling satisfied with the quality of the feedback session’, and ‘having the discussion be about their own practice and not others’ was important. The results indicated that they did not perceive their peers to have been effective in achieving these aspects.

Table 10 A) looked at the single topic of peers suggesting learning plans that would assist
their colleagues to address learning gaps in their practice. There was a high consent among all three groups that the importance of suggesting learning plans was significantly higher than its effectiveness.

In general, when significant differences between importance and effectiveness were found, importance was judged as higher than effectiveness in every case. This may lead to the conclusion that the importance of the question or statement about peer feedback was perceived to be significantly important, but not perceived to be significantly effective. The primary hypothesis in this research study was: There will be no significant difference in the perception of importance versus effectiveness of peer feedback among the three domains of practice. The results produce a rejection of this null hypothesis wherever significant differences occurred.

C. Quantitative Analysis of the Three Domains of Practice Among each Item

Table 5 B) demonstrates the results of the comparison among the groups on each item in the depth sub-scale. It showed several significant differences, causing the null hypothesis to be rejected in each of the following questions. Direct practitioners indicated that completing the peer feedback process when scheduled was less important (p= 0.003) to them than it was to educators. The null hypothesis was rejected in the effectiveness questions that asked if your peer ‘completed feedback when scheduled’, ‘exceeded what was required during the feedback session’, and ‘if your peer exceeded fifteen minutes in a feedback discussion’. Direct practitioners indicated that the need to go beyond more than a superficial discussion was less important than educators (p= 0.002) or administrators (p= 0.000) felt it to be. Direct practitioners also indicated that the effectiveness of their peers going beyond a superficial discussion was lower than educators
Moreover, the results indicated that their peer was not effective in going beyond a superficial discussion. Direct practitioners judged the importance of spending more than fifteen minutes with their peers as lower than administrators (p= 0.000). When significant differences occurred in this sub-scale, educators obtained the lowest score. In the sub-scale depth the null hypothesis was rejected in the importance question that asked if it was necessary to exceed what was required in peer feedback.

Table 6 B) shows the results of the comparison among the groups on each item in the listening sub-scale. Responses to all questions were deemed to be similar for all three groups. Only one significant difference occurred. Direct practitioners judged the effectiveness of their peers giving appropriate non-verbal communication as lower than educators (p= 0.001).

Table 7 B) shows the results of the comparison among the groups on each item in the content sub-scale. Again, responses to all questions were deemed to be similar for all three groups. Only one significant difference occurred. Direct practitioners perceived the importance of their peer suggesting specific ideas for improvement to their practice as significantly lower than the educators (p= 0.004).

Table 8 B) displays the results of the comparison among the groups on each item in the feedback sub-scale. There was no significant difference found among any of the groups in this sub-scale, a high level of consent occurred.

Table 9 B) summarizes the results of the comparison among the groups on each item in the satisfaction sub-scale. It showed several significant differences. Direct practitioners indicated that the importance of their peer conducting a helpful session was less important (p= 0.010) to
them than it was to educators. Direct practitioners also indicated that the effectiveness of their peers discussing only their practice with them during the feedback session had been less effective than educators (p = 0.002) felt their peers had been. Direct practitioners identified that they did not perceive discussing only their own practice with their peer as being as important as educators felt it to be (p = 0.008). In the sub-scale satisfaction the null hypothesis was rejected in the “importance questions” that asked if leaving feeling satisfied with your practice and with the feedback session was important. The null hypothesis was rejected in the effectiveness questions that asked if your peer conducted a helpful session, if your peer left you feeling satisfied with your practice and if the quality of the feedback session was acceptable.

Table 10 B) showed the results of the comparison among the groups on the one item of suggesting learning plans that would be helpful to improve the practice of a peer. All participants indicated no significant difference between importance and effectiveness, causing acceptance of the second, third and fourth null hypothesis. In general, when significant differences were found among the groups the direct practitioners always scored the lowest value.

D. Qualitative Findings

According to Polit and Hungler (1991), qualitative research emphasizes the dynamic, holistic, and individual aspects of data collection. It tries to incorporate people’s interpretation of events and circumstances. The information that is collected does not have a formal structure and there is no attempt to control the sample, but rather to capture the entirety of it. Polit and Hungler recommend that anecdotal material be analyzed using thematic analysis or recurring regularities
Table 5 A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale Depth

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th>Educator N=63</th>
<th>Administrator N=70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>( \bar{x} ) (s)</td>
<td>z (p)</td>
<td>( \bar{x} ) (S)</td>
</tr>
<tr>
<td>1 completing when scheduled</td>
<td>I 3.50 (1.11)</td>
<td>-1.625 (0.104)</td>
<td>3.95 (0.73)</td>
</tr>
<tr>
<td>E 3.32 (1.11)</td>
<td></td>
<td>3.81 (0.91)</td>
<td>3.24 (1.08)</td>
</tr>
<tr>
<td>6 exceeding what is required</td>
<td>I 2.85 (1.22)</td>
<td>-0.017 (0.987)</td>
<td>3.32 (0.99)</td>
</tr>
<tr>
<td>E 2.88 (1.11)</td>
<td></td>
<td>3.03 (1.16)</td>
<td>3.13 (0.95)</td>
</tr>
<tr>
<td>11 going beyond the superficial</td>
<td>I 3.65 (1.19)</td>
<td>-4.856 (0.000)*</td>
<td>4.37 (0.81)</td>
</tr>
<tr>
<td>E 3.05 (1.22)</td>
<td></td>
<td>3.76 (1.17)</td>
<td>3.50 (0.91)</td>
</tr>
<tr>
<td>16 spending more than 15 minutes</td>
<td>I 3.04 (1.25)</td>
<td>-0.854 (0.393)</td>
<td>3.51 (1.01)</td>
</tr>
<tr>
<td>E 2.96 (1.40)</td>
<td></td>
<td>3.16 (1.18)</td>
<td>3.54 (1.05)</td>
</tr>
</tbody>
</table>

\* (p \geq 0.01)

