CANADIAN THESES ON MICROFICHE

I.S.B.N.

THESES CANADIENNES SUR MICROFICHE

National Library of Canada
Collections Development Branch

Canadian Theses on
Microfiche Service

Ottawa, Canada
K1A 0N4

Bibliothèque nationale du Canada
Direction du développement des collections

Service des thèses canadiennes
sur microfiche

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us a poor photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de mauvaise qualité.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

9

NL-339 (r. 82/08)

Canada

LEADERSHIP AND THE EFFECTIVENESS OF COMMUNITY HEALTH NURSING SERVICES

by Marie des Anges Loyer

Thesis submitted to the School of Graduate Studies of the University of Ottawa as partial fulfillment of the requirements for the degree of Ph.D. in education

Ottawa, Canada, 1981

ACKNOWLEDGMENTS

The research reported in this thesis was conducted under the supervision of Professor Robert R. O'Reilly, Ph.D., to whom the writer is deeply endebted. Sincere appreciation is also expressed to Professor Marvin W. Boss, Ph.D., Dr. Ruth Y. Whitehead, and Dr. Harold L. Willis, who offered valuable assistance as members of the thesis committee.

The writer acknowledges with sincere thanks the support and cooperation of the Ontario Ministry of Health in particular: Dr. G.K. Martin, D.P.H., Executive Director - Health Programs Division, and Miss Ethel Irwin, Chief Public Health Services, the Directors and Supervisors of the Official health agencies and members of the V.O.N. for Canada; without their participation, this project could not have been realized.

Statistical assistance and consultation from Dr. Lewis Fu are acknowledged with thanks.

The dependable support and encouragement provided by Dr. Thomas DaSilva were the constant source of energy which urged the writer to a successful end.

CURRICULUM STUDIORUM

Marie des Anges Loyer was born in Ottawa, Ontario, October 10, 1933. She obtained a diploma in nursing, 1955, a certificate in public health nursing, 1958, and a Baccalaureate in public health nursing from the University of Ottawa, Ottawa, 1960. Following graduate studies at Columbia University, New York, N.Y., she was awarded a Master of Arts degree from Teacher's College in 1964 and a Master of Public Health from the School of Public Health and Administrative Medicine in 1965. In 1968, she also received a Master of Education from the University of Ottawa.

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

The purpose of this study is to test some of the propositions arising from the Contingency Model of Leadership Effectiveness and determine their applicability in the complex field of delivery of health services. The Model suggests that the effectiveness of a leader is contingent upon the relationship between certain qualities or factors pertaining to the leader and certain characteristics of the work situation. It has been postulated that the training which the leader has received influences leadership performance.

The context of the study is community or public health nursing. The nursing profession has been experimenting with organizational structure and function with a view to improving the effectiveness of nursing services. One of the functions explored has been the exercise of leadership at the management level. This has served to direct attention both to the educational preparation of nurse managers and the need for accountability in reaching organizational goals (The Canadian Nurses' Association, 1980, p. 9; 1973; Graydon, 1977; Spitzer, 1976, 1973, Chambers, 1977, Bell, 1973).

Community health nurses more so than their counterparts providing nursing services in hospitals are required to focus their attention on the entire health perspective

of the client and his family in relation to the environment in which they live. With increasing frequency, nurses are assuming a major responsibility for family health assessment and health maintenance, and for continuity of care, as patients receive earlier discharge from acute care settings or are treated entirely on an out patient basis.

In the present community health care system, Directors of Nursing in community health agencies are responsible for the effective performance of the nursing team working in the achievement of nursing organizational goals (Flynn, 1979, pp. 650-53). In this study, the term supervisory group is used to describe these teams formed by a group of community health nurses and their immediate supervisor working together to attain nursing service goals. The leadership exercized by the supervisor of these teams plays a key role in influencing group performance (Freeman, 1949, p. 127).

Throughout the province of Ontario, each community health unit is required to provide certain standard health care programs. Each health unit must examine its resources, adapt its programs to meet community needs and move towards a full implementation of ministerial guidelines for core programs. In this context, the leadership role of the supervisor becomes a prime element in assuring

the efficient performance of the staff.

Findings from organizational studies carried out in the hospital milieux may not necessarily be applicable to community health nursing, partly due to differences in organizational environment and structure, education of the practitioners, and nursing goals. Very few studies exist which focus on these aspects of community health nursing per se, as opposed to nursing care in the hospital setting. The field of community health nursing is therefore an ideal one in which to examine the predictive value of the Contingency Model.

Considerable investment is made by employees and employers in leadership training programs without valid evidence of the effect of such programs on leadership performance. The baccalaureate program in nursing is itself designed to provide training which aims at preparing nurses for leadership positions. Nonetheless, there is a scarcity of research data on the basis of which an assessment could be made of the impact of baccalaureate education on nursing performance. The present study based on the Contingency Model will provide an opportunity to determine the effect of baccalaureate training on the leadership performance of community health nursing supervisors as compared with the performance of supervisors without baccalaureate training.

The study is presented in four chapters. Chapter I consists of an overview of the literature on leadership, a review of Fiedler's Contingency Model with emphasis on the effect of training and experience on leadership performance, an examination of leadership research in nursing and the application of the Contingency Model to community health nursing, organizational effectiveness and its measurement with a focus on the goal approach, culminating with a statement of the research problem and resulting hypotheses to be tested.

Chapter II describes the research design used to test the hypotheses. It includes the development of an instrument for the measurement of organizational effectiveness and the pilot project carried out to determine its validity and test its reliability, the determination of task structure and position power in community health nursing supervisory groups in Ontario, a description of the design rationale and the design methodology, and finally the plan for data analysis and the limitations of the study.

Chapter III presents the results of the study including a summary of the findings.

Chapter IV presents a discussion of the results of the study, including a description of the implications and the contributions of the research to leadership theory.

CHAPTER I

REVIEW OF THE LITERATURE

Leadership is a role assumed by or often thrust upon nurses. An analysis of leadership behavior of nursing professionals in the community health sector of health care organizations should constitute a useful topic of inquiry and is bound to provide a contribution to general leadership theory and to community health nursing administration.

The elements of successful leadership have been studied in a number of ways in the social sciences field. However, Leininger (1974) stressed that leadership style and leadership effectiveness had not been given adequate study in nursing. Nursing is a helping profession which involves relating to a variety of others. Since nurses are often viewed or designated as leaders, it seems important that nurses in leadership positions be studied for leadership style and leadership effectiveness. Leadership means more than position or possession of power. It can be seen as the ability of the leader to influence others to alter their preferences so that they will coincide with those of the leader. Leadership has been defined as an attempt to influence others through the communication process in order to accomplish some goal (Fleishman, 1973). This definition requires a focus

on the nature of the leader-follower relationship. It recognizes the complementarity of the leader-follower roles, the functions of the leader and the components of leadership. Modifying components which interact with the leadership style could lead to anticipated modifications of the outcomes of leadership.

This chapter will present a review of the literature on leadership theory and its relation to effectiveness of community health nursing. The first section will include an overview of leadership research. The next section will describe Fiedler's Contingency Model of Leadership effectiveness. Section three will examine the effect of training on leadership performance. Section four presents a review of the literature on research in nursing, and in community health nursing pertinent to leadership effectiveness. Section five will discuss the application of the Contingency Model to community health nursing, and section six will examine the literature on measurement of organizational effectiveness. The last section will include a statement on the research problem and the study hypotheses.

Overview of Leadership Research

Although the concept of leadership and its definition have been with us for a long time, and it may be possible to bring together all the artistic and scholarly works

which deal with it, we are still very much involved in the process of developing a better understanding of leadership and its effects on organizational behavior. Investigations of this concept come from many fields, psychology, sociology, public administration, educational administration, to name a few. This section will review some of the approaches studied: psychological, sociological and behavioral.

The psychological approach. The psychological approach to the study of leadership was based upon the recognition that an individual's behavior is determined in part, by his unique personality structure. "What the individual is", was considered as important as "What he is expected to do". Traits were identified by observations, self reports, reports by superordinates and others. There were those who believed in the natural-born leaders. Still others sought more scientific measures of personality, which led investigators to develop ingenious devices to measure leadership qualities, such as Thurstone's (1944) figures test of perception and card sorting test, Chapple and Donald's (1946) interaction chronograph and Henry's (1949) Thematic Apperception Test. The number and types of personality attributes which were investigated spanned a wide range. In general, the findings were disappointing.

Stogdill (1948, 1974) reviewed the literature and gave the trait approach a coup de grace. He found that clusters of characteristics differentiate "(1) leaders from followers, (2) effective from ineffective leaders and (3) higher echelon from lower echelon leaders" (1974, p. 81). While these characteristics do not have diagnostic or predictive value, they interact to generate personality dynamics which may be to the advantage of the person exercising leadership functions. He indicated that personality was a factor in leadership differentiation. This was a modification of the situationist approach, which denied the influence of individual differences, attributing all variance between persons to the favorability and the demands of the situation. He further noted that patterns of leadership behavior tended to differ from time to time and from one culture to another (p. 82).

The sociological approach. In the sociological approach, there was a shift of focus from personal needs and dispositions to the study of organizational roles and relationships; from a concern with the characteristics of the individual to a concern with the characteristics of the group. Leadership was viewed as an interactive process between members of the group, with a focus on the interaction between the leader and the rest of the group.

Groups differ, but how they differ may not necessarily be related to the presence of leadership. Hemphill (1949) found that these differences could be described in terms of specific characteristics, such as size, homogeneity, flexibility, and stability. Two group characteristics or group dimensions defined by Hemphill and closely associated with leadership were viscidity, or the feeling of cohesion in the group and hedonic tone, the degree of satisfaction of group members. Leavitt (1952) and Shaw (1955) researched communication patterns in groups. The sociological studies served to dispell the view that leadership qualities derived only from a single source, either the group or the individual. They pointed to the necessity to describe operationally how leadership responded to both psychological and sociological determinents, paving the way to subsequent behavioral studies, focussing attention on the leader's behavior in given group situations.

The behavioral approach to leadership. Behavioral studies focussed on observed behavior. They recognized that people involved in leadership possess personal traits and were functioning in a situation. However, these studies did not seek to establish causal relationships. Many involving careful observation of leadership behavior have been reported by various types of organizations,

military, educational, businesses and others. These suggest that the things leaders do, the leadership behavior which they manifest, fall into two distinct categories or dimensions which have been labelled Structure and Consideration. The researchers do not assume that the leadership behaviors found in one situation will necessarily be found in another (Halpin, 1966, Chap. 3).

These two dimensions have been defined as follows:

> Initiating Structure refers to the leader's behavior in delineating the relationship between himself and the members of his work group and in endeavouring to establish well-defined patterns of organization, channels of communications and methods of procedure;
>
> Consideration refers to behavior indicative of friendship, mutual trust, respect and warmth in the relationship between the leader and the members of his staff (Halpin, p. 4).

It was from the work of the Personnel Research Board at Ohio State University that the two dimensions of leadership, Initiating Structure and Consideration, emerged as the significant dimensions for describing leader behavior. They were the result of a progressive factor analysis of responses to the Leader Behavior Description Questionnaire (LBDQ) of Hemphill and Coons (Halpin, 1957).

In studies carried out on aircraft commanders, Halpin found that effective leaders scored high on both dimensions. The same conclusion was reached by Hemphill in a study of departmental administrators in a liberal arts college. It should be remembered, however, that the dimensions of leader behavior being considered are the result of observers' perception of the extent to which the leader exhibits the kinds of behaviors described in the LBDQ, or any other similar research instrument that forms the basis of the data. This presents a limitation which must be carefully considered in interpreting the findings.

A summary by Bass (1960, pp. 101-105) of more than twenty studies related to military and industrial settings, substantiated the two-dimensional characteristics. Bass was led to conclude that leadership was not the presence of one dimension and the absence of the other, but that leadership was in fact an amalgam of both dimensions. Other theorists have tended to present some combination of the two dimensions as the "best" style of leadership (Halpin, 1957). Likewise, Blake and Mouton (1964), advocated that "team management", which is characterized by maximum concern for production and for people, is universally more effective than "impoverished management" which is

characterized by low concern for people. Other investigations supporting Bass' position have clearly revealed that there is no universally successful dimension of leadership effectiveness. Korman (1966, pp. 349-361) reviewed over twenty studies which have examined the relationship between the Ohio dimensions and other measures of effectiveness, like productivity, performance under stress, grievance and absenteeism. He concluded that the use of Initiating Structure and Consideration had no significant predictive power. After considerable research on his own, Fiedler reported:

> While one can never say that something is impossible, and while someone may well discover the all purpose leadership style or behavior at some future time, our data and those which have come out of sound research by other investigators do not promise such miraculous cures (Fiedler, 1969, p. 27).

The situational approach. A new approach to leadership has emerged within the last few years. The new approach lacks a firm label because of lack of agreement among its originators. Some have called it the "It Depends Approach" (Sergiovanni, 1971, pp. 200-203); the Life Cycle Theory of Leadership (House and Mitchell, 1974, pp. 81-97); the Situational Approach (Fiedler, 1967), and the Reality-Centered Approach (Argyris, 1964, pp. 214-216). The common assumption

underlying this new approach was that no one leadership style was to be considered the most effective. Each leadership style could be effective depending upon the given set of conditions. Effective leaders were those who were able to demonstrate different behavioral leadership styles, each reflecting a reality of the situation at any given time.

Two recent examples of this approach are represented by the contributions of House and Mitchell (1974) and Fiedler (1971). The path-goal approach to leadership developed by House and Mitchell is based on a more general motivational theory called expectancy theory. These authors posit that the effectiveness of leadership behavior is contingent upon the personal characteristics of subordinates and environmental pressures with which subordinates must cope. This leadership theory is concerned with how the leader affects the path-goal perceptions and satisfaction of his/her subordinates. The motivational function of the leader therefore consists in increasing the personal payoffs to subordinates for work-goal attainment by clarifying the paths to these goals, reducing the pressures and increasing the opportunities for personal satisfaction of the subordinate. House feels that this approach not only suggests what style of leadership may be most effective in a given situation but also attempts to explain why it will be more effective. Although the path-goal model appears to be very promising, Fiedler's model has been more widely researched and forms the theoretical base of this thesis.

The Fiedler Contingency Theory

This section will focus on basic elements of Fiedler's theory and on the related research studies culminating with the hypotheses for this study.

Fiedler's Contingency Model was empirically derived from field and laboratory studies. The model of leadership effectiveness was described in a theoretical paper he presented as early as 1957. Since that time many studies have been completed to test the theory. Instead of the "best leadership style" concept Fiedler has suggested an integrating theoretical framework which makes provision not only for the characteristics of the leader but also for the group and for a given situation. The most precise statement of the theory to date is the following:

> The Contingency Model postulates that the performance of interacting groups is contingent upon the interaction of leadership style and situational favourableness ...group effectiveness depends on the attributes of the leader as well as of the situation. ...The Contingency Model specifies that the so-called "task-oriented" leaders perform more effectively in very favourable situations, while "relationship-oriented leaders" perform more effectively in situations intermediate in favourableness (Fiedler, 1971, p. 128).

Fiedler has defined leadership style as "the underlying need - structure of the individual which motivates his behavior in various leadership situations" (Fiedler, 1967, p. 27). He also differentiated leader

behavior as being "the particular acts in which the leader engages in the course of directing and coordinating the work of his group members" (1967, p. 37).

He defined the leader as, "the individual ...given the task of directing and coordinating task-relevant group activity, or who, in the absence of a designated leader, carries the primary responsibility for performing these functions in the group" (Fiedler, 1967, p. 36) and leadership effectiveness "in terms of the group's performance on the group's primary assigned task" (Fiedler, 1967, p. 9).

Interacting, co-acting, and counteracting groups. Fiedler defines three types of task groups: interacting, coacting and counteracting. Interacting rather than coacting groups are prominent in Fiedler's discussion about groups.

1. Interacting - Groups in which members are and also perceive each other to be inter-dependent in achieving a common goal (Fiedler 1964, p. 95). By this he means "a face to face team situation, as a basketball team or a tank crew in which the members work inter-dependently toward a common goal" (Fiedler, 1968, p. 368).

In this kind of group the individual's contribution

influences the performance of other group members, and Fiedler believes it cannot be separated from total group performance.

2. Coacting - Groups in which members work individually on a task, even if their performance might later be summed to yield a 'group score' and even though coacting group members may indirectly affect each other's performance (Fiedler, 1964, p. 152).

An example of coacting groups is a banking team or a rifle team.

3. Counteracting - Groups typically engaged in negotiations or bargaining process, with some members representing one point of view and others an opposing or, at least, divergent point of view. Each individual member, to a greater or lesser extent, works towards achieving his own or his party's ends at the expense of the other (Fiedler, 1967, p. 20).

This type of group is seen to-day in many of the labor relations groups within our institutions.

Early studies based on the Contingency Model

involved mostly interacting groups. The model was more recently validated for use with coacting groups (Fiedler, 1971).

Leadership style. Interpersonal perception scores are utilized to determine a leader's style. These are used on the basis that "the way in which one person perceives another will affect his relations with him" (Fiedler, 1967, p. 38). Three distinct leadership styles have been identified: Low LPC, Intermediate LPC and High LPC (Fiedler, 1967, p. 51).

The predictor measure, is a score (least preferred co-worker, LPC) obtained from a 16 to 24 item LPC scale describing the one person with whom the individual being tested has been least able to work well, measured on an 8 point bipolar adjective scale, such as in the following examples:

friendly	:8:7:6:5:4:3:2:1:	unfriendly
cooperative	:8:7:6:5:4:3:2:1:	uncooperative

The LPC scale, as it exists today has a long history which dates back to Fiedler's early work with clinicians. Effective psychotherapists tended to perceive their clients to be more like themselves than poor psychotherapists. This phenomena suggested to him that "the individual who perceives another person as

similar tends to feel psychologically close, accepting, and permissive toward him" (Fiedler, 1964, p. 153). When this assumption was supported empirically (Fiedler, Warrington and Blairdell, 1952, pp. 790-796), Fiedler went on to ask the leader to think of all co-workers he had ever had. The leader was then asked to describe the one person with whom he had been least able to work well, i.e., the person he least preferred as a co-worker, This person need not be someone with whom the leader was working at the time. These investigations revealed that "a person who describes his least-preferred co-worker, in a relatively favorable manner tends to be permissive, human relations-oriented and considerate of the feelings of his men" (Fiedler, 1969, p. 389). The attitudinal quality in the permissive leader was such that he could conclude of his subordinate, "Even if I can't work with him, he may still be a very nice and valuable person" (Fiedler, 1964, p. 155). However, Fiedler stated, "a person ...who has what we have come to call a low LPC rating - tends to be managing, task-controlling and less concerned with the human aspects of the job" (Fiedler, 1969, p. 389). The low LPC person would therefore be described, in a uniformly undifferentiated or stereotyped manner, as "all bad" (Fiedler, 1971, p. 129).

Fiedler claims that the labels task-oriented and relationship oriented are somewhat misleading, for it is only in stressful and anxiety situations - therefore unfavorable situations and with little leader control - that the behavior of the leader will tend to conform to this description (Fiedler, 1967; Fiedler, 1971, p. 129). In a study by Mitchell (1970, pp. 166-174) it was demonstrated that high LPC leaders tended to be cognitively more complex in their thinking about groups, and low LPC leaders, on the other hand gave more stereotyped cognitively simple responses. Fiedler concluded that:

> The LPC score must be seen as a measure which at least in part reflects the cognitive complexity of the individual and which in part reflect the motivational system that evokes relationship-oriented and task-oriented behaviors from high versus low LPC persons in situations which are unfavorable for them as leaders (Fiedler, 1971, p. 129).

The LPC scale is very simple to administer, however, the process of understanding the LPC score has been a very frustrating one. Fiedler expressed this concern in these words:

> In some respect the Least Preferred Co-worker score, LPC is an almost ideal psychological measure. It takes no more than 5 minutes to administer; it consists of a short set of scale items (usually 16 to 20); it has split half reliability of above 0.90), a test-retest reliability for adults ranging from 0.5 to 0.8; and it arouses little if any resistance on the part of subjects (Fiedler and Chemers, 1974, p. 81). In addition, the score has yielded consistent relations with leadership performance. On the other hand, however, the score has also been extremely resistant to any meaningful interpretation despite a persistent and intensive effort which has extended over nearly two decades (Fiedler, 1972, p. 392).

There have been unsuccessful attempts at correlating LPC with most personality test scores as well as scores of descriptions (self - by others) or behavioral observations (Fiedler, p. 392).

Situational favorableness. Fiedler has specified three important aspects of the situation which influences the leader's role. In order of importance they are: (1) leader member relations, that is, the quality of the interpersonal relations between the leader and the followers, especially their acceptance of his leadership; (2) the task structure, or the degree to which the group's task is clear cut; and (3) the leader's formal position power; the ability to reward or punish the group members (Fiedler, 1967, pp. 22-36).

Measures were identified for each of the three dimensions listed above. The next step was to order group task situations along a favorableness continuum.

The group task situations were ordered on the basis of the leader's relation to his group, then on the basis of the task structure and finally on the basis of position power.

When a group is rated on each of the three dimensions it can be located in a three dimensional space. Each dimension is then divided into a high and a low half to obtain an eight-celled cube (Figure 1) (Fiedler, 1967, pp. 32-35). It is then possible to study the correlations between an individual's leadership style as measured by the Least Preferred Co-worker (LPC) scale and group performance. Differences in magnitude and directions and similarities within each of the eight cells or 'octants' can be identified.

This classification system was developed on the basis of groups (group task situations) which had been studied between 1951 and 1963 (Fiedler, p. 34). Table I shows that sets of groups falling within the same octant have similar correlations between the leader's LPC and group performance.

Ordering the group task situations on the basis of how favorable they are for the leader's exercise of power and influence, Fiedler concluded that "the performance of interacting groups is contingent upon the interaction of leadership style and situational favorableness (Fiedler, 1971, p. 128). Put in other

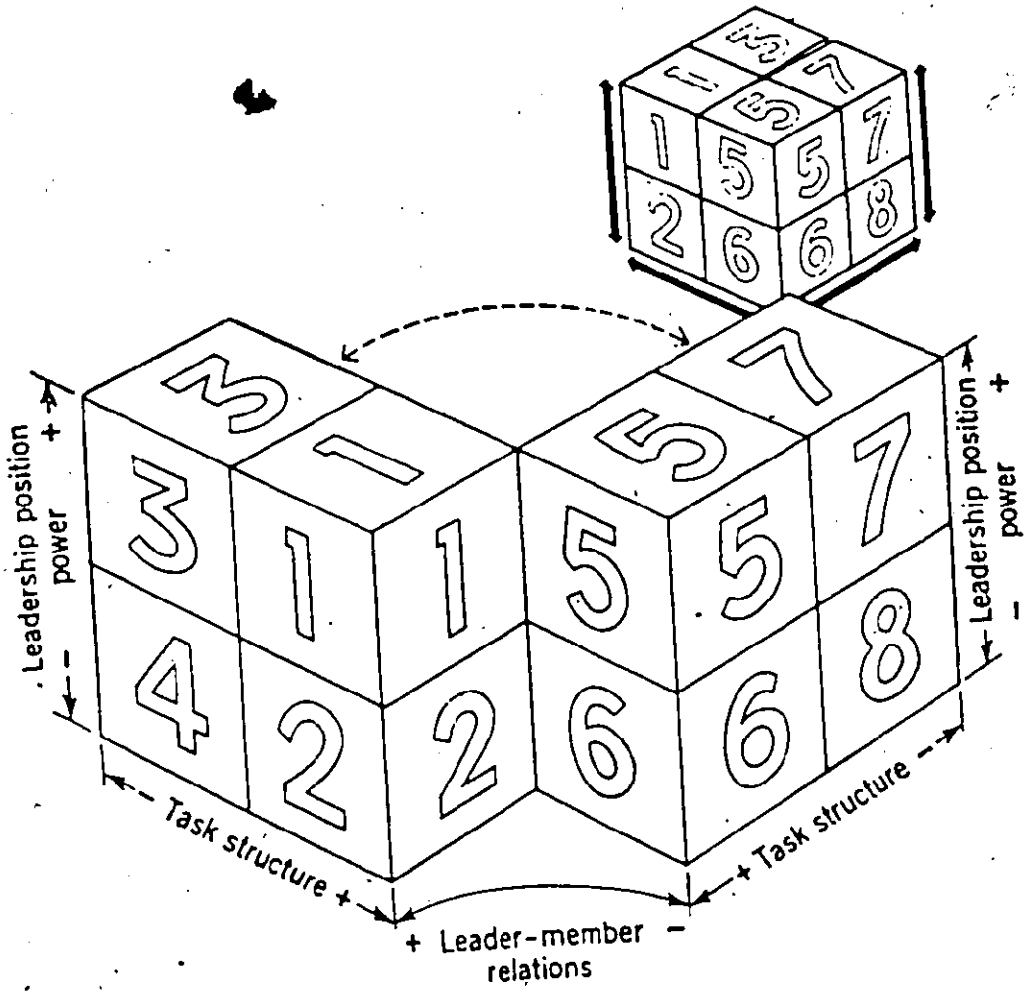


Figure 1. A model for the classification of group task situations. Source: The Harvard Business Review, September-October, 1965, p. 117. Reproduced from Fiedler, 1967, p. 33.

Table I Classification of Group Task Situations on the Basis of Three Factors

	Leader-Member Relations	Task Structure	Position Power
I	Good	High	Strong
II	Good	High	Weak
III	Good	Weak	Strong
IV	Good	Weak	Weak
V	Moderately poor	High	Strong
VI	Moderately poor	High	Weak
VII	Moderately poor	Weak	Strong
VIII	Moderately poor	Weak	Weak
VIIIA*	Very poor	High	Strong

*This cell was subsequently added by Fiedler.

Source: Fiedler, 1967, p. 34

words, this means that when plotted against situational favorableness, the correlations between the leader's LPC score and the group's effectiveness measures, a bow shaped distribution was generated, indicating that the low LPC leaders performed more effectively than high LPC leaders in very favorable and very unfavorable situations; and high LPC leaders performed more effectively in situations intermediate in favorableness. Figure 2 plots the correlations obtained by Fiedler in several studies (Fiedler, 1971, pp. 131-132).

Fiedler has defined situational favorableness as "the degree to which the situation itself provides the leader with potential power and influence over the group's behavior" (Fiedler, 1971, p. 129). The three major variables determine situational favorableness. Position power and task structure are organizationally determined (Fiedler, 1967, pp. 22-35). Position power and task structure are expected to remain constant within types of organizations, but this is not the case for leader-member relations. These are expected to vary from poor to good within types of organizations.

The theory is testable because leadership style as well as situational favorableness have been operationalized.

Interpretation of the L.P.C. The question, what does the LPC score measure, has been a baffling one. As a measure of social distance, low LPC leaders were thought to be more critical, analytical and socially distant than

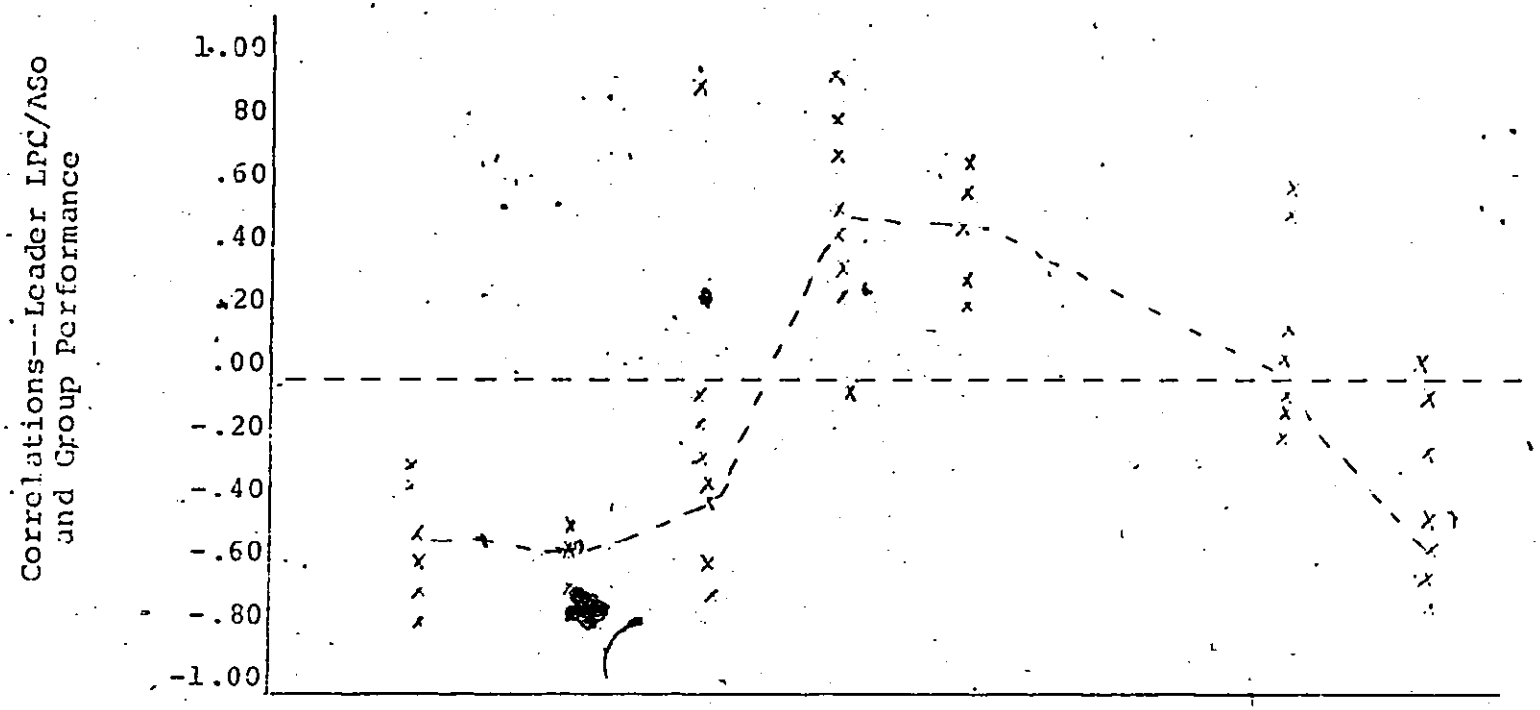


Figure 2 - Contingency Model of Leadership Effectiveness

Fred E. Fiedler, "Validation and Extension of the Contingency Model of Leadership Effectiveness: A Review of Empirical Findings," Psychological Bulletin, Vol. 67, No. 2, August 1971, p.131.

high LPC leaders (Fiedler, 1964). Later on, Fiedler modified his interpretation of the LPC towards a measure of leadership motivation (Fiedler, 1967). Then the leadership style of low LPC leader was interpretated as task-oriented. About a decade ago, Fiedler provided a further refinement in the interpretation of the LPC scales as a measure of cognitive style (Foa, Mitchell and Fiedler, 1971; Hill, 1969; Mitchell, 1970). Despite the fact that the high LPC respondent described a person with whom he found it difficult to work, (his least preferred co-worker) in relatively favorable terms, he was considered to be more cognitively complex. Fiedler (1971, p. 129) posits that the high LPC leader differentiates between the task and the social characteristics of his least preferred co-worker, while the low LPC respondent is unable to show such differentiation, since he describes his least preferred co-worker negatively on most of the scales. Rice's (1975) most recent interpretation of the LPC is consistent with Fiedler's earlier motivational interpretation:

> It is assumed that the primary goal of high LPC persons is good interpersonal relations. ...high LPC persons also have a secondary goal of attaining prominence and self enhancement in the group. ...low LPC persons are thought to have a secondary goal of achieving good interpersonal relations in addition to their primary goal of task achievement (Rice, p. 25).

Fiedler specifies certain conditions under which high and low LPC persons will seek out these different goals:

1. The motivation which an individual manifests to achieve various goals will depend on the importance he attributes to the various goals which he seeks.

2. Different types of individuals have different goal structures and therefore different behavior preferences.

3. Individuals attempt to achieve as many of their goals as they can. In situations that are favorable, that is, where the leader has control, where his influence is relatively great, where he feels he has or can attain his primary goal, that leader will also devote his efforts to attaining his less important 'secondary' goals. In situations that are not so favorable, that is, where his control and influence are relatively weak or threatened, that leader will tend to concentrate his efforts on securing his primary goals, to the neglect of his secondary goals.

4. Lastly, Fiedler sees individuals arrayed on a continuum in regards to their behavior in task situations, the poles of which identify two "types":

> "One type (high LPC) consist of individuals who are primarily motivated to seek 'relatedness' with others. ...At the other end of the continuum are low LPC individuals who are primarily motivated by explicit competition for material and tangible rewards in the work situation (Fiedler, 1972, (a) pp. 393-394).

In Fiedler's terms, related individuals seek interpersonal interactions with significant others; this includes supervisors, co-workers and subordinates, while task oriented individuals will also seek good interpersonal relations with their work associates, especially because good interpersonal relationships will assist them in accomplishing the assigned task (Fiedler, p. 394).

Rice (1975, p. 25) questions the different interpretations stated above as an oversimplification of the meaning of the LPC score. He feels that the same data can often be interpreted as support for more than one of the interpretations cited.

In his re-analysis of the studies already reported, using the Least-Preferred Co-worker scale, Rice found no advantage to the reintroduction of a motivational hierarchy of secondary values of high and low LPC persons as described by Fiedler, (b) (1972). Under conditions of high stress, high and low LPC persons pursue their primary goals.

In relatively favorable - (stress free) - conditions high and low LPC persons become concerned with their

secondary goals, that is concerned with task, or concerned with interpersonal success. Since only a small number of persons spend their time in conditions of high stress, during which they would pursue their primary goals, the basic task versus relationship interpretation of LPC would appear to be wrong more often than right. Low LPC persons would be expected to spend more of their time and energy pursuing secondary goals - (interpersonal relations), and high LPC persons would also be expected to spend more of their time and energy obtaining prominence through successful performance, also, their secondary goals. Rice believes that the concept of secondary goals would suffice to account for the findings and that it would seem more appropriate to interpret the "majority" of significant effects comparing the behavior of high and low LPC persons" ...(as) "simple main effects that can be accounted for by the basic task versus relationship interpretation of LPC" (Rice, 1975, pp. 250-251).

Other researchers have focussed on the interpretation of the differential LPC scores between the perceptions of followers and experimenters' observations of the leader as measured by the LPC scale. Bale's Interaction Process Analysis or the Leader Behavior Description Questionnaire have been the instruments of choice to explore the significance of these differential scores.

These studies have provided support for the interpretation of the LPC score as an index of relationship versus task orientation. The high LPC leader was seen as relationship oriented while his counterpart the low LPC leader was seen as task oriented. The study by Jones and Johnson also supports this interpretation. They administered the LPC scale to fifty-three managers and administered an instrument to measure management climate of organizations to their subordinates: the Likert Profile of Organization Characteristics. They found that high LPC leaders were perceived as having a more participative, human relations oriented and emotionally supportive organization than the low LPC leaders (Jones and Johnson, 1972, pp. 195-196).

In a factor analytic study Fiedler had claimed to isolate characteristics of the intermediate LPC person as different from the high and the low LPC person (Fiedler, 1967, pp. 49-51) however, few studies have been done which utilize this intermediate group of scores. In 1976, Fiedler expressed caution regarding the use of the intermediate scores as falling into a borderline area (p. 22).

Leadership effectiveness. Fiedler measures the effectiveness of the leader on the basis of the group's performance of its primary task. He recognizes that other aspects of group behavior such as morale, member

satisfaction or personal group may also be important and accompany group effectiveness. They do not constitute the primary criterion, but rather contribute to performance (Fiedler, 1971, p. 131). To the department store manager, this relates to total sales or productivity of the department, although employee morale and turnover may be important and contribute to productivity. For a community health nursing service agency, the task would be the accomplishment of the divisional objectives which pertain to quality nursing care. An alternative display of the Contingency Model, with a focus on leadership effectiveness is presented in Figure 3.

