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Staff Nurse Perceptions of Performance Feedback in a Clinical Ladder Performance Appraisal System

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STAFF NURSE PERCEPTIONS OF PERFORMANCE FEEDBACK
IN A CLINICAL LADDER PERFORMANCE APPRAISAL SYSTEM

by

Eileen T. French

A Thesis Submitted to the Faculty of the Graduate School
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Clinical ladder performance appraisal systems are currently very popular retention tools used by hospitals, but their effectiveness has not been systematically evaluated. A clinical ladder performance appraisal system is a system of vertical rungs for clinical advancement of staff nurses that delineates job expectations and degrees of competence.

Performance feedback, a necessary part of any performance appraisal system, is one aspect of clinical ladders that must be tested. Performance feedback is defined as a subset of information available to the nurse in the work environment that is specific to his or her nursing performance. It is used by the nurse to form a perception of his or her current nursing performance and to affect that nurse's future nursing performance.

This study was designed to assess staff nurse perceptions of performance feedback, and to determine changes in these perceptions after the implementation of a clinical ladder performance appraisal system. It was hypothesized that performance feedback would be enhanced with the implementation of a clinical ladder system. A clinical ladder system systematizes supervisor and peer feedback and specifies expected performance behaviors at the various levels of the ladder.
All staff nurses in a midwestern children's hospital were asked to fill out a questionnaire assessing their perceptions of performance feedback prior to the implementation of a clinical ladder performance appraisal system, and again one year after the clinical ladder was implemented (n=197). An instrument, grounded in the work of Greller and Herold, was developed to measure staff nurse perceptions of performance feedback. The performance feedback instrument contained four subscales of five items each. The instrument was pilot tested using 30 graduate nursing students.

Repeated measures ANOVAs were performed to test the hypotheses that staff nurse perceptions of the amount and type of performance feedback received would increase following implementation of a clinical ladder performance appraisal system. These hypotheses were not supported by the data. Multiple regression analyses were performed to test the hypotheses that educational background and experience level would explain a significant amount of variance in staff nurse perceptions of performance feedback. Level of education was a significant predictor of pretest perceptions of performance feedback, but the explanatory power of the predictor variable was found to be weak. Length of experience was a significant predictor of pretest perceptions of performance feedback only in the subscale of negative feedback from superior, and the explanatory power of this predictor variable was also weak.

Clinical ladder performance appraisal systems have been instituted by many hospitals, and have been viewed as a positive step by nurses. The proposed benefits of clinical ladders must continue to be rigorously tested, however, to justify their time and expense.
TABLE OF CONTENTS

ACKNOWLEDGMENTS .................................................. ii
LIST OF TABLES ......................................................... vi
LIST OF ILLUSTRATIONS ............................................ vi

Chapter

I. PROBLEM STATEMENT AND SIGNIFICANCE ......................... 1
II. REVIEW OF RELATED LITERATURE ................................. 4
    Theoretical Framework ....................................... 4
    Related Literature ........................................... 5
III. METHODS .......................................................... 18
    Design ......................................................... 18
    Sample and Setting ......................................... 18
    Measures ...................................................... 22
    Procedures ................................................... 24
    Limitations ................................................... 24
IV. RESULTS ............................................................ 26
    Hypotheses .................................................... 26
    Procedures .................................................... 27
    Effects of Clinical Ladder on Performance Feedback ....... 28
    Education and Experience ................................... 34
V. DISCUSSION .......................................................... 38
    Clinical Ladders and Performance Feedback .................. 38
    Education, Experience, and Performance Feedback .......... 41
    Staff Nurse Perceptions of Performance Feedback .......... 41
    Implications for Future Research ............................. 42

Appendixes

A. PERFORMANCE FEEDBACK TOOL ................................. 44
TABLE OF CONTENTS--Continued

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. CONSENT FORM</td>
<td>48</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>50</td>
</tr>
<tr>
<td>VITA</td>
<td>54</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Frequency Distribution of Pretest and Posttest Responses on Performance Feedback</td>
<td>29</td>
</tr>
<tr>
<td>2.</td>
<td>Analysis of Variance on Performance Feedback Variables Comparing Sources and Time Period</td>
<td>32</td>
</tr>
<tr>
<td>3.</td>
<td>Pearson Correlation Coefficients Between Pretest Subscales and Staff Nurse Education and Experience</td>
<td>35</td>
</tr>
<tr>
<td>4.</td>
<td>Partial Correlation Coefficients Between Pretest Subscales and Staff Nurse Education and Experience</td>
<td>35</td>
</tr>
<tr>
<td>5.</td>
<td>Stepwise Multiple Regression Analysis of the Effect of Staff Nurse Education and Experience on Pretest Performance Feedback Subscales</td>
<td>36</td>
</tr>
</tbody>
</table>

LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dimensions of Performance Feedback</td>
<td>6</td>
</tr>
</tbody>
</table>
CHAPTER 1

PROBLEM STATEMENT AND SIGNIFICANCE

Clinical ladder performance appraisal systems are currently very popular retention tools used by hospitals. A clinical ladder is defined as a system of vertical rungs for clinical advancement of staff nurses, which delineates expectations and degrees of competence (Zimmer, 1972). This hierarchy of criteria establishes a means for evaluation and/or professional development of nurses providing direct care to patients (del Bueno, 1982). Balasco and Black (1987) describe certain clinical ladders as "position classification systems that provided the basis for developing staff nurse job descriptions and evaluations" (p. 53).

Zimmer (1972), one of the first to describe such a system, stated that it was established in response to a need to recognize the performance of nurses who concentrate on clinical excellence. Formerly, nurses who wanted to advance in the profession had to do so primarily by taking positions, usually in management or teaching, which took them away from bedside practice (MacKinnon & Eriksen, 1977). Little consistency is found in the nursing clinical ladders being implemented by various organizations (Huey, 1982), which makes comparisons of clinical ladder performance appraisal systems difficult.