Table 5 B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Questions</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I 10.739</td>
<td>0</td>
<td>DP &lt; Ed (p=0.003)</td>
</tr>
<tr>
<td>E 9.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I 6.772</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>E 2.544</td>
<td></td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I 23.018</td>
<td>0</td>
<td>DP &lt; Ed (p=0.002) DP &lt; Ad (p=0.000)</td>
</tr>
<tr>
<td>E 18.107</td>
<td></td>
<td>0</td>
<td>DP &lt; Ed (p=0.000)</td>
</tr>
<tr>
<td>16</td>
<td>I 17.966</td>
<td>0</td>
<td>DP &lt; Ad (p=0.000)</td>
</tr>
<tr>
<td>E 9.048</td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
### Table 6 A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale Listening

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th>Educator N = 63</th>
<th>Administrator N = 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>ì (S) Z (p)</td>
<td>ì (S) Z (p)</td>
<td>ì (S) Z (p)</td>
</tr>
<tr>
<td>2 listening to your peer</td>
<td>I 4.13 (1.04) -2.927 (0.003)*</td>
<td>4.44 (0.82) -4.811 (0.000)*</td>
<td>4.29 (0.73) -3.848 (0.000)*</td>
</tr>
<tr>
<td></td>
<td>E 3.85 (1.13)</td>
<td>4.05 (0.80)</td>
<td>3.81 (0.87)</td>
</tr>
<tr>
<td>7 expressing your thoughts/feelings</td>
<td>I 3.55 (1.13) -2.948 (0.003)*</td>
<td>3.75 (1.02) -2.957 (0.003)*</td>
<td>3.89 (0.96) -4.001 (0.000)*</td>
</tr>
<tr>
<td></td>
<td>E 3.30 (1.24)</td>
<td>3.33 (1.09)</td>
<td>3.40 (1.00)</td>
</tr>
<tr>
<td>12 not to interrupt</td>
<td>I 4.05 (1.08) -4.633 (0.000)*</td>
<td>4.24 (0.90) -4.148 (0.000)*</td>
<td>4.16 (0.83) -3.296 (0.001)*</td>
</tr>
<tr>
<td></td>
<td>E 3.58 (1.25)</td>
<td>3.73 (0.95)</td>
<td>3.70 (0.90)</td>
</tr>
<tr>
<td>17 reading non verbal communication</td>
<td>I 3.40 (1.21) -3.300 (0.001)*</td>
<td>3.86 (1.05) -0.532 (0.595)</td>
<td>3.80 (0.10) -2.098 (0.036)</td>
</tr>
<tr>
<td></td>
<td>E 3.10 (1.24)</td>
<td>3.75 (1.12)</td>
<td>3.51 (0.94)</td>
</tr>
</tbody>
</table>

* (p >0.01)

### Table 6 B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>I 4.371</td>
<td>0.112</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 2.731</td>
<td>0.255</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I 4.373</td>
<td>0.112</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 0.376</td>
<td>0.829</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I 1.652</td>
<td>0.438</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 0.098</td>
<td>0.952</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>I 8.209</td>
<td>0.02</td>
<td>DP &lt; Ed (p=0.001)</td>
</tr>
<tr>
<td></td>
<td>E 14.855</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7 A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale Content

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th></th>
<th>Educator N = 63</th>
<th></th>
<th>Administrator N = 70</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} ) (S)</td>
<td>Z (p)</td>
<td>( \bar{X} ) (S)</td>
<td>Z (p)</td>
<td>( \bar{X} ) (S)</td>
<td>Z (p)</td>
</tr>
<tr>
<td>Question: 3 assessment in your practice setting</td>
<td>I 3.82 (1.14)</td>
<td>-1.764 (0.078)</td>
<td>4.13 0.85</td>
<td>-2.847 (0.004)*</td>
<td>3.93</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>E 3.69 (1.08)</td>
<td>3.73 1.00</td>
<td>3.41</td>
<td>1.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question: 8 suggesting specific ideas for improvement</td>
<td>I 3.72 (1.09)</td>
<td>-4.921 (0.000)*</td>
<td>4.37 0.81</td>
<td>-5.263 (0.000)*</td>
<td>4.19</td>
<td>0.73</td>
</tr>
<tr>
<td></td>
<td>E 3.13 (1.27)</td>
<td>3.50 1.03</td>
<td>3.44</td>
<td>1.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question: 13 communicating important practice aspects</td>
<td>I 3.85 (1.23)</td>
<td>-3.666 (0.000)*</td>
<td>4.30 0.78</td>
<td>-4.451 (0.000)*</td>
<td>4.19</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>E 3.48 (1.20)</td>
<td>3.76 0.94</td>
<td>3.47</td>
<td>0.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question: 20 strengths and weaknesses communicated</td>
<td>I 4.04 (1.09)</td>
<td>-5.475 (0.000)*</td>
<td>4.48 0.76</td>
<td>-4.244 (0.000)*</td>
<td>4.16</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>E 3.47 (1.24)</td>
<td>3.87 1.11</td>
<td>3.66</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* (p \( \geq 0.01 \))

### Table 7 B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>I 2.185</td>
<td>0.34</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 3.576</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I 20.94</td>
<td>0</td>
<td>DP &lt; Ed (p=0.004)</td>
</tr>
<tr>
<td></td>
<td>E 3.924</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I 6.007</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 2.764</td>
<td>0.25</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I 9.858</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 5.393</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>
Table 8A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Feedback

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th>Educator N = 63</th>
<th>Administrator N = 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td>( \bar{x} ) (S)</td>
<td>( z ) (p)</td>
<td>( \bar{x} ) (S)</td>
</tr>
<tr>
<td>4 using examples during feedback sessions I</td>
<td>3.95 (0.97)</td>
<td>-5.709 (0.000)*</td>
<td>4.27 (0.90)</td>
</tr>
<tr>
<td>E</td>
<td>3.27 (1.19)</td>
<td>3.46 (1.09)</td>
<td>3.36 (1.02)</td>
</tr>
<tr>
<td>9 receiving feedback so you are not defensive I</td>
<td>4.10 (1.09)</td>
<td>-3.440 (0.001)*</td>
<td>4.43 (0.82)</td>
</tr>
<tr>
<td>E</td>
<td>3.72 (1.14)</td>
<td>3.98 (1.13)</td>
<td>3.77 (0.99)</td>
</tr>
<tr>
<td>14 your peer is honest I</td>
<td>4.35 (1.14)</td>
<td>-4.956 (0.000)*</td>
<td>4.65 (0.74)</td>
</tr>
<tr>
<td>E</td>
<td>3.70 (1.31)</td>
<td>4.13 (0.99)</td>
<td>4.03 (1.04)</td>
</tr>
<tr>
<td>19 receiving descriptive rather than judgmental feedback I</td>
<td>4.06 (1.16)</td>
<td>-3.814 (0.000)*</td>
<td>4.59 (0.78)</td>
</tr>
<tr>
<td>E</td>
<td>3.64 (1.25)</td>
<td>4.00 (1.05)</td>
<td>3.84 (0.91)</td>
</tr>
</tbody>
</table>