Effect of Training and Experience

Fiedler (1974) reviewed the current status of the Contingency Model and the new developments which have influenced thinking about leadership and have an impact on the management of leaders in organizations. The fact that management and leadership training have not produced lasting effect on organizational performance has been most puzzling (1972 (b), p. 114). The two major methods for leadership training have been the "human relations" approach and the "orthodox type of approach" (Fiedler, 1972, p. 115). In the first place, attempts are made through appropriate courses of studies, including sensitivity training, to improve the leader's relations with his

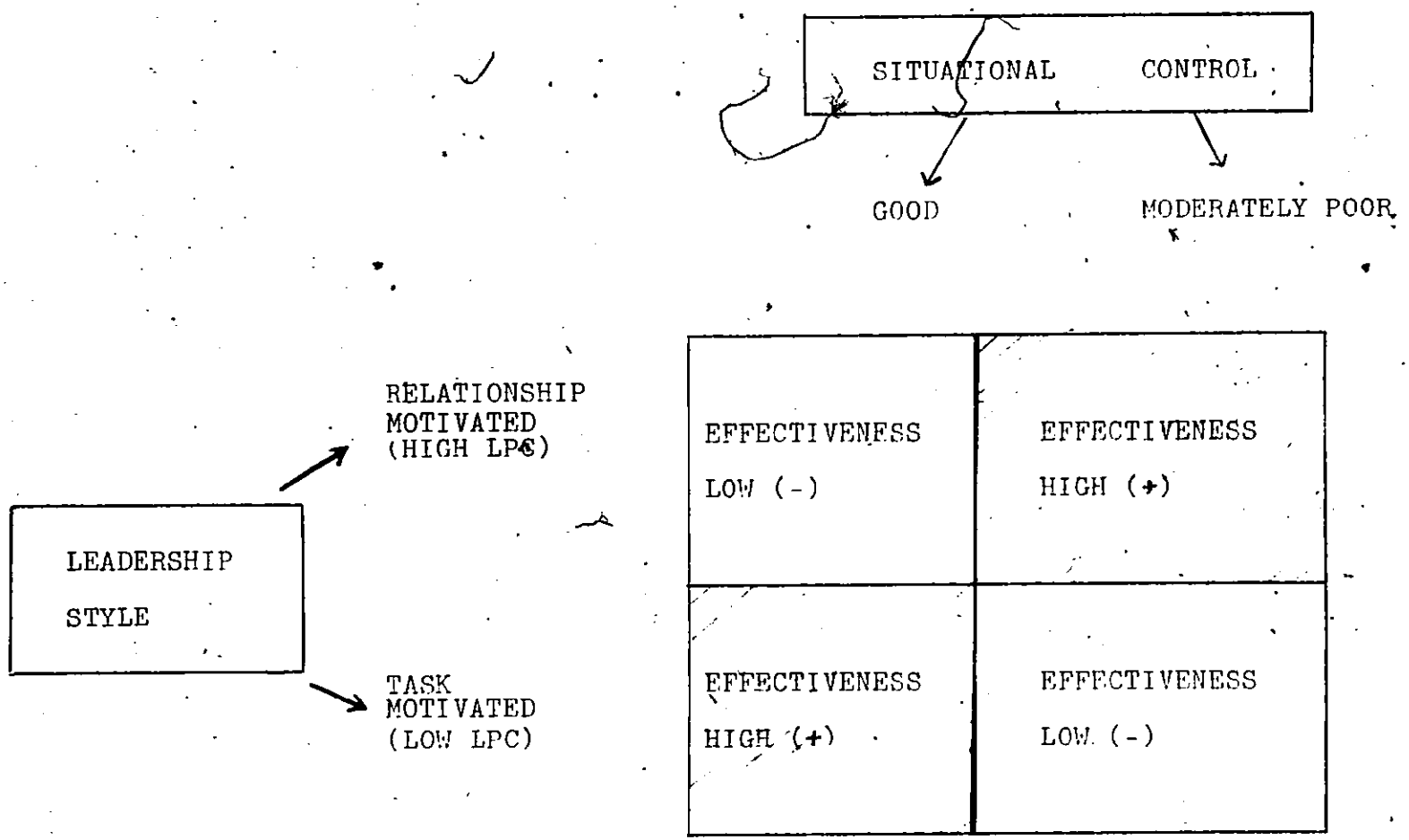


Figure 3: Contingency Model of Leadership Effectiveness (2)

group. In the latter, emphasis is placed on the acquisition of appropriate technical and administrative skills which are necessary for the role. While the human relations approach is focussed on improving the leader-member relationship, the technical skills are perceived to improve the task structure. According to the Contingency Model, this would bring about a change in the situational control and therefore increase the performance of one type of leader but decrease the performance of the other type of leader (Figure 4).

A number of studies were carried out by Fiedler and others to verify these findings. Very favorable leadership situations were explored (Godfrey, Fiedler and Hall, 1959, reported in Fiedler, 1972, (b) p. 116) that is, situations with structured task and high position power, for general managers, postmasters and mail superintendents, general foremen of mail and mail handling crews. LPC scores as well as data on experience, training and performance were obtained. Similarly, intermediate and unfavorable situations were examined and correlations tabulated between LPC and performance. The hypotheses of the studies were supported. It was concluded that in normally favorable leadership situations training tended to improve performance of low LPC leaders, while it tended to decrease performance of high LPC leaders (Figure 5). In moderately favorable situations the reverse tended to occur.

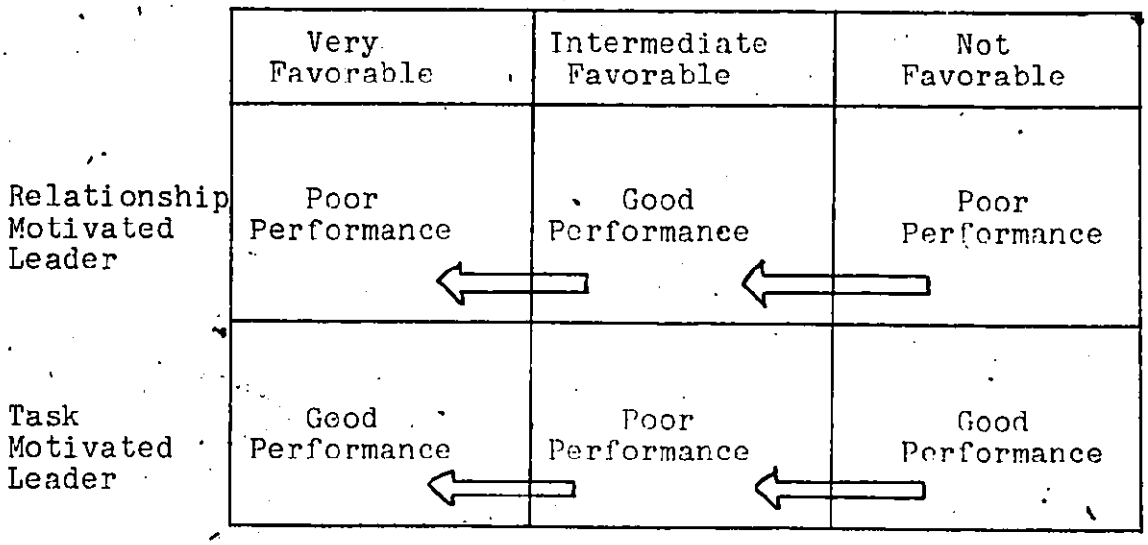


Figure 4. Schematic representation of the effects of training and experience in leadership performance for relationship-oriented (high LPC) and task-motivated (low LPC) leaders in three types of situational favorableness (Fiedler, 1972, (b) p. 115).

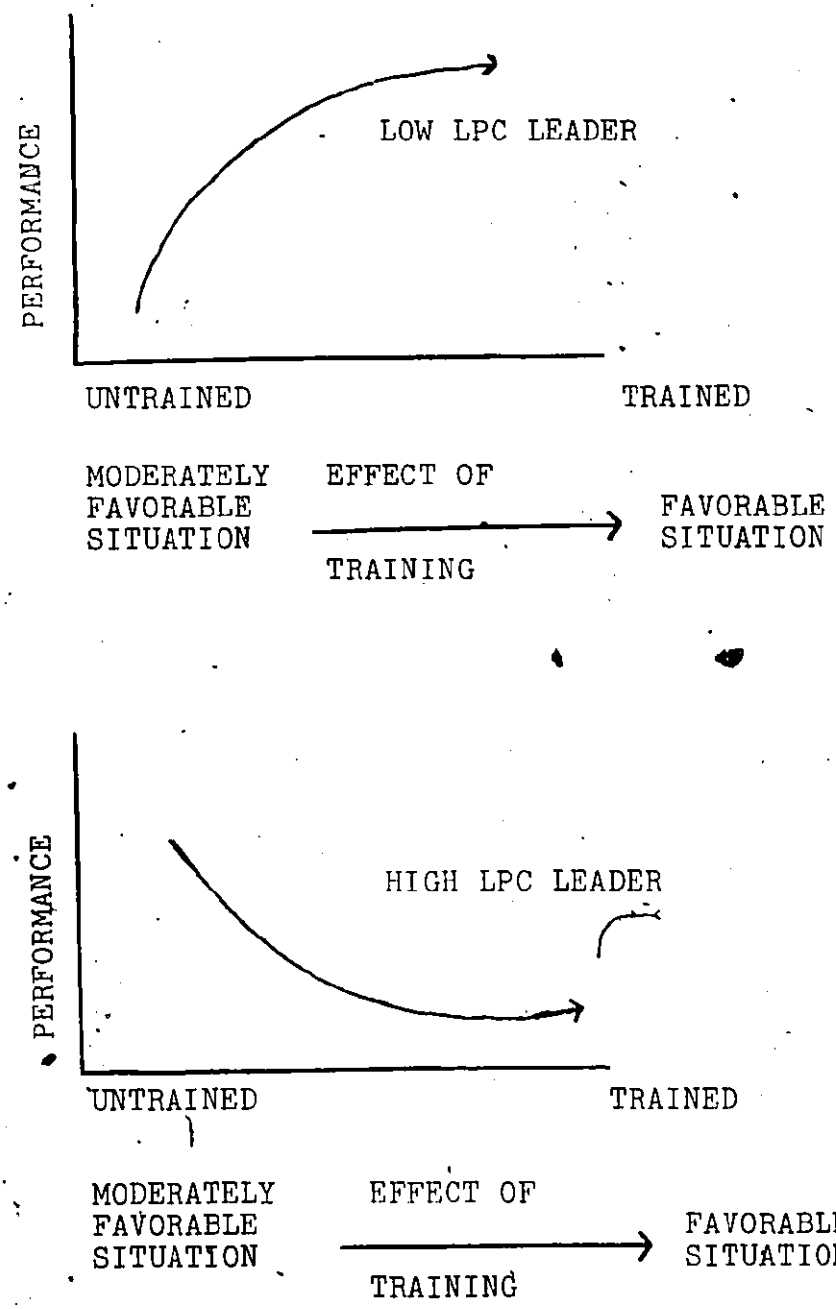


Figure 5. The Effect of Training on High and Low LPC Leaders in Situations which are Normally Favorable; Modified from Fiedler and Chemers, 1974, p. 147.

In these situations training or experience correlated positively with performance in low LPC leaders and negatively for high LPC leaders. In intermediate favorable situations, the researchers found that "training or experience improved the performance of high LPC leaders but degraded that of low LPC leaders" (Fiedler, 1972 (b) p. 116). In these situations training or experience was positively correlated with performance for relations-oriented leaders, and negatively correlated for the task-oriented leaders (Fiedler, 1972 (b), p. 116). This can be seen in the accompanying Figure 5 (Fiedler, 1972 (c), p. 458).

In Canada, a study by McNamara (1968) on elementary and secondary school principals, essentially explored the relationship between experience and training and the performance of high and low LPC principals. Performance outcomes were higher for low LPC principals with experience in elementary schools, where the situation was structured and where the principal had high position power. High LPC principals with experience appeared less effective. In secondary schools, where the task was less structured, though the principal held high position power, it was found that experience was associated with the performance of high LPC principals but not with that of low LPC principals (Fiedler, 1972, (b) p. 116).

The effect of training and experience on leadership

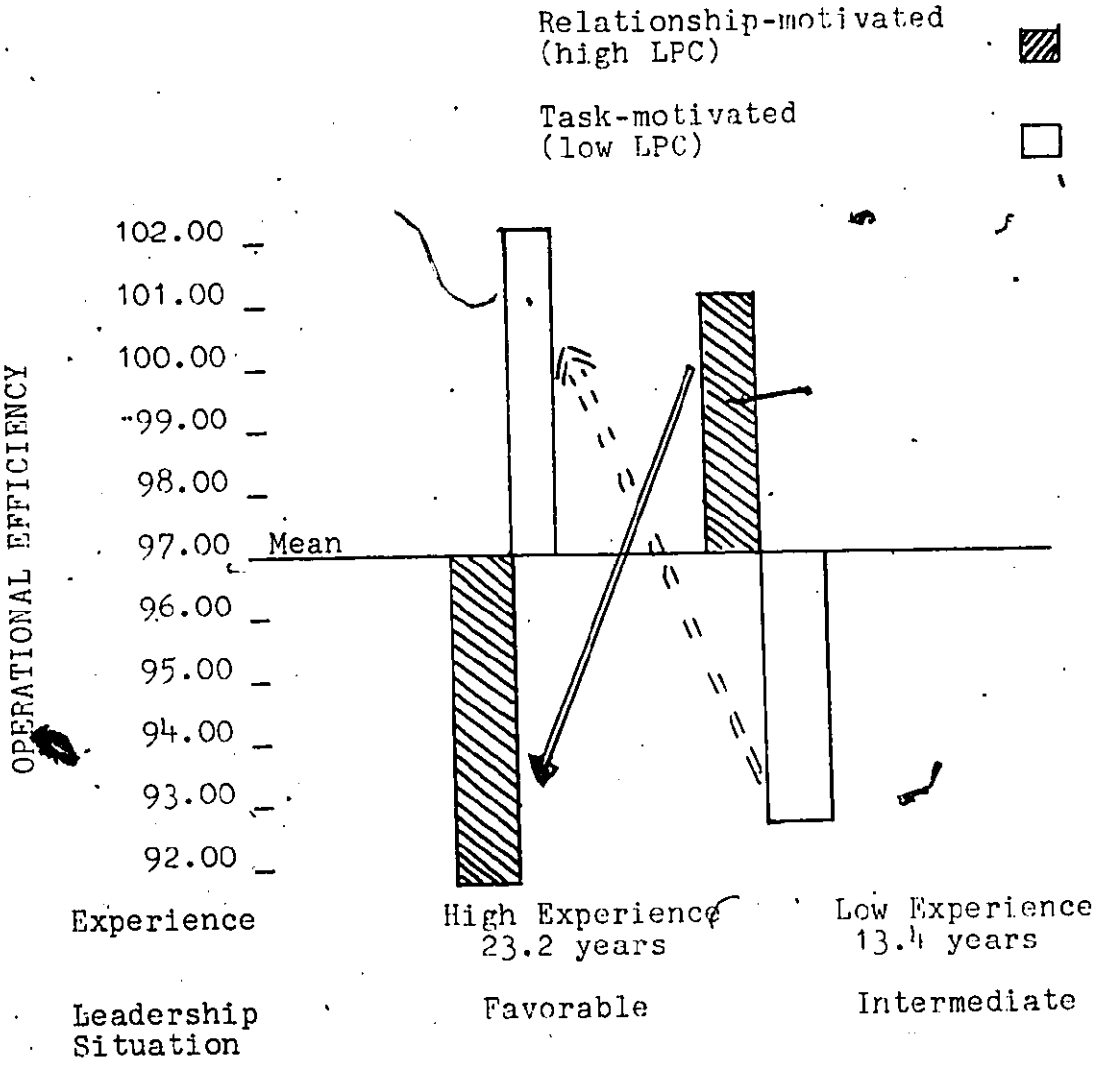


Figure 6. The predicted change in performance of relationship- and task-motivated company managers as a function of increased experience (Fiedler, 1972 (b), p. 458).

performance was tested in a number of studies (Csoka and Fiedler, 1972, Csoka and Bons, 1978, Bons and Fiedler, 1976, Fiedler, 1974, Fiedler and Mahar, 1979). In all these studies, training could be seen to improve the leader's control and influence, that is, his situational favorableness. Chemers (1969), as reported in Fiedler (1972 (d), p. 20) found that any training which increases the favorableness of the situation also decreases the consideration and good relationships of the high LPC leader, while it increases those of the low LPC leader. This was illustrated in Fiedler's study on Culture Assimilator training with two groups of American leaders working with Iranian nationals.

Given the findings provided by the Contingency Model with regard to the effects of training and experience on leadership effectiveness, major research efforts should now be directed to identify ways and means to develop training methods and management selection strategies, which will improve organizational performance. A group's performance depends on the leader's personality as well as the degree to which the situation provides him or her with control, power and influence (Fiedler, 1974, p. 73). Fiedler has stated, "the data show quite conclusively that the same type of training and experience given indiscriminately to relationship and task-motivated

leaders will be dysfunctional for a substantial number of these individuals" (Fiedler, 1972 (d), p. 20). Certain types of leaders will reach a "burn out" point after they have stayed on the job for a given length of time. They become bored, disinterested, and are no longer challenged by their job. Where selection and the promotion policies are ill-defined, attempts to improve organizational performance may be directed towards in-service education, training courses and some aspects of continuing education, all or some of which could only lead to more dysfunctional results. It would therefore seem appropriate to identify those leaders who would benefit from a rotation to a new or more challenging situation, so that the organization would continue to benefit from their skills, while improving the overall performance of the groups. This view has been advocated by Fiedler through the concept of the leader-match. His approach suggests an effective leadership training method which purports to assist organizational managers (or even leaders themselves) to modify leader-member relations or to manipulate the task structure of their group, such as to arrive at a match between the experienced leader and his/her leadership style, which will be conducive to effective performance (Fiedler, Mahar, 1979).

Leadership Research in Nursing and Community Health Nursing

Nealy and Blood (1968) performed one of the first studies involving nursing supervisory groups based on the Contingency Model. They investigated leadership style and its relationship to work performance and to job satisfaction. Data were collected from 22 first level supervisors (head nurses) and 8 second level supervisors (unit supervisory nurses) in a large Veterans Administration Hospital (convenience sample). Fiedler's least Preferred Co-worker (LPC) scale was used to measure leadership style, while the Leadership Behavior Description Questionnaire (LBDQ) served as a measure of leader behavior. Supervisors and head nurses responded to the LPC scale, staff members and the leaders' subordinates responded to the LBDQ.

Criterion variables were of two types: - performance ratings of organizational subparts provided by supervisors one level above the supervisor being rated, and job satisfaction scores obtained from the immediate subordinates of each supervisor. High performance ratings were given to task-oriented (low LPC) first level supervisors and to relationship-oriented (high LPC) second level of supervision. Job

satisfaction was related to the supervisor's consideration for others for both levels of supervisors. However, initiating structure was positively associated with job satisfaction of subordinates only at the first level of supervision, but inversely related to the job satisfaction of subordinates at the second level of supervision. These differences in effective supervisory patterns point to differences in situational leadership demands at the two supervisory levels.

Kruse and Stogdill (1973) in a paper and pencil test carried out in four hospitals, found that the hospital setting required active exercise of leadership. Supervisors were better satisfied and exhibited less role conflict when their administrative superiors structured expectations, and were considerate, insightful and non-permissive. Ward personnel were also better satisfied and performed more effectively when their supervisors kept leadership in their own hands, structured expectations and were considerate, insightful and non-permissive. These findings were compatible with those of Nealy and Blood (1968) who found that first level supervisors with high LPC

scores and high esteem for their subordinates, had highly dissatisfied subordinates. The researchers report that "high LPC first level supervisors who liked and trusted their subordinates, were seen by them as generally "inactive" in leadership behavior. Their subordinates in turn, were highly dissatisfied with their supervision and with their total jobs" (Nealy, pp. 419-420).

Johnson, (1976) found that successful leadership occurs when a leader exerts influence over another by reason of his position in the organization, and of the personal power that he has received from or is acknowledged by his followers. The focus of the study was on the internal state of the followers, and because it was attitudinal in nature, it reflected that the follower's own personal goals were being met, or were consistent with the leader's request. The leader was considered to be successful to the degree that the follower accomplished the job. The emphasis was on production. Looking back at the nursing staff, Johnson (1976) found similarity in the views of the staff about the leadership style of their respective head nurses, and significant

correlations between structure and consideration and the respective task and relationship behaviors. The nursing staff and the nursing supervisors' views of the head nurses' effectiveness were similar. The other perceived leadership behavior of head nurses were correlated significantly with the effectiveness ratings of both superiors and subordinates for structure, consideration, task behavior and relationship behavior. This suggested that if head nurses were to be viewed as effective leaders by superiors and subordinates, they were expected to exhibit both structure and consideration behaviors to a high degree (Johnson, p. 141). The findings of this study differ from those of Nealy and Blood (1968), who found that different organizational levels placed different demands on leaders (Nealy and Blood, p. 421). Nealy suggested that in selecting first level nursing supervisors, task-oriented (low LPC) applicants would seem to be generally active and effective in leadership behavior, while selecting second level supervisors, high LPC (relation-oriented) applicants would have a better chance of success. It is, however, recognized that most organizations tend to fill vacancies at the

upper level of supervision with personnel who have demonstrated good performance at lower levels. This practice would tend not to lead to effective behavior according to the evidence from Nealy and Blood's study.

Haussman (1976) reported on a study of the relationship between the quality of the nursing process and a number of organizational and environmental factors, as well as on an exploration of the relationship between the nursing process and patient outcomes. He defines quality of nursing care as the degree to which an ideal set of activities takes place for a sample of patients (Haussman, p. 26). Analyses of the data revealed that organizational factors, such as hospital size and complexity, significantly interact with the correlates of quality. The most potent factors were the proportion of registered nurses to the other nursing personnel in the unit, the number and kinds of patients, the clinical orientation of the nursing staff and the use of primary nursing. In addition, unit organizational structure, unit staff and supervisory staff attitudes, and nursing leadership style, which in turn were related to educational level, were also important correlates of quality. The findings indicated

that supervisory staff attitudes were more closely related to nursing leadership style and, in turn, to unit staff attitudes (Haussman, p. 57). For the benefit of the reader it is considered to be of importance to clarify differences in terminology in organizational and nursing literature, in reference to the word "outcomes". In organizational literature, "outcomes" refers to the output or product of work activities. In nursing and in hospitals, the major "outcome" is the quality of nursing care.

At the same time, Jelinek and Lyman (1976) reported on a comprehensive project aimed at a critical evaluation of current and previous efforts to assess and improve nursing productivity. Because nursing is such a central and critical activity in the delivery of health care, they searched for a conceptual framework and a methodology that could be used for evaluating productivity, that is both the adequacy and cost or quality and quantity of nursing care. Despite their preference for a closed system model for nursing, they were forced to conclude that only

an open model can be used since there are at present unmeasurable and uncontrolled variables that influence nursing productivity. The basic components of a closed system - input, technology, output and environment were considered to operate also in an open system but in a less definable relationship. For example, while the best defined output measure was regarded to be "health status outcome", it is not sufficiently developed or specific to allow its use at the present time as indicator of nursing output. Therefore, nursing process (nursing judgment and nursing acts) must be substituted, a component difficult to operationalize and measure.

Discussion of the conceptual framework for nursing productivity by Jelinek and Lyman highlights our present inability to use outcome measures to assess effectiveness of nursing services. More relevant to the present study, is to realize the effect of the environment as a component of the systems model for nursing productivity. These investigators state:

> ...the environment or setting for the system defines or affects the primary factors. ...In this systems framework, it is the environment that represents the complexity and, sometimes, the seemingly irrationality of reality (Jelinek and Lyman, p. 13).

Hagen and Wolff (1961) investigated nursing leadership behavior in six small and nine large hospitals. All administrative and supervisory personnel, 60% of head nurses and 27% of nurses were interviewed for a total of 800 respondents, using the critical incident technique. Leadership behaviors of administrative and supervisory nurses were related to the achievement of nursing goals. Certain kinds of leadership behavior were associated with a positive psychological climate for staff nurses. The findings pertinent to this study indicated that the director of nursing service was perceived as providing leadership in the areas of establishing good human relations among nursing service personnel and improving nursing service by obtaining adequate equipment, supplies and personnel, enforcing and adapting hospital policies, promoting intra-departmental understanding within the hospital, improving nursing care to patients, and providing for in-service growth of personnel. In large hospitals, the supervisors revealed a definite supportive leadership role. Their leadership role overlapped that of the director of nursing service in motivating

personnel to give better care to patients, in promoting good human relations with nursing service personnel and in improving communications within nursing service (Hagen, 1961, pp. 147-149).

White (1971 (a) (b)) surveyed 16 head nurses and 27 supervisory nurses and reported the results in two parts. In the first paper, the perceptions of the employees under effective and ineffective supervisors were tapped. In the second article, the perceptions of head nurses and supervisors were surveyed in regards to certain leadership practices of nurses in supervisory positions. The findings indicated that, in general, employees of effective supervisors, as contrasted with employees of ineffective supervisors, held more favorable attitudes than other hospital employees; were more cooperative and had more trust in their supervisor; sought higher standards; were more open and effective in their communications, and were more accurate in reporting performance. The more effective supervisors tended to be more sensitive to, and supportive of their employees, tended to share information and to utilize the ideas and special information of their subordinates; displayed trust and confidence and tended to emphasize positive reinforcement. These studies indicated that behavior of the employees is more positive because the leadership style of the

effective management is more appropriate. There were a number of methodological concerns in this study, such as size of sample, lack of information on validity and reliability of the test questions, and the categorization of "employees", who themselves were managers.

Anderson (1964) in a study of supervisors of nursing, found that those who preferred nursing activities were described as being high in consideration. Those supervisors who preferred coordinating activities were not described as being high in structuring expectations as one might anticipate. This study concluded that staff nurses and nursing supervisors differed in their view of what are effective supervisory activities.

Sheridan and Vredenburgh (1978) sampled 216 nurses from a metropolitan hospital to investigate the relationships between head nurses' behavior and social power variables, and staff members' job tension, performance and termination. A regression model was utilized. The findings indicated that leader consideration was inversely associated with tension and terminations and with job performance. Initiating structure had a positive relationship with terminations. Social power variables, particularly reward and expert power, were useful in predicting job tension. The subordinates' personality attribute of locus of control did not appear to moderate

relationships, but task structure had an interactive effect with expert and coercive power in predicting termination.

Beck (1976) explored the relationship between personality types and managerial style of registered nurses in a general health care facility, by focussing on the distribution of personality types in leadership roles, the managerial styles of registered nurses in staff and supervisory positions, and the relationship between personality types and managerial styles of nurses in staff and supervisory positions. Sixty-six staff nurses and thirty-one supervisory nurses of a large general hospital constituted the sample. No differences were found in the personality types between staff and supervisory nurses in this sample. When compared on the management dimensions, staff and supervisory nurses differed significantly on the dimension of task orientation; supervisory nurses were more task-oriented than staff nurses.

Oaklander and Fleishman (1964) studied the relationship between formal leadership characteristics and organizational stress. In their study, one questionnaire measured leadership and the other measured intra and interdepartmental stress in one governmental and two voluntary general hospitals. The sample was made up of

44 nursing supervisors. They found that role perceptions of the supervisors were related to the amount of both internal and interdepartmental stress. They also found that the higher the consideration dimension, the more positive the relationship to lower internal stress in both kinds of hospitals. In no instance was the higher consideration score related to inter-departmental stress. Finally, a less consistent relationship between initiating structure scores and stress was identified, suggesting the influence of situational differences on the effects of leadership.

Thornberry (1974) investigated the relationship between organizational level and leadership behavior within a hospital environment. The study provided an opportunity to examine the relationship between organizational level and a number of situational variables, assumed to influence leadership behavior. Examining the differences in situational variables, as a function of level, resulted in the extraction of one significant function which revealed the Assistant Director's position to be most unlike the others, in terms of its situational characteristics. The results of the correlational analysis only partially supported the assertion, that leadership behavior is influenced by situational variables.

Kelly (1974) analysed the predictive power of the California Psychological Inventory, (CPI) the Edwards Personal Preference Schedule (EPPS), the Minnesota Multiphasic Personality Inventory (MMPI) and the 16 Personality Factor Questionnaire (16 PF) in the selection of nurses for promotion. As hypothesized, the nurses who had been promoted were different than the non-promoted group, as far as the variables investigated are concerned. The promoted nurses were found to be more independent, feminine, distant, have more capacity for status, and be less prone to psychological pressures. They were more self-assured and relaxed and they liked nursing. Promoted nurses had significantly higher scores on the CPI intellectual efficiency scale than did non promoted nurses. Since this study focussed on those who had already been promoted, and on their characteristics, as compared to a non-promoted group, it can be considered as giving some insight into the characteristics which are sought by superiors in selecting effective leaders, in the absence of structured promotion policies in the field of nursing.

From these studies it can be seen that nursing leadership has typically been examined in a limited manner. Key variables have been the dimensions of task and consideration orientation. Those qualities which make for an effective leader vary by observer status in the organization. There are inconsistencies in results of

studies of performance ratings for higher level leaders and lower level leaders, and job satisfaction of their subordinates. Job satisfaction appeared positively related to clear, concise expectations set by the leaders. Most of the studies took place in the acute care setting. Further research in the area of leadership is necessary in relation to kinds of organizational structure and climate, situational variables and effectiveness of the organization, as well as a definite change of site from the acute to the distributive care setting.

Research in community health nursing. The concept of public health nursing has been broadened and is now commonly referred to as community health nursing. The literature in this area is divided between studies of the characteristics and attitudes of the nurse and characteristics of the programs. These are valuable sources of communication between members of the discipline, but where studies have been carried out it would be useful to find more theoretical and methodological sophistication (Jelinek, 1976, p. 103).

Soul searching questions concerning the leadership of the supervisor in community health nursing services were raised by Knollmueller (1979, pp. 666-667). She

asserted that the supervisor continued to be a key person in a generalized community health nursing service. The technical-assistant type of supervisor would be likely to show greater preoccupation with rules and regulations. However, Knollmueller felt strongly that present-day supervision involved a subtle relationship between the supervisor and the staff worker, as a teacher, adviser, facilitator and developer of the capabilities of each nurse aiming at integrating these into the work of the organization. She stated emphatically "the supervisor can make one of the most productive contributions to the effectiveness of the service offered" (Knollmueller, p. 667). To shed some light on the main relevant issues in community health nursing, this section will focus on role, attitudes and leadership.

Role. Christensen and Lingle (1972) evaluated the effectiveness of team and non-team public health nurses using both objective measurements and pencil and paper tools. There were no significant differences in any outcome measure between the two groups. Team nurses were, however, more satisfied with their roles. High levels of patient satisfaction associated with high levels of daily living activities were reported only for the team group. The study was limited by non-randomization. Stogdill reported that flat,

decentralized and less complex structures create the potential for improved employee satisfaction (1974, p. 328). This would be the case for nurses working in teams as opposed to the non-team groups.

Hansen (1962) studied the decision-making aspects of the role of community health nurses. She found the following activities to be relevant to their role: (1) ability to make priority decisions for home visiting, (2) freedom to decide on the need to refer a family or a family member for medical care to another agency, (3) delegation of some aspects of the responsibility for health care to members of the family, (4) adaptation of nursing techniques for use in particular situations.

Following basic changes in the organizational structure, Wilkes (1976) studied the operation of community health services, especially those associated with new health centers. She reported that nurses in the field generally regulated their workload on a daily basis, spending similar proportions of time each day on professional consultation, clerical work, home visits and travel. The average length of time per visit decreased as the workload increased. There were no attempts made to evaluate the quality of the care rendered. Visits to the elderly were more numerous and travel time played an important role in decreasing time available for patient visits.

Looking at the teaching and supervision functions of the supervisor, Clark (1979) reported on supervisor-shared home visits in community health nursing care. She found that although this type of visit was costly for the agency, it provided an important opportunity for the development and growth of the staff nurses. It contributed to the improvement of the nursing care given by the staff and assisted the supervisor in remaining knowledgeable about the community needs and staff strengths.

In a comprehensive study of nursing conducted for the Ontario Committee on the Healing Arts, Murray (1970), examined the current conditions of practice in community health nursing in government agencies (official agencies). His report on staff activities is in agreement with that of Soderstrom (1978). Reflecting on the activities of the staff nurses in home visiting, Murray stated: "Since supervisors could not possibly oversee the nurses' activities in each of the homes they (the staff nurses) visit, their work offers possibly the greatest amount of independence in the field of nursing" (Murray, p. 25).

Attitudes. Pittman (1972) studied the differences in attitudes of graduate students preparing for roles in school nursing, teaching, or supervision in community health nursing. She found that nurses in leadership roles, (supervisors and head nurses) made every effort

not to upset their staff by over directing and penalizing them.

Leadership. Scollie (1972) described the perceptions of public health nursing staff as to their decision-making authority in the initiation of physical nursing care and concluded that the office of the nursing supervisor was unnecessary. This investigator documented that community health nurses did not fully exercise their professional decision-making function about the application of their knowledge and skills, and perceived the physician as the authority in initiating certain aspects of physical nursing care. The report indicated that the supervisor was perceived more in the role of a consultant colleague in spite of the administrative overtones of the office. Scollie contended that the professional practitioner should accept responsibility for organizing and planning her work as well as for effectively carrying out the same without the need for supervision. She concluded that if the supervisor served as a resource person only, that is as a consultant, then the office of supervisor should be abolished (Scollie, p. 170).

The position of the supervisor in community health nursing has received support from Cunningham, who stated: "the middle-management, that is, the supervisor position, is a link between administration and service,

and a very important one in any agency (Cunningham, 1974, p. 3)". She goes on to add that the responsibilities of the supervisor are dual: - promotion of the quality of community health nursing services and staff development. In a previous study, which focussed on means of improving community health nursing care given to patients who had attempted suicide, she suggested that supervisors had a responsibility to help nurses explore new approaches, to develop counselling skills and to plan their work more effectively (Cunningham, 1973, p. 50). In a study which compared team nursing and traditional nursing in two areas of a generalized community health nursing program, she recommended further study of the role and responsibilities of the supervisor, as an important adjunct to the effectiveness of the service agency (Cunningham, 1970, p. 74). Looking at ways to improve the nursing care given by community health nurses to patients with cardiac disorders, Cunningham also found a need to explore the leadership aspects of the role of the supervisor in the agency (Cunningham, 1972).

The studies and articles reviewed above give some dimension of the complexity of the situation and of the environment in which community health nursing care is given. It becomes obvious that the leadership role of the supervisor is a very intricate one, given the great

autonomy for practice which the community health nursing staff can exercise. However, it is evident that the supervisor must maintain good relationships with her staff members, to assist them effectively in growth and development aspects of the caring function and thus, improve the service rendered. This is echoed by Freeman (1970, p. 409) in the following statement:

> The supervisor brings to evaluation of performance the special expertness and objectivity which grows out of a broadened preparation and experience, and her competence to relate this performance to that of other nurses with comparable background and to the nurses' own previous performance. (Freeman, 1970, p. 409).

Speaking to the issue of leadership competence, she suggests that community health nursing demands an ability to exert leadership, to influence the behavior of others (staff or clients), to give others confidence in themselves and to work through others to achieve service goals.