In theory, the benefits of clinical ladder performance appraisal systems are thought to be many. They include enhanced performance
feedback, increased retention and job satisfaction (Zimmer, 1972), improved quality of patient care (Bracken & Christman, 1978; Colavecchio, Tescher & Scalzi, 1974), and attraction of better job candidates (Miller, 1975). Almost no research has been reported, however, to test these effects.

Performance feedback is logically an important part of any performance appraisal system. Nemeroff and Cosentino (1979) studied the performance appraisal skills of managers and found that feedback and goal setting were important tools which together helped to improve these appraisal skills. Haas (1986) stated that a clinical ladder performance appraisal system should encourage ongoing feedback from both supervisors and peers regarding achievement of clinical ladder criteria.

The implementation and maintenance of a clinical ladder system takes a considerable amount of time, effort, and resources (del Bueno, 1982), as criteria for the various levels must be developed, disseminated, and revised as necessary. Especially in this time of nursing shortages and fiscal cutbacks, any system implemented to improve the profession of nursing must be shown to be effective. It is therefore imperative that the proposed benefits of clinical ladder performance appraisal systems be validated through research.

The purpose of this study was to examine one proposed benefit of clinical ladders—that of enhanced performance feedback. Specifically, this study examined whether there was a perception of improved performance feedback among staff nurses when their traditional work environment incorporated a clinical ladder performance appraisal system.

The definition of performance feedback in this study was based
on the research by Ashford and Cummings (1983) and Herold and Greller (1977). Performance feedback is a subset of information available to the nurse in the work environment that is specific to his or her nursing performance. Performance feedback is used by the nurse to form a perception of his or her current nursing performance and to affect that nurse's future performance.
CHAPTER II

REVIEW OF RELATED LITERATURE

Theoretical Framework

Feedback is an integral part of many communication models, and has its roots in general systems theory (Nadler, 1979). In Putt's (1978) description of systems theory, she states that feedback is a self-corrective mechanism, so that a portion of the system's output is returned to the system. This information is used by the system to alter its future output.

While a number of communication models exist, most contain the same basic components. A model by Engel, Warshaw, and Kinneal (1979) is a basic representation of the communications process. In this model, the communication begins at the source, who conceives the thought and encodes it into some form so that it may be communicated. The message thus formed is communicated to the receiver, who decodes the message into a form that he or she can understand. The receiver then uses the message to form some response, which is sent to the source in the form of feedback. According to Haas (1986), this feedback message serves as a stimulus to influence the behavior of the source in the workplace.

Feedback, or more specifically performance feedback, is not a simple stimulus but rather a multidimensional construct (Ilgen, Fischer & Taylor, 1979). It is defined as a specific form of the general
communications process where a sender delivers a message to a recipient (Ilgen et al., 1979). As such, it can be viewed as having the same components as the original communication: source, message, receiver, and response. This study will focus on the first three dimensions of feedback: source, message, and receiver.

The four dimensions of feedback: source, message, receiver, and response, are differentiated further in Figure 1. Sources of feedback may be categorized as intrinsic or extrinsic sources (Greller & Herold, 1975). Intrinsic sources include feedback from self and feedback from the task being performed, such as whether task performance yielded expected results. External sources of feedback include co-workers, supervisors, and the formal organization.

The feedback message itself may be differentiated by its valence and frequency (Ilgen et al., 1979). Valence refers to whether the feedback message is positive or negative in nature. Frequency simply means how often the feedback occurs.

The receiver decodes and perceives the feedback message. This perception of feedback will form the basis of our study. The response to performance feedback may be viewed as contingent upon perception of both the source of the message and the message itself.

**Related Literature**

The clinical ladder performance appraisal system was first described by Zimmer in 1972. Zimmer speaks of the need for a system of advancement for clinical nurses which recognizes the clinical performance of these nurses. The clinical ladder system Zimmer proposes

Fig. 1.---Dimensions of Performance Feedback
consists of vertical rungs for clinical advancement which delineate job expectations and degrees of clinical competence. This recognition of performance by the clinical nurse, Zimmer feels, will improve job satisfaction and increase retention of these nurses.

Since then, the literature contains many descriptions of clinical ladders implemented by various organizations. Many of these descriptions contain proposed benefits of clinical ladders. Proposed benefits include: enhanced performance feedback, increased retention and improved job satisfaction among nurses (Zimmer, 1972), decreased nursing turnover (Vestal, 1984), improved quality of patient care (Bracken & Christman, 1978; Colavecchio et al., 1978), increased productivity of nurses (French, 1988), and attraction of better job candidates (Miller, 1975).

Few research studies have been performed thus far to test whether these proposed benefits of clinical ladders actually occur. Barhyte (1987) found a positive relationship between length of employment and the level of practice in a clinical ladder system. Haas (1986) conducted a cross-sectional survey of staff nurse perceptions of several proposed outcomes of a clinical ladder performance appraisal system. She defined a clinical ladder as a system of behavioral criteria organized into levels of clinical competence.

In the study by Haas (1986), nurses working in institutions with a clinical ladder system and nurses in an organization without a ladder were surveyed. The nursing perceptions tested were levels of: participation in continuing education, performance feedback, job satisfaction, professional achievement, and professional,
organizational, and clinical commitment. The results of the study were inconclusive, and provided little support for most of the hypothesized outcomes. Clinical ladders were found to be a predictor of only productivity as an aspect of professional achievement. Haas's study recommended several changes in methodology for future research, in order to better measure the outcomes of clinical ladder performance appraisal systems.