* (p ≥ 0.01)

Table 8B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>I 9.724</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 0.653</td>
<td>0.721</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I 4.89</td>
<td>0.087</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 3.572</td>
<td>0.168</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>I 3.975</td>
<td>0.137</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 4.427</td>
<td>0.109</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I 12.94</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 3.01</td>
<td>0.222</td>
<td></td>
</tr>
</tbody>
</table>
Table 9A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Satisfaction

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th>Educator N = 63</th>
<th>Administrator N = 70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>z (S)</td>
<td>z (p)</td>
<td>z (S)</td>
</tr>
<tr>
<td>Questions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I 5 peer conducts helpful sessions</td>
<td>3.53 (1.11)</td>
<td>-4.178 (0.000)*</td>
<td>4.02 (0.99)</td>
</tr>
<tr>
<td>E</td>
<td>3.15 (1.16)</td>
<td>3.27 (0.97)</td>
<td>3.34 (1.06)</td>
</tr>
<tr>
<td>10 I you leave feeling satisfied with your practice</td>
<td>4.06 (0.97)</td>
<td>-3.110 (0.002)*</td>
<td>4.35 (0.94)</td>
</tr>
<tr>
<td>E</td>
<td>3.79 (1.09)</td>
<td>3.78 (1.22)</td>
<td>3.49 (0.90)</td>
</tr>
<tr>
<td>15 I you are satisfied with the quality of the feedback discussion</td>
<td>3.91 (1.13)</td>
<td>-5.167 (0.000)*</td>
<td>4.32 (0.86)</td>
</tr>
<tr>
<td>E</td>
<td>3.41 (1.16)</td>
<td>3.64 (1.05)</td>
<td>3.66 (0.95)</td>
</tr>
<tr>
<td>21 I your discussion was about your practice and not the practice of others</td>
<td>3.96 (1.14)</td>
<td>-4.856 (0.000)*</td>
<td>4.49 (0.76)</td>
</tr>
<tr>
<td>E</td>
<td>3.35 (1.28)</td>
<td>4.06 (1.15)</td>
<td>3.76 (1.11)</td>
</tr>
</tbody>
</table>

*(p ≤ 0.01)*

Table 9B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>I 11.326</td>
<td>0</td>
<td>DP &lt; Ed (p=0.010)</td>
</tr>
<tr>
<td></td>
<td>E 1.423</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>I 7.477</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 6.731</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I 7.179</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E 1.973</td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I 11.847</td>
<td>0</td>
<td>DP &lt; Ed (p=0.008)</td>
</tr>
<tr>
<td></td>
<td>E 15.565</td>
<td>0</td>
<td>DP &lt; Ed (p=0.002)</td>
</tr>
</tbody>
</table>
Table 10 A
Comparison of the Importance and Effectiveness of Peer Feedback for the Sub-scale: Learning Plans

<table>
<thead>
<tr>
<th>Domain of Practice</th>
<th>Direct Practitioner N=103</th>
<th>Educator N=63</th>
<th>Administrator N=70</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{x}$ (S)</td>
<td>$z$ (p)</td>
<td>$\bar{x}$ (S)</td>
</tr>
<tr>
<td>18 having your peer suggest learning plans</td>
<td>3.61 (1.21)</td>
<td>-4.185 (0.000)*</td>
<td>3.43 (1.28)</td>
</tr>
<tr>
<td></td>
<td>3.10 (1.23)</td>
<td>2.92 (1.32)</td>
<td>0.99 (1.14)</td>
</tr>
</tbody>
</table>

* (p $\geq$0.01)

Table 10 B
Difference Among Direct Practitioners (DP), Educators (Ed), and Administrators (Ad)

<table>
<thead>
<tr>
<th>Question</th>
<th>Chi-square (df=2)</th>
<th>p</th>
<th>Source of Significant Overall Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>1.926</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>4.133</td>
<td>0.13</td>
<td></td>
</tr>
</tbody>
</table>
including a consideration of subgroup influences. No attempt was made to draw conclusions from the data, but a summary of the identified themes and the number of times they recurred is reported. The themes may support the implications of the findings.

For the purposes of this research, qualitative data was collected at the conclusion of the instrument in the form of an open-ended request for participants to comment on the peer feedback process. This provided a different method of assessing registrant’s perception and allowed them to respond in their own words, unrestrained by a predetermined format. Of the 236 returned questionnaires there were 50 anecdotal responses (21.2%). Twenty-eight comments were made by direct practitioners (N=103) (27.2%), fifteen comments were made by educators (N=63) (36.5%), and seven were made by administrators (N=70) (10%). Five themes emerged from the data indicating that peer review is: a beneficial process, a threatening process, a challenging process when honesty is required, not a very useful process, and identifying that registrants need to take part in education before participating in the feedback process.

The benefits of peer feedback were acknowledged in 40% of the comments. Comments such as the following indicated positive advantages of completing peer feedback. “Peer feedback is a great asset because it gives nurses the opportunity to listen to a peer and make appropriate changes if necessary to make nurses a better, more confident practitioners. Peer feedback is a valuable tool to evaluate professional performance and also to evaluate my own learning. My peer is a role model for my practice and I am a better nurse today because of her and I know she feels the same. We support each other daily in our practice, I believe we are aware of areas of improvement. I found the peer feedback an asset for input on how to improve my weaknesses, in a positive constructive manner.” This theme supports the literature by Reali and Poirier (1991)
describing peer feedback as useful to increase nurses’ personal growth.