Lastly, Kergin (1971, p. 465) suggested that successful operation within nursing teams, either led by supervisors or team leaders, depended upon the nature of the interpersonal relationships and mutual understanding and acceptance of the respective role responsibilities of the supervisory group. Leininger stressed that leadership style and leadership effectiveness

had not been given adequate study in nursing. She states her position as follows:

> Because nursing is considered a helping profession that involves relating to a variety of others, and because, nurses are often designated or viewed as leaders, it becomes apparent that nurses in leadership positions must be studied for leadership style and effectiveness (Leininger, 1974, pp. 28-34).

Application of the Contingency Model to Community Health Nursing

The available information on the nature of supervisory groups in community health nursing, and training for leadership positions in nursing in Canada, as they relate to the Contingency Model, will be discussed in this section. The organizational structure and functions of Public Health (Community Health) Services in the Province of Ontario, where the study was performed is outlined in Appendix I.

Supervisory groups. Most studies of the Contingency Model were carried out in interacting groups. However, several studies of co-acting groups have been conducted and Fiedler and Chemers (1974) indicate that particularly for Octants I and V "Recent analyses suggest that co-acting task groups follow the same rules as interacting task groups" (p. 87). Supervisory groups in community health nursing are co-acting groups and one can question whether or not the Contingency Model is applicable to such groups. Motivation and supervision of

group members is essential to all types of formal groups but is somewhat more difficult to provide to co-acting groups. Fiedler (1967) states that the supervisor

> ...in co-acting groups must see that each individual meets his quota and that he is properly motivated to perform his task ...the leader of the co-acting group must, to a greater extent, motivate each individual separately (p. 221).

In co-acting groups, there is considerably less member interactions and less interdependence among group members. Members may be psychologically isolated and more vulnerable to maladjustive processes. A significant function of the supervisors of co-acting groups would appear to involve quasi-therapeutic interactions, to lessen the anxieties stemming from an inhospitable external environment or from stress-inducing tasks (Fiedler, 1967, p. 221). In carrying out their functions, community health nurses often find themselves in stressful situations, vis-à-vis the discharge of their role of carer, consultant, advocate and educator in dealing with clients and families. Constraints stemming from economic, social, interpersonal, and educational and other environmental factors, impose limitations on their ability to move patients and families towards improved health situations and problem resolution. The person most likely to be in a position to assist, consult and guide them is the respective supervisor of each group, therefore, the

quasi-therapeutic functions of the supervisor should play an important role in the group's effectiveness. According to Fiedler's theory, individuals with a high LPC score, that is, those who perceive even their least-preferred co-worker in a relatively favorable manner, are likely to provide for better adjustment and lower anxieties amongst their group members. Where quasi-therapeutic interactions are required, the relationship-oriented leader will importantly contribute to the performance of co-acting teams which operate under anxiety-arousing situations (Fiedler, 1967, p. 222).

Training for nursing leadership. The advocates of continuing education in nursing have made a strong case for improving nurses' managerial skills (Stevens, 1979). Professional associations and service agencies have collaborated extensively to provide numerous courses for nursing practitioners, many of them oriented to the development of management skills. Each year, considerable sums of money are spent on staff development at different organizational levels.

Nonetheless, a review of the majority of the university calendars of Schools of Nursing in Canada, either in their statement of goals or philosophy of the program, indicate that the baccalaureate degree is the minimum requirement for preparation for leadership in nursing. For example, the following University Calendars indicate that

the baccalaureate programs in nursing provide

> ...the kinds of learning experiences that will assist selected candidates in developing competence in nursing and ability to assume responsibility and leadership in meeting the nursing needs of a changing society (University of Alberta, 1975-76 Calendar, pp. 131-132).
>
> ...leadership in small groups of patients and colleagues (University of British Columbia, 1975-76 Calendar, p. 52).
>
> ...beginning leadership skills in the practice of nursing (University of Calgary, 1980-81 Calendar, p. 147).
>
> ...as its primary objective, the preparation of nurses skilled in professional nursing techniques and competent to assume positions of leadership in the profession after an appropriate period of experience (U. of Dalhousie, 1975-76 Calendar, p. 6).
>
> ...(preparation) to be a practitioner in professional nursing positions in the health care system and able to assume leadership in the profession and in the community (University of Lakehead, 1975-76 Calendar, p. 189).

The supervisors of community health nursing agencies who have held their position for a number of years, no doubt fall into Fiedler's classification of experienced supervisors. On the other hand, nurses who hold a baccalaureate degree have taken courses in the social sciences which include training in communications, human relations and team leading. Other nurses have added to their armamentarium by taking short-term courses intended specifically to provide training in human relations and management skills training.

Currently there is much discussion in the profession focussing on a minimum educational requirement for entry into professional nursing practice. The debate began in the United States some time ago and more recently was addressed widely in Canada. Professional educators are asserting that the baccalaureate should be the minimum educational requirement (C.A.U.S.N., 1980). However, there is uncertainty as to whether holders of a baccalaureate degree are seen to perform better administratively, or to exercise leadership skills more effectively than those nurses who do not possess such a degree (Nelson, 1978, 121:125). Gray demonstrated differences in the performance of graduates from technical and professional programs, and commented that leadership is one of the desired objectives for which the baccalaureate graduate should be sought (Gray, et al., 1977, pp. 368-373). The literature has revealed contradictory evidence of the relationship between educational preparation and performance. Significant differences among graduates of various programs have been shown in technical skills, leadership, use of the nursing process, and communication skills (Gray, 1977, Meleis and Farrell, 1974). Nelson (1978) found that supervisors of baccalaureate nursing graduates rated their overall competence significantly higher ($p<0.5$)

than did supervisors of diploma graduates. Haussmann, et al. (1976) and Welches et al. (1974) found no significant differences between the educational preparation of nurses and their job performance.

A pressing social problem has been the cost and quality of health care. Faced with rising costs and anecdotal evidence of inadequate service, efforts are required towards improving efficiency of health care services by a more effective utilization of human resources. One such focus of concern has been the development of supervisory skills. Traditionally, nurse's training has been oriented to professional and technical skills. However, nurses have filled roles requiring additional sets of skills to deal with, and manage subordinates. Health care administrators have attempted to bridge the gap by providing on the job training, continuing education opportunities or study leaves to upgrade the employees' education in order to properly fulfill their leadership roles at the supervisory level. Fiedler (1972, (b) has demonstrated that leadership training and leadership experience do not give across-the-board improvement in leadership performance. Certain leaders' performance will increase while others' will decrease, as a result of the control and influence which training and experience give them.

We are faced with the following dilemmas:

1. A doubt as to whether there is a difference in the performance of the graduates from diploma and baccalaureate programs, in the area of leadership and administrative skills.

2. Non-differentiating hiring and promotion policies which permit nurses with and without a degree to accede to the same positions.

3. As a consequence of these policies many diploma nurses have been promoted to the supervisory level and expected to be equally effective as their baccalaureate trained colleagues.

4. A baccalaureate degree in nursing is increasingly recognized as the minimum requirement for entry into professional nursing practice (C.A.U.S.N., 1980) and it is assumed that preparation at the baccalaureate level will have an impact on leadership performance, but there is still insufficient empirical evidence to support such an assumption.

Research based on the Contingency Model has suggested means of improving leadership effectiveness by matching individuals in leadership positions according to leadership style and job situation. Since there is evidence that training can modify the job situation, the Contingency Model appears to provide a valid and well suited approach for verifying the effect of baccalaureate training of the supervisor on leadership

performance in community health nursing services. In addition to helping to clarify the above mentioned dilemmas, the insights gained from testing the predictive value of the Contingency Model in community health nursing could provide the basis for a management program aimed at improving organizational performance.

Summary comments. It has been suggested that Fiedler's Contingency Model of Leadership Effectiveness would be an acceptable framework for a study of leadership effectiveness in community health nursing services. Of particular interest is the fact that this study includes coacting groups as defined by Fiedler. The study will test the effects of training on leadership effectiveness. The issue of training is of prime importance at the present time in nursing practice in general, and in nursing education in particular.

Organizational Effectiveness

This section will examine the literature on the development of measures of organizational effectiveness with a view to selecting an instrument for measuring organizational effectiveness in community health nursing services.

Organization. The term organizational effectiveness implies that attention is directed to the organization

as a whole, rather than to its individual members. This clarification of the definition is intended to bring insight into the phenomenon under study. Barnard has defined a formal organization as: "a system of consciously coordinated activities or forces of two or more persons" (Barnard, 1973, p. 73). This activity, he supports, is accomplished through conscious, deliberate and purposeful coordination. Organizations require communications, a demonstrated willingness by the members of the organization to contribute, and a common purpose among them (Barnard, pp. 82-95). Thus, it can be seen that Barnard is also concerned with members of the system. In fact, Barnard has defined effectiveness as relating "to the accomplishment of the co-operative purpose, which is social and non-personal in character" while efficiency relates to "the satisfaction of individual motives, and is personal in character" (pp. 60-61).

Hall has added a further dimension to the definition of organizations focussing on the consideration of the environmental factor as a necessary component. He claims that environment plays a major role in what goes on in an organization. Environmental factors are a major input of the organization, are acted upon by the organization, and return as outputs back into the environment.

Hall defines organization as follows:

> An organization is a collectivity with a relatively identifiable boundary, a normative order, ranks of authority, communications systems and membership-coordinating systems: this collectively exists on a relatively continuous basis in an environment and engages in activities that are usually related to a goal or a set of goals (Hall, 1964, p. 488).

At this point, it is important to mention that Fiedler and Chemers have given attention to environment as a situational component in their theory of leadership effectiveness. They state:

> The term situation generally refers to aspects of the environment which affect the individual. These aspects may be physical objects ...or they may be social relationships, ...the situation may refer to such commonly held attitudes or perceptions in an organization as the custom of taking work home from the office ...These are intra-organizational variables. Extra-organizational aspects of the situation may include a surplus or a shortage of labor, the number of competitors, or the location - suburban or urban - of an office (Fiedler and Chemers, 1974, pp. 56-57).

Effectiveness. Effectiveness has been defined as the degree of goal achievement (Etzioni, 1964, p. 3). Mott defined organizational effectiveness as "The ability of an organization to mobilize its centers of power for action-production and adaptation" (1972, p. 17). He states that effective organizations can be differentiated from other similar and less effective ones on the

basis of their ability to produce a quality product in sufficient quantity to assure the organization's survival, and in a manner which will be cost effective, that is, where the greatest output will be provided from the least input. To achieve these objectives, organizations must be responsive to their internal and external environment, flexible, and adaptable. Measuring organizational effectiveness presents a new challenge. Mott claims that measures of effectiveness would be ideal if they were valid and reliable as well as easy and inexpensive to obtain. He argues against the use of measures of productivity alone, because they reflect past effectiveness, exclude consideration of quality and production efficiency, and tell nothing about the organization's capability to adapt to problems or cope with emergencies (Mott, 1972, p. 21). He adds that measures of turnover and absenteeism, at best, can only serve as indicators, and are not adequate measures of organizational effectiveness. He proposes three criteria for the measurement of effectiveness: productivity including quality and quantity of product as well as the efficiency of production; adaptability, including awareness of the organization's internal and external state of equilibrium, technologies, anticipating problems, and resolving existing ones; and flexibility,

meaning the capacity to cope with unpredicted stressors (Mott, 1972, p. 20).

Mott elected to follow the path already identified by Georgopoulos and Mann (1962), and attempted to construct a valid, subjective measure of organizational effectiveness using a similar methodology and approach, where the overall measure of effectiveness would emphasize productivity, and adaptability, rather than flexibility. His study was conducted on the same sample of hospitals as that utilized by Georgopoulos and Mann; additional studies using the same approach were carried out in the office of Administration of NASA; a small Federal Agency, ALPHA Agency; the administrative office of the State Department; the Financial Management Office of the Department of Health Education and Welfare; and in a small Mental Health Hospital, the Byberry Hospital. Mott concluded that:

> ...the effectiveness index is a valid and inexpensive measure except when responses reflect outmoded standards. Such situations can usually be revealed by comparing internal assessments with those of top management and other outside rankers and by examining disagreements through follow-up interviews ...It seems important therefore to obtain measures of unit effectiveness from several sources, in order to ensure a clear estimate of the validity of the self appraisal measure (Mott, 1972, p. 199).

Goals. Effectiveness has been defined as the degree to which an organization realizes its goals. The determination of an organization's goals is therefore important in evaluating or measuring effectiveness. Etzioni's definition of organizational goals has been echoed by many authors, including Hall who states: "An organizational goal is a desired state of affairs which the organization attempts to realize" (Hall, 1977, p. 67). Discussion surrounding the definition of organizational goals has been extensive. Some of the major contributors have been Perrow (1961, p. 855), Simon (1964, pp. 1-22), Etzioni (1964, pp. 5-8), Price (1968, pp. 3-4) (1972, pp. 3-4), and Hall (1977, pp. 69-85). Two major classifications of goals arise from the discussion (Price): the official or prescribed goals, which are the general purposes and values of the organization, (usually found in the charter, annual reports, and public statements); the operative or derived goals, which represent the ends sought through the actual operating policies of the organization, (in other words, the goals the major decision makers of the organization actually try to realize). In many instances these operative or derived goals reflect the official goals, since they change the abstract concepts in more concrete achievable terms. These operational goals are developed by interaction

patterns within the organization, and by the forces of pressure from the external environment. An important phenomenon which should be kept in mind is goal displacement, which may affect significantly the operative goals of the organization (1968, pp. 3-4; 1972, pp. 3-4).

Hall argues in favor of the usefulness of the goal concept, despite difficulties of identification. The organization, he says, would not exist if it were not for some common purpose. This joins Barnard's definition of an organization, as reported previously. The activity of the members is purposeful, directed towards the organizational goals, explicated through policies and resources, determined by the centers of power or authority within the organization. Organizations have more than one goal, but the priority or importance of the goals can be appreciated by the amount of resources which are allocated by the organization to these various goals (Hall, 1977).

In conclusion, we have seen that organizations are social units, where the coordinated activities of a group of persons are oriented toward a common purpose or towards goals, and that effectiveness is the measure, which is used to identify the degree to which this purpose or these goals are achieved, within the environment of the situation which surrounds the social units.

Statement of the Problem and Hypotheses

The review of literature led to the selection of Fiedler's Contingency Model as the theoretical rationale for this study and the adoption of Price's concept of goal effectiveness as a reliable approach to assess leadership effectiveness.

No studies were identified where the relationship between leadership style and leadership effectiveness, contingent on situational control had been explored in the field of community health nursing service. According to the Contingency Model, it would be expected that supervisory groups with good supervisor-member relations would perform better under supervisors who were task-oriented and had a low LPC, while supervisory groups with moderately poor supervisor-member relations would be expected to perform better if their supervisors were relations-oriented and had a high LPC.

Staff community health nurses function at a greater distance from administrative control, are more independent in their practice of nursing, and according to Ontario legislation, are required to have at least one year of university nursing education beyond the diploma in nursing. However, holding a baccalaureate

degree in nursing is not a prerequisite for appointment to a position of community health nursing supervisor. On the other hand, it is known that health units often provide their supervisors with inservice training or other staff development programs geared to develop the supervisors' leadership and management competencies. It would also seem reasonable to expect that supervisors trained for leadership roles through a baccalaureate education, would normally perform more effectively. Nonetheless, according to Fiedler's Contingency Model, training improves the effectiveness of some leaders, while it decreases that of other leaders, depending on their situational control and their respective leadership styles. Supervisors, trained for leadership roles through a baccalaureate preparation would likely seek ways and means to improve their situational favorableness.

Stated generally the purpose of this study was to explore how the relationship between leadership style and organizational climate influenced organizational performance and, in particular, to verify whether or not baccalaureate training was a contingency factor.

This problem provided a test of the predictive value of Fiedler's Contingency Model in the field of community health nursing through the formulation of

the following hypotheses:

H.1.a. In favorable situations, groups led by low LPC supervisors have higher group effectiveness scores than groups led by high LPC supervisors.

H.1.b. In moderately favorable situations, groups led by high LPC supervisors have higher group effectiveness scores than groups led by low LPC supervisors.

H.2.a.1. In favorable situations, groups led by high LPC supervisors without training will have higher group effectiveness scores than groups led by high LPC supervisors with training.

H.2.a.ii. In favorable situations, groups led by low LPC supervisors with training will have higher group effectiveness scores than groups led by low LPC supervisors without training.

H.2.b.i. In moderately favorable situations, groups led by low LPC supervisors without training will have higher group effectiveness scores than groups led by low LPC supervisors with training.

H.2.b.ii. In moderately favorable situations, groups led by high LPC supervisors with training will have higher group effectiveness scores than groups led by high LPC supervisors without training.

H_1 is essentially a replication of many studies based on the Contingency Model. The major focus of the study is represented by H_2 which purports to test Fiedler's assumptions with respect to training as a situational variable.

CHAPTER II

RESEARCH DESIGN

This chapter describes the pilot studies which preceded the main study as well as the research design which was employed to test the hypotheses stated in the first chapter.

The first pilot study involved the development of an instrument for the measurement of organizational effectiveness in community health nursing. The second pilot study involved the determination of task structure and position power as components of the situational effectiveness in community health nursing supervisory groups in Ontario Health Units. Instruments used in studies based on Fiedler's Contingency Model, other than those used for the measurement of organizational effectiveness, are well known and adequately described. They will therefore be mentioned only as part of the presentation of the design methodology.

There are six sections to this chapter. The first section consists of a detailed discussion of the development of an instrument for the measurement of organizational effectiveness and the report of the pilot study conducted to determine its validity and test its reliability. In the second section is the report of a study to determine task structure and position power in nursing supervisory groups in Ontario

Health Agencies. The third section describes the design rationale or the nature of the study. Section four presents the design methodology including the variables, the sample, the investigative procedures and the instruments utilized to collect the data. The data analysis procedures are described in section five and the limitations of the study in section six.

Development of an Instrument for the Measurement of Organizational Effectiveness

Measurement of organizational effectiveness.. A number of methodologies to measure organizational effectiveness have been identified from the social sciences and within the field of nursing. Some of these will be presented here with a focus on the goal model, the systems resource approach and the nursing audit.

Cunningham discussed seven approaches to the evaluation of organizational effectiveness (Cunningham, B., 1977, pp. 463-474). In addition to the goal model and the systems resource approach, the other models suggested by the author are: the managerial process model, the organizational development model, the bargaining model, the structural functional model, and the functional model. The last five models are in fact variations of the first two he proposed, and utilize more or less, the open systems or the goal approach. The author concludes:

The choice of evaluation approach usually hinges in the organizational situation that needs to be addressed. ...the selection of an approach for evaluating organizational effectiveness depends on the information the decision maker requires. ...Each model provides unique information about the organization:

1. The rational goal approach evaluates the organization's ability to achieve its goals.

2. The systems resource model analyses the decision-maker's capacity to efficiently distribute resources among various sub-systems' needs.

3. The managerial process model assesses the capacity and productivity of various managerial processes - decision-making, planning and the like - for performing goal-related tasks.

4. The organizational development model appraises the organization's ability to work as a team and to fit the needs of its members.

5. The bargaining model measures the ability of decision-makers to obtain and use resources for responding to problems important to them.

6. The structural, functional approach tests the durability and flexibility of the organization's structure for responding to a diversity of situations and events.

7. The functional approach relates the usefulness of the organization's activities to its client groups (Cunningham, B., 1977).

The strongest advocate of the goal approach is Price, who has sought a standardized measure of effectiveness applicable to all types of organizations. In fifty studies analysed, he found that the dependent variable was consistently effectiveness. This variable was chosen because 1. it represents a classical problem: centrality of goals in all definitions of organization, and 2. because as a classical problem it has been highly researched (Price, 1968, p. 3). In proposing the goal approach Price states:

> The traditional way to study effectiveness has been the "goal approach". Its distinguishing characteristic is that it defines effectiveness in terms of the degree of goal-achievement. The greater the degree to which an organization achieves its goals - according to this approach - the greater its effectiveness (Price, 1972, p. 3).

The opponents of the goal approach criticize it on the basis of the difficulty to identify organizational goals, claiming that the prescribed goal approach fails to identify organizational goals, while the derived goal approach uses society as the determinent of organizational goals, that is, using an external basis for evaluation of the goals (Seashore and Yutchman, 1967, pp. 337-395). Another criticism is raised at the variety of goals inferred from organizational

behavior which give rise to ambiguity in the conceptualization of effectiveness. The meaning of effectiveness may shift with the type of organization and between levels of analysis (Benson, 1974, pp. 271-273). This procedure assumes normative concensus as to what constitutes quality performance in the organization, and between organizations of the same type. McCormick (1974, pp. 271-273) generally agrees with the goal effectiveness model, which provides the most viable approach to the study of organizational effectiveness. The general measurement device proposed by Price may present a problem of bias, since organizational members are asked to rate themselves on the scale of effectiveness. McCormick claims that the result is only agreement or disagreement that the members are doing a good job. He proposes that data be gathered from other sources, to support this internal evaluation. Lastly, he questions the method of verification of organizational goals based on the decision of the major decision-makers. A comparison of the intentions of these decision makers, with their actual behavior would be indicated.

Price (1972, p. 5) defends the goal approach. Accepting that organizational goal definition is

difficult, he suggests four guidelines which will render this task feasible: (1) "the focus of research should be on the major decision-makers in the organization", since they are the most valid source of information concerning organizational goals and they actually allocate most of the resources of the organization; (2) "the focus of research should be on organizational goals" since these represent the desired state of affairs which the organization attempts to realize. Within this concept, private or individual goals must be satisfied, in order to achieve a high degree of organizational effectiveness; (3) "the focus of research should be on operative goals", these goals are derived from the official goals of the organization. This view is also supported by Seashore and Yutchman (1967); and (4) "the focus of research should be on intentions and activities" (Price, 1972). Intentions represent what the organization is trying to do, while activities represent what persons in the organization are observed to be doing. Intentions can be described by interviews or questionnaires, while activities can be described by observations and documents.

Refuting the main argument of the advocates of the

systems resource approach, Price (1972) claims that the goal approach can use the organization rather than society as its basis for the evaluation of organizational effectiveness. He cites the impressive study by Georgopoulos and Mann (1962) as an example of this. Those asked to respond to the evaluation of effectiveness or goal achievement were knowledgeable and competent about the operative goals, as well as the formal goals, which are set by society in formal charters. Hall, in discussing the systems resource approach and the work of Seashore and Yutchman, claims that this approach is an empirical verification of the importance of the operative goal concept (Hall, 1977, p. 91). He supports the approach used by Georgopoulos and his associates:

> The easiest solution to the problem of who assesses effectiveness is to use the perspective of Basil Georgopoulos and his associates. They argue that effectiveness should be determined on the basis of organizational criteria rather than externally derived criteria. The organizational criteria are thus defined as legitimate. This procedure is satisfactory only when other criteria are acknowledged to be legitimate in viewing organizations for their role in society (Hall, 1977, p. 86).

Lastly, Price (1973, pp. 276-278) refutes the argument made by Benson (1974, pp. 273-276) against uniformity of meanings, in the overall measure of

effectiveness in complex organizations.

Referring to the evaluation of nursing care submitted by Georgopoulos (1962) in the Community General Hospital, Price states:

> The paper assumes a fairly high degree of uniformity in the meaning that the respondents, especially the physicians and the nurses assign to the word "nursing care". The paper assumes that respondents possess knowledge and competency with respect to the evaluation of nursing care, within their limited spheres of involvement in the hospitals. By combining these many partial evaluations one obtains a reasonable overall evaluation of effectiveness. Finally the paper assumes a fairly high degree of consensus, especially among physicians and nurses as to what constitutes quality performance of nursing care. These moderate assumptions characterize the paper and appear to be empirically plausible (Price, 1973).

Kirchhoff, in a recent article discusses the measurement of organizational effectiveness in terms of the goal approach and evaluative measures. He reviews several studies (Price, 1972; Mott, 1972; Hall; 1972, Georgopoulos and Mann, 1962), which have addressed the issue of measuring organizational effectiveness. He argues that there is no ultimate criterion of organizational effectiveness applicable to all organizations, as a single dimension. In fact, "organizational effectiveness is multi-dimensional and defined according

to the point of view of the definer and measured from the frame of reference of the measurer" (Kirchhoff, 1977, pp. 347-355). Kirchhoff adds: "Complex organizations pursue multiple goals. Real effectiveness can only be measured relative to a particular set of derived or prescribed goals" (p. 352).

Price has argued for the use of an overall measure of organizational effectiveness, utilizing the goal approach and providing the four major guidelines to increase the degree of certainty regarding goals.

Other authors have specified different criteria for the evaluation of organizational effectiveness. Argyris (1968) suggested that the organization's internal problem solving ability, as well as its ability to utilize its human resources, should be considered along with its defined goals. Thus, the measurement of effectiveness would be more valid. Katz and Kahn (1966) measured organizational growth, survival and control over the environment. Cameron (1978) reviewed twenty-one empirical studies of effectiveness in educational institutions. He found it most difficult to compare findings across studies, because most researchers had used sources and types of criteria which are not comparable

with other empirical investigations. Steers (1975) defending the use of operative goals, noted the lack of concensus on effectiveness measures. He reviewed seventeen multivariate models of organizational effectiveness. He also found a lack of consistency in the evaluation criteria and concluded that effectiveness could not be defined and measured in terms of static sets of variables. This led him to also support evaluation of effectiveness in terms of goal attainment.

In summary, several approaches to measure organizational effectiveness have been reviewed. The selection of an approach capable of determining the degree to which the organizational goals of community health nursing are met, would favor opting for the goal approach supported by Price. The guidelines which he advocated to define goals should serve to select the operative goals of community health nursing services, and provide for a uniform measure of effectiveness which could be applied for comparisons across different types of nursing services.

Measurement of organizational effectiveness in community health nursing. Studies pertaining to the development of an instrument for the measurement of

organizational effectiveness of nursing services have used in most cases an open model approach.

An automated health worker's activity system, to monitor nursing visits, and thus measure quantity of work, was developed by the Colorado Department of Health, and is reported in the comprehensive review on nursing productivity conducted by Jelinek and Lyman (Jelinek, 1976, p. 103). It is a beginning approach at the problem of program evaluation, or effectiveness of the organization, but lacks development of the broader perspective of effectiveness measures.

A recent article by Bergman details the process of evaluation in community health nursing. The author lists a number of questions to be explored in the process of establishing effectiveness, beginning with need identification, availability of resources, extent of service, accessibility, focus, timing, continuity, and satisfaction. In the area of outcomes, attention is directed to analysis of patient progress, use of the nursing audit, a retrospective analysis of patient records, an economics analysis based on costs versus alternative methods and use of expert consultants. No specific overall measure of effectiveness is described.

The author leaves the impression that a descriptive comparative analysis of hard data, collated from records of mortality, and agency records, and descriptive analysis of performance will be sufficient to satisfy the requirements of evaluation (Bergman, 1978, pp. 23-26). Freeman (1961) addressed the issue of measuring the effectiveness of public health nursing service. She suggested no particular method of appraisal but emphasized the need for specificity of goals. The following indexes of achievement were discussed as examples of tangible measures of effectiveness:

- Change in capacity to cope with a health situation (patient related);
- Adherence to regime (patient related);
- Fitness of the population served (appropriateness of care provided);
- Populations served or not served in relation to needs (community needs assessment and population distribution according to needs);
- Improvement in the situation (nursing audit);

- Conformity to criteria or standards (professionally developed statements);
- Differences in served and non-served populations (comparison by groups and criteria to be developed);
- Consumer satisfaction with services rendered (opinion surveys).

Freeman states: "The search for reliable, pertinent indices of change that are related to the nursing service provided, must go much further before we have adequate processes for evaluating effectiveness of what we do" (Freeman, 1961, pp. 605-607). Unfortunately she does not offer specific suggestions regarding the development of such indices.

The Slater Nursing Competencies Scale was developed to provide a tool to measure absolute clinical nursing performance. The variables are "Actions performed by nursing personnel as they provide care for patients" (Wandelt and Slater, HRA 78-54, pp. 529-530). The 84 item observer - completed rating scale taps six dimensions of nursing actions on behalf of patients. Notations are made on a five point rating scale. The instrument is to be used by trained raters who require approximately 30 to 40 minutes per evaluation. The inter-rater reliability was 0.77 based on pairs of observer-

rater scores for 74 senior nursing students, after twelve weeks of clinical experience. Inter-correlations among items scales and total scores were also computed. Odd-even split-half reliability was 0.98. Stability reliability of the scale was ascertained by a Pearson r of 0.60 after a six-month interval. Content validity was examined by expert nurse practitioners and nurse educators. Predictive validity was also established by correlations with instructor clinical experience grades, theory grades, National League for Nursing Achievement scores, and Social Interaction Inventory scores. The instrument has been copy-righted.

Although this is a very useful instrument, it focusses on nursing actions and does not account for outside situational influences. Its prime focus is whether nursing performance reflects the teaching and expectancies of practice of the professional nurse. Another concern is the subjectivity introduced by the observer and the possible bias of having the observer present in the clinical situation.

The Quality Patient Care Scale is the result of an adaptation of the previously described instrument. The variable being measured is "the quality of nursing care being received by a patient in any setting where nurse-patient interactions occur" (Wandelt and Ager, HRA 78-54, pp. 527-528). This observer-rated, five point rating scale is arranged in six categories. The

items for this tool are based on those of the Slater Nursing Performance Rating Scale. The reliability and validity have been tested. Interrater reliability coefficients range from r = 0.74 to 0.91. The Kuder-Richardson estimate of reliability is 0.96. There is also some evidence of stability reported at r = 0.98. The authors do not report on methods used to justify content and construct validity (Ward and Lindeman, no date, pp. 527-528).

The same concerns arise from the use of this tool; an outside observer has to be trained, and assesses the care received by the patient on the basis of a cue sheet, bringing concerns of subjective judgments and possible bias. This instrument does not account for variables which influence the situation in which the care is given and which may influence the quality of care.

Davis (1973) comments on a series of proposals utilizing different strategies for evaluating goal attainment. The goal attainment models discussed are tailored to individual clients and include goal attainment scaling, goal-oriented automated progress notes, concrete goal setting, and patient progress records. The methods proposed lack scientifically standardized scales. Davis suggests that there is a lack of consistency among scales as

they were constructed independently by different staff at different times. The models are sufficiently flexible and could be utilized in varying evaluation circumstances, but would require validation.

The Nursing Audit is a tool developed by Phaneuf (1972) which has been adapted to either distributive care settings (i.e. community) or episodic care settings (i.e. hospitals). The instrument focusses on the quality of nursing care. It is a method for systematic written appraisal of the process of nursing care, made after discharge of the patient-client through examination of the patient-care records. The appraisal is retrospective. Seven identified functions of nursing, one dependent and six independent functions, are used as the standards against which quality of care is judged. This instrument yields an overall rating of the quality of nursing care and a quality rating with regard to each of the criteria (nursing functions). The items focus primarily on the nursing process rather than outcome or structure. Audits are conducted by an internal audit committee composed of staff members, using a random sample of patient closed records. The author states that the tool is not designed "for evaluation of care while care is being given ...for use in evaluation of nurse performance ...(as) a "patient care" audit ...(or as) an error detecting scheme" (Phaneuf, p. 18). No information is available with regard to reliability or validity.

Donabedian comments on some technical issues related to the evaluation process involved in the nursing audit (1975, pp. 267-271). He claims that the evaluation assesses the quality of the record rather than the care provided; he raises the issue of the difficulty of definition of quality. Although the audit uses the nursing functions as a framework, it leaves the interpretation of the extent of compliance with professional standards to the judgment of the reviewers. Regarding implementation and effectiveness Donabedian states:

> There has been remarkably little study of the ability of professional audits to bring about lasting changes in professional behavior. ...There is urgent need for studies of the professional audit primarily as a complex social process rather than merely a technical problem of measurement... [There are no] data on cost in relation to effectiveness (Donabedian, p. 71).

Craig developed an audit in Canada which is specifically intended for use in community health nursing (1978, p. 140). The author claims that its purpose is to promote excellence in the provision of nursing care in the community. It is based on the standards of nursing care developed by the College of Nurses of Ontario, the provincial licensing body. This instrument has been tested for content validity and found adequate. Data are being collected for determination of interrater reliability (personal correspondence with the author).

Although the audit tool has made a contribution to the assessment of quality of nursing care, the nursing audit is not an appropriate tool for evaluating the effectiveness of a nursing service department.

The National League for Nursing published selected articles on evaluation of community health agencies. Denistón (1976) comments in these articles on the issue of goals or objectives. He claims that program evaluation requires consideration of objectives, activities and resources. He views the difficulty of evaluation being rooted in the trouble nursing has in stating program goals or objectives in specific terms. Addressing the issue of accreditation as a form of evaluation he states:

> In accrediting a program most attention is given to the resources of the program and to the activities. We see very little attention given to whether the goals of the program are attained. Among a couple hundred questions, at times we may see one question, is the program attaining its goals. It seems to me that as we think about improving the kinds of evaluation we do in accreditation we should aim more at identifying and measuring attainment of program goals (p. 3).

All the other papers in this collection discuss the issue of evaluation, but none of them focus on measures of effectiveness. Georgopoulos (1975) carried out an extensive analysis of 1054 studies to review, evaluate and summarize the empirical research literature on hospital organization, produced by social, behavioral

and management administration investigators from 1965 to 1975. The massive analysis of these data permitted Georgopoulos and Mann to move towards greater understanding of hospitals and of the conditions affecting hospital effectiveness (p. 188). He went on to develop a general measure of organizational effectiveness which will be discussed in the next section of this chapter. There is overwhelming support for utilizing the goal approach as a method for measuring organizational effectiveness. Many authors have indicated the difficulties which surround the identification of the goals of an organization. Those who expressed concern for the use of this approach felt it may be too narrow if utilized within the organization only and cautioned that goal achievement should be verified by outside measures and from relevant others.

A review of the nursing literature did not yield an overall measure of organizational effectiveness. Instead, the focus was generally toward measuring productivity of nurses mainly through use of the nursing process, or measuring the quality of nursing care through the nursing process, by means of the process of accreditation, or through the nursing audit.

Evaluation of the effectiveness of community nursing care through the nursing process may be a relevant approach,

but it must be recognized that it focusses only on the dimension of the practitioner's use of theoretical knowledge as applied to the assessment of the clinical situation which the client/family present. It could be extended to give a measure of quality and quantity subsumed under productivity, according to Mott's three criteria (Mott, 1972, p. 20), but would only provide possible inference as to adaptability and flexibility.

Despite the high profile which accreditation enjoys in the health care delivery field, it is only responsive to a reflection of quality according to pre-established standards, as measured by a review team. Accreditation, according to Deniston, focusses on the program and its activities, but fails to ask the crucial question "Is the program attaining its goals" (Deniston, 1976, p. 3)?

In summary, measurement of quality nursing care should ideally include assessments of structure, process and outcomes. Evaluation of structure is mainly used in accreditation; assessment of process questions more directly whether the client received good nursing care; and outcomes are directed at establishing the effects or consequences of nursing care. In view of the constraints already discussed, only limited approaches to evaluate quality of care are possible at the present time. The ideal framework for measuring nursing

productivity should be a closed system involving the measurement of input, technology, output and environment factors. Such a system is not feasible at present. Even in an open system, health status outcomes have neither been developed nor focussed specifically on nursing. Evaluation of nursing process or nursing outcomes lack acceptable and valid criteria and, if universally applied, the cost could be prohibitive.

In conclusion, the goal approach embodied in the Georgopoulos and Mann (1962) study and supported by Mott (1972) and Price (1968) is considered the method of choice to evaluate the effectiveness of community health nursing services as they exist in the Ontario Health Units, particularly when the intention is to use a comparative measure of organizational effectiveness.

Adaptation of the Georgopoulos and Mann Instrument for use in community health nursing. A general measure of organizational effectiveness was developed by Georgopoulos and Mann (1962) from a study carried out in general hospitals, based on effectiveness considered as a measure of how well the organization is achieving its operative goal.