Studies of nursing turnover provide some foundation of support for clinical ladders. One study on nursing turnover found that promotional opportunities and fairness of rewards were two important determinants of job satisfaction, which in turn affected the nurse's intent to leave (Curry, Wakefield, Price, Mueller & McCloskey, 1985). Seybolt (1986) found that nursing job satisfaction and turnover varied at different stages of the nurse's career. Turnover was highest in nurses employed 3-6 years, due in part to a poor link perceived between job performance and feedback or rewards. Clinical ladders in theory could provide more promotional opportunities, improve perceived fairness of rewards, and strengthen the link between job performance and feedback and rewards. These potential effects of clinical ladders need to be studied systematically.

Any performance appraisal instrument, including clinical ladders, should be tested for reliability and validity. According to Kane and Lawler (1979), performance appraisal instruments have long had problems with their reliability and validity. However, no studies have been reported to date that examined the reliability and validity of clinical ladder performance appraisal instruments.
In theory, the proposed benefits of clinical ladder performance appraisal system are many. If these benefits do in fact occur, then these systems have the potential to dramatically improve the quality of clinical nursing. But due to the fact that these systems are costly to develop, implement and maintain (del Bueno, 1982), the proposed benefits need to be tested. In addition, the reliability and validity of clinical ladder performance appraisal systems must be assessed.

Performance Feedback

Much has been written about feedback in general and performance feedback in particular. Despite this, the concept of feedback is still poorly understood, due in part to the fact that many studies have taken a simplistic rather than a multidimensional approach to the concept (Greller & Herold, 1975). The four dimensions of feedback from the communications model (source, message, receiver, response) will be used in this review of relevant feedback literature.

Source of Feedback

Greller and Herold (1975) used a Likert scale to delineate five sources of performance feedback: the formal organization, supervisor, co-workers, the task, and one's own self. They found that sources that were intrinsic or closer to the individual (such as task and self) were relied upon more heavily than the more extrinsic sources (such as organization and supervisor). This reliance on intrinsic sources may be partly due to the fact that feedback from these sources is immediate, there may be less distrust of the source, and the feedback can be made
available when the individual wishes to receive it (Greller & Herold, 1975).

Pavett (1983) used a Likert scale and found that three sources of feedback (patient, co-worker, supervisor) had a similar impact on performance and motivation. Feedback from patients and co-workers, however, had more of an impact on instrumentality (the perceived correlation between performance and reward) than feedback from supervisors. This was an unexpected finding.

Studies have found relevant differences in the perceived informativeness of various sources, as well as differences in the perceived reliability and usefulness of information from these sources (Herold, Liden & Leatherwood, 1987). The study by Herold et al. (1987) found that the five sources of feedback are conceptually distinct, and that frequency, reliability, and usefulness are all relevant aspects of feedback. In addition, they found that feedback from all sources was negatively related to role ambiguity. Feedback from supervisors, co-workers and the organization were negatively related to thoughts of quitting, and feedback from supervisors, co-workers and task were negatively related to experienced mental stress.

The concept of peer review in nursing emphasizes the co-worker as a valuable source of performance feedback. Peer review is defined by the American Nurses' Association (1988) as "the process by which practicing registered nurses systematically assess, monitor, and make judgements about the quality of nursing care provided by peers as measured against professional standards of practice" (p.3).

The proposed benefits of nursing peer review are many. Mann,

The benefits of nursing peer review in the areas of quality assurance, clinical ladder advancement, and performance appraisal have been proposed in the literature (Mann et al., 1990). The American Nurses' Association (1988) proposed many benefits of peer review, including: consumers' assurance of nurse's competence, rewards for competent practice, identification of generic weaknesses in practice, and increased nursing control over nursing practice.

Nursing peer review is often associated in the literature with clinical ladders (Davis, 1987; Pierce, 1984). Pierce (1984) states that peer review is an essential component of a fair and unbiased clinical ladder program.

While many descriptions of nursing peer review can be found in the literature, few studies can be found. According to Hickey (1986), mainly isolated trials of peer review have been reported, but long-term effects have seldom been evaluated. Mio et al. (1985) studied two nursing units, and found that nurses perceived peer review evaluations as fairer than those done by supervisors alone, and that nurses favored peer review by a wide margin. Proposed differences in self-esteem in nurses undergoing peer review were not found in the short term.
Peer review was incorporated into the curriculum of one clinical nurse specialist program, and the students consistently expressed positive comments concerning their growth and development during the peer review process (Hickey, 1986). Hinshaw and Field (1974) found that when nursing professional colleagues evaluated each other, they ranked on the basis of professional standards and criteria, not on the basis of personal liking or willingness to help. Thus, peers can be a valuable source of objective information about the performance of other nurses.

Feedback Message

One important part of a performance feedback message is the concept of valence, which refers to whether the feedback is of a positive or negative nature. Herold and Greller (1977), in a factor analysis of employee responses, found a distinction between positive and negative feedback. The source of the feedback was differentiated in employee responses only when feedback was positive.

Fisher (1979) found several differences in the way performance feedback was given by supervisors based on valence. Supervisors tended to give feedback sooner to those subordinates they felt were performing poorly than to those they felt were doing well, possibly in an effort to change the behavior of the poor performers. In addition, when two supervisors rated the same employee behaviors, the supervisor required to give feedback rated those behaviors less negatively than the supervisor who did not give feedback. In dealing with the effects of positive feedback, Pavett (1983) found that positive feedback from supervisors to subordinates was highly correlated with a decrease in role disagreement between them.
A study by Johnson and Frederickson (1983) differentiated the content of the feedback message by feedback given about process versus outcomes. They found that feedback about the process of a procedure led to an increase in process behaviors, but not necessarily an increase in outcomes.