Peer feedback was identified as threatening in 6% of the comments. These comments included, “It’s hard to be honest with someone you have to work with, it is easy to give strengths but hard to give weaknesses and then continue working with them. I wish there were more canned text descriptions, because some people are really intimidated to give peer feedback and that is unfortunate. Some people are really good at gathering a fair cross-section of opinion on your practice.” The threat nurses felt peer feedback placed on their practice was reported in many articles (Richardson and Sebilia (1982); Fedor et al. (1999); Roper and Russell (1997)) indicating that time, planning, and specific parameters were required if the peer feedback process was to be successful.

Twelve percent (12%) of the comments identified peer feedback as difficult when honesty was expected. Their comments included: “Tend to ask someone that likes me and I like them as well, it helps to appreciate their skills and assets. Could not do peer feedback with someone I do not think has all the qualities of a good nurse. I don’t think peer feedback is beneficial because it’s hard to be objective with someone you don’t like working with. I think nurse managers should do the peer feedback with input from other staff members, then complaints could be brought to the forefront sooner and individuals would be more accepting. It is very difficult in some work settings to find a peer who is familiar enough with you and your practice to provide useful and honest feedback.” Four of the negative comments about peer feedback were made by registrants that indicated they had not participated in the peer feedback process.

A fourth theme indicating that peer feedback was not a very useful process was identified in 24% of the comments. Their comments included some of the following: “I feel we always kept
ourselves educated in the important things pertaining to our practice before peer assessment and we were accountable to report any concerns re nursing performance in the past. I don’t see the need of peer feedback yearly. I don’t feel peer feedback is a useful tool. I think if there are problems it is very difficult to evaluate someone you have to work side by side with. I feel the self-evaluation is much more useful. It gives a broader scope of what you need to work on. I do not feel peer feedback is very effective, you can’t change people’s personalities. I was very disappointed in the feedback that I received from my peer. I really don’t think that it makes a lot of difference in changing people’s practice.” Dancer et al.(1997) described the need for trust building between colleagues before peer reviews became a worthwhile process. Their project indicated that when peers both gave and received feedback a greater degree of honesty occurred.

The final theme identified was the need for more education before nurses participated in peer feedback. This was made by 45% of the respondents. Some comments made by these nurses were: “More explanation of the meaning of weaknesses and strengths are needed; more information regarding how to do peer feedback should be available. For peer review nurses often choose ‘buddies’ at work that are not always very honest. Nurses need more guidance with respect to this issue. More education is needed on evaluation techniques so staff understand what to look for.” The need to educate registrants or staff on the peer feedback process was cited in almost every article reviewed in the literature. One article by Frid et al.(1998) described in detail the mechanisms used to instruct student teachers in the use of effective peer feedback measures.
CHAPTER V

DISCUSSION

Peer feedback is described in the nursing literature as one of the vital ways to assure quality, improve skills, and to increase ownership of nursing practice. What nurses learn through feedback increases the opportunity for them to grow professionally and to improve outcomes for the people they care for.

This study was designed to investigate if there was a significant difference between the perceived importance of peer feedback and its effectiveness. The results suggested that nurses perceived peer feedback to be important in almost every aspect that was measured, but the effectiveness of the process did not match the perceived importance. The study queried if there was a significant difference in the perception of importance and effectiveness amongst the samples of nurses in the three domains of practice investigated.

A. Importance and Effectiveness of Peer Feedback

Participants clearly identified in many items that they perceived the importance of peer feedback to be significant. They also indicated that they often perceived peer feedback not to be effective. For the purposes of this research study, it was meaningful to review the sub-scales where participants perceived the statements to be important and make recommendations on how to also make them effective.

Active listening was identified as an important part of giving and receiving peer feedback, but registrants were having difficulty achieving effectiveness in all aspects of this sub-scale. Curriculum must be developed that helps current registrants and nursing students learn
communication skills, including clarification, illustration, and explanation. Nurses need to ensure that they are clearly expressing their thoughts, and understanding their colleagues responses. Nurse educators need to include non-verbal communication skills in their programs, including the understanding of facial expression, kinesics, physical space, and appearance (Larsen, 1995).

Discussing content specific to the nurses practice is important, but registrants were having difficulty perceiving effectiveness in all aspects of this sub-scale. Nurses perceived that it is important for their peers to assess them in their practice setting, offer specific ideas to improve their practice, and discuss their strengths and weaknesses. Because it was not always possible to observe one another in a specific practice setting, nurses must learn to use clinical story-telling to describe cases and experiences (Benner, 1984). This will allow colleagues to have insight into the practice of their peers without actually being present. By hearing their peer’s stories nurses are able to offer reinforcement of strengths and suggestions to improve weaknesses. A concept similar to this is being used by outpost nurses through the Internet. There is an opportunity for the College of Nurses, professional nursing associations, employers, and academic institutions to form partnerships developing web sites and chat rooms for nurses to use and develop this skill.

Satisfaction with the process and the relevance of feedback provided were perceived as important. However, registrants were challenged to make all of these identified elements effective. Already identified suggestions may assist to improve these outcomes. However, one component in particular needs further discussion. Nurses identified that focussing on just their practice during feedback sessions was important, but they were having difficulty meeting this goal. This is supported in the qualitative findings, when nurses identified they often discussed issues about their
units and other colleagues instead of their own practice. Encouraging nursing leaders and educators to lead by example and help nurses to become more self-actualized may assist with improvement of this problem. Teaching nurses that this is an unique opportunity to discuss just their practice with a trusted colleague will increase acceptance. Encouraging nurses to make feedback sessions into events like morning coffee or lunch dates will place a more positive perspective on the process.

Suggesting specific and helpful learning plans is identified as important, but registrants are having difficulty assisting with this component effectively. There is an opportunity for professional nursing interest groups to develop standardized learning plans that registrants could use as templates and individualize. Some examples include: the Canadian Intravenous Nurses Association (CINA) developing a learning plan for nurses learning to initiate intravenous therapy, the Emergency Nurses Association developing a learning plan for nurses learning to triage emergency patients, or the Gerontological Nurses Association developing learning plans for nurses trying to increase their knowledge of abuse in the elderly.

B. Perception Differences Among Direct Practitioners, Educators, and Administrators

The results indicated that there was little difference in the perceptions among the domains of practice in most of the sub-scales. When the differences did occur it was always the direct practitioners that scored the lowest. The two sub-scales with the most differences were depth and satisfaction. It is important for the purposes of this research study to discuss some of the reasons these differences occurred and possible solutions for both present and future consideration.