Price has given considerable attention to this measure's validity and reliability and concluded that Georgopoulos and Mann had exercised "an uncommon care in the evaluation of the validity and reliability of their measures" (1972, p. 106). Price went on to suggest that the measure could be adapted with relative ease for use in other organizations. Mott also endorsed Georgopoulos and Mann's effectiveness index as "a valid and inexpensive measure" (1972, p. 199). This same measure was used successfully by Knoop (1976) in a study of seventy-five elementary schools and most recently by Viney (1980) in a study of the relationship between organizational structure and effectiveness in school board program departments.

Ten hospitals were included in the initial study to measure organizational effectiveness (Georgopoulos and Mann, 1962). Four measures of effectiveness were used: nursing care, medical care, non-comparative overall patient care, and comparative overall patient care.

Medical, nursing, technical and administrative personnel were asked to assess how well their organization was achieving its operative goals. Questionnaires were used to collect the data which was verified, for validity purposes, by the interview method.

The validation methods, commented on by Price (1972, p. 106), included a comparison of questionnaire results with clinical judgments by physicians and nurses, and with hard criteria or objective measures (i.e. hospital records, mortality data, staffing data, etc.). He felt that those asked to respond to the evaluation of effectiveness or goal achievement were knowledgeable and competent about the operative goals, as well as the formal goals which were set by society in formal charters. This was also confirmed by Georgopoulos and Tannenbaum (1957, pp. 80-87). The findings in Georgopoulos and Mann's validation process support and illustrate this process. The mean scores of all physicians in each hospital were found to be positively related to the ratings of hospitals by a panel of outside physicians. The scores were also related to infant mortality rates. The evaluation of quality nursing care by doctors and nurses in each hospital was also found to be related to infant mortality rates. Judgment of all hospital employees other than physicians was significantly related to that

of physicians. This would appear to support Price's claim that the goal approach can use the organization rather than society, as a basis for the evaluation of organizational effectiveness. The indicators of validity of the general measure of organizational effectiveness identified in the Community General Hospital study are six in number. (Georgopoulos, 1962, pp. 215-225). They are: 1) the ten hospitals investigated differed in the quality of overall patient care with combined hospital scores ranging from 1.99 to 2.94; 2) the relative standing of the ten hospitals on overall care as evaluated by one category of respondents correlated positively with the standing on the same measure as evaluated by other categories of respondents; 3) inter-hospital differences on overall patient care could not be attributed to differences in responses due to particular characteristics of medical and nursing staff. Major control factors like shift-work, different hospital divisions, full-time versus part-time work, and medical specialties did not effect the evaluation of overall care by the medical and nursing staff; 4) interview data were consistent with the questionnaire ranking of the hospitals on the overall care measure; 5) customer satisfaction was greater in those hospitals that ranked higher on the measure of overall patient care; 6) a positive relationship existed between the reputation of

each hospital in the community and the quality of its overall patient care. The intercorrelations between the four measures of patient care were positive and statistically significant (see Table II) (Georgopoulos, 1962, pp. 257-258).

It was therefore decided that the concept of goal effectiveness was a reliable approach to assess leadership effectiveness and that the Georgopoulos and Mann Instrument would be modified and adapted for use in community health nursing by using questions devised for measuring appropriate goals for this field of health services.

The Directors of Nursing of the official health agencies in Ontario would be the respondents in rating the performance of supervisory groups in their units. They are technically qualified and familiar with the conditions prevailing in their respective agencies and therefore fell in the same class as the respondents to Georgopoulos and Mann's original study. It was felt that this approach was compatible with the methodology supported by Mott (1972) and Price (1968).

The adapted Georgopoulos and Mann Instrument will be discussed in terms of establishing its content and face validity and testing its reliability.

1. Content validity. Content validity is

Table II

Rank Order Intercorrelations Among Four Measures of Patient Care

Patient Care Measures	1	2	3	4
1. Measure of quality of nursing care	-	.60	.91	.82
2. Measure of quality of medical care		-	.67	.78
3. Measure of quality of overall care			-	.96
4. Comparative measure of the quality of overall care				-

concerned with the sampling adequacy of the content area being measured (Polit and Hungler, 1978, p. 434).

In the case of the adapted Georgopoulos and Mann Instrument, the goal approach to effectiveness requires an exacting and representative identification of the goals or objectives of community health nursing. Goal identification, in order to be valid for the purpose of evaluating organizational effectiveness, should focus on the operative "organizational goals that the major decision-makers actually pursue" and should involve "data collected about the major decision-makers' intentions and activities" (Price, 1972, p. 6). However, the emphasis in identifying goals or objectives of community health nursing was on the actual goals pursued and the intentions of the major decision-makers, whereas activities were not to be observed as part of this study.

The objectives of public health nursing in Canada were first identified by a National Advisory Committee of the Canadian Public Health Association (Canadian Public Health Association, 1966, p. 3). This document, prepared as a joint project of the Canadian Public Health Association

and Health and Welfare, Canada, became the Canadian reference for directors, supervisors, consultants, practitioners and educators in the field of public health nursing. These decision-makers, at a federal-provincial conference of Directors of Public Health Nursing, held in 1975 under the aegis of Health and Welfare Canada, recommended that the document be revised and expanded. An Advisory Committee with broad provincial participation was commissioned for this purpose, by the Canadian Public Health Association and funded by Health and Welfare Canada, (Chairman, M.A. Loyer). The Committee held a one-day workshop in Moncton, N.B., in June 1976. Study groups involving professional leaders made recommendations concerning the planning of the document, the philosophy, goals and functions, and qualifications for the practice of community health nursing in Canada.

Based on the recommendations of the Workshop, a draft of the objectives, functions and qualifications for practice of community health nursing in Canada was prepared by the project Director, under the guidance of the Advisory

Committee. Major inputs used in the preparation of this document were selected reference texts on nursing and community health, as well as recent articles by Canadian leaders in these fields and a long list of position papers, sponsored by Federal and Provincial Governments, professional associations of nurses, nursing educators, and international organizations (Appendix VII, Selected Bibliography). The draft document, including objectives of community health nursing, was then widely circulated to provincial Ministries of Health, university Schools of Nursing, and all relevant professional associations, requesting comments and replies to questionnaires prepared to survey national opinion. The identification of goals or objectives was, therefore, not only endorsed by the major community health decision-makers, but received extensive input from all levels of community health nursing.

The following objectives for community health nursing were identified (Canadian Public Health Association, 1977, p. 3).

1. Promotion and maintenance of physical, mental and social well-being;

2. Prevention of disease and disability;

3. Furnishing skilled nursing services for the sick and disabled in the community;

4. Provision of supportive counselling for their families;

5. Continuity of care;

6. Education of the community, the nursing profession and other health workers;

7. Initiation of participation in and utilization of research in nursing and related health care.

Given the present state of the art in service units, goal number 7, regarding research in nursing, was generally recognized as an official, rather than an operative goal. Therefore, for this study, it was excluded from the list of goals to be used for the determination of organizational effectiveness (Perrow, 1961, p. 855).

Georgopoulos and Mann's instrument for measuring organizational effectiveness was consequently adapted for use in this study incorporating questions devised for each of the six goals. An overall effectiveness measure was added to comprise all goals (see Appendix VIII).

2. Face validity. Using a technique

recommended by Diers (1979, p. 230) face validity of the adapted instrument to measure organizational effectiveness was tested by a panel of experts which included eight university educators specialized in community health nursing, one director of a community health nursing service agency and her two supervisors. The latter three persons were from a voluntary agency in order not to contaminate the sample of Ontario health units for study purposes. The panel of experts were asked to express their opinion as to whether or not the adapted instrument was a good indicator of the objectives of community health nursing care and would measure the effectiveness of community nursing care. Ten of the eleven respondents were of the opinion that the questionnaire developed to assess the general overall effectiveness of community nursing services looked like it would measure what it purported to do. The respondent who differed felt that the measure would yield a global measure. This was indeed the intent sought through the questionnaire. The comments provided can be summarized as follows: those which pertain to

the structure of the questionnaire, terminology, rater's perceptions, scope of responses. Most of the comments clustered around the lack of definition of quality, and that the responses would be the perception of the values held by the respondents. The term "good" lacked specificity, according to the respondents.

According to Benson (1974, pp. 271-273) this approach to goal effectiveness, or quality of nursing care would reflect the normative concensus of what constitutes quality performance by one level of assessors in the organization. The measurement of effectiveness would be based on the evaluation of the major decision makers, (Directors of Nursing) in the organization as recommended by Price (1972, p. 5). Finally, Price (1973) supported Georgopoulos and Mann's measurement of organizational effectiveness as empirically plausible, even though it assumed a fairly high degree of consensus regarding what constitutes quality care.

3. Reliability. One of the branches of a private community health nursing agency matched for organizational goals, training of staff and for organizational structure, agreed to volunteer for the

pilot study of the Effectiveness Measure.

The Director of Nursing, two supervisors and twenty-one staff nurses participated in the pilot study. The questionnaire was administered to the three levels of respondents for the purpose of assessing the effectiveness of two supervisory groups of the nursing staff. Appropriate strategies were adopted to code the questionnaires and to protect the security of the ratings.

In order to estimate the reliability of the instrument, with respect to the individual items, it was subjected to statistical analysis. The number of cases was 25, composed of two groups of respondents, (10 and 11) the two evaluations by the supervisors and the two evaluations at the Director's level. For the seven items of the instrument, a Cronbach coefficient alpha of 0.78 was obtained.

Since organizational effectiveness was viewed in terms of an overall measure, as well as the measurement of six specific goals, the items 2 to 7 were subjected to statistical analysis. Again the same statistic was computed. The Cronbach coefficient alpha for the total of these six

items (specific goals) yielded a 0.75 reliability coefficient.

An examination of Table III shows the relative standing of the three groups based on the measure of effectiveness of community nursing services. It shows how the different levels of respondents scored; that is the individual mean score obtained from the assessment of effectiveness by the Director for each of the two supervisory groups, by the supervisors for their supervisory groups and by the staff members for their supervisory groups. In all instances, larger means represent a more favorable evaluation of nursing care.

The mean scores for the three levels of respondents range from 4.65 for the staff nurses of group A, the supervisory group which assesses the community nursing service as least effective, to 5.29 for the evaluation by the Director of the effectiveness of one of the supervisory groups, group B. Group B was rated higher than Group A.

The assessment of effectiveness of group A made by the Director, by the supervisor of that

Table III

Comparison of Mean Scores on Effectiveness of Community Nursing Services, Between Three Levels of Staff

Assessment by Level of Staff	Group A N=12	Group B N=13
Director	5.14	5.29
Supervisors	5.00	5.14
Staff Group	4.65	4.81

group, and by the staff of the same group, is in the same direction as the evaluation of group B, with group B being slightly more effective than group A. From these results, it would appear that there is a considerable amount of agreement between these various groups of raters regarding their perception of achievement of organizational goals for community health nursing. The Director appears to present a more favorable evaluation of effectiveness of each of the two supervisory groups, as compared to the evaluation made by the Supervisors of Nursing.

Comparing the data of the pilot study with the findings of Georgopoulos and Mann (1962, pp. 214-215) in relation to the quality of nursing care in the ten hospitals, as evaluated by the registered nursing staff, we find that the range of mean scores obtained was between 2.56 and 3.55, while the range for combined groups was between 2.44 and 3.32. In that study, the lower the score, the more favorable were the evaluations of effectiveness (these data compare favorably with the observed range

of scores obtained in the pilot study). Similarly, Knoop (1974, pp. 107-110) reported a range from 3.78 to 6.17 on a similar criterion measure of organizational effectiveness. In Knoop's study, the higher the mean score the more effective were the seventy-five schools in achieving their educational goals. In a study by Viney, (1980) the reported range was from 3.90 to 5.37. In this study the higher the score the more favorable was the evaluation.

The range of scores obtained in the pilot project compares with those observed in similar studies.

4. Test-retest reliability. The instrument was administered to the same twenty-five respondents eighteen weeks later (Test I, Feb. 5/81; Test II, June 8/81) to assess the stability of the instrument over time. The test-retest reliability coefficient was computed by calculation of the Pearson Correlation Coefficients and yielded a value of 0.954 (N=25) (see Appendix XI for test-retest raw scores).

From the above test, it can be concluded that the adapted Georgopoulos and Mann Instrument is a reasonably valid and reliable instrument.

Determination of the Task Structure and Position Power in Community Health Nursing Supervisory Groups

A pilot study was carried out to verify the amount of task structure and position power which existed in community health units in Ontario.

Task structure. After leader-member relations (group atmosphere), task structure plays the second most important role in defining situation favorableness. The task of a group represents the assignment of duties and responsibilities that have been delegated to the group by the organization, and for which the leader is held responsible. Only relatively recently has a closer investigation and description of tasks of small groups been the object of study (Fiedler, 1967, p. 26). The nature of the task determines the leader's influence to a considerable extent. A structured task provides one way of influencing member behavior by means of organizational sanctions, which the leader may choose to impose; it also reinforces his position power. An unstructured task leaves the leader less able to use position power to control the subordinate's work, because the task dilutes his influence (Fiedler, 1967, p. 28).

No study could be identified in which the task structure of community health nursing staff groups had been categorized. As already stated, community health

nursing practitioners carry out their assigned role in a very autonomous manner and at a distance from close supervision (Murray, 1970, p. 25; Scollie, 1972; Cunningham, 1973). The task could conceivably be unstructured. Therefore, a pilot study was conducted to clarify this issue.

The amount of structure of the task was verified through an Expert Panel consisting of a Director of Community Health Nursing, two assistant directors and two professional nurse educators, teaching community health nursing in a University setting. The five respondents completed Fiedler's Task Structure Rating Scale (Fiedler, Chemers and Mahar, 1976, p. 71, sample scale in Appendix II) and rated the structure of the staff nurse members of supervisory groups in official health units in Ontario as moderately structured. The scores obtained were 12, 13, 13, 13, 14 respectively. Task structure scale (Fiedler et al., 1976, p. 55) scores 0-6 are considered low, 7 to 13 are considered moderate and 14-20 are considered high in task structure.

The situational favorableness dimension of the Contingency Model entertains two divisions in the task structure, that is, structured and unstructured. It seems that from the results obtained the task structure would have to be considered moderately structured.

However, for leaders (supervisors) with training and experience, the task would have to be considered structured, while for those without training and experience, the task would appear to be less structured.

In support of their decision the experts suggested that the policies and guidelines of the health units, coupled with the job description of the staff nurses and the supervisors, provided for a clear definition of the expected role and function of these staff members (examples in Appendix III and IV). Some guidelines described the nurse's task during a child maternal health visit, for an immunization clinic, while conducting a home visit, or within the framework of a psychiatric home-nursing visit. The experts recognized the staff Nurses' reponsibility to be guided by the basic principles of nursing practice, the nursing process and nursing standards, in discharging their role as community health nursing practitioners. It was further indicated that the staff exercised discretion, and adapted their caring and teaching function, based on an ongoing assessment of the family situation, the presenting nursing problems, and the ability of the family and/or client to cope with the disturbing situation(s). The staff nurses are also guided in the discharge of their task by a prescribed system of

reporting (CHARIS, Appendix V) and other instructions and procedures such as the Ontario Ministry of Health: Guide for Public Health Nursing. Additional tools were available in each health unit to specify the goals, to identify alternative procedures available to reach the goals, to provide a framework for judging the appropriateness of solutions and to identify resource persons, like the supervisor, the consultant, the nutritionist (etc.) who were available for decision, verifiability and specificity. Some of the guides or recommendations used are: ANDSOOHA: Scope of Public Health Nursing Practice; Registered Nurses' Association of Ontario, Community Health Nursing; Ontario Ministry of Health, Recommendations of the Core Committee on Family and Personal Health.

Many of the provincial health units interacted with the Ministry to develop the recommended Core Programs. For more than a year, the attention of the staff has been polarized on the Family and Personal Health components which they contain. Each of the sections described concludes by enumerating outcome objectives. The document recognizes the role and functions of the nurse in the following terms:

> Though health services to families and individuals are of multi-disciplinary nature, the bulk of services is provided by the Public Health Nurse. The nurse plays an important role in the delivery of these services because of expertise and access to families which no other health professional has. The health unit is the only agency that has a mandate to the whole community and to promote health as opposed to dealing with disease (Ontario Ministry of Health, 1980, p. 3).

These core programs were endorsed by The Honorable Dennis Timbrell in his address to the Provincial Legislature, December 8, 1980, in the course of the proposed revision of the Public Health Act in the following statement:

> ...my staff completed the first stage of the Health Protection Act project earlier this year, with the development of a package of core public health proposals to be included in the new act. Incorporating these new core programs into legislation will not only provide a clear legislative mandate for the delivery of public health services in the province, but will also remove many of the existing inequities in program delivery (Dennis Timbrell, M.O.H., December, 1980).

For these reasons, the panel of experts labelled the group task as being at the high end of moderately structured. Therefore, in a structured/unstructured classification, the task must be considered structured.

Position power. This component of situational control is of concern because it affects the role relationship between the leader and the members of the group. It also

affects the compliance which the leader can demand from his group.

For the purpose of this study, the same Expert Panel was asked to rate the position power of supervisors in Ontario health units using the Position Power Rating Scale (Fiedler, Chemers and Mahar, 1976, p. 81, see Appendix VI). Scores of 0 to 3 are considered low, 4 to 6 are considered moderate and scores of 7 to 10 are considered high. Since all five respondents rated the position power of the supervisors as 10, it was concluded that the supervisors enjoyed a high level of authority and control in their supervisory groups.

It has been the practice of Fiedler to determine task structure and position power for each category of organizations. The two pilot studies served to determine two of the three components of situational favorableness in community health nursing agencies in Ontario. The agencies are similarly structured and are expected to meet common minimum standards of practice as well as follow ministerial guidelines for program orientation. On the basis of the pilot studies, the task was considered "structured" and position power "strong".

Therefore, supervisory groups with good leader-member relations, and led by a trained leader should be grouped in Octant I, while those led by an untrained

leader should be grouped in Octant IV. Supervisory groups with moderately poor leader-member relations, and led by a trained leader should be grouped in Octant V, while those which are led by an untrained leader should be grouped in Octant VIII.

Design Rationale

This study was an ex post facto investigation carried out in the real social setting of the regional health units of Ontario. It proposed to examine the relationships between the achievement of organizational goals by the supervisory groups of community health nurses, the leadership style of their supervisors and the situational favorableness which was operant in these groups at the time of the study, as indicated in the aforementioned hypotheses. Katz' (1953) classic essay on field studies describes two major types of field study: Exploratory and Hypothesis testing. The present study was of the latter type. There can be no control over the independent variables, namely leadership style, situational favorableness and training; as well, there is no possibility for random assignment to groups or experimental manipulation. These are weaknesses of ex post facto/ correlational research (Kerlinger, 1973, in Polit and Hungler, 1978). However, this type of research continues to play a crucial role in nursing, medical and social science research, because many of the interesting

problems to be solved in those fields are not always amenable to experimentation. Since the hypotheses have been deduced from an established theory, there can be reasonable confidence in the relationships identified.

Design Methodology

The variables. The dependent variable in this study is the degree of effectiveness in goal achievement of each of the supervisory groups of community health nursing, as measured by the adapted Georgopoulos and Mann (1962) instrument.

The independent variables of the study are (1) the leadership style of the supervisors as measured by the Least Preferred Co-worker scale (LPC); (2) the amount of situational control, as measured by the Group Atmosphere Questionnaire (GA). (the two other dimensions of this variable have been determined through the pilot studies on task structure and position power); and (3) training, defined as the supervisor having received a basic or post basic baccalaureate degree in nursing.

The sample. The entire number of nursing supervisory groups and their leaders, in each of the forty-four official health units in the Province of Ontario constituted the target population for this study.

However, it was assumed that Ontario community health nursing supervisors were a representative sample of all supervisors of community health nursing in official agencies in Canada. Although the study was limited to Ontario health agencies, it was assumed the same relationships would apply in any other such agency in Canada because of the similarity of programs and structure (pyramidal hierarchy) within the division of nursing service, and because supervisors hold the same middle management position.

Investigative procedures. A list of the names and addresses of each of the Ontario health units was obtained from the Ontario Ministry of Health, Community Health Services, Health Programs Branch. Endorsement of the study was secured from the Executive Director of the Branch and from the Chief of Public Health Nursing, following the submission of a description of the study, including an outline of the procedures, design and instruments to be used. They in turn encouraged the Medical Officers of Health and the staff of the Nursing Service Division of each health unit to provide support to, and participate in the study. A copy of the letters exchanged with Community Health Services and the Health Units is contained in Appendix XII. Due to reorganization in progress, two Health Units were not included in the

study. For the purpose of the study, one of the Units was considered as two independent Units, due to an internal division of administrative authority and control over nursing activities. Therefore, forty-three health units were included in the study.

Letters of introduction requesting permission to contact the Nursing Directors and Supervisors were sent to the Medical Officers of Health. Similar letters were sent to the Directors of Nursing asking for their participation and for that of their respective Supervisors. Upon receipt of the Directors' replies, accompanied by the list of names of their Supervisors, appropriate questionnaires were mailed to all respondents. Forty-three Directors of Nursing agreed to participate. One hundred and forty-eight Supervisors were approached and asked to participate. Copies of this correspondence are included in Appendix XII. Each Director of Nursing was asked to complete an adapted Georgopoulos and Mann instrument to measure the effectiveness of community health nursing for each of the supervisory groups under her jurisdiction. Each Supervisor was asked to complete the following package of questionnaires or instruments: - the Least-Preferred Co-worker scale (LPC), the Group Atmosphere questionnaire (GA, and a brief biographical data sheet. Copies of these instruments

are contained in Appendix VIII to X.

To qualify for the study, the Supervisors were required to have at least two nurses reporting to them. They also needed to be in the role of supervisors for at least two years, so that their influence could be felt by their staff nurses and be related to goal achievement. Experience was, therefore, a controlled variable, since all Supervisors had at least two years of experience. This information was secured from the biographical data sheets.

Forty-three Directors of Nursing returned measurement of organizational effectiveness instruments, while one hundred and thirty-eight supervisors returned packages of instruments and questionnaires. Ten of these packages were completed and returned by Directors of Nursing who, in addition to their other administrative functions, acted in a supervisory capacity and had supervisory groups reporting to them.

The instruments. This section describes each of the three major data collecting instruments utilized in the study.

1. Least Preferred Co-worker scale. The least Preferred Co-worker scale (LPC) is a tool which provides an index of motivational hierarchy or of behavioral preferences, indicating the goals which are more important for the leader being

assessed (Fiedler and Chemers, 1974, p. 74). The LPC scale is recognized as having a high degree of internal consistency. Studies using the semantic differential form have reported split half reliability coefficients in the 0.80's and 0.90's, when attenuated for number of scale items length. Rice (1975, p. 16) reports a high degree of internal consistency given the large sample size used in some of the studies. Normative data collected by Posthuma (1970) provide additional indirect evidence for the equivalence of similar instruments with a different number of scale items. His analysis of large and diverse samples of LPC respondents showed no significant difference in the mean scores for 16, 17, and 20 item LPC scales. Reviewing data on test-retest stability, Rice (1975, p. 19) concluded that there was often considerable stability in LPC scores across time, especially when there were no dramatic changes or incidents in the respondent's life during the test-retest interval. However, he suggested intervening experiences could introduce change in the LPC score and reduce stability. There was greatest stability in the LPC scores of respondents

who either described the same specific individual each time or did not describe a specific individual. According to Rice, available reliability information suggested three conclusions:

> (a) The LPC scale has a high degree of internal consistency. (b) Different response formats and different specific items appear to yield scores of high degree of equivalence. (c) Finally, the stability of the scale appears to be dependent on the nature of the experience intervening the first and second administration of the scale (Rice, 1975, p. 23).

The 16 item scale was administered to each of the Supervisors included in the study. The scale was scored by summing each line score and obtaining a total score. Scores of 64 or above were considered to indicate a high LPC person, scores of 57 or below were considered to indicate a low LPC person. Scores of 58 to 63 were considered to indicate an intermediate LPC person (Fiedler, Chemers and Mahar, p. 8).. A copy of this scale is contained in Appendix IX.

2. <u>The Group Atmosphere questionnaire</u>. The major determinant of situational favorableness is the leader-member relations. This has been supported by extensive studies (Fishbein, Landy & Hatch, 1969; Mitchel, 1969).

The Group Atmosphere questionnaire (GA) was used to measure supervisor-staff relations. The Group Atmosphere questionnaire was devised by Fiedler to test the degree to which a leader felt accepted by the group. The instrument, modelled after the Least Preferred Co-worker scale, consists of 10 bipolar adjective items which are highly intercorrelated (Fiedler, 1967, p. 32). Each of the items is scored by assigning a value ranging from eight at the good end to one at the poor end. The GA score is calculated by summing the item scores. Scores of 66 and above were considered to indicate good group atmosphere, while scores of 65 and below were considered to indicate moderately poor group atmosphere. The mean GA score for normative data collected by Posthuma (1970, p. 12) was 66.

The internal consistency of Group Atmosphere scores seems high. Fiedler (1967, p. 163) reported high intercorrelations of GA scores among ratings performed at the conclusion of three sessions with Belgian naval leaders, namely 0.76, 0.73, and 0.83. Corrected split-half reliability of the scale was 0.90. McNamara (1968) reported a test-retest reliability co-

efficient of 0.42 (n=31) for elementary school principals over an interval of 1½ years. Garland and O'Reilly (1976, p. 20) reported a test-retest reliability coefficient of 0.67 over an interval of 6 weeks. A copy of the GA questionnaire is included in Appendix X.

3. Adapted Georgopoulos and Mann Instrument. This instrument was used to measure the effectiveness of community health nursing care provided by the supervisory groups included in the study. The basis for this measure has been extensively discussed in chapter I and in the section on pilot projects of this chapter.

The Directors of Nursing responded to this questionnaire. Their response was utilized to test the hypotheses. The Directors of Nursing are both competent and knowledgeable with respect to evaluation of the adequacy of patient care (Price, 1972, p. 105) and set the objectives and goals for nursing. The evaluation of the supervisory group involves the performance of a whole subunit of the organization, rather than the performance of the supervisor. This procedure is followed in most studies of the Contingency Model. The questionnaires were scored in the following manner. Scores of one to seven were assigned to each of the seven responses to each question; a higher score corresponds

to more effective nursing care. The scores for each of the seven questions were added and used to compute arithmetic means for each supervisory group in the study.

Procedures for Data Analysis

The data were analysed using the following methods: - The biographical data regarding Supervisors and supervisory groups was summarized and presented using descriptive statistics.

Effectiveness scores for each supervisory group were calculated and the arithmetic mean determined. An analysis of the correlations among the seven measures of organizational effectiveness followed. As a result, the average score for items One to Seven was used in testing the hypotheses. Measures of central tendency were obtained for the LPC scale and for the GA questionnaire.

The six hypotheses were tested by contrasting means of effectiveness scores, using the Scheffé method.

Limitations

Population/sample. Directors and Supervisors of official community health nursing services in Ontario were approached for this study. Those who fitted the criteria for inclusion were invited to participate. The data are based on all of those who returned usable questionnaires. Assurances were given regarding the security of the ratings and reporting of the data on a pooled data base.

The data obtained permit the establishment of relationships, and allow for inference only within the framework

of the validation studies of the Contingency Model.

The questionnaires were completed by professional practitioners considered to be knowledgeable and competent in their field. All were licenced to practice as nurses in Ontario and met the minimum educational requirement for community health nursing practice under the Public Health Act of Ontario. All have been confirmed in their respective function by officers of the community health agency as either Directors or Supervisors. This is taken to mean that they have been judged competent to meet the requirements of their positions.

The appraisals requested were limited to qualities that appear overtly in interpersonal relations, and reflect the perceptions of the raters.

Limitations related to the rating procedures may be due to the extent to which the respondents are willing to make favorable/unfavorable judgments about their co-workers; or their leniency/severity in rating co-workers.

There may have been limited contacts between the respondents and the supervisory group being rated, a factor which could influence the ratings. However, differences of this nature will tend to be lost in the pooling of responses.

By virtue of their professional preparation, nurses in general are accustomed to providing judgments about situations, persons and group interactions. It would be

expected that this would in some way positively affect their willingness and ability to provide ratings on their co-workers.

This study did not include responses from the client population in community health nursing. In this respect, it does not differ from the Georgopoulos and Mann study, where hospital clients were not included among the raters. It is doubtful that they would be knowledgeable enough to provide valid data, and practical financial considerations would also be a limiting factor (Georgopoulos and Mann, 1962, p. 83 and p. 204).

Instruments. Each of the three instruments used in the study are subject to limitations of reliability and validity. The three variables themselves are limited in scope. The Least Preferred Co-worker score reflects but one aspect of the personality of the supervisors in community health nursing services. The Group Atmosphere score alone does not describe the totality of leader-member relations. The Measure of Organizational Effectiveness is a very broad measure of achievement of organizational goals and was used for the first time in the field of community health nursing. Ambiguities may have remained which were not detected through the validity and reliability studies. The scale was based on ordinal data and lacked sensitivity, due to the limited number of

categories. The data were collected by a mail survey method. Finally, this scale was developed from the operative goals of the major decision makers of the organization.

There was no attempt within this study to confirm by site observations that the activities of the supervisory groups match the operative goals (Price, 1972, p. 6).

Findings. It would seem reasonable to draw inferences from this study applicable to community health nursing services in other settings. However, it would be desirable to have further validation studies of the Contingency Model in this field of health services. The similarity of the community health service program in other settings, the nature of the practitioners involved and the administrative structure under which such services are provided, should also be considered.

CHAPTER III

PRESENTATION OF RESULTS

This chapter addresses the analysis of data obtained as a result of the study. These data are presented in six distinct sections. The biographical data are summarized in the first section. Section two presents the data obtained on each of the independent variables. The data concerning the dependent variable, organizational effectiveness, is presented in the next section. The relationship between the variables is described in section four. The data pertaining to each of the hypotheses and the results of the statistical analysis are presented in section five. A summary of the findings is included in the last section.

Biographical Data

Replies were provided by 138 supervisors representing 93.2% of the community health nursing supervisors contacted in Ontario. Five questionnaire packages were returned incomplete or unusable, leaving data from 133 supervisors for inclusion in the analysis of results (89.9% of the provincial total). Performance of these supervisory groups was rated by 43 directors of nursing (one for each community health agency), representing 100%

of those contacted (see Table IV).

The distribution of community health agencies, according to the number of supervisory groups per agency, is disclosed in Table V. The total number of nurses in the sample of supervisory groups was 1779 and the distribution of supervisory groups, according to the number of nurses per group, is shown in Table VI. Appendix XIII contains the raw data for the composition and nursing education of members of the supervisory groups.

The characteristics of the sample of supervisors, in terms of age and work experience in nursing, is presented in Appendix XIV and XV, while Tables VII and VIII illustrate respectively the distribution of the sample according to education and work experience as supervisors. It should be noted that more than 40% of the supervisors fall between 50 and 65 years of age; 84 or 63% have a baccalaureate degree; and 22 or 16% have less than two years of experience in the role of supervisors.

The Independent Variables

Leadership Style. The leadership style of the supervisors was measured using a 16 item LPC scale. All respondents completed the LPC scale. Scores on the LPC scale ranged from 22 to 101 with a mean of 63.82, a median of 63.75 and a mode of 57.00. Of the one hundred and

Table IV

Summary of Data Sources for Study Sample

Sample	Number Contacted	Responses Number	Responses Percentage
Agencies	43	43	100.0
Directors	43	43	100.0
Supervisors	148	138	93.1

	Number	Percentage
Supervisors Questionnaire		
Mailed	148	100
No Response	10	6.7
Incomplete or Unusable	5	3.4
Used in the Study	133	89.9

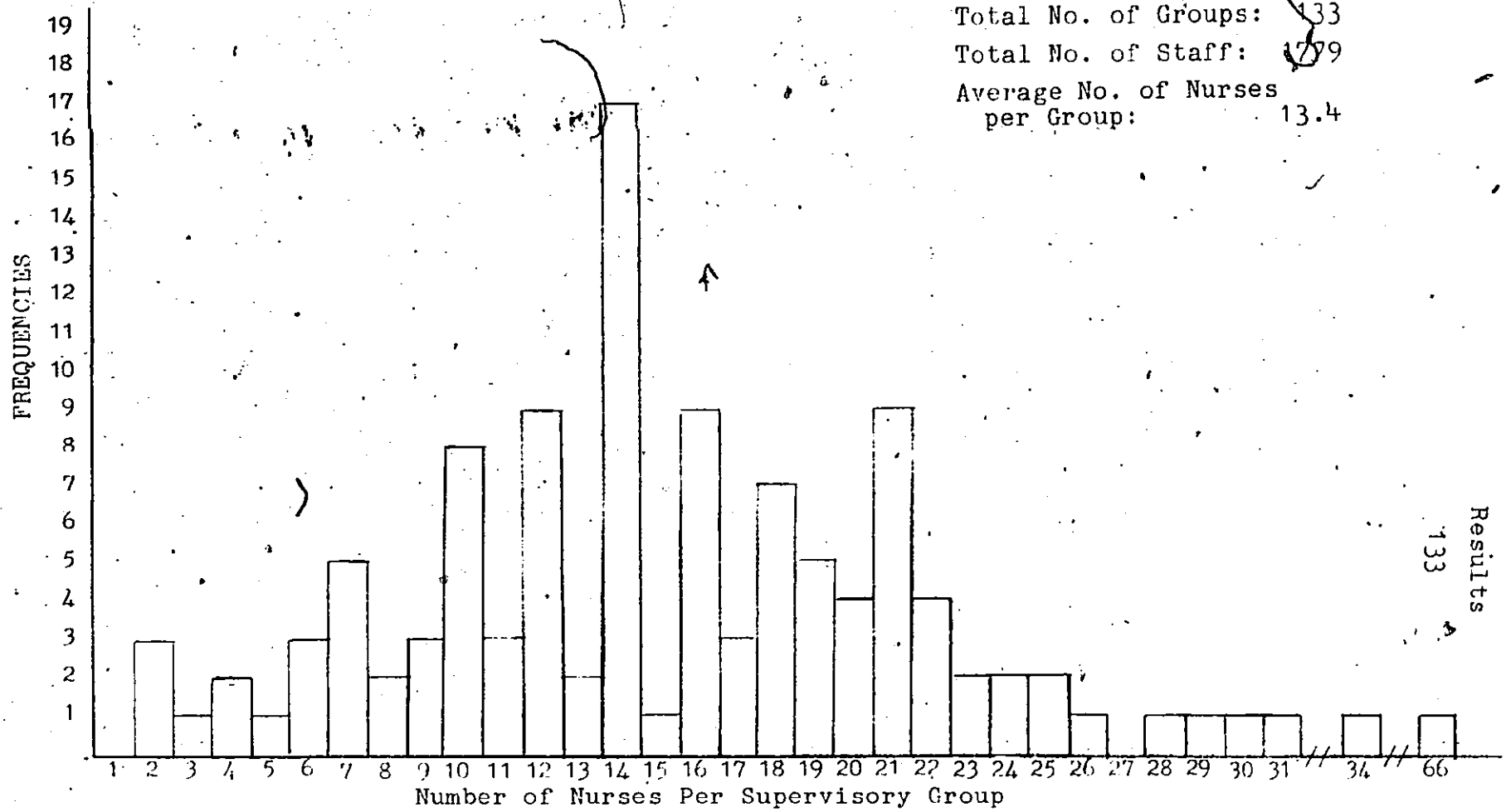
Table V

Frequency Distribution of Community Health Agencies According to Number of Nursing Supervisory Groups per Agency

Number of Supervisors per Community Health Agency	Frequency	Cumulative Frequency
1	9	9
2	14	37
3	8	61
4	3	73
5	2	83
6	3	101
7	2	115
9	1	124
14	1	138
TOTAL		138

Table VI

Frequency Distribution of Supervisory Groups According to Number of Nurses per Group*



* Including Full-Time RN's, RNA's, P.C.L.N.'s

Table VII

Distribution of Nursing Supervisors by Type of Educational Program

Type of Educational Program	Supervisors			
	N+	%+	N++	%++
University Degree Programs*				
Basic Baccalaureate	41	30.8		
Post-Basic Baccalaureate	43	32.3		
Master's	9	6.8		
Total With Baccalaureate or Higher degree			84	63.1
Non-Degree Programs**				
Diploma	91	68.4		
Certificate in Public Health	86	64.5		
Certificate in Public Health Supervision	27	20.3		
Total Without Baccalaureate Degree			49	36.9
TOTAL			133	100.0

* Some supervisors have more than one degree

** Some supervisors may have one or more degrees and/or one or more non-degree programs

\+ Number and percentage of supervisors with individual degree or non-degree programs

++ Number and percentage of supervisors with and without a baccalaureate program

Table VIII

Distribution of Sample According to Years of Work Experience as a Supervisor*

Time in Years	No	%
<2 years**	22	16.2
3-5	41	30.8
6-10	33	24.8
11-15	16	12.0
16-20	13	9.8
21 or more	8	6.0

*N = 133

** Data for supervisors with less than two years of experience were not used in testing the hypotheses.

thirty three respondents, 68 or 51.1% obtained scores of 64 and above and were classified as high LPC, whereas 51 or 38.3% obtained scores of 57 or below and were classified as low LPC. Fourteen respondents or 10.5% fell in the intermediate group, obtaining scores between 58 and 63. This last group of respondents was not included in the testing of the hypotheses. Fiedler et al. (1976, p. 22) considered this group as borderline.