Frequency of the message is also important. Pavett (1983) found that the perceptions by nurses of a greater quantity and frequency of performance feedback are related to better job performance and higher motivation. Larson, Glynn, Fleenor and Scontrino (1986) studied four dimensions of feedback: frequency, timeliness, specificity and sensitivity. They found that these four feedback dimensions were not empirically distinct, but felt that one explanation may be that as feedback is given more frequently, it might naturally be more timely and specific. This study did provide evidence, however, that managers tend to give positive and negative feedback in different ways, and that the quality of positive feedback is usually rated higher than negative feedback.

Receiver of Feedback

According to communications theory, the receiver must decode a message into some form that is understandable to him or her. The perception of performance feedback, then, can vary in any aspect of the message. This perception may depend on the personal characteristics of the receiver, the nature of the message, or the source of the feedback (Ilgen et al., 1979).

The importance of the source of the feedback message in the perception of that message is shown in the study by Kanfer, Karoly and
Newman (1974). When performance feedback was administered by several sources, the subjects later recalled feedback from self more frequently than any other source.

The perception of the message by the receiver is also influenced by the valence of the message. Ilgen and Hamstra (1972) found that positive feedback is perceived and recalled with more accuracy than negative feedback. Based on previous studies, Ilgen et al. (1979) concluded that the frequency of performance feedback given was positively correlated with a greater accuracy in perception of the message. In some complex situations, however, feedback given too frequently led to confusion. Despite these studies, Ilgen et al. (1979) feel that we still have a long way to go in our understanding of perceptions of performance feedback.

Response to Feedback

The outcomes of performance feedback may be considered as the response portion of the communications model. There is some uncertainty as to whether performance feedback is an independent predictor of performance. Nemeroff and Cosentino (1979) found that feedback plus goal setting were superior to both feedback alone and a control group in increasing the performance appraisal skills of managers. Pavett (1983), on the other hand, found that the perception of positive feedback was an independent predictor of performance. She further found that frequent positive feedback had an impact on both performance and motivation.

In studying communication among nurses, Pincus (1986) found that performance feedback was a significant contributor to nurse's job satisfaction and job performance. Those aspects of communication most
strongly related to job satisfaction and performance were: communication with a supervisor, communication climate, and performance feedback. Seybolt (1986) studied turnover intentions in nurses, and found that performance feedback (supervisor, co-worker, or job feedback) was a significant factor in turnover intentions at four of five stages of a nurse's career.

Weisman, Alexander and Chase (1981) also studied staff nurse turnover. This study found that communication with the head nurse was the strongest predictor of autonomy, which in turn was the strongest predictor of job satisfaction and therefore of the nurse's intent to leave that institution. The Job Characteristics model by Hackman and Oldham (1975) predicts that feedback provides knowledge of performance results, which affects the desired outcomes of motivation, performance, and satisfaction. This relationship is moderated by the growth-need strength of the employee. Thus performance feedback, as shown by these studies, has a significant impact on nurses, and may affect their performance and retention in an institution.

It has been proposed that clinical ladder performance appraisal systems will improve performance feedback. Zimmer (1972) stated that the clinical ladder gives staff nurses "an organized and consistent set of standards for performance in practice" (p. 262). The clinical ladder also provides a formal recognition system so that "the level of individual achievement is communicated to co-workers" (Zimmer, p. 261).

Haas (1986) stated that a clinical ladder should encourage ongoing feedback to staff nurses from both supervisors and peers about achievement of clinical ladder criteria. Many clinical ladder systems
have included a formal peer review program to insure feedback from peers regarding achievement of criteria needed for advancement to each level.

Given the lack of studies about the proposed benefits of clinical ladder performance appraisal systems, studies attempting to test these benefits should be undertaken. Given also the lack of studies evaluating the impact of peer review, clinical ladder performance appraisal systems using peer review must have this component evaluated also. This study therefore examines the influence of a clinical ladder performance appraisal system on perceived performance feedback among nurses. The measure of feedback may be said to be an indirect indicator of the impact of peer review. This study is an extension of a previous study by Haas, (1986) using a pretest / posttest design and refinement of tools.

The hypotheses of this study were as follows:

1. Staff nurse perceptions of the frequency of positive performance feedback from peers would increase following implementation of a clinical ladder performance appraisal system in their work environment.

2. Staff nurse perceptions of the frequency of positive performance feedback from superiors would increase following implementation of a clinical ladder performance appraisal system in their work environment.

3. Staff nurse perceptions of the frequency of negative performance feedback from peers would increase following implementation of a clinical ladder performance appraisal system in their work environment.
4. Staff nurse perceptions of the frequency of negative performance feedback from superiors would increase following implementation of a clinical ladder performance appraisal system in their work environment.

5. Staff nurse perceptions that performance feedback contained specific information would increase following implementation of a clinical ladder performance appraisal system in their work environment.

6. Staff nurse perceptions that performance feedback gave direction for future nursing behavior would increase following implementation of a clinical ladder performance appraisal system in their work environment.

7. Staff nurse perceptions that performance feedback was a true reflection of their nursing performance would increase following implementation of a clinical ladder performance appraisal system.

8. Educational background of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback.

9. Length of experience of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback.
CHAPTER III

METHODS

Design

This was a quasi-experimental study that measured differences in perceptions of performance feedback using a pretest/posttest design. The subjects acted as their own controls. It was part of a larger evaluation by Dr. Haas of clinical ladder performance appraisal systems over a protracted period. A questionnaire including the performance feedback subscale was administered one month prior to and one year after implementation of a clinical ladder performance appraisal system. Testing was performed at one year after implementation in order to give nurses adequate time to apply for and achieve desired levels in the clinical ladder.

Sample and Setting

All staff nurses at an urban midwestern pediatric hospital were invited to participate in this study. The sample was a census (100%) of nurses working in the hospital as no sampling frame existed prior to implementation of the clinical ladder, and there was no way of knowing where on the ladder these nurses would be placed. There were approximately 450 nurses eligible for the clinical ladder at this institution, and a high response rate was necessary to overcome any
self-selection bias that might threaten the internal validity of the study.