Direct practitioners felt it was less important than educators to complete peer feedback
when scheduled or to take more than fifteen minutes to complete the process. They perceived it to be less important than educators or administrators to go beyond a superficial discussion. Direct practitioners also perceived their peers to be less effective in going beyond a superficial discussion than educator’s peers. Direct practitioners perceived that focusing on just their practice during a feedback session was not as important as educators, nor were their peers as effective at focusing on just their practice as educator’s peers. This data was supported in the qualitative results of this research study with two of the themes; that peer feedback was threatening and not a very useful process. All of these findings have been supported in the literature making the conclusions valid and worthy of consideration. The literature indicated that direct practitioners found doing peer feedback time consuming (Jambunathan (1992), Fedor et al. (1999)) and not very helpful (Cohen et al. (1996). It also indicated that women were discouraged from participating in collegial review (Littlejohn, 1989).

For peer feedback to improve the quality of the nursing profession and the outcomes for patient care, all nurses need to understand how to make the process effective. Short term changes could include clearly developed peer feedback tools with defined standards that help nurses identify the relevance of feedback. Programs that teach respectful communication will help nurses feel less threatened, supporting longer and more in-depth feedback sessions. In the future educational programs need to be developed introducing curriculum that assists with an understanding of collegial review. Organizations must find creative ways to support nurses in the feedback procedure clearly identifying that the process is for personal professional development only and that confidentiality is guaranteed.
C. Opportunities for Future Research

Because of its potential use as a diagnostic instrument for measuring perceptions of importance and effectiveness, the Peer Feedback Importance and Effectiveness Inventory Tool should be tested for validity and reliability. The instrument is useful to highlight individual items or categories of peer feedback that are identified as important but are not effectively working. This instrument, if validated, could be used as an identifier of gaps in nursing practice and assist with action planning. It could also be a particularly powerful tool for data gathering to consider future practice standards. It could be generalized for use among the Regulated Health Colleges in Ontario.

If a researcher accepted that numerous studies have already identified the importance of peer feedback, then an opportunity to investigate, using clearly identified outcomes, how nurses perceive peer feedback to be effective would be a powerful research project. Indications are that peer feedback has positive outcomes, but conducting quantitative research is important to confirm these perceptions (Roper and Russell, 1997). Nurses have stated that improving patient outcomes is important to them. A question could be asked, how can peer feedback be practiced so that individual nurses feel it improved their patient outcomes? For example, a nurse is told by their peer that they have strong clinical skills, but they have been observed leaving families when emotional pain is exhibited. What concrete guidance could a peer provide that would assist a nurse to become more effective helping families in pain? This goal could be supported by including in the research study a closer look at the items that nurses indicated were both important and effective and investigate why these particular items scored well in both items.
This research was conducted looking at three of the domains of nursing practice. The fourth domain of practice that was not studied were nurses working in research. An opportunity remains to conduct future research into the importance and effectiveness of peer feedback for the nurse researcher. The impact of peer feedback in combination with other interventions such as increased education or rewards could be studied. An opportunity exists to compare the findings of self reflection to the findings of peer review. A future project could be the replication of this present study using a larger sample. This would strengthen the findings and expose more nurses to the concept of effective peer feedback.

D. Recommendations

In the College of Nurses framework for quality assurance peer feedback was the one concept that most nurses in Ontario identified, anecdotally, as being difficult. The reality of the process often produced anxiety and conflict. A negative feeling was difficult to eliminate when nurses sensed that their personal worth was neither perceived nor appreciated. The need for nurses to clearly understand and articulate their practice is essential, and peer feedback provides a forum for nurses to measure their practice against accepted and recognizable standards.

Based on the importance of peer feedback for nursing practice there are some recommendations that may improve feedback outcomes. As described earlier the College of Nurses offers education programs through a Regional Educational Network. Expanding this approach to include sessions focussed just on the peer feedback process with special emphasis on how to give effective peer feedback would assist nurses to participate more fully in the process.
Explaining the use of concrete examples, focusing just on your peer’s practice during the session, and suggesting future learning plans are some ways that education could improve feedback effectiveness.

Considering the results of this study and the literature review, organizations that employ nurses need to take every opportunity to integrate effective peer feedback into the work life of their nursing employees. Some of the opportunities that employers could consider are development of evidence-based feedback tools by nurses, paid time to complete peer feedback, offering educational programs that teach staff about peer feedback, and guaranteeing confidentiality. Administrative and financial support is cited numerous times in the literature (Cohen (1998), Fedor et al. (1999) and Jambunathan (1992)) as essential for feedback to be effective.

The continued integration of peer feedback education and practice into diploma and baccalaureate programs is essential. This will assist in reducing fear and defensiveness for nurses of the future. It is essential that curriculums include communication courses to help nurses become effective in giving and receiving peer feedback. The CNO must continue to work closely with the colleges and universities to provide research information and clearly articulated standards for nursing graduates. This supports much of the literature that indicates peer feedback must be based on clearly expressed standards of practice (Jambunathan, 1992), Andrusyszyn (1990) and Deckert (1990)).

The findings of this research study are a valuable addition to the body of knowledge on the
peer feedback process. The conclusions point to some interesting questions for future researchers.

The standards for excellence in any discipline are dependent on review by knowledgeable peers (de Tornyay, 1983).
CHAPTER VI

REFERENCES


Deckert, B. (1990). Peer review for leaders?: Yes, we can. *Nursing Management, 21* (8), 48b - 48g.


Noer, D. (1979). *The effects of training managers in helping skills on employee perceptions of the relevance and usefulness of performance appraisal*. Unpublished manuscript, Faculty of the School of Business and Management, Pepperdine University.


Regulated Health Professions Act (1993), *Bill 64*, Ontario Legislature.


CHAPTER VII
APPENDIXES
APPENDIX A

LETTER OF CONSENT TO PARTICIPANTS

1732 Mater Dr.,
Sarnia, Ontario

Dear Participant,

You are requested to participate in a research project investigating how important peer feedback is and your perception of how effective the peer feedback you received was in helping you improve your practice. This study will form the basis of the researcher's Master's of Education thesis at the University of Windsor. A total of 150 nurses, 50 from each of direct practice, education and administration have been requested to participate. The results of the study will assist in predicting a correlation on how effective peer feedback is perceived to be among three of the domains of nursing practice.