Situational favorableness. Situational favorableness has three components. As discussed in Chapter II, group atmosphere was the variable component of situational favorableness measured for the whole sample. One hundred and thirty three responses were obtained from the administration of the GA scale. Scores ranged from 37 to 80, with a mean of 66.25, a median of 66.67 and a mode of 70.00. As can be seen, the mean, median and mode do not differ significantly among themselves or from the cut-off score used to dichotomize group atmosphere. The respondents were distributed according to good group atmosphere, representing those with scores of 66 and above, and moderately poor group atmosphere, representing those with scores of 65 and below. This yielded 78 respondents or 58.6% with good GA and 55 or 41.4% respondents with moderately poor GA.

Training. Training was the third independent variable

selected to categorize the one hundred and thirty three respondents. Tables IX and X illustrate the distribution of supervisors with and without a baccalaureate degree in nursing. A total of 84 respondents (63.1%) were baccalaureate prepared, that is holding either a baccalaureate or higher degree in nursing, and 49 (36.8%) did not have a baccalaureate degree. These tables show the distribution of the sample according to the three independent variables.

The Dependent Variables

The adapted Georgopoulos and Mann instrument designed to measure organizational effectiveness was completed by all the Directors of Nursing for each of their supervisory groups. Scores ranged from 3.00 to 7.00. The mean score for general effectiveness (items 1 to 7) was 4.91, the median was 4.98 and the mode was 5.00.

Pearson correlation coefficients for the different measures of effectiveness of community nursing services were calculated and are displayed in Table XI. All correlations were significant at $p \leq 0.05$; there is therefore a close interrelationship of the nine criteria of effectiveness. These findings added support for the statistical reliability of the criteria used to test the hypotheses, the combination of the seven single item

Table IX

Distribution of Supervisors with Baccalaureate Training According to Leadership Style and Group Atmosphere

Leadership Style	Good GA N	%	Moderately Poor GA N	%	Total	%
High LPC	20	42.6	23	62.2	43	51.2
Low LPC	22	46.8	8	21.6	30	35.7
Intermediate LPC	5	10.6	6	16.2	11	13.1
TOTAL	47	56.0	37	44.0	84	100

Table X

Distribution of Supervisors Without Baccalaureate Training, According to Leadership Style and Group Atmosphere

Leadership Style	Good GA N	%	Moderately Poor GA N	%	Total	%
High LPC	17	54.8	8	44.4	25	51.0
Low LPC	12	38.7	9	50.0	21	42.9
Intermediate LPC	2	6.5	1	56.6	3	6.1
TOTAL	31	63.3	18	36.7	49	100

Table XI

Pearson Correlation Coefficients for Nine Measures of Organizational Effectiveness

COMPONENTS	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(1-7)	(2-7)
(1) Overall Effectiveness	1.000								
(2) Community Goal 2	0.750*	1.000							
(3) Community Goal 3	0.673*	0.669*	1.000						
(4) Community Goal 4	0.702*	0.714*	0.627*	1.000					
(5) Community Goal 5	0.773*	0.758*	0.585*	0.726*	1.000				
(6) Community Goal 6	0.718*	0.755*	0.550*	0.670*	0.722*	1.000			
(7) Community Goal 7	0.676*	0.587*	0.568*	0.633*	0.591*	0.620*	1.000		
(1-7) All Goals Including Overall (General Effectiveness)	0.883*	0.875*	0.756*	0.867*	0.866*	0.859*	0.805*	1.000	
(2-7) All Goals Except Overall	0.841*	0.870*	0.746*	0.866*	0.856*	0.867*	0.812*	0.991*	1.000

* $p \leq 0.05$

scores into a single-index score of General effectiveness (1-7). The intercorrelations among the effectiveness criteria indicated that community health nursing agencies which had high scores on one measure of effectiveness would be expected to also achieve high scores on each of the other measures of organizational effectiveness.

Relationship Between Variables

The relationship between the independent variables, LPC scores, GA scores and training, was explored through the process of correlation. The general measure of effectiveness (mean of items 1 to 7) was also correlated with each of the independent variables. Table XII reports no significant correlation coefficients between any of these variables.

Tests of the Hypotheses

Six hypotheses were tested in the study. The first two hypotheses under H_1 were based on Fiedler's Contingency Model and predicted the influence of leadership style and situational control on group effectiveness in community health nursing services. The next four hypotheses under H_2, based on Fiedler's reanalysis of McNamara's data, predicted the influence of baccalaureate training on the situational favorableness of the leaders and hence on group performance, contingent on the leadership style of

Table XII

Pearson Correlation Coefficients for Independent and Dependent Variables (N=133)

Components	LPC	GA	General Effectiveness	Training
LPC	1.000			
GA	-0.078	1.000		
General Effectiveness	-0.090	-0.0060	1.000	
Training	0.0009	0.0897	-0.11136	1.000

the supervisors.

The six hypotheses were tested by contrasting means of the effectiveness scores, using the Scheffé Method (Myers, 1979, p. 311). The very conservative Scheffé test was used because of the unequal size of the samples used for testing the hypotheses. Means and standard deviations of effectiveness scores for supervisory groups types 1 to 12, classified according to the independent variables, LPC, GA, and training, are given in Table XIII. Raw scores for the independent and the dependent variables, for each of the supervisory groups are presented in Appendix XVI. The effectiveness ratings of supervisory groups types 1 to 8 can be found in Appendix XVII.

The contrasts by the Scheffé Method are listed in Table XIV. These results indicate that all six hypotheses were supported.

The hypothesis H.1.a. stated that in favorable situations, supervisory groups led by low LPC leaders (Type 9) would be more effective than those led by high LPC leaders (Type 10). Hypothesis H.1.b. stated that in moderately favorable situations, supervisory groups led by high LPC leaders (Type 11) would be more effective than those led by low LPC leaders (Type 12). The results of the Scheffé test (Table XIV) indicate that the negative

Table XIII

Descriptive Statistics of Effectiveness Scores of Different Types of Supervisory Groups, Classified According to LPC, GA and Training

Hypothesis	Type of Supervisory Group	Supervisors and Group Characteristics	N	Mean	S.D.
H.2.a.i.		*Good Group Atmosphere:*			
	1	High LPC Supervisors without Baccalaureate	14	4.61	0.54
	2	High LPC Supervisors with Baccalaureate	18	3.88	0.30
H.2.a.ii.		*Good Group Atmosphere:*			
	3	Low LPC Supervisors with Baccalaureate	19	5.70	0.45
	4	Low LPC Supervisors without Baccalaureate	12	4.92	0.34
H.2.b.i.		*Moderately Poor Group Atmosphere:*			
	5	Low LPC Supervisors without Baccalaureate	9	4.80	0.56
	6	Low LPC Supervisors with Baccalaureate	8	3.96	0.18
H.2.b.ii.		*Moderately Poor Group Atmosphere:*			
	7	High LPC Supervisors with Baccalaureate	15	5.69	0.45
	8	High LPC Supervisors without Baccalaureate	9	4.86	0.28
H.1.a.		*Good Group Atmosphere:*			
	9	Low LPC Supervisors (Types 3 and 4)	31	5.40	0.58
	10	High LPC Supervisors (Types 1 and 2)	32	4.20	0.56
H.1.b.		*Moderately Poor Group Atmosphere:*			
	11	High LPC Supervisors (Types 7 and 8)	24	5.38	0.57
	12	Low LPC Supervisors (Types 5 and 6)	17	4.41	0.60

contrast between supervisory groups Type 10 and Type 9 and the positive contrast between supervisory groups Type 11 and Type 12 were significant with alpha equal to 0.05 and confidence intervals of -1.413 and -0.985, and 0.700 and 1.238, respectively. Therefore, H.1.a. and H.1.b. were supported.

The contrasts chosen for testing the hypotheses under H_2 were as follows: - H.2.a.i.: in favorable situations, supervisory groups led by high LPC supervisors without training (Type 1) would be more effective than groups led by high LPC supervisors with training (Type 2); - H.2.a.ii.: in favorable situations, supervisory groups led by low LPC supervisors with training (Type 3) would be more effective than those led by low LPC supervisors without training (Type 4); H.2.b.i.: in moderately favorable situations, supervisory groups led by low LPC supervisors without training, (Type 5) would be more effective than groups led by low LPC supervisors with training (Type 6); H.2.b.ii.: in moderately favorable situations, supervisory groups led by high LPC supervisors with training, (Type 7) would be more effective than groups led by high LPC supervisors without training (Type 8). The hypotheses under H_2 were all supported by the results of the study (Table XIV).

TABLE XIV

Testing of Hypotheses: Contrasts by the Scheffé Methods

Testing of Hypotheses	Contrast	$\hat{\psi}$	Confidence Interval Lower	Upper
H.2.a.i.	$M1 - M2$	-0.771	-1.033	-0.429*
H.2.a.ii.	$M3 - M4$	0.770	0.458	1.082*
H.2.b.i.	$M5 - M6$	-0.846	-1.258	-0.434*
H.2.b.ii.	$M7 - M8$	0.836	0.478	1.194*
H.1.a.	$M9 - M10$	-1.199	-1.413	-0.985*
H.1.b.	$M11 - M12$	0.969	0.700	1.238*

Note:

(a) Data from Table XIII

(b) $\alpha = 0.05$ for all contrasts

(c) $MS_e = 0.183$; df. = 96

(d) $\hat{\psi}$ is an estimate of $\mu_1 - \mu_2$; μ_1 and μ_2 are estimated by sample means

* Significant, (Confidence Interval does not span zero)

Summary Findings

The prediction that Fiedler's Contingency Model of organizational effectiveness would apply to supervisory groups in community health nursing received strong support from the results of the study. In favorable situations, groups led by experienced supervisors with low LPC performed better than those led by experienced supervisors with high LPC. In moderately favorable situations, groups led by experienced high LPC supervisors performed better than those led by experienced low LPC supervisors.

Prediction of the effect of baccalaureate training of supervisors on group performance, was fully supported in the case of experienced leaders. In favorable situations, groups led by experienced supervisors without baccalaureate training but with high LPC, performed better than those led by experienced high LPC supervisors with baccalaureate training, while groups led by experienced low LPC supervisors with baccalaureate training had better group performance than those led by experienced low LPC supervisors without baccalaureate training. In moderately favorable situations, groups led by experienced supervisors without baccalaureate training but with low LPC had better group performance than those led by experienced low LPC super-

visors with baccalaureate training, and groups led by experienced high LPC supervisors with baccalaureate training had better group performance than those led by experienced high LPC supervisors without baccalaureate training.

CHAPTER IV

DISCUSSION OF RESULTS

The hypotheses proposed for the study were supported. The results presented in the previous chapter are discussed in this chapter. Five sections are presented. The independent and dependent variables, and the relationship between the variables are included in the first two sections. Section three refers to the testing of the first hypothesis, while section four refers to the testing of the second hypothesis. The implications are presented in section five.

The Independent and Dependent Variables

The results of this study were based on questionnaires completed by 100% of the Directors of Nursing and 89.9% of the Supervisors in the 43 community health nursing agencies of Ontario. The sample used for the study is therefore province-wide addressing the totality of the population of supervisory groups of the official health units. Thus, it permits an assessment of the parameters of leadership effectiveness as they apply to community health nursing throughout the province. In view of the wide basis from which the study population was drawn and the similarity in the objectives and administrative structure of community health nursing throughout the country, inferences

can be drawn from the study applicable to other Canadian provinces with similar programs, staffing and organizational structure.

The high rate of response in completing the questionnaires speaks in favor of the interest demonstrated by the Directors of Nursing, Supervisors and Medical Officers of Health, in the research problem posed and its implications for nursing administrators.

The instruments used to measure situational control and leadership style of the supervisors were the group atmosphere and the LPC scale (Fiedler, 1971, pp. 129-130). The mean LPC score for the study sample was 63.82. This is higher than the overall average of approximately 59 for the sixteen item scale as determined by Posthuma in his normative data derived from a sample of 2014 questionnaires (Posthuma, 1970, p. 11). Fiedler (Fiedler, Chemers and Mahar, 1976, pp. 8-21) identified two leadership styles, high LPC if the score was 64 and above, and low LPC if the score was 57 and below. This study adopted Fiedler's suggested cut-off points as determinants of high and low LPC scores. In community health nursing agencies in Ontario, high LPC supervisors predominate, accounting for 51.1% of the total sample as opposed to 38.3% for low LPC supervisors (N:133). Excluding the intermediate or borderline supervisors who obtained scores between 58 and

63, there were 57.14% high LPC supervisors and 42.86% low LPC supervisors (N:119).

Two studies based on Fiedler's Contingency Model of leadership effectiveness involved testing of the model in hospital settings (Hill, 1969, Nealy and Blood, 1968), but no studies of this model have been performed in community health agencies. Distribution of LPC scores in the two studies involving nurses in the hospital setting is not available for comparison with results of the present study. Nonetheless, should the predominance of high LPC supervisors in community health nursing be confirmed by future studies, this fact deserves consideration when establishing task structure, allocating position power and deciding on training policy, as will be discussed further on in this chapter.

Fiedler states that "the LPC score tends to accurately reflect a leader's personality in various situations (Fiedler, Chemers, Mahar, 1976, p. 9)". A high LPC score indicates that the respondent has described his/her least-preferred co-worker in relatively favorable terms, while a low score indicates that the respondent perceives his/her least preferred co-worker in a very negative and rejecting manner. Thus, according to Fiedler, the low LPC person "describes his least preferred co-worker in a uniformly, hence undifferentiated or stereotyped manner as "all bad"

(Fiedler, 1971, p. 129)". Fiedler claims as well, that the

> LPC score must be seen as a measure which in part reflects cognitive complexity of the individual, and in part reflects the motivational system that evokes relationship-oriented and task-oriented behaviors from high versus low LPC persons in situations which are unfavorable for them as leaders (Fiedler, 1971, p. 129).

Although the Contingency Model does not adequately explain why low or high LPC leaders behave in a different manner, there is evidence to suggest that they have different motivational hierarchies. The primary goals of high LPC leaders is good interpersonal relations and the secondary goal is that of attaining prominence and self enhancement. The primary goal of low LPC leaders is task achievement, while the secondary goal is achieving good interpersonal relations (Fiedler, 1972, p. 456).

Fiedler suggests that in an unfavorable or threatening situation, both high and low LPC supervisors will behave in the direction of their primary goal. On the other hand, in favorable, non threatening situations, satisfaction of their primary goals being no longer a motivating factor (Fiedler and Chemers, 1974, p. 76), both leaders will focus on secondary goals: - the high LPC supervisor can be expected to attend to the task while the low LPC leader will emphasize getting the task done by being considerate.

Research based on the Model suggests that high and low LPC leaders change their behavior depending on the situational favorableness confronting them. This is born out by the results of the test of hypothesis 1.

Assessment of the group atmosphere rating by each of the community health nursing supervisors surveyed, yielded a mean score of 66.25. The characteristics of the situational favorableness in the supervisory groups studied are in remarkable conformity with those observed by Posthuma (1970, p. 12) in a compilation of data from 2,415 supervisory groups in real life and laboratory situations. The overall mean score for his normative data on group atmosphere was 66. Good group atmosphere (scores of 66 or above) was reported by 58.6% of the supervisors in the study, while 41.4% reported moderately poor group atmosphere (scores of less than 66). Assessment of group atmosphere for other community health nursing groups is not available for comparison purposes.

The other two factors that determine situational favorableness in the Contingency Model are task structure and position power. Task structure has been defined as "the degree to which the task requirements are spelled out (Fiedler and Chemers, 1974, p. 66)". The task includes the goals to be achieved, the methods, strategies or procedures used to achieve them, their specificity, and

the standards against which the leader can judge the extent to which the task was accomplished. Nealy and Blood (1968) obtained leadership power ratings on a nine item scale in their study of hospital supervisors, but did not measure task structure. Hill (1969) tested the validity and the extension of Fiedler's theory of leadership effectiveness to interacting and coacting groups in an electronic firm and in a large hospital. In this study, the nursing groups were judged unstructured as compared to other hospital groups and position power was considered strong. In comparison with the structured tasks, which prevail in accounting, purchasing and admissions, no other judgement could be reached. In the present study task structure and position power were predetermined on the basis of pilot studies already reported. Task was determined by using Shaw's dimensions of task structure and Hunt's check list was used for determining leader position power (Fiedler, Chemers and Mahar, 1976). For the study sample, the task was considered structured and the position power strong (Chapter II). If we reinterpret the Nealy and Blood and Hill's data assuming that the task for nursing was structured, then their data agree with Fiedler's Model.

As far as situational favorableness is concerned, on the basis of the supporting evidence obtained from the study, community health nursing supervisory groups were

placed in Octants I or V, depending on whether they were rated as having good or moderately poor group atmosphere. According to theory, placement in Octants I or V applies specifically to experienced or trained supervisors (Fiedler, 1972, p. 459). The actual situational favorableness for untrained leaders of supervisory groups that were rated as having good or moderately poor group atmosphere, could place these groups in situations of less favorable control. Other data regarding the situational control for community health nursing groups are not available.

Effectiveness Measure

One of the difficulties which has hampered research in nursing, and particularly evaluative research, has been the lack of measurement of effectiveness instruments developed on the basis of clearly stated goals. In this study, organizational effectiveness was measured using Georgopoulos and Mann's adapted instrument, based on recognized community health nursing service objectives (Canadian Public Health Association, 1977). The data-collecting instrument was subjected to strict validity and reliability testing. Test-retest reliability of the instrument was measured and yielded a Pearson correlation coefficient of 0.95 ($p \leq 0.01$). In addition, a majority of intercorrelations between items in the pre and post

test yielded significant correlation coefficients (See Appendix XIX). The methodology utilized in the construction of the effectiveness measure was based on the position taken by Price (1968) and Mott (1972) who advocate the need for an overall measure of organizational effectiveness which will allow comparisons to be made between organizations, based on organizational operative goals. Successful use in the study of the adapted Georgopoulos and Mann instrument suggests that overall goal achievement in community health nursing could be reasonably compared with overall goal achievement in other areas of nursing service, using the same methodology.

The approach to assess overall organizational goals should not be confused with individual goal achievement at the level of each group member, nor with the assessment of each practitioner's ability to give quality nursing care. The instrument used was not intended to assess nursing care at that level. In view of the comments received, the instrument could however be further refined in another study to particularize some specific program goals and activities which are subsumed under some of the broad goals. Nonetheless, an instrument such as the effectiveness measure used in the study cannot be expected to provide an assessment of the specific outcomes, effects, benefits or impact of community health nursing in relation to

resources used.

The instrument appears to adequately represent the operative goals of community health nursing, is simple in format, and was quickly and clearly understood by the respondents. Supplementary comments made on the response sheet provided an indication that in some instances respondents would have preferred to have been able to achieve optimal goal expectations, but were restricted by the allocation of resources at the unit level. This suggests that there was appropriate discrimination by the respondents. All the hypotheses that were proposed based on the Contingency Model were supported by the study results. Since the modified Georgopoulos and Mann instrument was used to assess organizational effectiveness, confirmation of the hypotheses provides additional evidence of the usefulness of this instrument.

Relationship Between Variables

The correlation coefficients between LPC, GA and organizational effectiveness scores were non significant (see Table XII).

As already discussed, Fiedler's model predicts in fact a positive correlation between LPC and effectiveness only in some situations and a negative one in others. Throughout the validation studies (Fiedler, 1971, pp. 131-132, Fiedler and Chemers, 1974, p. 99) as well as in other

studies (Hill, 1969), there was consistent evidence that the correlations between leadership style and group performance were moderated by the situational favorableness. As illustrated in the findings of the study, the leadership style of the supervisors was negatively or positively related to effective achievement of nursing service goals depending on whether the group atmosphere in which they found themselves was good or moderately poor. Nealy and Blood in their study of leadership performance of nursing supervisors also found differences in effective supervisory patterns related to differences in situational leadership demands at two levels of supervision (1968, pp. 414-422).

Linear correlations between group atmosphere and effectiveness are also not part of Fiedler's theoretical model, and his position is that situation favorableness does not by itself influence group performance (Fiedler, 1962, p. 113; 1967, pp. 152-153).

As predicted by the Contingency Model, no relationship between training and effectiveness was found in the present study. Similarly, in McNamara's study (1968) no significant relationship was identified when the number of years of experience of the principal were correlated with the performance criteria. His study also supports the notion that the experience of a leader is a modifier of the situational favorableness. As discussed

in section five of this chapter, training was identified in the present study as a modifier of situation favorableness.

The Influence of Leadership Style and Situational Control on Organizational Effectiveness of Community Health Nursing

In the present health care delivery system staff nurses in community health agencies in Ontario work under the leadership of supervisors who are responsible for the effective performance of their groups in reaching nursing organizational goals. The present study explored the relationship of leadership style with effective group performance and confirmed the predictability of Fiedler's Contingency Model when applied to community health nursing services.

The Contingency Model postulates that the performance of groups in an organization is contingent upon the interaction of the leadership style of the supervisors and the situational favorableness in which they find themselves (Fiedler, 1971, p. 128). The common assumption underlying the situational approach to leadership effectiveness is that no one leadership style is to be considered the most effective in all situations. The Contingency Model predicts that high LPC leaders tend to perform well in moderately favorable situations while low LPC leaders tend to perform well in favorable or unfavorable situations.

The first hypothesis of the study (H.1.a.) predicted that in situations with good group atmosphere (good GA) community health nursing supervisory groups led by supervisors with low LPC would have higher group effectiveness scores than supervisory groups led by high LPC supervisors. Hypothesis H.1.b., which completes the first research question, predicted that in situations with moderately poor group atmosphere (moderately poor GA) community health nursing supervisory groups led by supervisors with high LPC would have higher group effectiveness scores than supervisory groups led by low LPC supervisors. Both these hypotheses were confirmed. For the purpose of this study it was assumed that supervisors need to be in the role at least two years so that their supervisory influence can be felt by the staff nurses and lack of experience can be fully controlled when testing the hypotheses.

The Contingency Model has not been applied previously to the study of community health nursing. However, Nealy and Blood (1968, pp. 419-420) in their study of leadership performance of nursing supervisors in a hospital situation, found that high LPC first level supervisors who liked and trusted their subordinates and scored high on a scale identical to the group atmosphere scale, were rated by them as lowest in consideration and their subordinates were

highly dissatisfied with their supervision and with their jobs. This finding is consistent with the results obtained in testing hypothesis H.1.a. In Nealy and Blood's study (p. 416), low LPC first level supervisors received higher performance ratings. In testing the Contingency Model in a hospital setting, Hill (1969) was able to verify that when the situational favorableness is moderately poor, high LPC nursing supervisors tended to be more effective than low LPC supervisors. This conclusion is consistent with the results obtained in testing hypothesis H.1.b.

Influence of Baccalaureate Training of the Supervisor on Organizational Effectiveness in Community Health Nursing

The baccalaureate degree is the minimal requirement for leadership positions in nursing. "The hallmark of the baccalaureate nurse is the demonstration of leadership in the practice of nursing" (ORCAUSN, 1979, p. 1). Educational programs throughout Canada leading to the baccalaureate in nursing purport to prepare the graduate for a leadership role in nursing. Therefore, in the present study training was defined as having received a baccalaureate in nursing.

Empirical studies have failed to demonstrate that leadership training and experience are able to improve organizational performance. In 1966, Fiedler

concluded that there was no difference between the leadership performance of many recruits in the Belgian navy and the performance of petty officers or officers of higher rank. In 1970, Fiedler studied 385 different leaders and managers from different organizations and found again that the correlation between years of experience of the leader and performance was -0.12. Historically the basic assumption was that the leader skilled in human relations as well as in the technical aspects of the job would be more effective. Hence, training in these areas would improve leadership performance. However, research data did not confirm this conclusion. For example, sensitivity training of leaders was found in a review of adequately controlled studies to be associated with decreased group productivity, although an increase in group cohesiveness was often reported (Stogdill, 1974, p. 192).

After reviewing a considerable number of studies on the effect of training on behavioral change, Stogdill found that training in human relations tended to change attitudes, but there was little conclusive evidence that lasting change occurs in overt behavior (p. 185).

From a survey in which the effectiveness of training programs was evaluated, it was also found that 57% of the respondents indicated a belief that training

was valuable, but only 14% reported evidence in support of this belief (Stogdill, 1974, p. 196). Campbell and Dunnette (1968, pp. 73-104) considered that laboratory training changed the leader's behavior in the laboratory but reported no evidence of transfer of such training to the work situation. Chemers (1969, pp. 531-546) found however that intercultural training tended to modify the situation in the direction of making it more favorable to the task-oriented leader who then was able to show more consideration than the relationship oriented leader. In reviewing studies on different training methods Stogdill was able to suggest that the organizational climate to which the leader returns tends to condition his behavior after training (1974, p. 195).

Johnson reported a concerted theme in the nursing literature suggesting that nurses are ineffective leaders because they have not had the appropriate training or educational background to be leaders or managers (1976, p. 1). Dimarco and Kuehl, exploring indicators of management training effectiveness for nursing supervisors found that of supervisors with high and low LPC scores, the former were more likely to show an increase between pre and post-training consideration scores, while the latter were more likely to show an increase between pre and post-training

structure scores. Their study suggested the need for careful selection of prospective trainees since the high and the low LPC leaders responded differently to training (1976, p. 44).

There have been few well structured empirical studies which have explored the effects of training on group performance. The real criterion of the effect of training is whether or not it results ultimately in change in the performance or response of the group supervised by the trained leader. Whereas Stogdill sought to establish the relationship between training and effective performance, Fiedler has predicted that effective performance is the result of the leader's ability to successfully exercise control and influence the group's output.

Several studies (Fiedler, 1972(b); 1972(c); 1972(d); Csoka and Fiedler, 1972) have tested the contingency model hypothesis that training improves the favorableness of the situation rather than overall leadership performance. These studies confirmed that training modifies situational favorableness and therefore can be functional or dysfunctional for the leader, depending on leadership style and leader-member relations.

The influence of baccalaureate training on the leadership performance of community health nursing supervisors, as predicted by the Contingency Model, was confirmed in the present study. Examination of the contrasts selected for testing the hypotheses under H_2, listed in Table XIV reveals that these hypotheses have been confirmed.

As predicted, training appears to improve the situational control for the supervisors. Trained supervisors with good or moderately poor group atmosphere have situational controls which place them in Octants I and V respectively. On the other hand, the performance of untrained supervisors varies significantly from that of their trained counterparts with similar leadership styles and group atmosphere, as predicted by the Contingency Model and hypotheses H_2. The actual situational favorableness of untrained supervisors with good and moderately poor group atmosphere appears to place them in Octants IV and VIII respectively. In fact, in groups with good atmosphere, supervisors without baccalaureate training but with high LPC are more effective than their counterparts with baccalaureate training, while supervisors with baccalaureate training and low LPC are more effective

than their counterparts without baccalaureate training. In groups with moderately poor atmosphere, supervisors with baccalaureate training and high LPC are more effective than their counterparts without baccalaureate training, while supervisors without baccalaureate training but with low LPC are more effective than their counterparts with baccalaureate training. That is, for groups with good G.A. atmosphere baccalaureate education would appear to improve the situational control of the leader moving her situational favorableness from Octant IV to Octant I, and for groups with moderately poor group atmosphere, baccalaureate education would appear to improve the situational control of the leader, moving her situational favorableness from Octant VIII to Octant V. The tentative explanation for this effect of training, according to Fiedler's (1972, (c) p. 462) interpretation would appear to reside in the supervisor's ability to structure the group task and may also be related to an improvement in her ability to maintain her position power.

The hypotheses formulated regarding the effect of training on the organizational effectiveness of

nursing supervisors were verified. However, the data can be looked at in other ways. The data from Table XIII are represented in a different format in Table XV. By comparing the effectiveness scores of untrained supervisors with different leadership styles and situational favorableness, it can be seen that the scores do not vary in the direction predicted by the Contingency Model and the postulated effect of training on situational favorableness. The scores of trained supervisors vary, in accordance with leadership style and situational favorableness, in the direction predicted by the Contingency Model. Trained and untrained supervisors had at least two years of experience on the job, but it is possible that other non-controlled variables might have affected the situational favorableness of untrained supervisors and could be responsible for performance scores which are not in conformity with the direction predicted by Fiedler's Model.

For purposes of this study we contrasted the scores of trained and untrained leaders with different leadership styles and with good and moderately poor GA scores. These scores represent a favorable or moderately favorable situation only for the trained leaders. Untrained leaders, by virtue of their lack of training would be in a less favorable situation. By comparing in Table XV the

TABLE XV

Means and Standard Deviations of Effectiveness Scores of Supervisory Groups, Classified According to LPC, GA, and Training

	Favorable Situation (Good G.A.)		Moderately Favorable Situation (Moderately Poor G.A.)		
	HIGH LPC	LOW LPC	HIGH LPC	LOW LPC	
TRAINED	$M2$ = 3.881 s = 0.308 N = 18	$M3$ = 5.698 s = 0.499 N = 19	$M7$ = 5.694 s = 0.454 N = 15	$M6$ = 3.963 s = 0.183 N = 8	1.
UNTRAINED	$M1$ = 4.612 s = 0.542 N = 14	$M4$ = 4.928 s = 0.343 N = 12	$M8$ = 4.858 s = 0.278 N = 9	$M5$ = 4.809 s = 0.561 N = 9	2.

.1	.2	.3	.4
$M10$ = 4.20	$M9$ = 5.40	$M11$ = 5.38	$M12$ = 4.41
N = 32	N = 31	N = 24	N = 17

effectiveness scores of high LPC leaders in supposedly moderately favorable situations (trained supervisors with moderately poor GA scores and untrained supervisors with good GA scores) it can be seen that trained high LPC leaders had higher effectiveness scores.

Implications

Organizations are complex entities about which much remains to be explored. Leadership studies in organizations have often been confusing, particularly due to the number of variables used in leadership analysis (Stogdill, 1974, pp. 363-364). The field of community health nursing was the practice area selected for testing the Contingency Model since preventive and primary health care in our communities, where nursing has the major responsibility, are among the highest priorities world wide, and there is a dearth of previous studies in leadership and administration in this area. Most of the studies utilizing

the Contingency Model have been on male populations. Therefore, there was also a challenge in exploring the predictive value of the theory in terms of leadership performance in an entirely female population. In community health nursing, as in many other organizations, skillful leaders are a scarce resource. While not everyone has the aptitude or interest to qualify for leadership positions, it is recognized that selection and maintenance of appropriate leadership in nursing is bound to have an important impact on the provision of effective and efficient health education and health care.

In this study, it was assumed that supervisors exercising leadership roles were selected by their superordinates because they met criteria established by their respective health units. Only supervisors with at least two years of experience were included in the study,

in order to ensure that the incumbents had the requisite "on the job training" for performance in their role and comparability with other supervisors. The results of the study support the theory and, for the first time, establish the fact, already verified in a number of other activities and organizations, that community health nursing supervisors with different leadership styles are more effective in some situations than in others. Furthermore, the study demonstrated that the effectiveness of community health nursing supervisors depends on an appropriate match between the supervisor's motivational system, that is, whether she is primarily motivated by task accomplishment (low LPC) or by good interpersonal relations (high LPC), and the degree to which the situation provides the leader with control and influence. Low LPC community health nursing supervisors tended to perform best in favorable situations, while high LPC supervisors tended to perform best in moderately favorable situations.

The study also confirmed for the first time that, contingent on leadership style, baccalaureate trained community health nursing supervisors were more effective than community health nursing supervisors without baccalaureate training in certain situations and less effective in others. These findings constitute a major step in confirming the application of Fiedler's Contingency

Model to community health nursing. The Contingency Model therefore provides a guide for predicting when training of the supervisors might be beneficial or detrimental to the performance of the organization. Although baccalaureate training appears to improve the situational favorableness of the supervisor, the effect of such an improvement on organizational performance is contingent on the leadership style and on the actual situational control of the supervisor. This finding enables us to consider, under certain circumstances, the legitimacy of two routes to nursing leadership positions, that of the experienced nurse with baccalaureate training and the diploma nurse with a certificate in Community Health and on the job experience. Whether or not the supervisor has a baccalaureate degree in nursing has, however, implications from the standpoint of achieving optimal organizational performance, which must be considered on an individual basis. Some of these implications will be discussed in the sub-section on training.

Confirmation of the hypotheses based on the Contingency Model justifies applying the Model to the improvement of organizational leadership in community health nursing. The implications or options stemming from the application of the Model are relevant to management practice and particularly to the development of a rational management program dealing primarily with supervisory groups in community

health nursing. The following comprehensive leadership utilization program, based on Fiedler and Chemers (1974, pp. 140-152), provides general guidelines for applying the Contingency Model to the improvement of organizational performance in community health nursing. The implications for management practice must nevertheless be tempered by the realization that the LPC scale is unrelated to other psychological parameters and is not reliable enough for use as an exclusive factor in personnel practice. However, a leadership utilization program following some of the considerations outlined by Fiedler and Chemers (1974, pp. 140-152) can provide a general guideline for using the Contingency Model as a frame of reference in attempting to achieve improvement of organizational performance in community health nursing.

Selection of Supervisors. The results of the study suggest once more that simply promoting the person who is next in line for the position of supervisor or the best "all-round" nurse can be dysfunctional. Nonetheless, the aforementioned limitations, the predictive value of the Contingency Model justify its use more in supervisory management rather than in selection and placement of supervisors.

Coping with change and Improving Performance. Situational favorableness changes constantly in organizations. The

supervisor's control and influence increases as she gains experience. As demonstrated in the present study baccalaureate training can also increase situational control. The situational favorableness can decrease as a result of changes in assignments, group membership and organizational structure, or due to shifts in economic conditions or internal organizational climate. The Contingency Model provides management with a framework within which to examine staff performance and suggests strategies that can be used in some instances to cope with change and maintain or improve the match between the supervisor's leadership style and the job situation. However, in using the Contingency Model for this purpose, it is necessary to bear in mind that it does not account for all the possible factors that might be responsible for effective supervision. Poor performance may, in fact, be related to causes not accounted for by the Contingency Model. The following strategies can however be considered:

1. Rotation. The Contingency Model provides management with a framework for defining a policy for job rotation. Fitting the supervisor to the job can involve using a low LPC supervisor for groups in which the situation is either very favorable or unfavorable and an inexperienced high LPC supervisor for groups in which the situation is moderately favorable if we are seeking to obtain the best long range performance.