In the previous study by Haas (1986), an 83% response rate among staff nurses was obtained. In order to achieve a similar response rate in this study, several methods were employed. Unit leaders were informed of the purpose and method of the study in advance, and again at the time of implementation of the study. Questionnaires were delivered personally by researchers to each staff nurse, along with a brief explanation of the study. The questionnaire itself was accompanied also by a brief written explanation. After 2 weeks, those who did not respond were personally given another questionnaire. One week after this, a reminder notice along with another questionnaire was sent to non-respondents.

For the pretest, 446 questionnaires were distributed to staff nurses, and 316 usable questionnaires were returned. This provided a response rate of 71%. For the posttest, only 247 of the 316 questionnaires were distributed, as a number of the original respondents had taken positions outside the clinical ladder, were on leave, or were no longer at the hospital. There were 197 of the 247 posttests returned, a response rate of 80%. This resulted in an n of 197, and an overall response rate of 44% of the original pretest sample.

The mean age of staff nurses at the time of the pretest was 32 years, with a mode of 28 years. The modal response for length of experience was 2 years. All of the nurses who completed both pretest and posttest were female. The nurses were generally well educated, with 71% holding a BSN or higher degree, and 14% of the staff nurses stating
they either had or were working towards a masters degree. At the time of the pretest, this was the first hospital position for most nurses (56%).

There were no apparent risks involved in the study. The feedback subscale took a short time to fill out (5 minutes), and the full questionnaire took about 30 minutes to complete. There were no apparent benefits to the individual subjects in the study, though there may be future benefits in advancing the body of nursing knowledge.

All efforts were taken to maintain anonymity of subjects in the study. Questionnaires were identified by code numbers only. To maintain confidentiality, the questionnaires were available only to the investigators. All subjects were given an explanatory letter with the questionnaire that explained the study, risks and benefits, confidentiality and right to withdraw from the study. Envelopes were provided for respondents to return questionnaires by mail. Completion of the questionnaire implied agreement to participate in the study.

The clinical ladder performance appraisal system at this institution is promoted as a voluntary career progression system, which serves to expand the role of the staff nurse and provide substantial opportunities for career advancement. The goals of this clinical ladder are: retention and development of professional staff nurses, recognition of levels of professional practice, development of formal rewards for advanced levels of practice, and improvement of patient care outcomes.

The clinical ladder consists of four levels. The levels are differentiated according to experience, education, and responsibilities in the parameters of clinician, teacher, researcher, and leadership. A
master's degree in nursing will be required in 1995 for a level IV practitioner, and a BSN for a level III position.

Progression to clinical ladder levels is voluntary. To petition for the second level, a staff nurse must assemble a credential file for review. The file includes evaluations by peer reviewers, unit coordinator and the staff nurse herself on the criteria of the proposed level. In addition, the staff nurse must submit a statement of intent, resume, the last performance appraisal results, documentation samples on two patients reflective of the new level criteria, teaching plans, presentations, or handouts developed, and a summary of research and educational activities. The decision for promotion is made by the unit coordinator in collaboration with the group. If problems exist with a decision at this level, then the hospital peer review committee makes the decision.

To petition to level three or four, the staff nurse must present a credential file to the hospital peer review committee, and the promotional decision is made by that committee. In addition to the documents needed for level two, the nurse must submit additional data such as samples of clinical documentation and a personal philosophy of nursing.

As a formal peer review system was new to this institution, the nurses received education on performance feedback and peer review. Criteria for effective performance feedback were used as part of the educational process. Useful feedback, according to Mill (1988): is descriptive rather than evaluative, focuses on feelings, is specific, is directed toward behavior that can be changed, is solicited, is well-
timed, and is checked to ensure clear communication.

In addition to education on performance feedback and peer review, nurse managers and charge nurses also received information and a workshop on coaching, and on the formal feedback mechanisms associated with the clinical ladder. Coaching is defined here as the management method used to help nurse managers and charge nurses to implement performance feedback. This content was then to be brought to the unit nurses by the nurse managers and charge nurses. One assumption made in this study was that all this education led to an increased comfort among nurses with both formal and informal feedback and peer review.

**Measures**

The performance feedback subscale was part of a larger questionnaire concerning nurses' perceptions of their work environment. The subscale consists of four subscales of five items each, measuring positive feedback from peers (peer/positive), positive feedback from superior (superior/positive), negative feedback from peers (peer/negative), and negative feedback from superior (superior/negative) (see Appendix A). Two additional questions were included to measure perceptions of feedback from self-assessment and from the job itself. Each question consists of 3-5 forced choice responses. Data on the educational level and length of experience of staff nurses were obtained from the larger questionnaire.

The feedback scale was devised for this study. It is conceptually based on the construct definition of performance feedback by Herold and Greller (1977), and includes the major points of their definition. Face validity of the scale was determined by three faculty
members with experience in tool design. The scale addressed several dimensions of performance feedback: valence (positive or negative), frequency, and source (supervisor, peers, task, and self). Questions were also included on whether performance feedback was perceived as specific, whether it was considered a true reflection of performance, and whether it served as a guide for future behavior.

Reliability of the tool was determined by pilot testing the feedback subscale on 30 graduate nursing students. In addition to the scale, the pilot included questions on whether all aspects of the tool made sense, and whether the nurse was working in an institution using clinical ladders.

Reliability alphas were performed on the feedback pilot scale using the SPSS-X program. Reliability alphas for each five-question subscale were: peer/negative = 0.73, superior/negative = 0.70, peer/positive = 0.67, and superior/positive = 0.71.