As you are aware, the College of Nurses of Ontario has implemented a Quality Assurance Program for all nurses in the Province of Ontario. Part of the program requires peer feedback to be completed. The questionnaire relates to your perception of the effectiveness of the process. Please answer each question as honestly as possible. You are assured complete confidentiality and you may withdraw from the study at any time. Your participation in the project is completely voluntary. It will take approximately fifteen minutes to complete the questionnaire.

If you have any questions about the questionnaire while it is being administered you may ask the questionnaire administrator. If you have any questions about the study itself feel free to contact me at 519-542-1155. If there are any questions of an ethical nature you are invited to contact, Dr. Larry Morton, Ethics Committee Chair, University of Windsor 519 253 4232 x3800. Thank you for your time and consideration.

Katharine A. Hungerford

Thesis Advisor
Dr. Linda McKay
Faculty of Education
University of Windsor
1-519-253-4232 x 3819

Please return to the questionnaire administrator.

I, __________________________ (please print), consent to participate in the perception of effectiveness of peer feedback study. I understand that confidentiality will be assured and that I may withdraw from the study at anytime.

Signature of Participant: __________________________
Please complete the following questions and return with the attached questionnaire. All information will remain confidential.

1. Gender: Female _______ Male _______

2. Age Range: 20 - 29 _______ 30 - 39 _______
   40 - 49 _______ 50 - 59 _______
   60+ _______

3. Classification:
   Registered Nurse _______ Registered Practical Nurse _______

4. Indicate all education completed:
   Diploma/Certificate _______ Baccalaureate _______
   Graduate Degree _______ Other _______________________

5. Number of years in nursing practice: _______

6. Present position in nursing: Choose one only (where you spend the majority of your time)
   Direct Practitioner _______
   Educator _______
   Administrator _______

7. How many times have you completed the College of Nurses peer feedback requirement? _______ times.

Thank you.
APPENDIX C

Peer Feedback Importance and Effectiveness Inventory

The purpose of this questionnaire is to give you an opportunity to express your feelings and opinion about various aspects of peer feedback. An analysis will be completed to compare how important you rank certain aspects of peer feedback and your perception of how effective the peer feedback you received was in those same aspects. A second analysis will be completed comparing differences in answers about peer feedback among three of the domains of nursing practice: direct practitioner, administrator and educator. It will take approximately 15 minutes to complete the questionnaire.

There are three parts to be completed:

i) a separate consent form to assure confidentiality

ii) a demographic questionnaire

iii) a) an importance inventory

b) an effectiveness inventory

Your answers to this questionnaire will be completely confidential. Please, do not sign your name on the questionnaires. Your answers will be statistically analyzed on a group basis. Please try to complete the questionnaire as honestly as possible. Comments are very welcome.

Thank you very much for helping with this research project.
There are two parts to answer on every question or statement:

The first question is how important you consider the statement to be when you are receiving peer feedback.

The second question asks you to rank how effective you feel your peer was in meeting that aspect when they gave you your peer feedback. Please circle the appropriate number.

Circle "1" if it is/was not important or effective
Circle "2" if it is/was somewhat important or effective
Circle "3" if it is/was important or effective
Circle "4" if it is/was very important or effective
Circle "5" if it is/was extremely important or effective
When **RECEIVING** Peer Feedback .................

1a) How important is it to complete peer feedback when scheduled ........... 1 2 3 4 5

b) How effective was your peer in completing your feedback when
   scheduled ................................................................. 1 2 3 4 5

2a) How important is it to listen to what your peer has to say ................. 1 2 3 4 5

b) How effective was I in listening to what my peer had to say ................. 1 2 3 4 5
   (For example - did it change my practice?)

3a) How important is it that your peer assesses you in
   your practice setting ................................................... 1 2 3 4 5

b) How effective was your peer in being able to assess you in your
   practice setting ........................................................... 1 2 3 4 5

4a) How important is it that your peer uses examples during feedback ....... 1 2 3 4 5

b) How effective was your peer in being able to use examples ................. 1 2 3 4 5

5a) How important is it that your peer conducts helpful feedback
   sessions ................................................................. 1 2 3 4 5

b) How effective was your peer in being able to conduct helpful
   sessions ............................................................... 1 2 3 4 5
6a) How important is it that your peer exceeds what is required on the form .................................................. 1 2 3 4 5

b) How effective was your peer in being able to exceed what was required on the form .................................................. 1 2 3 4 5

7a) How important is it that your peer encourages you to express your thoughts and feelings .................................................. 1 2 3 4 5

b) How effective was your peer in encouraging you to express your thoughts and feelings .................................................. 1 2 3 4 5

8a) How important is it that your peer suggests specific ideas to improve practice .................................................. 1 2 3 4 5

b) How effective was your peer in suggesting specific ideas to improve practice .................................................. 1 2 3 4 5

9a) How important is it that your peer gives feedback without making you defensive .................................................. 1 2 3 4 5

b) How effective was your peer in giving feedback without making you defensive .................................................. 1 2 3 4 5
10a) How important is it to conduct the feedback so that you leave feeling satisfied with your practice ........................................ 1 2 3 4 5

b) How effective was your peer in conducting the feedback so you left feeling satisfied with your practice ........................................ 1 2 3 4 5

11a) How important is it to go beyond a superficial discussion ........................................ 1 2 3 4 5

b) How effective was your peer in going beyond a superficial discussion ........................................ 1 2 3 4 5

12a) How important is it not to cut off or interrupt your peer ........................................ 1 2 3 4 5

b) How effective were you in not cutting off or interrupting your peer ........................................ 1 2 3 4 5

13a) How important is it to have your peer communicate important aspects of your practice ........................................ 1 2 3 4 5

b) How effective was your peer in communicating important aspects of your practice ........................................ 1 2 3 4 5

14a) How important is it that your peer was honest ........................................ 1 2 3 4 5