However, experience on the job tends to increase the situational favorableness, if the leader is intellectually competent (Csoka, 1972, pp. 305-407; Mitchell, 1970, pp. 160-174). Supervisors who are outstanding when they are inexperienced, gradually tend to become less effective or may reach the burn out point as they settle into a routine which provides no challenges (Fiedler, 1974, p. 76). Others acquire more skills and improve their performance. These findings suggest that organizations may consider a sound policy of job rotation as a means of improving the match between the supervisor's leadership style and the changes in situational favorableness. In favorable situations, high LPC supervisors could be reassigned or promoted when they reach the point where their effectiveness declines, while low LPC supervisors tend to remain effective for longer periods. In moderately favorable situations, the reverse tends to occur. On the other hand, in clearly unfavorable situations, a low LPC supervisor might be likely to increase performance. In the short-run, an inexperienced high LPC supervisor might tend to be more effective when the situation is favorable, while an inexperienced low LPC supervisor might tend to be more effective when the situation is only moderately favorable.

2. Training. The results of the study should be kept in mind when determining inservice training for supervisors. As with other established personality characteristics, efforts to change the leadership style of a supervisor are bound to be exceedingly difficult and impractical. However the present study suggests that baccalaureate training can improve to an extent the situational favorableness for the supervisor and thereby influence leadership performance. Hence when necessary it is possible to consider re-assigning supervisors, whether they are baccalaureate trained or hold a nursing diploma and a certificate in community health nursing, in a manner that will provide the most effective match available between the leader and the situational control in the group. At the same time an effort can be made to avoid matches which might tend to be dysfunctional.

The results of this study would tend to suggest that in a favorable situation, high LPC supervisors without baccalaureate training would tend to be more effective than high LPC supervisors with baccalaureate training, while low LPC supervisors with baccalaureate training would tend to be more effective than their counterparts without baccalaureate training. Nonetheless, in a favorable situation, low LPC supervisors with

baccalaureate training might tend to be more effective than any supervisor without baccalaureate training regardless of her leadership style. In a moderately favorable situation high LPC supervisors with baccalaureate training might tend to be more effective than high LPC supervisors without baccalaureate training, while low LPC supervisors without baccalaureate training might be more effective than their counterparts without baccalaureate training. However, in a moderately favorable situation, high LPC supervisors with baccalaureate training might tend to be more effective than supervisors without baccalaureate training regardless of their leadership style (For a summary of the possible effects of training, see Figure 7). Fiedler's concept of training includes the development of human relations skills and the acquisition of management skills. Baccalaureate education in nursing is steeped in human relations skills which form the basis of the establishment of a caring or therapeutic nurse-client relationship. Therefore, it is not surprising that in proposing an hypothesis on the effect of training on the supervisor's performance, it would be assumed in the present study that baccalaureate education in nursing

SUMMARY OF HYPOTHESES REGARDING THE EFFECTS OF TRAINING AND EXPERIENCE

Favorableness of situation for experienced leader	Performance level of leaders with adequate experience		Favorableness of situation for inadequately experienced leader	Performance level of leaders without adequate experience		Predicted effect of training and experience for previously untrained leader
	LPC			LPC		
	High	Low		High	Low	
Very favorable	Poor	Good	Moderate	Good	Poor	High decreases Low increases
Moderately favorable	Good	Poor	Unfavorable	Poor	Good	High increases Low decreases
Unfavorable	Poor	Good	Very unfavorable	Good?	Poor?	High decreases Low increases

Figure 7: Fiedler, 1973. Copyright 1973 by the American Psychological Association and reproduced from Fiedler and Chemers, 1974, p. 131.

provides preparation for leadership positions in nursing. The study would also appear to support the conclusion that there is little evidence of transfer of continuing education type of training to the job situation (Campbell et al., 1970), and that sensitivity training is not a method of building leadership but rather "training in the democratic sharing of leadership and may, in fact be associated with a decline in productivity (Stogdill, 1974, p. 199)".

3. The Supervisor's Influence over her own Leadership Situation. The individual supervisor has considerable control over her situational favorableness and therefore can experiment with measures that might influence her group's productivity. She can increase or decrease the structure of the tasks or invite the group to develop guidelines which will have the effect of planning and organizing the job to a greater or lesser extent. She can also increase or decrease her position power by changing some of the procedures or establishing policies relative to communications with the group members, and availability to her subordinates.

4. Organizational Engineering. The Contingency Model provides management with a framework for examining job performance. The organization may attempt to

increase an individual supervisor's performance by endeavoring to modify the job in order that it may fit the leadership style of the supervisor. The favorableness of the situation can be modified in a manner that would permit an individual supervisor to perform at her best. This might be accomplished by changing the assignment of group members, influencing the structure of the job, and changing the position power of the supervisor.

In summary, the study has provided strong support for a contingency approach to the study of leadership, and in particular for the Fiedler Contingency Model. The implications for practice cannot be too precise at this stage. Nevertheless, the results suggest to the manager the necessity of considering leader personality, situational factors and previous performance when selecting, deploying, training and supervising leaders. Applying the model in a general sense should lead to more sophisticated and effective methods of dealing with leaders in any organizations.

Contributions to Leadership Theory

The contributions of this study to leadership theory and community health nursing education and administration were as follows: -

1. Provides support for the value of the Contingency Model in predicting leadership performance in community health nursing. The explicit methodology and all the component dimensions of the Contingency Model have been used and tested. There is some argument regarding the extent to which the nursing task is structured. In this study, task structure was verified and the weight of the supporting evidence allows for the conclusion that the task in community health nursing is structured. All the hypotheses which were posed and which stem from the theory were supported.

At the same time this study adds to the very few empirical studies on effective management of community health nursing services in Canada.

2. It suggests that baccalaureate training influences situational favorableness in community health nursing in that higher performance scores were associated with low LPC scores when the group atmosphere is good and with high LPC scores when the group atmosphere is moderately poor, and that lower performance scores were

associated with low LPC scores when the group atmosphere is moderate and with high LPC scores when the group atmosphere is good.

3. It has presented a comprehensive examination of the hypotheses relating training to effectiveness and their implications for creating an optimal leadership environment.

As a result, the study has demonstrated the wisdom of permitting two groups of nurses access to nursing leadership, through the baccalaureate route or through the diploma/certificate and experience on the job route, since the evidence suggests that for both groups of nurses, a match usually can be achieved between leadership style and particular job situations which will serve the needs of the supervisor and tend to optimize her performance.

4. It provides empirical evidence in support of the usefulness of an overall measure of organizational effectiveness.

A new tool to measure organizational effectiveness has been developed and validated for community health nursing.

5. It provides a validation of the Contingency Model when applied to an entirely female population.

BIBLIOGRAPHY

Abdellah, F.G., The development of nursing research in the U.S.A. In First national conference on research in nursing practice, School of Nursing, University of British Columbia, B.C. (Department of Health and Welfare, Grant No. 610-22-1), 1971.

Anderson, R.M., Activities preferences and leadership behavior of head nurses, Nursing Research, 1964, 13:(3) 239-243 and 13(4), 333-337.

Argyris, C., Effectiveness and planning for change. In Sills, D., (ed.). Intersectional encyclopedia of the social sciences, New York, Macmillan and the Free Press, 1968.

Argyris, C., Integrating the individual and the organization, New York, Wiley, 1964.

Association of Nursing Directors and Supervisors of Ontario Official Health Agencies, Scope of public health nursing practice, The Association, Toronto, 1979.

Barnard, C.I., The Functions of the executive, Cambridge Mass., Harvard University Press, 1938.

Bass, B.M., Leadership psychology and organizational behavior, New York, Harper and Row, 1960.

Beck, J., Relationship between personality type and managerial style of leadership personnel in nursing. Doctoral dissertation, University of Florida, Gainsville, 1976, reviewed in Dissertation Abstract International, 37-4988B.

Bell, W., Community care for the elderly: An Alternative to Institutionalization, Gerontologist, 1973, 13, Autumn, 349-354.

Benedikter, H.C., The future of nursing administrators in quality assessment, programs and process, New York, The National League for Nursing, 1974.

Benson, J.K., Comments on Price's The study of organizational effectiveness, Sociological Quarterly, 1974, 14, 273-276.

Bergman, R., Evaluation of community health nursing, The New-Zealand Nursing Journal, March 1978, 71.

Blake, R.L., and Mouton, J.S., The Managerial grid, Houston, Texas, Gulf Publishing Co., 1964.

Bons, P.M., and Fiedler, F.E., Changes in organizational leadership and behavior in relation and task-motivated leaders, Administrative Science Quarterly, 1976, 21, 453-473.

Charis, Community health activity resources information system, Ontario Ministry of Health. Computerized daily activity sheets of nursing activities, 1980.

Cameron, K., Measuring organizational effectiveness in institutions of higher learning, Administrative Science Quarterly, 1978, 23(4), December, 604-629.

Campbell, J.P., and Dunnette, M.D., Effectiveness of T-Group experiences in managerial training development, Psychological Bulletin, 1968, 70, 73-104.

Campbell, J.P. et al., Managerial Behavior, Performance and Effectiveness, New York, McGraw Hill, 1970.

Canadian Association of University Schools of Nursing, Position Paper on Entry Level Preparation for Nursing Practice, Task Force Report to Canadian Association of University Schools of Nursing, October 1980.

Canadian Public Health Association, A Statement of functions and qualifications for public health nursing in Canada, Ottawa, The Canadian Public Health Association, 1964.

Canadian Public Health Association, The Nurse and community health, functions and qualifications for practice in Canada, (revised edition), Ottawa, The Canadian Public Health Association, 1977.

Chambers, L.W. et al., A controlled trial of the impact of the family practice nurse on volume, quality and cost of rural health services, Medical Care, 1977, 15(12), December, 974-981.

Chapple, E.D. and Donald, G., Jr., A method for evaluating supervisory personnel, Harvard Business Review XXIV, Winter, 1946, 201-203. In Lipham, James M., Leadership and administration, 127 in Griffith, Daniel E. ed., Behavioral science and educational administration, Sixty-Third Yearbook of the National Society for the Study of Education, Chicago, Illinois, The University of Chicago Press, 1964.

Chemers, M.M., Cross-cultural training as a means for improving situational favorableness, Human Relations, 1969, 22, 531-546.

Christensen, K., and Lingle, J., Evaluation of effectiveness of team and non-team public health nurses in health outcomes of patients with strokes or fractures, American Journal of Public Health, 1972, 62:(4), 483-490.

Clark, J.H., and Ansett, M., The Supervisor-shared home visit, Nursing Outlook, 1979, 27:(1), 54-56.

Coffin, T.E., A three component theory of leadership, Journal of Abnormal Social Psychology, 1944, 39, 63-83.

Craig, D., The Development of a nursing audit tool, Toronto, Master's Thesis, Department of Nursing, University of Toronto, 1978.

Csoka, L.S., and Bons, P.M., Manipulating the situation to fit the leader's style: Two validation studies of Leader-Match, Journal of Applied Psychology, 1978, 63(3), 295-300.

Csoka, L.S., and Fiedler, F.E., The Effect of military leadership training: A test of the Contingency Model, Organizational Behavior and Human Performance, 1972, 8, 395-407.

Cunningham, B.J., Approaches to the evaluation of organizational effectiveness, Academy of Management Review, July 1977, 463-474.

Cunningham, R., Team nursing in a generalized public health nursing program (not including bedside care), Toronto, School of Nursing, University of Toronto, 1970.

Cunningham, R., An Analysis of home visits by public health nurses: Project I, An Exploratory study of home visits by public health nurses to patients with cardiac disorders, Toronto, School of Nursing, University of Toronto, 1972.

Cunningham, R., An Analysis of home visits by public health nurses, Project II, An Exploratory study in one community, of home visits by public health nurses, to patients following hospitalization for attempted suicide, Toronto, School of Nursing, University of Toronto, 1973.

Cunningham, R., An Analysis of the supervisory process in Middlesex-London District Health Unit in 1973, Toronto, Faculty of Nursing, University of Toronto, 1974.

Davidson, S.V., Community nursing care evaluation, Family Community Health, 1978, 1, April 37-55.

Davis, Howard R., Four Ways to goal attainment, Special monograph no. 1, Evaluation, 1973, 3-28.

Deniston, O.L., Community health agency evaluation. In Council of home health agencies and community health services, Community health agency evaluation, New York, National League of Nursing, 1976.

Diers, D., Research in nursing practice, Toronto, J.B. Lippincott, 1979.

Di Marco, N., and Kuehl, C., Predictors of management training effectiveness for nursing supervisors, Journal of continuing education in nursing, 1976, 7(4), 39-46.

Donabedian, A., Quality of care: The Nursing audit, Part B. In Spradley, B.W., Contemporary Community Nursing, Boston, Little Brown Co. Inc., 1975, 267-271.

Etzioni, A., Modern organizations, Englewood Cliffs, N.J.: Prentice-Hall Inc., 1964.

Fiedler, F.E., Leader attitudes, group climate, and group creativity. Journal of Abnormal and Social Psychology, 1962, 65, 308-318.

Fiedler, F.E., A Contingency Model for leadership effectiveness. In Berkovitz, L., (ed.) Advances in Experimental Social Psychology, New York, Academic Press, 1964, Vol. 1.

Fiedler, F.E., Engineering the job to fit the manager, in Harvard Business Review, 1965, 43(5), 115-122.

Fiedler, F.E., A theory of leadership effectiveness, New York, McGraw-Hill, 1967.

Fiedler, F.E., Engineer the job to fit the manager. In Litterer, Joseph A., Organizations, Vol. 1), Toronto, John Wiley & Sons, 1969.

Fiedler, F.E., Leadership experience and leader performance: another hypothesis shot to hell, Organizational Behavior and Human Performance, 1970, 5, 1-14.

Fiedler, F.E., Validations and extension of the contingency model of leadership effectiveness: A review of empirical findings, Psychological Bulletins, 1971, 76, 128-148.

Fiedler, F.E., Personality motivational system and the behavior of high and low LPC persons, Human Relations, 1972, 25, November, 391-412.(a).

Fiedler, F.E., Predicting the effects of leadership training and experience from the Contingency Model, Journal of Applied Psychology, 1972, 56, 114-119.(b).

Fiedler, F.E., The Effects of leadership training and experience: A Contingency Model interpretation, Administrative Science Quarterly, 1972, 17, 453-470.(c).

Fiedler, F.E., Leadership experience and leadership training, Some new answers to an old problem, Seattle, Washington, University of Washington, Technical Report 72-36, 1972, April. (d).

Fiedler, F., The trouble with leadership training is that it doesn't train leaders, Psychology to-day, 1973, Feb., 23, 25, 27, 29, 30, 92.

Fiedler, F.E., The Contingency Model, New directions for leadership utilization, Journal of Contemporary Business, 1974, Autumn, 65-79.

Fiedler, F.E., Leader attitudes and group effectiveness, Urbana, Illinois, University of Chicago Press, 1958, Final Report of ONR Project, NR 170-106, N6-ori-07135 In Rice, R.W., The Esteem for Least Preferred Co-worker (L.P.C.) score: what does it measure, Doctoral dissertation, Department of Psychology, University of Utah, 1975.

Fiedler, F.E., Chemers, M.M., and Mahar, L., Improving leadership effectiveness, John Wiley and Sons, Toronto, 1976.

Fiedler, F.E., and Chemers, M.M., Leadership and effective management, Glenview, Illinois, Scott Foresman and Company, 1974.

Fiedler, F.E., and Mahar, L., The Effectiveness of Contingency Model training, a review of the validation of leader-match, Personnel Psychology, 1979, 32, 45-62.

Fiedler, F.E., Warrington, W.G. and Blaisdell, F.J., Unconscious attitudes as correlates of sociometric change in a social group, Journal of Abnormal and Social Psychology, 47(4), 1952, 790-796.

Fleishman, E.A., Twenty years of consideration and structure. In Fleishman, E.A. and Hunt, J.G., (ed.). Current developments in the study of leadership, Carbondale, Illinois, Southern Illinois University Press, 1973.

Flynn, B.C., and Ray, D.W., Quality assurance in community health nursing, Nursing Outlook, 1979, 27, (10), 650-653.

Foa, U.G., Mitchell, T.R. and Fiedler, F.E., Differentiation matching, Behavioral science, March 1971, 16, 130-142. In Rice, R.W., The Esteem for Least Preferred Co-worker (LPC) score, what does it measure, Doctoral dissertation, Department of Psychology, University of Utah, 1975.

Freeman, R.B., Community health nursing practice, Toronto, W.B. Saunders Co., 1970.

Freeman, R.B., Techniques of supervision in public health nursing, (2nd ed.), Philadelphia, W.B. Saunders, 1949.

Freeman, R.B., Measuring the effectiveness of public health nursing service, Nursing Outlook, 1961, 9(10): 605-607.

Garland, P., The Effect of principal-teacher interaction on secondary school environment: an empirical study, Doctoral dissertation, Ottawa, Ontario, University of Ottawa, 1973.

Garland, P., and O'Reilly, R.R., The effect of leader-member interaction on organizational effectiveness Educational Administration Quarterly, 1976, 12(3), 9-30.

Georgopolous, B.S. and Tannenbaum, A.S., A study of organizational effectiveness, American Sociological Review, 22: 534-40, 1957. In Georgopolous, B.S., and Mann, F.C., Community general hospital, New York, Macmillan Co., 1962.

Georgopolous, B. and Tannenbaum, A., A study of organizational effectiveness. In American sociological review, 1957, 22(5), 80-87.

Georgopolous, B.S., Hospital organization research, review and source book, Saunders Series of Health Care Organization and Administration, Toronto, W.B. Saunders, 1975.

Georgopolous, B.S., and Mann, F.C., The Community general hospital, New York, The Macmillan Co., 1962.

Getzel, J.W., Administration as a social process, In Administrative theory in education, 150-165, edited by Alpin, A.W., Chicago, Midwest Administration Center, University of Chicago, 1958.

Gray, J.E., Murray, B.L.S., Roy, J.F., and Sawyer, J.R., Do graduates of technical and professional nursing programs differ in practice, Nursing research, 1977, Sept.-Oct., 26, (5), 368-373.

Graydon, J., and Hendry, J., Outpost nursing in Northern Newfoundland, Canadian Nurse, 1977, 73(8), 34-37.

Hagen, E. and Wolff, L., Nursing leadership behavior in general hospitals, New York, Institute of research and Service in Nursing Education, Teachers College, Columbia University, 1961.

Halpin, A.W., How leaders behave. In Theory and research in administration, New York, The Macmillan Co., 1966.

Halpin, A.W. and Winer, J.B., A factorial study of the leader behavior descriptions. In Leader behavior, its description and measurement, edited by Stogdill, R.M. and Coons, C., Columbus, Ohio State University, 1957.

Hall, E.M., Canada's National/Provincial health program for the 1980's: A Committment for renewal, Ottawa, Queen's Printer, 1980.

Hall, E.M., (Chairman) Royal Commission on health services, Ottawa, Queen's Printer, 1964.

Hall, R.H., Organization, structure and process, Englewood Cliffs, New Jersey, Prentice-Hall Inc., 1977.

Hall, R.H., Structure and Process, Toronto, Prentice-Hall Ltd., 1977.

Hanlong, J.J., Principles of public health administration, St. Louis, C.V. Mosby Co., 1964.

Hansen, A.C. and Upshaw, H.S., Evaluation within the context of role analysis, Nursing Research, 1962, 11(3), 148-149.

Haussman, D.R.K., Hegyvary, S.T., Newman, J.T., Monitoring quality of nursing care, Part II, Assessment and study correlates, DHEW, Pub. No. (HRA) 76-3, Maryland, U.S. Department of Health Education and Welfare, Nursing Division, July, 1976.

Health and Welfare Canada, Guidelines for accreditation of public health units, Steering committee on accreditation of public health units of the Federal/Provincial Advisory Committee on Community Health, August, 1980.

Hemphill, J.K., Situational factors in leadership, Columbus, Ohio, Bureau of Business Research, College of Commerce and Administration, The Ohio State University, 1949.

Henry, W.E., The Business executive: The psychodynamics of social role, American Journal of Sociology, LIV, January 1949, 286-291. In Lipham, James M., Leadership and administration, 127. In Griffith, D.E., Behavioral science and educational administration, Sixty-Third Yearbook of the National Society for the Study of Education, Chicago, Illinois, The University of Chicago, Press, 1964.

Hill, W., The validation and extension of Fiedler's theory of leadership effectiveness, Academy of Management Journal, 1969, 12(1), March, 33-47.

House, R.J. and Mitchell, T.R., Path - goal theory of leadership, Journal of Contemporary Business, 1974, Autumn, 81-97.

Hunt, J.G., Fiedler's leadership Contingency Model: An empirical test in three organizations, Organizational Behavior and Human Performance, 2, 290-308.

Jelinek, R.C. and Lyman, D.C., A Review and evaluation of nursing productivity, Maryland, U.S. Department of Health, Education and Welfare, Health Resources Administration, November 1976, Pub. No. (HRA)77-15.

Johnson, K.R., Nursing leadership: A comparative study of self concept, leadership style and leadership effectiveness, Doctoral dissertation, Amherst, University of Massachusetts, 1976.

Jones, H.R., and Johnson, M., LPC as a modifier of leader-follower relationships, Academy of Management Journal, 1972, 15(2), June, 185-196.

Katz, D., Field Studies. In Festinger, L. and Katz, D., Research methods in the behavioral sciences, New York, Holt Rinehart and Winston, 1953, Chap. 2.

Katz, D., and Kahn, R.L., Leadership. In The Social psychology of organizations, (ed.), Katz and Kahn, New York, Wiley, 1966. 300-335.

Katz, D., and Kahn, R.L., The Social psychology of organizations, New York, John Wiley, 1966.

Kelly, W.L., Psychological predictions of leadership in nursing, Nursing research, 1974, 23(1) January-February, 36-42.

Kergin, D., Symposium on community nursing in Canada - Foreward, The Nursing clinics of North America, 1971, 6, (3), 463-466.

Kirchhoff, B.A., Organization effectiveness measurement, and policy research, Academy of Management Review, July, 1977, 347-355.

Knollmeuler, R., What happened to the P.H.N. supervisors; Nursing Outlook, 1979, 27, (10), 666-667.

Knoop, R.G., Dimensions of job satisfaction, on determinants of organizational effectiveness, Doctoral dissertation, Ottawa, University of Ottawa, 1975.

Koerner, B.L., Selected correlates of job performance of community health nurses, Nursing Research, 1981, Jan.-Feb., 30(1) 43-48.

Korman, A.K., Consideration, initiating structure and organizational criteria - A Review, Personnel Psychology: A Journal of Applied Research, 1966, 19(4), Winter, 349-361.

Kruse, L.C. and Stogdill, R.M., The leadership role of the nurse, The Ohio State University, Columbus, Ohio, Sept. 1973 (DHEW Pub. No. NU-00380).

La Monica, E.L., The nursing process: A humanistic approach, Don Mills, Ont., Addison-Wesley Publishing Co., 1979.

Leavitt, H., Some efforts of certain communications patterns on group performance. In Swanson, G. et al., (ed), Reading in social psychology, New York, Holt and Winston, 1952.

Leininger, M., The leadership crisis in nursing: A critical problem and challenge, Journal of Nursing Administration, 1974, 4(2), 28-34.

Likert, R., New patterns of management, New York, McGraw Hill, 1961.

Mann, F.C., Toward an understanding of the leadership role in formal organization. In Leadership and productivity, (ed.) R. Dubin, F. Mann, and D. Miller, San Francisco: Chandler, 1965, 68-103, cited in Mott, P., The characteristics of effective organizations, New York, Harper and Row, Publishers, 1972.

Mayers, M.G., A systematic approach to the nursing care plan, New York, Appleton, Century Croft, 1972.

McBride, A., Diers, D., Slovinsky, A., Leadership: problems and possibilities, American Journal of Nursing, 1972, (8) 1445-1456.

McConnell, E.A., How to choose a leadership style, "Nursing 80", 1980, 10(3), 21-23.

McCormick, L.C., Comments on Price's The Study of organizational effectiveness, Sociological Quarterly, 1974, 14, 271-273.

McNamara, V.D., The Principal's leadership style, the school staff leadership situation and school effectiveness, Doctoral dissertation, Edmonton, Alberta, University of Alberta, 1968.

Meleis, A., and Farrell, K.M., Operation concern; A study of senior nursing students in three nursing programs, Nursing Research, 1974, Nov.-Dec., 23 (6), 461-468.

Mitchell, T.R., Leader complexity and leadership style, Journal of Personality and Social Psychology, 1970, 16, 166-174.

Mott, Paul E., The Characteristics of effective organizations, New York, Harper & Row, 1972.

Murray, V.V., Nursing in Ontario. A Study for the Committee on the Healing Arts, Toronto, Queen's Printer, 1970.

Myers, J.L., Fundamentals of experimental design, Toronto, Allyn and Bacon, Inc., 1979.

National Health and Welfare, Guidelines for accreditation of public health units, (draft 3) Health Services Directorate, Health Services and Promotion Branch, Ottawa, August 1980 (restricted document).

National League for Nursing, Policies and procedures for NLN/APHA accreditation of home health agencies and community nursing services, New York, The National League for Nursing, 1976, (a).

National League for Nursing, Criteria and standards for NLN/APHA accreditation of home health agencies and community nursing services, New York, The National League for Nursing, 1976, (b).

Nealy, S.M., and Blood, M.R., Leadership performance of nursing supervisors at two organizational levels, Journal of Applied Psychology, 1968, 52(5), 414-422.

Nelson, L.F., Competence of nursing graduates in technical, communicative and administrative skills, Nursing Research, 1978, Mar.-Apr., 27(2), 121-125.

Nouri, C.J., and Rainville, C., Supervisory development for nursing leaders, Journal of Nursing Administration, 1972, 2, 52-59.

Oaklander, H., and Fleishman, E., Patterns of leadership related to organizational stress in hospital settings, Administrative Science Quarterly, 1964, 8(4), 520-532.

Ontario Ministry of Health, Recommendations of the core committee on family and personal health, Family Health Unit, Ontario Ministry of Health, Toronto, January 31, 1980.

Ontario Ministry of Health, Community Health Services Bulletin, Toronto. The Ontario Ministry of Health, November, 1980, 1 (Accreditation Program Update).

Ontario Ministry of Health, Voluntary accreditation program for local official health agencies, Steering Committee, Ontario Ministry of Health, December 1980.

Perrow, C., Goals in complex organizations, American Sociological Review, 1961, 26, December, 855.

Phaneuf, M.C., The Nursing audit, New York, Appleton-Century, Crofts, 1972.

Pittman, R.J., Attitudes toward their role of graduate students preparing for school nursing or teaching or supervision in community nursing, International Journal of Nursing Studies, 1972, 9:33-41.

Polit, D.F., and Hungler, B.P., Nursing research, principles and methods, Toronto, J.B. Lippincott, 1978.

Price, J.L., Organizational effectiveness, Homewood, Illinois, Richard D. Irwin Inc., 1968.(a).

Price, J.L., Organizational effectiveness. An inventory of propositions, Homewood, Illinois, Richard D. Irwin Inc., 1968.(b).

Price, J.L., Handbook of organizational measurement, Toronto, D.C. Heath Co., 1972, (a).

Price, J.L., The study of Organizational Effectiveness, The Sociological Quarterly, 1972, 13, Winter, 3-4, (b).

Price, J.L., Reply to McCormick and Benson, The Sociological Quarterly, 1973, 14, Spring, 276-278.

Pryor, M.W., DeStephano, M.K. Jr., Perceptions of leadership between job satisfaction and internal-external control across three nursing legels, Nursing Research, 1971, 20(6), 534-537.

Registered Nurses' Association of Ontario, Community health nursing, The Registered Nurses' Association of Ontario, Toronto, 1978.

Registered Nurses' Association of Ontario, Community health nursing, standards for the organization and administration of the nursing department, Toronto, The Registered Nurses' Association of Ontario, 1979.

Rice, R.W., The Esteem for least-preferred co-worker (LPC) score: What does it measure? Doctoral dissertation, University of Utah, 1975.

Ryan, S.J. and Wassenberg, C., Symposium on: Community health and home care nursing - foreward, The Nursing Clinics of North America, 1980, 15(2), 321-322.

Schurr, M.C., A comparative study of leadership in industry and the nursing profession, International Nursing Review, 1969, part 1, 16(1), 16-30, and part II, 115-132.

Scollie, J.R., Perceptions of the public health staff nurse in Manitoba, Canada, as to the decision-making authority in the initiation of physical nursing care, Ph.D. dissertation, Teachers' College, New York, Columbia University, 1972.

Scott, W.R., Theory of organizations, Robert E.L. Faris, (ed), Handbook of modern sociology, Chicago, Paul McNally and Co., 1964.

Seashore, S.E. and Yutchman, Factorial analysis of organizational performance, Administration Science Quarterly, 12, December, 1967, 377-395.

Sergiovanni, T.J., and Starratt, R.J., Emerging patterns of supervision: Human perspectives, Toronto, McGraw Hill, 1971.

Shaw, M., A comparison of two types of leadership in various communication nets, in Journal of Abnormal and Social Psychology, 1955, 50(19), 127-134.

Sheridan, J.E. and Vrendenburgh, D.J., Usefulness of leadership behavior and social power variables in predicting job tension, performance and turnover of nursing employees, Journal of Applied Psychology, 1978, 63, 89-95.

Simon, H.A., On the concept of organizational goals, Administrative Science Quarterly, 1964, 9, 1-22.

Soderstrom, L., The Canadian health system, London, Croom Helm Ltd., 1978.

Spitzer, W.O., Evidence that justifies the introduction of the new health professionals. In Conference on the professions and public policy, University of Toronto, October 15-16, 1976, Paper presented.

Spitzer, W.O., and Kergin, D.J., Nurse practitioners in primary care, I; The MacMaster University educational program, and Spitzer, W., et al., Nurse practitioners in primary care, II; Prior attitudes of a rural population, Canadian medical association journal, 1973, 108, April 21, 991-1003.

Splane, V.H., Symposium on: Community nursing in Canada - Foreward.. The Nursing Clinics of North America, 1975, 10(4), 687-689.

Steers, R.M., Problems in the measurement of organizational effectiveness, Administrative Science Quarterly, 1968, 20(4), 546-558.

Stevens, B.J., Improving nurses' managerial skills, Nursing Outlook, 1979, 27(12), 774-777.

Stogdill, R.M., Personal factors associated with leadership, A survey of the literature, Journal of psychology, 1948, 25, 35-71.

Stogdill, R.M., Handbook of Leadership: A survey of theory and research, The Free Press, Inc., New York, 1974.

The Canadian Nurses' Association and the Department of National Health and Welfare, National conference on nurses for community services, Ottawa, The Canadian Nurses' Association, 1973.

The Canadian Nurses' Association, News, The Canadian Nurse, 1981, 77(2).

The Canadian Nurses' Association, Putting "Health" into health care: submission to Health Services Review, 1979, Ottawa, The Canadian Nurses' Association, February, 1980.

Thornberry, N.E., An exploration of the effects of organizational level on leadership behavior among nurses, Doctoral dissertation, Bowling Green, State University Bowling Green, 1974. In Dissertations Abstracts International, No. 35-1101B, August, 1974.

Thurstone, L.L., A factorial study of perception, Chicago, University of Chicago Press, 1944, 140-141. In Lipham, James M., Leadership and Administration, 127. In Griffith, Daniel E. (ed) Behavioral science and educational administration, Sixty-Third Yearbook of the National Society for the Study of Education, Chicago, Illinois, The University of Chicago Press, 1964.

Timbrell, D., Notes for statement by Dennis Timbrell, Minister of Health, Tabling of Discussion Paper on Proposed Health Protection Act, Toronto, Monday, December 8, 1980.

Viney, B.L., Organizational structure and effectiveness in school board program departments, Doctoral Dissertation, Ottawa, University of Ottawa, 1980.

Wandelt, M.A. and Ager, J., Quality Patient Care Scale (QualPacs). In Instruments for measuring nursing practices and other health care variables, Hyattsville, Maryland, D.H.E.W., Publication, HRA 78-54, 527-528.

Wandelt, M.A., and Stewart, Slater, The Slater Nursing Competencies Scale. In Instruments for measuring nursing practice and other health care variables, Hyattsville, Maryland, U.S., Department of Health, Education and Welfare, D.H.E.W. Publication, HRA 78-54, 529-530.

Ward, M.J., and Lindeman, C.A., (ed), Instruments for measuring nursing practice and other health care variables, Vol. 2, Hyattsville, Maryland, U.S. Department of Health, Education and Welfare, Bureau of Health Manpower, Division of Nursing, (Vol. 2), D.H.E.W. Publications No. HRA 78-54.

Welches, L.J. et al., Typological prediction of staff nurse performance rating, Nursing Research, 1974, Sept.-Oct., 23(5), 402-409.

Wennlund, D.M., A day with the public health nursing program office supervisor, Florida Nurse, 1978: 26, 9-10.

White, H.C., Perceptions of leadership style by nurses in supervisory position, Journal of Nursing Administration, 1971, 1(2), 44-51 (a).

White, H.C., Some perceived behavior and attitudes of hospital employees under effective and ineffective supervisors, Journal of Nursing Administration, 1971, 1(1), 49-54 (b).

Wilkes, J.S., and Nimimo, A.W., An analysis of the work patterns of community nursing, Nursing Times, 1976, 76(4), 13.

Winslow, C.E.A., The Untitled field of public health, Modern Medicine, 1920, 2, 183-191.

Yura, H., Nursing leadership behavior, Supervisor Nurse, 1971, 2(55), 57-69.

APPENDIX I

ORGANIZATIONAL STRUCTURE OF PUBLIC HEALTH SERVICES

Appendix I

ORGANIZATIONAL STRUCTURE OF PUBLIC HEALTH SERVICES

The British North America Act grants provincial governments primary jurisdiction for most health services. Through cost sharing agreements between the federal and the provincial governments, provincial jurisdictions have been persuaded to establish certain programs which meet federal standards. The best known is our national medical care insurance program. Currently a program for national accreditation of official health units is slowly being developed.

In Ontario, the Ministry of Health, is responsible for the following programs and services:

1. public health services
2. institutional and ambulatory care for tuberculosis control
3. mental health services
4. laboratory services
5. statistical services

6. ambulance services
7. hospital services
8. physician services, and certain other health professionals as well as home care programs operated by hospitals or through community health agencies.

The control of various communicable diseases and the provision of various community health services are usually decentralized. The primary purpose of these two services is the prevention and early detection of illness, which includes (1) communicable disease control, (2) enforcement of environmental sanitary regulations and community health nursing services (Soderstrom, 1978, pp. 41-42).

The province is divided into regions. Local Boards of Health in major municipalities and Health Units in other regions provide the public health services and programs according to ministerial guidelines. At the local level, the Medical Officer of Health directs the programs and activities of the Board or of the Health Unit. The philosophy of public health (Winslow, 1920, p. 183) stresses the multi-facetted relationship of health (Hanlon, 1964, p. 24) and community health. The philosophy which emanates from the teachings of Winslow and his definition of public health

also guides the definition of community health nursing, which has been reaffirmed through national consultation (The Canadian Public Health Association, 1977, p. 3).