Reliability alphas were also performed on the feedback scale using the pretest and posttest data. Reliability coefficients for the pretest data were: peer/positive = 0.79, superior/positive = 0.90, peer/negative = 0.69, and superior/negative = 0.81. Reliability coefficients using the posttest data were: peer/positive = 0.75, superior/positive = 0.58, peer/negative = 0.64, and superior/negative = 0.75.

The reliability coefficient for positive feedback from superior decreased dramatically for the posttest results. Examination of the corrected alpha coefficients revealed that deletion of the question on the frequency of feedback would substantially increase the reliability.
of the peer/negative subscale. Deletion of the feedback frequency item would also minimally increase the reliability of the three other subscales on the pretest, and two of the four subscales on the posttest. Deletion of this item from the pilot data would have minimally increased the reliability of the two negative subscales, but substantially decreased the reliability of the two positive subscales.

Procedures

Pretest questionnaires were distributed one month prior to the planned implementation date for the clinical ladder, so that data could be obtained prior to a planned inservice on the clinical ladder. Even so, there was some awareness by the staff nurses that the clinical ladder performance appraisal system would soon take place. Questionnaires were distributed according to the method discussed previously.

Posttest questionnaires were distributed approximately one year after the pretest. This was to allow time for the nurses to apply for ladder levels, complete the review process, and experience a performance review under clinical ladder criteria.

Questionnaires were identified by code number only, and due to the confidential nature of performance appraisal tools, subjects were not identified by unit. The addressed envelopes provided for mailing back the questionnaires were not coded, to further insure anonymity of subjects.

Limitations

The limitations of the study were as follows:
1. The length of the study was relatively short, assessing only one point prior to the implementation of the clinical ladder, and measuring changes only once at a year after implementation of the clinical ladder. Thus, long-term changes due to the clinical ladder performance appraisal system may not have been captured in this study. However, the larger study by Dr. Haas will measure feedback variables along with other proposed benefits of clinical ladder performance appraisal systems for a period of two years after its institution.

2. There may have been an influence of confounding variables on the study, such as changes in a supervisor’s feedback style unrelated to the clinical ladder performance appraisal system. In some cases staff nurses were working under a different superior at the time of the posttest versus the pretest, as either the staff nurse or the superior changed positions during that time. The large sample size may have helped to reduce some of these influences, and a future analysis of information from the larger study may help to understand these confounding variables.

3. The study was conducted in a specialized urban hospital environment, dealing exclusively with children, and thus may attract a certain type of nurse not predominantly found at other types of institutions.
CHAPTER IV

RESULTS

Hypotheses

The purpose of this study was to examine whether there is a perception of improved performance feedback among staff nurses following the introduction of a clinical ladder performance appraisal system in their work environment. The hypotheses of this study were as follows:

1. Staff nurse perceptions of the frequency of positive performance feedback from peers would increase following implementation of a clinical ladder performance appraisal system in their work environment.

2. Staff nurse perceptions of the frequency of positive performance feedback from superiors would increase following implementation of a clinical ladder performance appraisal system in their work environment.

3. Staff nurse perceptions of the frequency of negative performance feedback from peers would increase following implementation of a clinical ladder performance appraisal system in their work environment.

4. Staff nurse perceptions of the frequency of negative performance feedback from superiors would increase following implementation of a clinical ladder performance appraisal system in their work environment.
5. Staff nurse perceptions that performance feedback contained specific information would increase following implementation of a clinical ladder performance appraisal system in their work environment.

6. Staff nurse perceptions that performance feedback gave them direction for future nursing behavior would increase following implementation of a clinical ladder performance appraisal system in their work environment.

7. Staff nurse perceptions that performance feedback was a true reflection of their nursing performance would increase following implementation of a clinical ladder performance appraisal system.

8. Educational background of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback.

9. Length of experience of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback.

**Procedures**

Feedback subscales were analyzed using the SPSS-X repeated-measures ANOVA. This test was used instead of a paired t-test in order to examine differences both within and between subgroups. Separate regression analyses on the four pretest and four posttest subscales were used to examine the effect of education and experience on perceptions of performance feedback. Descriptive statistics were used to describe the population studied.
Effects of Clinical Ladder on Performance Feedback

Frequencies.

Frequencies of pretest and posttest results are shown in Table 1. In general, perceptions of feedback under the clinical ladder varied only slightly, with some posttest scores slightly higher than the pretest scores, and some posttest scores slightly lower. Those areas that increased slightly in the posttest were: the frequency, satisfaction with amount, and helpfulness of positive feedback from peers; satisfaction with the amount of negative feedback from peers; and the frequency and belief that positive feedback from superiors was a true reflection of their performance. Scores from all other areas decreased slightly in the posttest.

The modal responses to the feedback scale offer some insight into how staff nurses perceive performance feedback. Staff nurses felt they received positive feedback from their peers once per week or more at the pretest, and during the posttest the mode was more than once week but less than once a month. The mean score for frequency of positive feedback from peers did increase slightly in the posttest, however. Staff nurses perceived that this amount of positive feedback from peers was about right at both pretest and posttest. Staff nurses perceived positive feedback from their superior as occurring between once a week and once a month at both the pretest and posttest. The amount of feedback from their superior was perceived as too little at the pretest, and about right at the posttest.