14 b) How effective do you feel your peer was in being honest ........................................ 1 2 3 4 5
15a) How important is it that peer feedback be conducted so that you are satisfied
    with the quality of the feedback discussion ........................................ 1 2 3 4 5

b) How effective was your peer in conducting the session so that you were satisfied
    with the quality of the feedback discussion ........................................ 1 2 3 4 5

16a) How important is it to spend more than 15 minutes in a peer feedback
    discussion ................................................................................................. 1 2 3 4 5

b) How effective was your peer in spending more than 15 minutes in a peer feedback
    discussion ................................................................................................. 1 2 3 4 5

17a) How important is it to read non verbal communications from
    your ................................................................................................................ 1 2 3 4 5

b) How effective was your peer in giving appropriate non verbal
    communication ............................................................................................... 1 2 3 4 5

18a) How important is it to have your peer suggest possible learning
    plans ................................................................................................................. 1 2 3 4 5

b) How effective was your peer in suggesting possible learning
    plans ................................................................................................................. 1 2 3 4 5
19a) How important is it that you receive descriptive rather than
ejudgmental feedback ........................................ 1 2 3 4 5

b) How effective was your peer in giving descriptive rather than
judgmental feedback ........................................ 1 2 3 4 5

20a) How important is it that your strengths and weaknesses were
communicated ...................................................... 1 2 3 4 5

b) How effective was your peer in communicating your strengths
and weaknesses .................................................... 1 2 3 4 5

21a) How important is it to deal only with your practice rather than the
practice of others or other issues ........................... 1 2 3 4 5

b) How effective was your peer in dealing only with your practice rather than the
practice of others or other issues ........................... 1 2 3 4 5
Please feel free to comment on the peer feedback process:


Thank you for participating in this research project.
APPENDIX E

LETTER OF PERMISSION TO THE UNIVERSITY ETHICS COMMITTEE

1732 Mater Dr.,
Sarnia, Ontario

2000 08 14

Dr. L. Morton,
Chair, Ethics Committee,
Faculty of Education,
University of Windsor,

Dear Dr. Morton,

As a graduate student in the Faculty of Education at the University of Windsor, I am writing to request approval for a research study which will be conducted to meet the thesis requirements for a Masters of Education.

The study will compare the perception of effectiveness of peer feedback among nurses as direct practitioners, nurses as educators, and nurses as administrators. Data will be collected from nurses working in these different domains of practice, in both the hospital sector, and in the community, from across the Province of Ontario. Questionnaires will be completed by purposive sample of convenience. Participation is voluntary and confidentiality will be ensured.

There are no known risks associated with this study and participants may withdraw at any time. Please find the enclosed research proposal which outlines the procedures to be followed, a description of the inventory to be used, and letters requesting permission and consent.

If you have any further questions, I can be reached at 519-542-1155 or my advisor, Dr. Linda McKay, can be reached at 519-253-4232, extension 3819.

Sincerely,

Katharine A. Hungerford RN, BScN
encl.
APPENDIX F

UNIVERSITY ETHICS COMMITTEE APPROVAL

Memo

To: Katherine Hungerford

From: Dr. Larry Morton
    Chair, Ethics Committee

Date: September 27, 2000

Re. Ethics Committee Approval

The responses of the Ethics Committee have been returned and a number of concerns have been raised. The concerns raised that you need to address are as follows:

1. Stress that participation is voluntary.

2. In the "Letter-to-Inform" include advisor's name and phone number.

3. Include an invitation to make concerns of an ethical nature know to the Chair of the Ethics Committee—Dr. Larry Morton. 253, 4232 Ext 3800.

4. Might be a good idea to inform the participants of an approximate time involvement.

PLEASE FORWARD THE REVISIONS WHEN COMPLETED TO DR. L. MORTON
APPENDIX G

LETTER OF INFORMATION TO THE CHIEF EXECUTIVE OFFICER,
LAMBTON HOSPITAL’S GROUP

1732 Mater Dr.,
Sarnia, Ontario

2000 08 14

Mr. David Vigar,
Lambton Hospital’s Group

Dear Mr. Vigar,

As a graduate student in the Faculty of Education at the University of Windsor, I am writing to confirm our conversation in regards to conducting a research study which will meet the thesis requirements for a Masters of Education.

The study will compare the perception of effectiveness of peer feedback among nurses as direct practitioners, nurses as educators, and nurses as administrators. Data will be collected from nurses working in these different domains of nursing practice, in both the hospital sector, and in the community, from across the Province of Ontario. Questionnaires will be completed by purposive samples of convenience. Participation is voluntary and confidentiality will be ensured. Many nurses in the Lambton Hospitals Group will be used for geographic convenience.

There are no known risks associated with this study and participants may withdraw at any time. Please find the enclosed research proposal which outlines the procedures to be followed, a description of the inventory to be used, and letters requesting permission and consent.

If you have any further questions, I can be reached at 519-542-1155 or my advisor, Dr. Linda McKay, can be reached at 519-253-4232, extension 3819.

Sincerely,

Katharine A. Hungerford RN, BScN
APPENDIX H
LETTER OF PERMISSION, LAMBTON HOSPITALS GROUP

October 26, 2000

Dr. L. Morton, Chair
Graduate Program
Faculty of Education
University of Windsor
Windsor, ON

Dear Dr. Morton:

Mrs. Hungerford has submitted a letter of information to the Lambton Hospitals
Group and a copy of her thesis proposal. I am supportive of her completing this
research. It has also been sent to the hospital’s ethics committee for comment.
The committee encouraged Mrs. Hungerford to proceed with her project.

Sincerely

David Vigar, President/C.E.O.
Lambton Hospitals Group

DV:mn
APPENDIX I

LETTER FOR COMMENT TO THE HOSPITAL ETHICS COMMITTEE

1732 Mater Dr.,
Sarnia, Ontario
N7S 3S5

2000 08 14

Ms. Jennifer McCallum,
Chair, Ethics Committee,
Lambton Hospitals Group,
Sarnia, Ontario.

Dear Ms. McCallum,

As a graduate student in the Faculty of Education at the University of Windsor, I am writing to request approval to conduct a research study which will meet the thesis requirements for a Masters of Education.

The study will compare the perception of effectiveness of peer feedback among nurses as direct practitioners, nurses as educators, and nurses as administrators. Data will be collected from nurses working in these different domains of nursing practice, in both the hospital sector, and in the community, from across the Province of Ontario. Questionnaires will be completed by purposive samples of convenience. Participation is voluntary and confidentiality will be ensured. Many nurses in the Lambton Hospitals Group will be used for geographic convenience.