Community health agency structures and programs have been rather stable since their inception in 1916. Traditionally the nursing service departments, in large centers, have been under the management of a Director of Public Health Nursing, assisted by one or more supervisors and a number of public health or community health nurses. These nurses are responsible for carrying out nursing programs in family health, including family planning, maternal health, infant health, school health, immunization, adult and geriatric health, community mental health, communicable disease control, preventive dental health, accident prevention, nutrition and environmental health. The community health nurses utilize all the knowledge and skills of the basic practitioner of nursing, and the broader content of community health nursing, to provide either direct care and services or to make referral to appropriate community agencies in order to meet health needs of families under their jurisdiction.

These staff nurses are usually members of a team, normally reporting to their respective supervisors. Some

agencies have gradually employed other categories of health professionals as well as nurses qualified to practice at different levels of care. In Ontario, nurses exercising their professional skills as community health nurses (P.H.N. or C.H.N.) must have, as a minimum level of education, either a baccalaureate degree (generic or post basic) or have a diploma in nursing and a certificate in public health nursing. The nature of the field of practice, the community at large, has provided the individual nurse with a wider scope for professional independent practice than is the case for the staff nurse functionning in acute care settings.

APPENDIX II

TASK STRUCTURE RATING SCALE

APPENDIX II

VERBAL DIRECTIONS READ TO EACH RESPONDENT BEFORE COMPLETING THE TASK STRUCTURE RATING SCALE

- The heading of the accompanying questionnaire refers to one of the dimensions helping to define the favorability to the supervisor of the situation in which she functions.

- I would like to enlist your assistance in a research project by asking you to make a judgment regarding the complexity of the tasks faced by her supervisory group.

- Please circle the number in the appropriate column which best represents your judgment.

Appendix II

Task Structure Rating Scale

Circle the number in the appropriate column.	Usually True	Sometimes True	Seldom True
Is the Goal Clearly Stated or Known?			
1. Is there a blueprint, picture, model or detailed description available of the finished product or service?	2	1	0
2. Is there a person available to advise and give a description of the finished product or service, or how the job should be done?	2	1	0
Is There Only One Way to Accomplish the Task?			
3. Is there a step-by-step procedure, or a standard operating procedure which indicates in detail the process which is to be followed?	2	1	0
4. Is there a specific way to subdivide the task into separate parts or steps?	2	1	0
5. Are there some ways which are clearly recognized as better than others for performing this task?	2	1	0
Is There Only Only One Correct Answer or Solution?			
6. Is it obvious when the task is finished and the correct solution has been found?	2	1	0
7. Is there a book, manual or job description which indicates the best solution or the best outcome for the task?	2	1	0

	Usually True	Sometimes True	Seldom True
Is It Easy to Check Whether the Job Was Done Right?			
8. Is there a generally agreed understanding about the standards the particular product or service has to meet to be considered acceptable?	2	1	0
9. Is the evaluation of this task generally made on some quantitative basis?	2	1	0
10. Can the leader and the group find out how well the task has been accomplished in enough time to improve future performance?	1	1	0

TOTAL [ ]

APPENDIX III

SAMPLES FROM EASTERN ONTARIO HEALTH UNIT

JOB DESCRIPTIONS: REGISTERED NURSE

PUBLIC HEALTH NURSE

Appendix III

Eastern Ontario Health Unit - Nursing Department

Job Description

The Registered Nurse

Description of Position

The registered nurse works under the direction of the supervisor of public health nursing. She is assigned activities that require the judgment, knowledge and skills of a professional nurse but do not need the special preparation of a public health nurse. In some of her assignments, such as clinic management and special projects, she must use considerable independent judgment and make independent decisions. In other assignments, where a nursing team approach is necessary for covering the wide range of the public health nursing program, her work is assigned and supervised by the public health nurse team leader.

Qualifications:

- Current registration with the College of Nurses of Ontario as a registered nurse.

Role and Responsibilities

Under the direction of the supervisor of public health nursing, takes responsibility for specific assignments such as immunization clinics, school health.

This would include the following activities:

- Participates in planning the services for which she is responsible.

- Supervises auxiliary workers who assist her.

- Recommends to the supervisor of public health nursing the physical facilities and equipment that are needed to carry out her assignments.

As a team member, participates in planning, implementing and evaluating nursing care for selected patients. This may include such activities as the following:

- Gives nursing care and health guidance in compliance with medical orders and the policies of the organization's nursing program.

- Demonstrates and supervises the nursing procedures to be carried out by responsible family members in her absence.

- Teaches patients and families rehabilitative aspects of nursing consistent with medical orders.

- Reports signs and symptoms indicative of unexpected changes of conditions to attending physicians.

- Keeps the public health nurse team leader informed of each patient's progress and of family relationships and attitudes which may affect the patient's recovery. As a team member contributes to planning implementing and evaluating the organization's nursing program in special settings such as schools.

This would include such activities as the following:

- Refers special problems to the public health nurse team leader; plans with the public health nurse team leader for the follow-up of individuals with actual, suspected or potential illness or disorders.

- Assists in planning, organizing and conducting special projects such as immunization services and tuberculosis surveys.

- Plans and uses visual aids to promote health education. Contributes to the planning and implementing of methods for providing efficient, effective and economical use of staff in carrying out the organization's nursing program.

Uses such means as the following:

- Contributes to the defining of functions and the selecting of activities for her own position and for auxiliary workers.

- Contributes to the formulation of personnel policies. Maintains the standards of the organization's nursing services as they apply to her assignments; contributes to the formulation of the standards. Uses and sees that auxiliary personnel use physical facilities, supplies, and equipment appropriately and effectively. Uses approved formal and informal communication channels in carrying out her assignments.

- Maintains records and reports that are necessary for providing and evaluating service and collecting statistics.

- Contributes to the development of records and reports.

- Participates in the performance evaluation process.

This would include the following:

- Evaluates the effectiveness of her own service to individuals and in special settings.

- Keeps the supervisor of public health nursing and the public health nurse team leader informed about her adequacy in meeting her assignments.

- Seeks and uses supervisory help to improve her work performance.

- Detects and works toward eliminating or modifying health hazards in all areas of her assignments.

- Promotes public relations for the organization and the public health nursing program.

Uses such means as the following:

- Takes advantage of the opportunities provided in her daily work to promote public relations.

- Participates in planning, implementing and evaluating in-service education programs for registered nurses.

- Participates in studies and research programs with the approval of the Director of Public Health Nursing.

The Public Health Nurse

The Public Health Nurse is perceived as the key figure in the process of revising values, in health practice and health care, beginning with well people in their normal environment.

Provides generalized public health nursing service throughout the life cycle to individuals, families and groups in prevention of disease, and promotion of health in home, school and community. Provides health super-

vision, teaching and counselling; collaborates with other community agencies to coordinate services for continuity of care.

Qualifications:

- Current registration with the College of Nurses of Ontario.
- Certificate in public health nursing or Baccalaureate degree in nursing which includes public health preparation or Baccalaureate degree plus certificate in public health nursing.

Role Responsibilities:

- Home visiting - family health supervision
  - geriatric services
- Immunization
- Communicable Diseases - related to Prevention and Control
- VD & TB - case & contact follow-up
- Posture Screening with registered nurse
- Secondary schools and schools for handicapped - elementary schools specifically assigned
- Pre-natal classes
- P.C.C. when applicable
- Liaison person with other agencies
- Referrals from R.N.
- Delegation of visits to R.N.
- Attending conferences & workshops
- Public Relations - Interpretation of Health Unit Services in the Community.
- Group teaching, classes
- Nurse attachment services with physicians
- Screening programmes e.g. pre-school, vision, hearing, scoliosis, immunization, according to school assignments.

- Responsible for students assigned to the agency for field work practice and/or observation
- Serves on committees within and without the agency as assigned.
- Other duties as assigned.

Direct Care Services - Family Health Supervision

Pre-natal visits

Counselling re:

- Need for early and continuing medical supervision
- Nutritional needs
- Accurate information of reproductive process
- Suggestions to relieve discomforts
- Knowledge & ability to recognize symptoms requiring medical attention
- Help parents overcome fears about pregnancy, labour, delivery & parenthood
- Relaxation exercises during labour & at rest

Pre-Natal Visits

1) Mother

a) Physical status - Healing of episiotomy - C section
- Rest & adequate nutrition
- Problems - breast-feeding?
- Inform of contraceptive methods

b) Emotional status - Wanted child?
- Acceptance of newborn & resultant responsibilities
- Father's acceptance

2) Newborn

- Check if possible asleep & awake

- Check from "head to toe"
- Presence of reflexes
- Eating habits
- Bowel movements
- Healing of umbilicus
- Information regarding immunization clinics
- Anticipate any problems which may arise
- Answer parent's questions

Mental Health Visits

- Aid client in fulfilling or recognizing his needs for affection, belonging, independence, achievement, recognition & self-esteem.
- Consider causative factors
- Physical, social, economic
- Personal defects & limitations
- Incompatible goals - moral standards of individual
- Encourage - reassure - support

Geriatric Care visits

- Encourage patient to be participant in own plan of care.
- Encourage individuality of person - preserve identity and sense of contact.
- Set realistic & attainable goals to help him/her gain a sense of accomplishment & purpose.
- Communicate to patient his value as an individual and status as a member of the family and society.

Medical Visits

e.g. - Diabetic visits

- Review diet exchange with patient
- Discuss & explain taking of insulin if applicable

- Testing of urine being done?
- Encourage
- Poison Control
- Assist family in recognizing hazards in home & making necessary corrections
- Guide parents in teaching & training of children in safety measures
- Hypertension
- Taking of blood pressure, apical pulse
- Enlist patient's cooperation in redirecting his lifestyle in keeping with the guidelines of therapy
- Review dietary plan
- Inform of possible side effects of medications

Surgical visits

e.g. - Cardiac surgery
- Observation of client's incisinal areas
- Apical pulse
- Following Dr.'s orders re: exercises - medications - diet
- Reassurance & encouragement
- Orthopedic surgery
- Explain cast care to person responsible for care.
- Instruct to observe for decubitues ulcers and preventive measures.
- Observation for complications due to prolonged disability.

Communicable Disease Prevention and Control

e.g. - VD & TB
- Includes interviewing of cases

- Contact tracing
- Assisting of families in contact and treatment
- Immunization
- Health Teaching
- Stressing need for immunization in family, including the new born.
- Assisting the Immunizing Team in the actual clinics - (1) for infant & preschoolers and (2) school immunization clinics, as well as specially organized clinics, e.g. polio

e.g. - Hygiene problems

- Convince clients that good general hygiene is important to a person's general health
- Aid clients to keep hygienic measures considering their milieu and means
- Nutrition problems
- Provide clients with the knowledge and incentive needed to ensure good nutrition and good health
- Canada Food Guide used as basis for teaching
- Consult with staff Public Health Nutritionist.

APPENDIX IV

SAMPLES FROM EASTERN ONTARIO HEALTH UNIT

JOB DESCRIPTIONS: SUPERVISOR

DIRECTOR

Appendix IV

Eastern Ontario Health Unit - Nursing Department

Job Description

Supervisor of Nursing (Public Health)

- Is responsible to the Director of Nursing for planning and directing the activities of nursing in a designated area.
- Is the line of communication between the Director of Nursing and Nursing personnel.
- Assists in developing the philosophy, objectives and policies of the Public Health Nursing program in accordance with those of the Health Unit.
- Participates in planning the Nursing Programs in accordance with community health needs by identifying the present needs and resources of Public Health Nursing in her assigned area. Informs the Director of Nursing of the needs, problems and work of her staff.
- Interprets to her staff the philosophy, objectives and policies of the Public Health Nursing services in accordance with those of the Health Unit.
- Assists in setting priorities of services for the nursing program.
- Assists her staff to adjust their work assignments to meet priority needs.
- Determines assignments for nursing staff under her supervision so that each worker is utilized according to her preparation, experience and ability.
- Interprets role of agency to individuals and community agencies.
- Assists in determining personnel policies and sees that they are implemented for the staff under her supervision.
- Recommends to the Director of Nursing, promotion, transfers and dismissals, as well as actions regarding special requests of her staff.

- Responsible for yearly performance appraisal of her Nursing personnel.

- Implements the Nursing program in her area and stimulates staff to carry out work assignments by forming, attending and supporting Nursing Teams and Team Leaders.

- Promotes the concept of co-operative and co-ordinated team approaches in meeting the needs of individuals and families in the community and assists her staff to provide continuity of care and lessen the disruption of service due to staff changes.

- Conducts inservice conferences for the Nurses under her supervision to stimulate sharing of ideas about problems of mutual concern and to keep her staff up-to-date with Health Unit plans and policies, guidance re: introduction of new programs and periodic review of existing procedures.

- Assists staff members in the maintenance of records and reports that are essential for the provision and evaluation of service and for the collection of statistics.

- Responsible for obtaining and maintaining necessary equipment and supplies.

- Encourages her staff to use appropriately the consultant services available within and outside the Health Unit.

- Develops a supervisory program that will ensure high quality of service, maintain the policies and standards of the Nursing Program and promote the development of her personnel by counselling, guiding, supporting, discussing problems and assisting in special projects.

- Contributes to the annual report of the Public Health Nursing program and prepares other requested reports pertaining to the activities in her assigned area.

- Advises the Director of Nursing and consultants about the staff's educational need in relation to the services they provide.

The Director of Nursing (Public Health)

- Advises Schools of Nursing and other related health & social educational institutions of the preparation and qualifications to carry out the role of a nurse in Community Health Nursing.

- Interprets to above institutions and community groups the role and responsibilities of the generalized nursing service provided by this Health Unit.

- Assists the Staff at all levels to carry out the interpretation of Services for the general public.

- Plans, develops and evaluates programs related to local health needs as advised by the Ministry of Health, the Director of the Health Unit and through feedback from Nursing Staff of the Health Unit.

- Interviews and assesses the qualifications and suitability of applicants for Nursing Department Staff positions.

- Develops and implements a program of performance evaluation of staff.

- Plans for and supports In-Service Education Programs for all levels of Nursing Department Staff.

- Interprets to the Director & Medical Officer of Health and the Board of Health the need for providing up-dating, through courses, workshops and conferences, of their professional knowledge as it relates to community health and nursing in general.

- Prepares an Annual Report of the Nursing Programme and related activities for presentation to the Board of Health, and Nursing Staff. The material is a reference source for reporting to community groups and the media.

- Initiates and supports action for providing other services that are needed in the community.

- Promotes the concept of the team approach both on a staff and interagency level.

- Assesses the resources of the nursing staff for contributing to research and arranges for their participation in selected research projects.

- Advises educational institutions (including nursing) regarding the required preparation for qualifying for community nursing both on the public health and registered nurse level.

- Acts on community health and Social Service and educational boards and committees for the purpose of providing services to meet community needs.

- Outlines staffing plans appropriate to agency and community health needs - advises the Medical Officer of Health, the Board of Health, and Senior Nursing personnel on the need to maintain sufficient staff and adjust staffing patterns to promote an acceptable service standard.

APPENDIX V

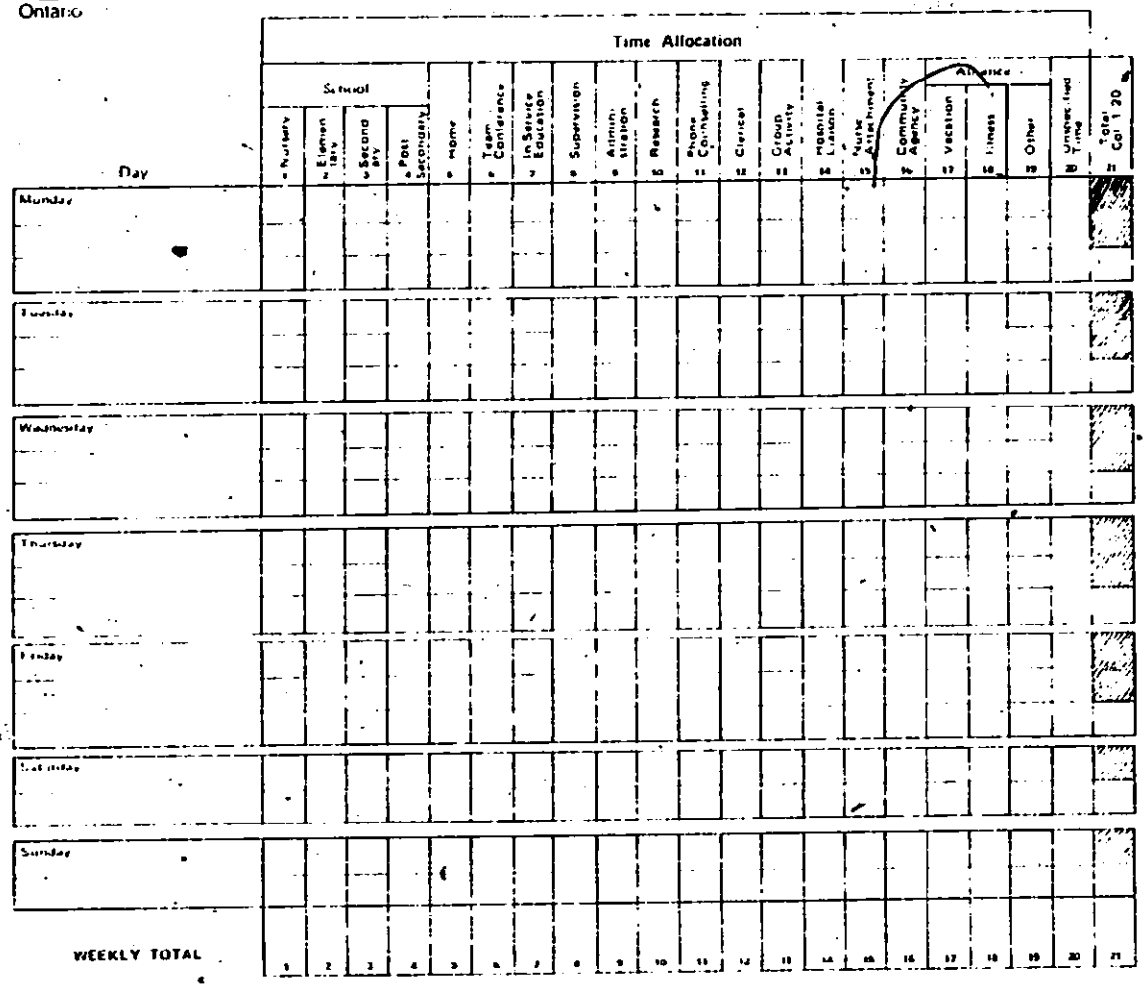
CHARTS ONTARIO

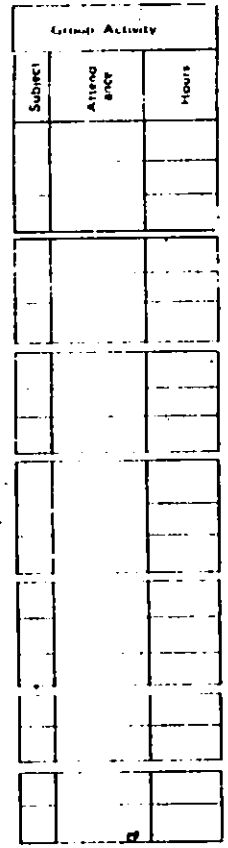
REPORTING SYSTEM

Ministry of Health — Public Health Branch
Ontario

Weekly Activity Report (CHR-1)

Name | Date | CHR No



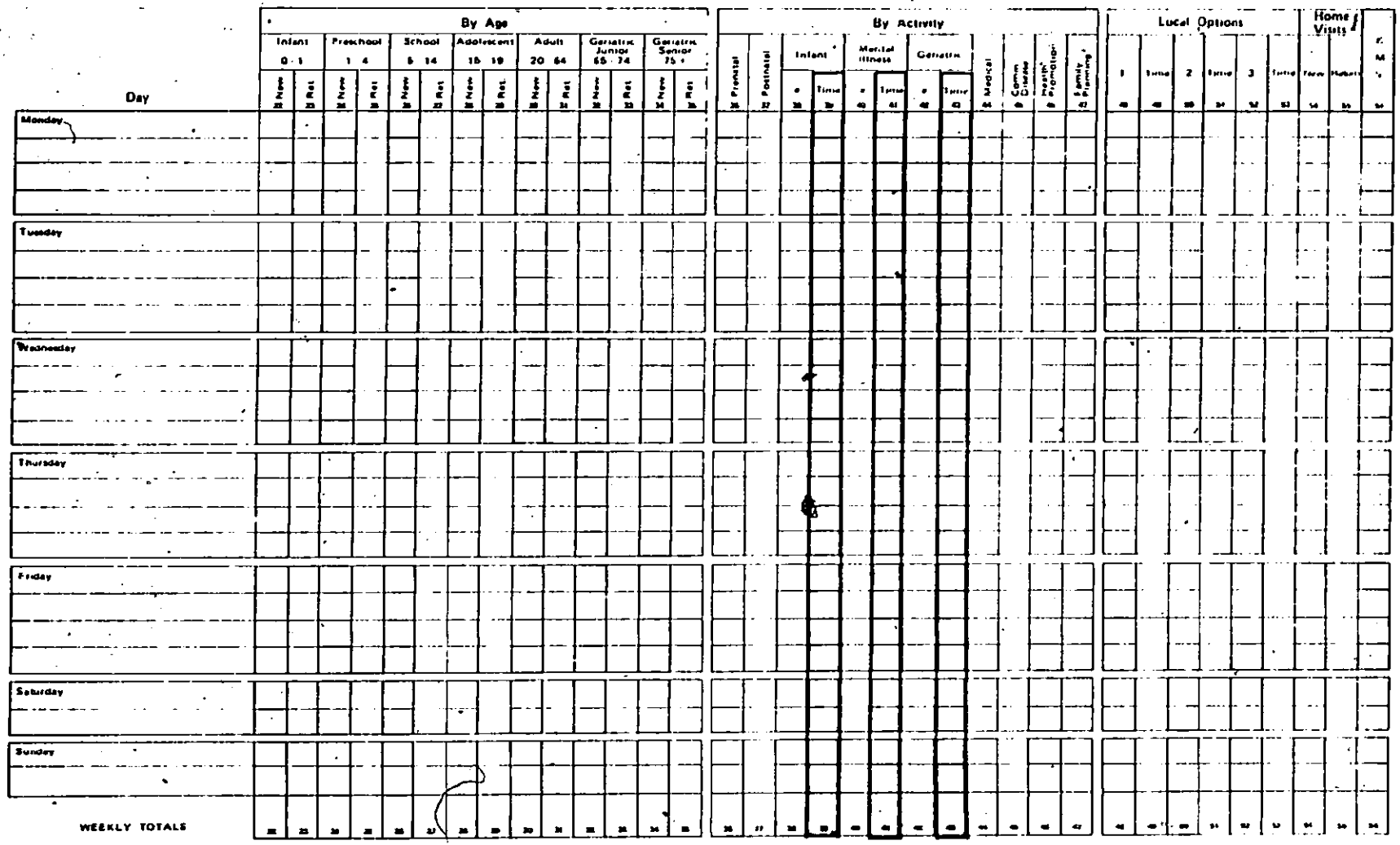


Group Coding Instructions

Subject

- A – Interpretation of Health Services
- B – Mass Media
- C – Child Health
- D – Drugs and Alcohol
- E – Scoliosis Screening
- F – Family Planning
- G – Genetics
- H – Health Assessment
- J – Immunization
- K – Chest
- L – Life Style
- M – Mental Health
- N – Nutrition
- P – Parent Education
- R – Registration of Preschool Children
- S – Screening - Audio
- T – Screening - Vision
- V – Screening - Communicable Disease
- W – Sexually Transmitted Diseases
- X – Expectant Parent - New Registration
- Y – Expectant Parent - Total Attendance
- 1 – 9 - Local Options

CHARIS: ONTARIO REPORTING SYSTEM



CHARIS: ONTARIO REPORTING SYSTEM

APPENDIX VI

POSITION POWER RATING SCALE

APPENDIX VI

VERBAL DIRECTIONS READ TO EACH RESPONDENT OF THE PILOT PROJECT BEFORE COMPLETING THE POSITION POWER RATING SCALE.

- The heading of the accompanying questionnaire refers to one of the dimensions helping to define the favorability to the supervisor of the situation in which she functions.

- I would like to enlist your assistance in a research project by asking you to make a judgment regarding the degree of power held by the supervisor in a typical supervisory situation vis-à-vis her group members.

- Please circle the number in each row which best represents your answer.

Appendix VI

Position Power Rating Scale

Circle the number which best represents your answer.

1. Can the leader directly or by recommendation administer rewards and punishments to his subordinates?

2	1	0
Can act directly or can recommend with high effectiveness	Can recommend but with mixed results	No

2. Can the leader directly or by recommendation affect the promotion, demotion, hiring or firing of his subordinates?

2	1	0
Can act directly or can recommend with high effectiveness	Can recommend but with mixed results	No

3. Does the leader have the knowledge necessary to assign tasks to subordinates and instruct them in task completion?

2	1	0
Yes	Sometimes or in some aspects	No

4. Is it the leader's job to evaluate the performance of his subordinates?

2	1	0
Yes	Sometimes or in some aspects	No

5. Has the leader been given some official title of authority by the organization (e.g., foreman, department head, platoon leader)?

2	0
Yes	No

TOTAL [ ]

APPENDIX VII

SELECTED BIBLIOGRAPHY* FOR CONTENT VALIDITY OF THE MEASURE OF ORGANIZATIONAL EFFECTIVENESS

* The Canadian Public Health Association. The Nurse and Community Health, Functions and Qualifications for Practice in Canada, 1977, pp. 10-11.

Appendix VII

Selected Bibliography

Articles

Du Gas, Beverley. Nursing's Expanded Role in Canada. Nursing Clinics of North America 9:523-33, September 1974.

Hurd, Jeanne. Directional Signals for Nursing's Expanding Role, Canadian Nurse 68(1): 21-5, January 1972

Kergin, Dorothy J. Symposium on Community Nursing in Canada. Nursing Clinics of North America 6:463-556, September 1971.

Kergin, Dorothy J. University Education for Nurses - For What Purpose? 12th Florence Nightingale Oration, Sydney, Australia, October 1975 (unpublished).

Munro, John. Guest Editorial - Canadian Nurse 68(1): 19-20, January 1972.

Smith, Dorothy. The Education of the Occupational Health Nurse: Canadian Journal of Public Health 66:493-6, November/December 1975.

Smith, Dorothy. Skills and Competence Required of Nurses working in Occupational Health and their Need for Education. Canadian Journal of Public Health 67: Supplement 2, 68-71, September/October 1976.

Splane, Verna. Symposium on Community Nursing in Canada. Nursing Clinics of North America 10: 687-769, December 1975.

Tonkin, Roger S. Primary Health Care. Canadian Journal of Public Health 67:289-94, July/August 1976.

Weber, Kirsten. Current Concepts in Community Health Nursing and Their Implications for the Secondary School Health Services in British Columbia. Canadian Journal of Public Health 63:137-42, March/April 1972.

Documents

Alberta Association of Registered Nurses. Position Paper on Nursing. Edmonton, 1976.

Alberta Department of Advanced Education and Manpower. The Report of the Alberta Task Force on Nursing Education, Edmonton, 1975.

American Association of Industrial Nurses. Standards for Evaluating an Occupational Health Nursing Service. New York, Revised, 1975.

Canadian Nurses' Association. Role, Function and Educational Preparation for the Practice of Nursing. Ottawa, 1967.

Canadian Public Health Association. A Statement of Functions and Qualifications for the Practice of Public Health Nursing in Canada, Toronto, 1966.

Department of National Health and Welfare. A new Perspective on the Health of Canadians. Working Document (Lalonde). Ottawa, 1974.

Department of National Health and Welfare. Report of the Committee on Nurse Practitioners. (Boudreau). Ottawa, 1972.

Department of National Health and Welfare. The Community Health Centre in Canada. (Hastings). Vols. I, II, III. Ottawa, 1972.

Department of National Health and Welfare and Canadian Nurses' Association. National Conference on Nurses for Community Service, Ottawa, Canadian Nurses' Association, 1972.

Government of Ontario, Report of the Health Planning Task Force. (Mustard). Toronto, 1974.

Government of Newfoundland and Labrador. Royal Commission on Nursing Education. (Miller). St. John's, 1974.

Grant McEwan Community College, Alberta, Occupational Health Nursing Certificate Program. Edmonton, 1976.

League of Red Cross Societies. Nursing and Community Health. Geneva, 1974.

Manitoba Association of Registered Nurses. Nursing Education - Challenge and Change. Winnipeg, 1976.

Ontario Council of Health. Annex D. Education of the Health Disciplines. Toronto, 1969.

Ontario Region Canadian Conference of University Schools of Nursing. Guidelines for Baccalaureate Programs in Ontario. Toronto, October, 1970.

Order of Nurses, Province of Quebec. Le Nursing en Santé Communautaire. Québec, 1976.

Registered Nurses' Association of Ontario. Guide to Qualifications and Responsibilities of Registered Personnel in Nursing Service. Toronto, 1976.

Reference Books

Abdellah, Faye G., Beland, Irene L., Martin, Almeda and Mathenay, Ruth V. New Directions in Patient Centred Nursing, Toronto, Collier-MacMillan Canada, 1973.

Benson, Evelyn R. and McDevitt, Joan O. Community Health and Nursing Practice, Toronto, Prentice-Hall of Canada, 1976.

Brown, Esther. Nursing Reconsidered, A Study of Change. Part II. Toronto, J.B. Lippincott, 1971.

Leahy, Kathleen M., Cobb, M. Marguerite and Jones, Mary C. Community Health Nursing. Toronto, McGraw-Hill, 2nd ed., 1972.

Little Dolores E. and Carnevalli, Doris L. Nursing Care Planning. Toronto, J.B. Lippincott, 1969.

Murray, Ruth and Zentner, Judith. Nursing Concepts for Health Promotion. Toronto, Prentice-Hall of Canada, 1975.

Tinkham, C. and Voorhies, E. Community Health Nursing - Evolution and Process. New York, Meredith Corporation, 1976.

APPENDIX VIII

INSTRUMENT TO MEASURE ORGANIZATIONAL EFFECTIVENESS

Appendix VIII

Instrument to Measure Organizational Effectiveness

Supervisory Group Code

Agency Code

1. On the basis of your experience and information, how would you rate the quality of COMMUNITY HEALTH NURSING CARE that individuals and families GENERALLY receive from the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers).

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

2. On the basis of your experience and information, how good would you say is the community health nursing care oriented to THE PROMOTION AND MAINTENANCE OF PHYSICAL, MENTAL AND SOCIAL WELL-BEING given to individuals and families by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers).

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

3. On the basis of your experience and information, how good would you say is the community health nursing care oriented to THE PREVENTION OF DISEASE AND DISABILITY given to individuals and families by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers).

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

4. On the basis of your experience and information, how good would you say is the community health nursing care oriented to FURNISHING SKILLED NURSING SERVICES FOR THE SICK AND DISABLED IN THE COMMUNITY given to individuals and families by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers)

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

5. On the basis of your experience and information, how good would you say is the community health nursing care oriented to THE PROVISION OF SUPPORTIVE COUNSELLING FOR THE FAMILIES OF THE SICK AND DISABLED IN THE COMMUNITY given to individuals and families by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers)

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

6. On the basis of your experience and information, how good would you say is the community health nursing care oriented to CONTINUITY OF CARE given to individuals and families by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers)

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather Poor

_____ Poor

7. On the basis of your experience and information, how good would you say is the community health nursing care oriented to THE PROVISION OF HEALTH EDUCATION SERVICES TO THE COMMUNITY, THE NURSING PROFESSION AND OTHER WORKERS given by the staff nurses who report to the Supervisor of the above-coded Supervisory Group? (check one of the following answers)

_____ Outstanding

_____ Excellent

_____ Very good

_____ Good

_____ Fair

_____ Rather poor

_____ Poor

APPENDIX IX

SAMPLE LEAST PREFERRED CO-WORKER SCALE

Appendix IX

AGENCY CODE_____

SUPERVISORY CODE_____

LPC SCALES

Think of the person <u>with whom you can work least well</u>. She/he may be someone you work with now, or she/he may be someone you knew in the past. She/he does not have to be the person you like least well, but should be the person with whom you had the most difficulty in getting a job done. Describe this person as she/he appears to you by checking the appropriate number on each scale.

Pleasant	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Unpleasant
Friendly	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Unfriendly
Rejecting	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Accepting
Helpful	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Frustrating
Unenthusiastic	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Enthusiastic
Tense	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Relaxed
Distant	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Close
Cold	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Warm
Cooperative	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Uncooperative
Supportive	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Hostile
Boring	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Interesting
Quarrelsome	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Harmonious
Self-assured	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Hesitant
Efficient	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Inefficient
Gloomy	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8	Cheerful
Open	8 : 7 : 6 : 5 : 4 : 3 : 2 : 1	Guarded

APPENDIX X

SAMPLE GROUP ATMOSPHERE QUESTIONNAIRE

Appendix X

AGENCY CODE_____

SUPERVISORY CODE_____

Group Atmosphere Questionnaire

Please describe the group atmosphere of your present supervisory group by checking the number indicating your rating of the relative position of your staff on each scale.

1. Friendly : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Unfriendly
2. Accepting : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Rejecting
3. Satisfying : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Frustrating
4. Enthusiastic : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Unenthusiastic
5. Productive : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Nonproductive
6. Warm : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Cold
7. Cooperative : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Uncooperative
8. Interesting : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Boring
9. Supportive : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Hostile
10. Successful : 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Unsuccessful

APPENDIX XI

TEST-RETEST-SCORES FOR THE MEASUREMENT OF EFFECTIVENESS

Appendix XI

Test-retest scores
for the measurement of effectiveness

Subject	Test I score	Test II score
1.	36	35
2.	37	36
3.	35	35
4.	36	37
5.	33	32
6.	39	39
7.	32	32
8.	34	35
9.	32	30
10.	34	34
11.	26	26
12.	33	34
13.	31	31
14.	32	32
15.	27	28
16.	28	28
17.	31	31
18.	33	34
19.	41	42
20.	35	31
21.	33	35
22.	38	37
23.	35	35
24.	29	29
25.	41	42

APPENDIX XII

SAMPLE LETTERS

1. Letter to Executive Director, Health Programs Division Ministry of Health.
2. Letter to Chief, Public Health Nursing, Ministry of Health.
3. Reply from (1)
4. Reply from (2)
5. Letter to Medical Officers of Health of each Unit
6. Letter of Invitation to Directors of Nursing in Ontario Health Unit
7. Letter of Acknowledgement and Instructions to Directors of Nursing
8. Letters of Invitation and Instructions to Supervisors, Ontario Health Units

UNIVERSITÉ D'OTTAWA UNIVERSITY OF OTTAWA
OTTAWA ONTARIO CANADA

March 10, 1981

Dr. Gordon K. Martin,
Executive Director,
Health Programs Division,
Community Health Services,
Ministry of Health,
15 Overlea Blvd., 5th Floor,
Toronto, Ontario.
M4H 1A9

Dear Doctor Martin:

Further to our recent telephone conversation, I am writing to request your permission to contact the Medical Officers of Health of the Province of Ontario and your assistance in enlisting their support on behalf of my proposed research project in public health nursing supervision.

The project involves a study of the interaction between the leadership style and educational background of public health nursing supervisors, the favorability of the existing environmental climate, and the perception of the group's performance. This study will form part of the thesis requirements for a doctoral degree in educational administration which I am postulating from the University of Ottawa.

The questionnaires for this study should take Directors of Nursing and Supervisors no more than 15 to 20 minutes of their time to complete. I hope you will share my conviction of the advantages which might come from a better understanding of some of the management factors which play an important role in the effectiveness of such a vital service as public health nursing.

As suggested, I enclose a summary description of my request for assistance.