Positive feedback from both peers and superior was perceived as usually containing specific information and usually giving nurses
TABLE 1.--Frequency Distribution of Pretest and Posttest Responses on Performance Feedback (N=197)

<table>
<thead>
<tr>
<th>Response</th>
<th>Peers</th>
<th>Superiors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>1. Frequency of positive feedback:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>once a week or more often</td>
<td>39%</td>
<td>34%</td>
</tr>
<tr>
<td>more than once a month</td>
<td>37%</td>
<td>47%</td>
</tr>
<tr>
<td>less than once a month</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>less than once per 6 months</td>
<td>05%</td>
<td>03%</td>
</tr>
<tr>
<td>2. Amount of positive feedback is:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>too much</td>
<td>01%</td>
<td>00%</td>
</tr>
<tr>
<td>about right</td>
<td>64%</td>
<td>65%</td>
</tr>
<tr>
<td>too little</td>
<td>35%</td>
<td>35%</td>
</tr>
<tr>
<td>3. Positive feedback includes specific information:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>always</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>usually</td>
<td>59%</td>
<td>70%</td>
</tr>
<tr>
<td>seldom</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>never</td>
<td>04%</td>
<td>01%</td>
</tr>
<tr>
<td>4. Positive feedback gives direction:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>always</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>usually</td>
<td>51%</td>
<td>53%</td>
</tr>
<tr>
<td>seldom</td>
<td>27%</td>
<td>32%</td>
</tr>
<tr>
<td>never</td>
<td>09%</td>
<td>04%</td>
</tr>
<tr>
<td>5. Positive feedback a true reflection:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very true reflection</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>somewhat true reflection</td>
<td>45%</td>
<td>52%</td>
</tr>
<tr>
<td>not very true reflection</td>
<td>08%</td>
<td>04%</td>
</tr>
<tr>
<td>not at all true reflection</td>
<td>02%</td>
<td>01%</td>
</tr>
<tr>
<td>6. Frequency of negative feedback:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>once a week or more often</td>
<td>04%</td>
<td>01%</td>
</tr>
<tr>
<td>more than once a month</td>
<td>08%</td>
<td>08%</td>
</tr>
<tr>
<td>less than once a month</td>
<td>31%</td>
<td>30%</td>
</tr>
<tr>
<td>less than once per six months</td>
<td>55%</td>
<td>60%</td>
</tr>
<tr>
<td>7. Amount of negative feedback is:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>too much</td>
<td>10%</td>
<td>06%</td>
</tr>
<tr>
<td>about right</td>
<td>79%</td>
<td>83%</td>
</tr>
<tr>
<td>too little</td>
<td>09%</td>
<td>11%</td>
</tr>
</tbody>
</table>
TABLE 1.--Continued

<table>
<thead>
<tr>
<th>8. Negative feedback includes specific information:</th>
<th>Peers</th>
<th>Superiors</th>
</tr>
</thead>
<tbody>
<tr>
<td>always</td>
<td>23%</td>
<td>28%</td>
</tr>
<tr>
<td>usually</td>
<td>42%</td>
<td>44%</td>
</tr>
<tr>
<td>seldom</td>
<td>23%</td>
<td>19%</td>
</tr>
<tr>
<td>never</td>
<td>09%</td>
<td>05%</td>
</tr>
<tr>
<td>9. Negative feedback gives direction:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>always</td>
<td>17%</td>
<td>26%</td>
</tr>
<tr>
<td>usually</td>
<td>52%</td>
<td>52%</td>
</tr>
<tr>
<td>seldom</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>never</td>
<td>09%</td>
<td>10%</td>
</tr>
</tbody>
</table>

| 10. Negative feedback is a true reflection:       | Pre   | Post  |
| very true reflection                             | 13%   | 11%   |
| somewhat true reflection                        | 54%   | 59%   |
| not very true reflection                        | 24%   | 22%   |
| not at all true reflection                      | 04%   | 06%   |

| 11. Feedback from job gives direction:           |       |        |
| always                                          | 19%   | 17%   |
| usually                                         | 66%   | 68%   |
| seldom                                          | 10%   | 12%   |
| never                                           | 02%   | 02%   |

| 12. Feedback from self gives direction:          |       |        |
| always                                          | 25%   | 24%   |
| usually                                         | 68%   | 74%   |
| seldom                                          | 03%   | 01%   |
| never                                           | 02%   | 01%   |
| don't assess                                     | 02%   | 01%   |

direction for their future nursing performance. Positive comments by peers and superiors were also felt to be a somewhat true reflection of
their performance. These modal responses did not change from pretest to posttest.

Staff nurses felt they received negative feedback from both peers and superiors less than once every six months, both before and after the implementation of the clinical ladder and peer review system. Furthermore, they consistently felt that this amount of negative feedback was about right. As with positive feedback, staff nurses felt that the negative feedback received was usually specific, usually gave them direction, and was a somewhat true reflection of their performance. The staff nurses also felt that two other sources of feedback, feedback from the task and their personal assessment of their performance, usually gave them direction for their future nursing performance.

Thus staff nurses seemed, in general, satisfied with the performance feedback they received from each source. This included the frequency, specificity, and helpfulness of their performance feedback in guiding behavior, and belief that the feedback was usually a true reflection of their nursing performance.

Analysis of Variance.

A repeated measures ANOVA was performed on the pretest and posttest data, measuring differences in time (pretest vs. posttest), feedback source (peers vs. superior), and a combination of time and feedback source (Table 2). The combination of time and source was measured, because the educational experiences regarding performance feedback varied between peers and superiors, which possibly resulted in an interaction effect between time and source on the posttest.
TABLE 2.--Analysis of Variance on Performance Feedback Variables
Comparing Sources and Time Period (N=197)