There are no known risks associated with this study and participants may withdraw at any time. Please find the enclosed research proposal which outlines the procedures to be followed, a description of the inventory to be used, and letters requesting permission and consent.

If you have any further questions, I can be reached at 519-542-1155 or my advisor, Dr. Linda McKay, can be reached at 519-253-4232, extension 3819.

Sincerely,

Katharine A. Hungerford RN, BScN
PRIVATE AND CONFIDENTIAL

November 2, 2000

Dr. L. Morton, Chair
Graduate Program
Faculty of Education
University of Windsor,
Windsor, Ont.

Dear Dr. Morton,

Mrs. Hungerford has submitted a letter of information to the Lambton Hospitals Group Ethic’s Committee with a copy of her thesis proposal. We are supportive of her completing this research. It has also been sent to the Chief Executive Officer of the Hospital Group for comment. Mr. Vigor encouraged Mrs. Hungerford to proceed with her project.

Sincerely,

Jennifer McCallum

Jennifer McCallum, Chairperson
Ethics Committee
Lambton Hospitals Group
JM/hb
APPENDIX L

LETTER OF INFORMATION TO THE COLLEGE OF NURSES OF ONTARIO

1732 Mater Dr.,
Sarnia, Ontario

Ms. Anne Coghlan,
Executive Director,
College of Nurses of Ontario,
Toronto, Ontario

Dear Ms. Coghlan,

As a graduate student at the University of Windsor’s Faculty of Education, I am writing to provide the College with information about a research study - it will be conducted to meet the thesis requirements for a Master of Education.

The study will compare the perception of effectiveness of peer feedback among nurses as direct practitioners, nurses as educators, and nurses as administrators. Data will be collected from registrants working in these different domains of nursing practice in hospitals and in the community from across the Province of Ontario. Questionnaires will be completed by a purposive sample of convenience. Participation is voluntary and confidentiality will be ensured.

There are no known risks associated with this study and participants may withdraw at any time. Please find the enclosed research proposal which outlines the procedures to be followed, a description of the inventory to be used, and letters requesting permission and consent.

If you have any concerns or questions, I can be reached at 519-542-1155 (home), 519-464-4400, ext.8395 (work) or my advisor, Dr. Linda McKay, can be reached at 519-253-4232, extension 3819. As you may be aware, I am a Regional Education Co-ordinator for the West Region for the College of Nurses of Ontario.

Sincerely,

Katharine A. Hungerford RN, BScN

cc
Ms. Nancy Fletcher
Ms. Sylvia Rodgers
APPENDIX M

Results of the Pair Wise Comparison using the Kolmogorov-Smirnov Two Sample Test

<table>
<thead>
<tr>
<th>Two-sided probabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1A</strong></td>
</tr>
<tr>
<td>Direct Practitioner</td>
</tr>
<tr>
<td>Direct Practitioner</td>
</tr>
<tr>
<td>Educator</td>
</tr>
<tr>
<td>Administrator</td>
</tr>
</tbody>
</table>

| **Question 1B**         |
| Direct Practitioner     | Educator | Administrator |
| Direct Practitioner     | -        | -             |
| Educator                | 0.107    | -             |
| Administrator           | 0.998    | 0.245         |

| **Question 11A**        |
| Direct Practitioner     | Educator | Administrator |
| Direct Practitioner     | -        | -             |
| Educator                | 0.002    | -             |
| Administrator           | 0        | 0.121         |

| **Question 11B**        |
| Direct Practitioner     | Educator | Administrator |
| Direct Practitioner     | -        | -             |
| Educator                | 0        | -             |
| Administrator           | 0.042    | 0.255         |

<p>| <strong>Question 16A</strong>        |
| Direct Practitioner     | Educator | Administrator |
| Direct Practitioner     | -        | -             |
| Educator                | 0.003    | -             |
| Administrator           | 0.336    | 0.147         |</p>
<table>
<thead>
<tr>
<th>Question 17B</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 8A</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 20A</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 4A</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 19A</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
<tr>
<td>Question 5A</td>
<td>Direct Practitioner</td>
<td>Educator</td>
<td>Administrator</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------</td>
<td>----------</td>
<td>---------------</td>
</tr>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 21A</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question 21B</th>
<th>Direct Practitioner</th>
<th>Educator</th>
<th>Administrator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Practitioner</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educator</td>
<td>0.003</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Administrator</td>
<td>0.336</td>
<td>0.147</td>
<td>-</td>
</tr>
</tbody>
</table>
VITA AUCTORIS

Katharine Ann Hungerford (née Giffin) was born July 15, 1951 at Sarnia, Ontario, Canada, County of Lambton. She graduated with an Honours Graduation Diploma from Northern Collegiate Institute and Vocational School, Sarnia, Class of 1969. She then graduated with the ninety-third class of the School of Nursing, The Toronto General Hospital, class of 1972. Katharine was employed at The Toronto General Hospital in the Urological Intensive Care Unit until 1973 when she entered George Brown College, St. Michael’s Hospital Campus. She graduated from the Operating Room Post Diploma Program in 1974. She was then employed in the Operating Room at Toronto East General and Orthopaedic Hospital until 1976.

Moving to Sarnia in 1976, she was employed in the Operating / Recovery Room at Sarnia General Hospital until 1990. During those years she and her husband Peter raised two sons, Sean and Ian. In 1990, she became an Operating Room Educator and eventually an agency-wide Clinical Nursing Educator, for St. Joseph’s Health Centre, Sarnia. A Post Diploma Certificate in Maternal / Infant Care was completed in 1992 from Fanshaw College, London and a Diploma in Adult Education was completed in 1994 from Lambton College, Sarnia.

Katharine enrolled as a part-time student in the Post RN Bachelors of Science in Nursing Program at the University of Windsor in 1991 and graduated in 1994. She was accepted into the Masters of Education program at the University of Windsor in September, 1996. In March, 2000 Katharine became the Program Co-ordinator for Complex Care / Rehabilitation / Palliative services for the Lambton Hospitals Group, St. Joseph’s Health Centre site.