.../2

École des sciences infirmières
Faculté des sciences de la santé

770 King Edward
K1N 6N5
(613) 231-3228

School of Nursing
Faculty of Health Sciences

Your cooperation and assistance in ensuring the success of this project will be greatly appreciated. Since I will be in a position to contact the Health Units very shortly, I would be grateful for your early approach to the Medical Officers of Health.

With kindest personal regards.

Yours Sincerely,

Marie A. Loyer,
Associate Professor

Enclosure

UNIVERSITÉ D'OTTAWA
OTTAWA ONTARIO
CANADA
UNIVERSITY OF OTTAWA

March 11, 1981

Miss Ethel Irwin,
Chief,
Public Health Nursing,
Community Health Services,
Ministry of Health,
15 Overlea Blvd, 5th Floor,
Toronto, Ontario,
M4H 1A9.

Dear Miss Irwin:

Further to our recent telephone conversation, I have requested Dr. Gordon Martin's permission to contact the Medical Officers of Health of Ontario, and his assistance in enlisting their support on behalf of my proposed research project in public health nursing supervision. I would very much appreciate your authorization to contact the Directors of Nursing and Nursing Supervisors, and your help in requesting their support for, and cooperation in participating in, my project.

With your concurrence, I will contact the Directors and Nursing Supervisors to seek their cooperation in completing the necessary research questionnaires. It should take no longer than twenty minutes of their time to complete the mailed questionnaires. These will be appropriately coded, in order to protect completely the security of the answers.

As I have briefly outlined to you, the project, which will form part of my doctoral thesis in administration, consists of a study of the interaction between the leadership style of public health nursing supervisors, the characteristics of the work environment and perception of the supervisory group's performance and goal achievement. Three different validated instruments in the form of questionnaires will measure each of these variables.

I would like to initiate the study very shortly and, therefore, I would be very grateful for your valuable assistance in this matter.

With kind personal regards.

Yours sincerely,

Marie A. Loyer,
Associate Professor.

École des sciences infirmières
Faculté des sciences de la santé

770 King Edward
K1N 6N5
(613) 231-3228

School of Nursing
Faculty of Health Sciences

Ontario

L

Ministry of Health

416/965-2426

5th Floor
15 Overlea Blvd.
Toronto, Ontario
M4H 1A9

March 17, 1981.

Ms. Marie A. Loyer,
Associate Professor,
School of Nursing,
University of Ottawa,
Faculty of Health Sciences,
770 King Edward,
Ottawa, Ontario.
K1N 6N5

Dear Marie:

Thank you for your letter of March 10th which you sent me as a follow up of our recent telephone conversation. Ethel Irwin has advised me of your communication with her and we are anxious to support you in this project. I plan on sending the attached letter to all Medical Officers of Health later on this week and I have asked Ethel to send an appropriate letter directly to each of our Directors of Public Health Nursing.

Good luck with your study. If we can be of any further help with respect to Ontario health units, I am sure you will let us know without hesitation.

Yours very truly,

G.K. Martin, M.D., D.P.H.,
Executive Director,
Health Programs Division.

Att.

Ontario

Ministry of Health

416/965-2426

5th Floor
15 Overlea Blvd.
Toronto, Ontario
M4H 1A9

March 20, 1981.

TO: MEDICAL OFFICERS OF HEALTH

Dear Doctor:

Ms. Marie A. Loyer, Associate Professor, University of Ottawa, has discussed with me her need for assistance from your Nursing Division in the conduct of a research study in Public Health Nursing Supervision which she is undertaking as part of her doctoral thesis in administration.

Her project will consist of a study of the interaction between the leadership style of public health nursing supervisors, the characteristics of the work environment and the perception of the group's performance. Carrying out this project will require the cooperation of all Ontario Public Health Agencies.

Ms. Loyer will be contacting you shortly to request your support and cooperation and that of the Directors of Nursing and Public Health Nursing Supervisors of your Agency for her project. The study will involve mail questionnaires which should take the Director of Nursing and Supervisors no more than fifteen to twenty minutes to complete. The returned questionnaires will be identified only by code in order to protect the security of the answers.

Ms. Loyer is well known to you as our current President of the Canadian Public Health Association. She holds an M.A. in public health nursing supervision and administration, an M.Ed and an M.P.H., and is presently on sabbatical leave from the faculty of the School of Nursing of the University of Ottawa to complete her doctoral studies.

I am convinced that this study deserves all our support since it is likely to improve our understanding of the many factors that play a role in determining the effectiveness of public health nursing. Therefore, it is my hope that you will authorize and encourage the Director and Nursing Supervisors of your Agency to participate in this study.

I have asked our Senior Consultant in Public Health Nursing, Miss Ethel Irwin, to write directly to your Director of Public Health Nursing respecting this study as there is some degree of urgency in Ms. Loyer's initiation of this project.
I am grateful to you for your anticipated cooperation in this study.

Yours very truly,

G.E. Martin, M.D., D.P.H.,
Executive Director,
Health Programs Division.

Ontario

Ministry of Health

416/965-4441

5th Floor
15 Overlea Boulevard
Toronto, Ontario
M4H 1A9

March 18, 1981

MEMORANDUM TO: Directors of Public Health Nursing

Dear Colleague:

This memorandum is to inform you of a research project in public health nursing supervision being conducted by Marie A. Loyer, Associate Professor, School of Nursing, Ottawa University.

Supervision in public health nursing is an important function in our health units/departments. I am sure that all of us will welcome a scientific enquiry into the nature of this position. For this reason, I am writing to request your support of this study and to encourage you to complete the questionnaires which you will be receiving in the mail.

Thank you for your cooperation in this matter.

Yours sincerely,

Ethel Irwin

(Miss) Ethel Irwin
Chief
Public Health Nursing Service
Public Health Branch

EI/dt

UNIVERSITÉ D'OTTAWA UNIVERSITY OF OTTAWA
OTTAWA ONTARIO
CANADA

Dear Doctor

I am writing to request your support for a research study in public health nursing supervision which I am undertaking as part of my doctoral thesis at the University of Ottawa. My study has the support of the Executive Director, Health Programs Division, Ontario Ministry of Health.

The project I propose to undertake will involve all cooperating Ontario Public Health Agencies. It will consist of a study of the interaction between the leadership style of public health nursing supervisors, characteristics of the work environment and perceptions of the group's performance. The returned questionnaires which will be used in the study will be doubly coded in order to completely protect the security of the answers. Therefore, there will be no identification of the specific source (person or agency) of any data.

I am also writing to the Director of Nursing of your Agency to request her support and participation in this study. Upon receipt of a favorable reply, I will approach the Nursing Supervisors to request their assistance and cooperation in completing the mailed questionnaires. I hope you will support their participation in this study.

Your cooperation will be greatly appreciated.

Sincerely,

Marie A. Loyer,
Associate Professor

École des sciences infirmières
Faculté des sciences de la santé

770 King Edward
K1N 6N5
(613) 231-3228

School of Nursing
Faculty of Health Sciences

Dear

I am a doctoral candidate at the University of Ottawa and I am writing to request your cooperation in participating in my study. This project has been discussed with, and enjoys the support of the Chief, Public Health Nursing Service of the Ontario Ministry of Health. I am also writing to the Medical Officer of Health of your Agency to request his support for this study.

I propose to investigate the interaction between the leadership style of supervisors, the characteristics of the work situation and their influence on the achievement of nursing service goals. The study will include all cooperating Ontario Public Health Agencies and will involve mailed questionnaires which should take you and your Supervisory Staff no more than twenty minutes to complete. The returned questionnaires will be doubly coded in order to completely protect the security of the answers. Therefore, there will be no identification in the study of the specific source of any data.

I would very much appreciate it if you would complete the attached form, listing the names of your Supervisory Staff and return it to me at your earliest convenience. A stamped self-addressed envelope is provided for this purpose.

Upon receipt of your reply, I will approach your Nursing supervisors to request their assistance and cooperation in completing the questionnaires that will be mailed to them at the same time that you will receive yours. I would like to assure all participants that neither the agency nor the individual participants will be identified in the reports, tabulations or findings of this study.

.../2

I hope it will be possible for you and your Supervisory Staff to participate in this study, which I am confident will contribute to our understanding of the role of supervision in community health nursing.

Your cooperation in this study would be very much appreciated.

Sincerely,

Marie A. Loyer
Associate Professor

UNIVERSITÉ D'OTTAWA
OTTAWA ONTARIO
CANADA
UNIVERSITY OF OTTAWA

Dear

Thank you for agreeing to participate in my study of supervision in community health nursing.

The attached questionnaire(s) (is a) are copies of an instrument that has been developed to obtain comparable information about the effectiveness of community health nursing care.

Please think about the community health nursing care which is given by staff nurses who report to each of the Nursing Supervisors in your agency (Supervisory Groups). You are requested to complete one copy of the Effectiveness Questionnaire for each Supervisory Group in your agency. Each questionnaire is identified by a code in order to protect the security of your ratings.

Attached to this letter, you will find a list of codes which will permit you to identify the Supervisor of each of the coded Supervisory Groups. In addition, the half-page cover attached to each questionnaire will also identify the Supervisor of the Group you are rating, helping you to think exclusively about the nursing care provided by that group. After completing the questionnaires, please tear off and destroy the half page covers.

Read each question carefully and check (✓) only one of the alternative answers for each question. Please answer all seven questions of each questionnaire.

...2

École des sciences infirmières
Faculté des sciences de la santé

770 King Edward
K1N 6N5
(613) 231-3228

School of Nursing
Faculty of Health Sciences

Enclosed, please find a stamped self addressed envelope to enable you to return the completed questionnaires with minimum inconvenience.

I would be grateful if you could complete and return the questionnaires at your earliest convenience.

Thank you for your cooperation and participation in this project.

Yours sincerely,

Marie A. Loyer

UNIVERSITÉ D'OTTAWA UNIVERSITY OF OTTAWA
OTTAWA ONTARIO
CANADA

Dear

I am writing to request your support and participation in a study of public health nursing supervision which I am undertaking as part of my thesis at the University of Ottawa. The study will explore different factors related to the role of supervision and their influence on community health nursing services. This project enjoys the support of the Chief, Public Health Nursing Service, of the Ontario Ministry of Health. I have also written to the Medical Officer of Health and to the Director of Nursing of your Agency to enlist their support.

Participation in the study will be limited to nurses in administrative and leadership positions. Since this represents a relatively small population among the public health nurses of Ontario, the success of the study will depend upon your cooperation and willingness to complete the three questionnaires and the general biographical data form which are enclosed. The questionnaires will be doubly coded in order to completely protect the security of your answers. Neither the agency nor the individual participant will be mentioned in any reports, tabulations or findings of the study.

I know that the demands on your time are many. Therefore, the questionnaires were designed for easy answering with almost all questions requiring only a check mark.

Your participation in this study will permit us to gain a better understanding of the role of supervision in community health nursing. I would, therefore, very much appreciate it if you would complete the three attached questionnaires and the biographical data form and return them to me at your earliest convenience. A stamped and self-addressed envelope is provided for this purpose.

Please be assured that I sincerely appreciate your cooperation and participation in this study.

Yours sincerely,

Marie A. Loyer

770 King Edward
K1N 6N5
(613) 231-3228

École des sciences infirmières
Faculté des sciences de la santé

School of Nursing
Faculty of Health Sciences

APPENDIX XIII

RAW DATA SHOWING GROUP MEMBER COMPOSITION IN SAMPLE

Appendix XIII

Raw Data Showing Group Member Composition in Sample

RN	PHN	RNA	Total	Number with Bacc. Degree
0	10	3	13	7
0	12	2	14	8
0	18	0	18	8
0	12	2	14	7
0	12	0	12	2
1	14	2	17	11
1	16	3	20	9
1	21	0	22	7
2	11	2	15	6
0	5	1	6	2
0	13	0	13	6
3	2	0	5	1
0	15	0	15	7
1	18	2	21	7
5	8	5	18	4
5	14	0	19	0
14	8	0	22	8
0	14	2	16	8
0	15	0	15	5
13	9	0	21	4
2	13	0	15	6
2	15	2	19	11
4	13	2	19	8
2	9	2	13	1
0	17	3	20	7
4	10	4	18	5
0	9	3	12	7
2	11	0	13	10
2	7	0	9	4
0	21	0	21	11
5	10	0	15	6
0	16	0	16	8
0	16	0	16	13
0	6	1	7	4
0	13	0	13	10
0	21	3	24	15
2	7	3	12	5

Appendix XIII Cont'.

Raw Data Showing Group Member Composition in Sample

RN	PHN	RNA	Total	Number with Bacc. Degree
0	19	0	19	15
0	6	0	6	1
18	48	0	66	22
3	10	3	16	5
1	11	2	14	51
2	13	0	15	11
0	20	0	20	13
7	18	3	28	8
0	14	0	14	13
0	14	0	14	9
13	12	0	25	8
2	4	0	6	2
0	2	0	2	2
1	14	0	15	10
2	11	0	13	9
0	10	4	14	8
0	7	3	10	3
0	10	0	10	8
3	11	0	14	9
3	15	3	21	13
3	13	0	16	6
0	12	0	12	8
0	14	0	14	8
4	12	0	16	12
0	7	0	7	4
5	9	1	15	5
2	6	0	8	2
1	16	1	18	13
0	4	0	4	3
4	23	4	31	14
0	11	3	14	7
0	2	0	2	0
1	9	0	10	7
2	14	2	18	10
1	17	3	21	17
4	12	2	18	6
6	15	0	21	14

Appendix XIII Cont'.

Raw Data Showing Group Member Composition in Sample

RN	PHN	RNA	Total	Number with Bacc. Degree
1	10	2	13	7
0	6	1	7	2
0	18	3	21	13
0	9	0	9	4
0	9	3	12	5
0	13	1	14	5
1	30	3	34	21
6	14	2	22	0
1	13	0	13	8
0	14	0	14	6
3	20	2	25	7
4	3	3	10	0
3	1	0	4	0
0	2	0	2	0
2	9	0	11	5
2	9	0	11	6
3	7	0	10	2
4	8	0	12	0
0	8	0	8	6
0	20	0	20	6
6	16	1	23	12
2	16	0	18	8
4	17	0	21	10
2	10	0	12	10
5	7	0	12	4
0	3	0	3	2
4	26	0	30	11
4	13	0	17	0
2	10	2	14	2
1	14	0	15	13
0	6	1	7	3
0	21	3	24	12
7	7	0	14	4
0	19	3	22	0
3	8	0	11	5
0	10	3	13	7

Appendix XIII Cont'.

Raw Data Showing Group Member Composition in Sample

RN	PHN	RNA	Total	Number with Bacc. Degree
1	15	0	16	11
1	9	0	10	3
0	12	0	12	8
4	10	0	14	3
5	20	1	26	13
6	15	2	23	10
2	14	0	16	6
6	11	0	17	7
0	9	0	9	7
2	12	0	14	7
1	6	0	7	3
0	15	0	15	8
4	15	0	19	13
4	24	1	29	11
1	13	0	14	7
2	11	0	13	6
0	14	0	14	10
6	13	2	21	12
4	6	0	10	2
4	12	0	16	6
4	8	3	15	1
0	10	0	10	10
0	13	0	13	1

APPENDIX XIV

COMMUNITY HEALTH NURSING SUPERVISORS IN THE STUDY SAMPLE: AGE DISTRIBUTION

Appendix XIV

Community Health Nursing Supervisors in the Study Sample:

Age Distribution

Age in Years	N	%
<25 years	0	0
26-30	12	9.0
31-35	13	9.8
36-40	14	10.5
41-45	20	15.0
46-50	20	15.0
51-55	26	19.5
56-60	18	13.5
61-65	10	7.5
TOTAL	133	99.8

APPENDIX XV

DISTRIBUTION OF SAMPLE ACCORDING TO YEARS OF WORK EXPERIENCE IN NURSING

Appendix XV

Distribution of Community Health Nursing Supervisors in Sample According to Years of Work Experience in Nursing and in Community Health Nursing

Experience in years	In Nursing		In Community Health Nursing	
	No.	%	No	%
3 years	2	1.5	2	1.5
4-5	2	1.5	5	3.8
6-10	22	16.5	29	21.8
11-15	19	14.3	36	27.1
16-20	28	21.0	24	18:0
21-25	13	9.7	12	9.0
25	42	31.5	22	16.5
No Response	5	3.7	3	2.0
Total	133	99.7	133	99.7

APPENDIX XVI

DISTRIBUTION OF SAMPLE ACCORDING TO YEARS OF WORK EXPERIENCE IN THE PRESENT AGENCY

Appendix XVI

Distribution of Sample According to Years of Work Experience in the Present Agency

Time in Years	No	%
1 year	5	3.7
2-5	24	18.0
6-10	40	30.0
11-15	35	26.3
16-20	16	12.0
21-25	4	3.0
> 25	9	6.8
TOTAL	133	99.8

APPENDIX XVII

RAW SCORES OF INDEPENDENT AND DEPENDENT VARIABLES OF SUPERVISORY GROUPS

Appendix XVII

Raw Scores of Independent and Dependent Variables of Supervisory Groups

Group No.	Training		Experience		LPC	GA	Effectiveness		
	ē Bac	s̄ Bac	<2 yrs.	>2 yrs.			Total	AV.1 1-7	AV.2 2-7
001	x			x	52	68	42	6.00	6.00
002		x		x	72	65	35	5.00	5.00
003	x			x	56	67	40	5.71	5.83
005	x			x	75	65	40	5.71	5.67
006	x			x	51	79	37	5.29	5.33
008	x			x	70	67	28	4.00	4.00
009	x			x	73	60	43	6.14	6.17
010		x		x	55	66	37	5.29	5.33
012	x			x	95	60	42	6.00	6.00
013		x		x	72	66	35	5.00	5.00
014	x			x	76	77	30	4.29	4.17
016	x			x	64	66	27	3.86	3.83
017	x			x	40	70	39	5.57	5.50
018	x			x	79	74	27	3.86	3.83
020	x			x	56	70	42	6.00	6.00
021	x			x	26	80	42	6.00	6.00
022	x		x		64	44	40	5.71	5.67
023	x			x	76	70	28	4.00	4.00
024		x		x	64	69	35	5.00	5.00
025	x			x	22	80	35	5.00	4.83
026	x			x	86	64	41	5.86	5.83
027		x		x	54	62	28	4.00	4.00
028	x			x	65	63	42	6.00	6.00
030	x			x	70	64	35	5.00	5.00
031	x		x		88	62	39	5.57	5.50
032	x			x	66	70	21	3.00	3.00
033	x			x	47	63	28	4.00	4.00
034		x	x		60	72	37	5.29	5.33
035	x		x		63	59	34	4.86	4.83
036	x		x		96	80	35	5.00	5.00
037		x		x	34	70	32	4.57	4.50
038		x		x	69	61	29	4.14	4.17
039		x		x	96	58	35	5.00	5.00
040	x			x	58	51	37	5.29	5.33
041		x		x	67	75	34	4.86	4.83
042	x			x	53	56	26	3.71	3.67
043	x			x	51	80	36	5.14	5.17
044	x			x	58	65	40	5.71	5.67
045		x		x	73	66	35	5.00	5.00

Appendix XVII Cont'.

Raw Scores of Independent and Dependent Variables of Supervisory Groups

Group No.	Training		Experience		LPC	GA	Effectiveness		
	c Bac	s Bac	<2 yrs.	>2 yrs.			Total	AV.1 1-7	AV.2 2-7
046	x			x	59	73	32	4.57	4.50
047		x		x	57	56	31	4.43	4.33
048		x		x	56	62	35	5.00	5.00
049		x		x	57	80	35	5.00	5.00
050	x			x	49	80	35	5.00	5.00
051		x		x	83	74	29	4.14	4.17
052		x		x	54	80	33	4.71	4.67
053		x		x	68	68	31	4.43	4.33
055	x			x	57	73	43	6.14	6.17
056		x		x	70	61	35	5.00	5.00
057		x		x	57	73	38	5.43	5.50
058	x		x		76	60	38	5.43	5.50
059	x			x	96	75	28	4.00	4.00
060		x		x	101	80	28	4.00	4.00
061		x		x	53	73	35	5.00	5.00
062		x		x	76	76	42	6.00	6.00
063	x			x	55	53	27	3.86	3.83
064	x			x	70	66	24	3.42	3.33
065	x			x	38	51	29	4.14	4.17
067	x		x		77	55	32	5.33	5.40
068	x		x		52	70	32	4.57	4.50
069		x		x	67	70	31	4.43	4.33
070	x			x	56	52	29	4.14	4.17
071		x		x	64	68	30	4.29	4.33
072		x		x	43	63	33	4.71	4.67
073	x			x	51	71	38	5.43	5.33
074	x			x	60	68	35	5.00	5.00
075	x			x	47	76	40	5.71	5.83
077		x	x		76	71	33	4.71	4.67
078		x	x		78	66	31	4.43	4.33
079		x		x	46	37	33	4.71	4.67
080	x		x		62	66	35	5.00	5.00
081		x		x	72	48	35	5.00	5.00
082		x		x	55	66	29	4.14	4.17
083	x			x	72	67	28	4.00	3.83
086	x			x	55	60	26	3.71	3.67
087	x		x		68	51	42	6.00	6.00
088	x			x	42	69	39	5.57	5.50
089	x			x	95	61	40	5.71	5.67

Appendix XVII Cont'.

Raw Scores of Independent and Dependent Variables of Supervisory Groups

Group No.	Training		Experience		LPC	GA	Effectiveness		
	c Bac	s Bac	<2 yrs.	>2 yrs.			Total	AV.1 1-7	AV.2 2-7
091	x			x	43	74	49	7.00	7.00
092	x			x	93	65	38	5.43	5.50
093	x		x		26	70	29	4.14	4.17
094	x			x	65	63	41	5.86	5.83
095	x		x		78	70	30	4.29	4.17
096	x			x	44	49	29	4.14	4.00
097	x		x		59	55	28	4.00	3.83
098	x			x	44	67	40	5.71	5.67
099	x		x		78	43	40	5.71	5.67
100	x		x		60	56	29	4.14	4.17
101	x			x	78	63	42	6.00	6.00
102	x		x		72	60	40	5.71	5.67
103	x			x	49	65	28	4.00	3.83
104		x		x	71	64	35	5.00	5.00
105	x			x	64	68	28	4.00	3.83
106	x			x	51	80	42	6.00	6.00
107		x		x	57	62	30	4.29	4.17
108		x		x	67	63	34	4.86	4.83
109	x			x	90	67	28	4.00	3.83
111	x			x	65	61	31	4.43	4.33
112	x			x	73	49	40	5.71	5.67
113		x		x	53	60	39	5.57	5.50
114		x		x	70	71	28	4.00	3.83
115		x		x	56	65	40	5.71	5.67
118	x			x	63	60	36	5.14	5.17
119	x			x	74	67	29	4.14	4.00
120		x		x	72	74	29	4.14	4.00
121		x		x	80	68	32	4.57	4.50
122	x			x	73	56	43	6.14	6.17
123	x			x	57	70	35	5.00	5.00
124	x			x	67	68	30	4.29	4.17
125		x		x	57	70	36	5.14	5.17
126	x			x	47	72	42	6.00	6.00
127	x		x		51	77	42	6.00	6.00
128		x		x	51	74	35	5.00	5.00
129		x	x		66	67	42	6.00	6.00
130	x			x	72	77	28	4.00	4.00
131	x			x	57	68	42	6.00	6.00

Appendix XVII Cont'.

Raw Scores of Independent and Dependent Variables of Supervisory Groups

Group No.	Training		Experience		LPC	GA	Effectiveness		
	♂ Bac	♀ Bac	<2 yrs.	>2 yrs.			Total	AV.1 1-7	AV.2 2-7
132		x		x	69	60	34	4.86	4.83
133		x	x		61	64	28	4.00	4.00
134		x		x	53	75	34	4.86	4.83
135	x			x	92	71	25	3.57	3.50
136		x		x	54	76	36	5.14	5.17
137	x		x		72	59	38	5.43	5.33
138	x			x	74	65	40	5.71	5.67
011		x		x	67	65	34	4.86	4.83
015	x			x	64	67	26	3.71	3.83
019	x			x	73	70	27	3.86	3.83
076	x			x	63	67	31	4.43	4.33
084		x		x	43	64	34	4.86	3.83
085	x			x	79	66	27	3.86	3.83
090	x			x	84	65	40	5.71	5.67
110		x		x	56	74	34	4.86	4.83
116	x			x	58	73	40	5.71	5.83
117		x		x	79	73	33	4.71	4.67

APPENDIX XVIII

EFFECTIVENESS RATINGS OF TYPES OF SUPERVISORY GROUPS CLASSIFIED ACCORDING TO TRAINING, GROUP ATMOSPHERE (G.A.) AND LEAST PREFERRED CO-WORKER SCORES (LPC)

Appendix XVIII

Effectiveness Ratings of Types of Supervisory Groups Classified According to Training*, Group Atmosphere (G.A.) and Least Preferred Co-Worker Scores (LPC)

Type	Number	G.A.	LPC	Effectiveness
1	027	62	54	4.00
	047	56	57	4.43
	048	62	56	5.00
	072	63	43	4.71
	079	37	46	4.71
	084	64	43	4.86
	107	62	57	4.29
	113	60	53	5.57
	115	65	56	5.71
2	008	67	70	4.00
	014	77	76	4.29
	015	67	64	3.71
	016	66	64	3.86
	018	74	79	3.86
	019	70	73	3.86
	023	70	76	4.00
	032	70	66	3.00
	059	75	96	4.00
	064	66	70	3.42
	083	67	72	4.00
	085	66	79	3.86
	105	68	64	4.00
	109	67	90	4.00
	119	67	74	4.14
	124	68	67	4.29
	130	77	72	4.00
	135	71	92	3.57
3	002	68	52	5.00
	011	65	67	4.86
	038	61	69	4.14
	039	58	96	5.00
	056	61	70	5.00
	081	48	72	5.00
	104	64	71	5.00
	108	63	67	4.86
	132	60	69	4.86

Appendix XVIII Cont'.

Effectiveness Ratings of Types of Supervisory Groups Classified According to Training*, Group Atmosphere (G.A.) and Least Preferred Co-Worker Scores (LPC)

Type	Number	G.A.	LPC	Effectiveness
4	033	63	47	4.00
	042	56	53	3.71
	063	53	55	3.86
	065	51	38	4.14
	070	52	56	4.14
	086	60	55	3.71
	096	49	44	4.14
	103	65	49	4.00
5	013	66	72	5.00
	024	69	64	5.00
	041	75	67	4.86
	045	66	73	5.00
	051	74	83	4.14
	053	68	68	4.43
	060	82	101	4.00
	062	76	76	6.00
	069	70	67	4.43
	071	68	64	4.29
	114	71	70	4.00
	117	73	79	4.71
	120	74	72	4.14
	121	68	80	4.57
6	010	66	55	5.29
	037	70	34	4.57
	049	80	57	5.00
	052	80	54	4.71
	057	73	57	5.43
	061	73	53	5.00
	082	66	55	4.14
	110	74	56	4.86
	125	70	57	5.14
	128	74	51	5.00
	134	75	53	4.86
	136	76	54	5.14

Appendix XVIII Cont'.

Effectiveness Ratings of Types of Supervisory Groups Classified According to Training*, Group Atmosphere (G.A.) and Least Preferred Co-Worker Scores (LPC)

Type	Number	G.A.	LPC	Effectiveness
7	005	65	75	5.71
	009	60	73	6.14
	012	60	95	6.00
	026	64	86	5.86
	028	63	65	6.00
	030	64	70	5.00
	089	61	95	5.71
	090	65	84	5.71
	092	65	93	5.43
	094	63	65	5.86
	101	63	78	6.00
	111	61	65	4.43
	112	49	73	5.71
	122	56	73	6.14
	138	65	74	5.71
8	001	68	52	6.00
	003	67	56	5.71
	006	79	51	5.29
	017	70	40	5.57
	020	70	56	6.00
	021	80	26	6.00
	025	80	22	5.00
	043	80	51	5.14
	050	80	49	5.00
	055	73	57	6.14
	073	71	51	5.43
	075	76	47	5.71
	088	69	42	5.57
	091	74	43	7.00
	098	67	44	5.71
	106	80	51	6.00
	123	70	57	5.00
	126	72	47	6.00
	131	68	57	6.00

Note:

Supervisory groups lead by supervisors with less than two years experience and with intermediate LPC scores (between 58 and 63) have not been included.

APPENDIX XIX

INTERCORRELATIONS FROM THE PRE AND POST TEST INSTRUMENT OF EFFECTIVENESS

APPENDIX XIX

INTERCORRELATIONS FROM THE PRE AND POST TEST INSTRUMENT OF EFFECTIVENESS

ITEM:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	PRETEST	RETEST
Item 1	1.000															
	P=0.0															
Item 2	0.562	1.000														
	P=0.003*	P=0.0														
Item 3	0.523	0.419	1.000													
	P=0.007*	P=0.037*	P=0.0													
Item 4	0.436	0.511	0.048	1.000												
	P=0.029*	P=0.009*	P=0.820	P=0.0												
Item 5	0.324	0.461	0.335	0.355	1.000											
	P=0.114	P=0.020*	P=0.102	P=0.082	P=0.0											
Item 6	0.398	0.460	0.527	0.106	0.334	1.000										
	P=0.049*	P=0.021*	P=0.007*	P=0.613	P=0.102	P=0.0										
Item 7	0.036	0.321	0.206	0.744	0.488	0.542	1.000									
	P=0.863	P=0.117	P=0.323*	P=0.724	P=0.013*	P=0.005*	P=0.0									
Item 8	1.000	0.562	0.523	0.437	0.324	0.398	0.036	1.000								
	P=0.0*	P=0.003*	P=0.007*	P=0.029*	P=0.114	P=0.049*	P=0.863	P=0.0								
Item 9	0.661	0.870	0.490	0.445	0.346	0.502	0.351	0.661	1.000							
	P=0.000*	P=0.000*	P=0.013*	P=0.026*	P=0.090	P=0.010*	P=0.085	P=0.000*	P=0.0							
Item 10	0.576	0.379	0.931	0.089	0.408	0.481	0.252	0.576	0.455	1.000						
	P=0.003*	P=0.062	P=0.000*	P=0.671	P=0.043*	P=0.015*	P=0.225	P=0.003*	P=0.022*	P=0.0						
Item 11	0.434	0.389	0.196	0.782	0.343	0.084	0.114	0.434	0.328	0.329	1.000					
	P=0.030*	P=0.055	P=0.347*	P=0.000*	P=0.093	P=0.688	P=0.589	P=0.030*	P=0.030*	P=0.108	P=0.0					
Item 12	0.338	0.398	0.306	0.261	0.949	0.367	0.538	0.338	0.341	0.416	0.255	1.000				
	P=0.098	P=0.049*	P=0.136*	P=0.207	P=0.000*	P=0.07?	P=0.005*	P=0.098	P=0.096	P=0.038*	P=0.219	P=0.00				
Item 13	0.395	0.353	0.509	0.141	0.275	0.834	0.440	0.395	0.320	0.578	0.114	0.350	1.000			
	P=0.050*	P=0.084	P=0.009*	P=0.501	P=0.183	P=0.000*	P=0.028*	P=0.050*	P=0.119	P=0.002*	P=0.586	P=0.086	P=0.0			
Item 14	0.0	0.280	0.280	0.0	0.502	0.517	0.903	0.0	0.384	0.336	0.0	0.592	0.425	1.000		
	P=1.000*	P=0.160	P=174	P-1.000*	P=0.011*	P=0.008*	P=0.000*	P=1.000*	P=0.058	P=0.101	P=0.000*	P=0.002*	P=0.034*	P=0.0		
Pretest	0.640	0.757	0.663	0.478	0.749	0.725	0.637	0.644	0.742	0.680	0.460	0.724	0.632	0.604	1.000	
	P=0.001	P=0.000*	P=0.000*	P=0.016*	P=0.000*	P=0.000*	P=0.001*	P=0.001*	P=0.000*	P=0.000*	P=0.021*	P=0.000*	P=0.001*	P=0.001*	P=0.0	
Retest	0.655	0.653	0.677	0.406	0.715	0.683	0.622	0.655	0.702	0.761	0.450	0.756	0.682	0.659	0.954	1.000
	P=0.000*	P=0.000*	P=0.000*	P=0.004*	P=0.000*	P=0.000*	P=0.001*	P=0.000*	P=0.000*	P=0.000*	P=0.024*	P=0.000*	P=0.000*	P=0.000*	P=0.000*	P=0.0

NOTE:

*Significant at the p=0.05

Pretest items are 1 to 7; Retest items are 8 to 14

APPENDIX XX

ABSTRACT OF: LEADERSHIP AND THE EFFECTIVENESS OF COMMUNITY HEALTH NURSING SERVICES

Abstract of

Leadership and the Effectiveness of

Community Health Nursing Services

The study explored the relationship between leadership style and effective group performance, with particular emphasis on how training affects the leadership performance of supervisors of community health nursing services. The problem investigated provided a test for some of the propositions arising from Fiedler's Contingency Model of Leadership Effectiveness. The study supported the predictive value of the Contingency Model in the field of community health nursing services.

This project was carried out in the 43 official community health agencies in Ontario. Data were gathered from 133 supervisory groups using mailed questionnaires. Leadership style, situational favorableness, and baccalaureate training were the independent variables; organizational effectiveness of community health nursing services was the dependent variable. The instrument used to measure leadership style was the Least-Preferred Co-worker (LPC) scale. Situational favorableness was measured using the Group Atmosphere (GA) scale. These scales were completed by the community health nursing supervisors. Organizational effectiveness was measured by using a modified Georgopoulos and Mann instrument which was completed by the Directors of Nursing for the supervisory groups in

their respective agencies. The research hypotheses were as follows:

H.1.a. In favorable situations, groups led by low LPC supervisors have higher group effectiveness scores than groups led by high LPC supervisors.

H.1.b. In moderately favorable situations, groups led by high LPC supervisors have higher group effectiveness scores than groups led by low LPC supervisors.

H.2.a.i. In favorable situations, groups led by high LPC supervisors without training will have higher group effectiveness scores than groups led by high LPC supervisors with training.

H.2.a.ii. In favorable situations, groups led by low LPC supervisors with training will have higher group effectiveness scores than groups led by low LPC supervisors without training.

H.2.b.i. In moderately favorable situations, groups led by low LPC supervisors without training will have higher group effectiveness scores than groups led by low LPC supervisors with training.

H.2.b.ii. In moderately favorable situations, groups led by high LPC supervisors with training will have higher group effectiveness scores than groups led by high LPC supervisors without training.

The hypothesis were tested using analyses of variance followed by post hoc procedures for simultaneous multiple contrasts.

The prediction that Fiedler's Contingency Model of organizational effectiveness would apply to supervisory groups in community health nursing received strong support from the results of the study. In favorable situations,

groups led by experienced supervisors with low LPC performed better than those led by experienced supervisors with high LPC. In moderately favorable situations, groups led by experienced high LPC supervisors performed better than those led by experienced low LPC supervisors. Prediction of the effect of baccalaureate training of supervisors on group performance was fully supported in the case of experienced leaders. Baccalaureate training increased the favorableness of the leadership situation such that in favorable leadership situations training increased the performance of low LPC supervisors but decreased the performance of high LPC supervisors, and in moderately favorable leadership situations training increased the performance of high LPC supervisors but decreased that of low LPC supervisors.

The results of the study suggest that performance of community health nursing supervisors depends on the match between the supervisor's motivational system and the degree to which the situation provides the leader with influence and control. The study findings permit the prediction of situations in which baccalaureate training would tend to increase or decrease the performance of the supervisor depending on her leadership style. The major implication of the study is its support for the development of a rational management program based on the Contingency Model, including strategies for the selection,

placement and training of community health nursing supervisors, and the creation and maintenance of an optimal leadership match. Other findings, limitations, implications and suggestions for further research are discussed.