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Feedback</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>3.13 / 2.68</td>
<td>31.92</td>
<td>.0000</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>2.90 / 2.95</td>
<td>0.33</td>
<td>n.s.</td>
</tr>
<tr>
<td>Good Amount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>2.67 / 2.59</td>
<td>3.28</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>2.63 / 2.61</td>
<td>0.17</td>
<td>n.s.</td>
</tr>
<tr>
<td>Specific</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>3.08 / 3.11</td>
<td>0.04</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.10 / 2.82</td>
<td>0.88</td>
<td>n.s.</td>
</tr>
<tr>
<td>Gives Direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>2.79 / 2.93</td>
<td>1.49</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>2.86 / 2.84</td>
<td>0.05</td>
<td>n.s.</td>
</tr>
<tr>
<td>True Reflection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>3.51 / 3.41</td>
<td>0.37</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.46 / 3.45</td>
<td>0.03</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>Negative Feedback</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>1.77 / 1.77</td>
<td>0.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>1.77 / 1.66</td>
<td>1.32</td>
<td>n.s.</td>
</tr>
<tr>
<td>Good Amount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>2.84 / 2.91</td>
<td>0.37</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>2.87 / 2.86</td>
<td>0.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>Specific</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>3.00 / 3.24</td>
<td>6.31</td>
<td>.0124</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.12 / 2.96</td>
<td>3.51</td>
<td>n.s.</td>
</tr>
<tr>
<td>Gives Direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers / Superior</td>
<td>2.88 / 3.13</td>
<td>6.13</td>
<td>.0137</td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.00 / 2.96</td>
<td>0.19</td>
<td>n.s.</td>
</tr>
<tr>
<td>True Reflection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.08 / 2.89</td>
<td>2.29</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
TABLE 2.--Continued

<table>
<thead>
<tr>
<th></th>
<th>Means</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feedback from Task</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest / Posttest</td>
<td>3.24 / 3.10</td>
<td>2.15</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>Feedback from Self</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest/Posttest</td>
<td>4.13 / 4.20</td>
<td>1.64</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>Subscales</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Feedback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers/Superior</td>
<td>3.24</td>
<td>0.07</td>
<td>n.s.</td>
</tr>
<tr>
<td>Pretest/Posttest</td>
<td>0.07</td>
<td>1.64</td>
<td>n.s.</td>
</tr>
<tr>
<td>Negative Feedback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peers/Superior</td>
<td>4.27</td>
<td>0.0395</td>
<td></td>
</tr>
<tr>
<td>Pretest/Posttest</td>
<td>1.62</td>
<td></td>
<td>n.s.</td>
</tr>
</tbody>
</table>

No significant differences were found between the pretest and posttest data, or on the combined measurement of time and source. Therefore, the hypotheses stating that there would be a significant difference in staff nurse perceptions of performance feedback following the implementation of a clinical ladder performance appraisal system were not supported by this data.

Several significant differences were found between feedback sources (peers vs. superior). Staff nurses felt they received a significantly greater number of positive comments from their peers than from their superior. Staff nurses also felt that negative feedback from their superior was significantly more specific in nature, and gave the nurses more direction for their future nursing behavior. ANOVAs performed on the subscales revealed a significant difference between
negative feedback as a whole from peers and negative feedback from superiors.

**Education and Experience**

**Correlations.**

Pearson correlation coefficients were analyzed between the performance feedback subscales (positive feedback from peers, positive feedback from superior, negative feedback from peers, and negative feedback from superior) and staff nurse levels of education and experience (Table 3). The coefficients were significant but weak for all four subscales in the pretest, and show that the level of staff nurse education was significantly related to pretest perceptions of performance feedback as measured by the subscales. The strongest correlation was between education and negative feedback from superior. Length of experience by the staff nurse also showed a weak but significant correlation to pretest perceptions of performance feedback, and again the strongest correlation was between experience and negative feedback from superior. Level of education and length of experience were compared, revealing a pretest correlation of 0.28 (p<.001). When the posttest data was analyzed, none of the correlations were found to be significant.

Partial correlation coefficients were performed to analyze the relationship between performance feedback subscales and the education and experience of the nurse, as education and experience may each influence the relationship of performance feedback with the other variable.
### TABLE 3.---Pearson Correlation Coefficients Between Pretest Subscales and Staff Nurse Education and Experience (N=197)

<table>
<thead>
<tr>
<th>Subscales</th>
<th>Level of Education</th>
<th>Length of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>p</td>
</tr>
<tr>
<td>Peer/Positive</td>
<td>.24</td>
<td>.000</td>
</tr>
<tr>
<td>Superior/Positive</td>
<td>.16</td>
<td>.011</td>
</tr>
<tr>
<td>Peer/Negative</td>
<td>.27</td>
<td>.000</td>
</tr>
<tr>
<td>Superior/Negative</td>
<td>.30</td>
<td>.000</td>
</tr>
</tbody>
</table>

The results of these correlations (Table 4) show that in the pretest, the level of education of the nurse has a weak but significant correlation with the four feedback subscales when the effects of length of experience are partialled out. When the effects of staff nurse level of education are partialled out of the pretest data, there is a weak but significant correlation between length of experience and negative feedback from superiors only. When the posttest data was analyzed, no significant partial correlations were found.

### TABLE 4.---Partial Correlation Coefficients Between Pretest Subscales and Staff Nurse Education and Experience (N=197)

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Level of Education</th>
<th>Length of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>p</td>
</tr>
<tr>
<td>Peer/Positive</td>
<td>.20</td>
<td>.002</td>
</tr>
<tr>
<td>Superior/Positive</td>
<td>.13</td>
<td>.032</td>
</tr>
<tr>
<td>Peer/Negative</td>
<td>.23</td>
<td>.000</td>
</tr>
<tr>
<td>Superior/Negative</td>
<td>.26</td>
<td>.000</td>
</tr>
</tbody>
</table>
The data on effects of level of education and length of experience on staff nurse perceptions of performance feedback was analyzed using a stepwise multiple regression. The multiple regression analysis on the effects of education and experience on perceptions of performance feedback revealed some significant effects with the pretest data (Table 5).

**TABLE 5.--Stepwise Multiple Regression Analysis of the Effect of Staff Nurse Education and Experience on Pretest Performance Feedback Subscales (N=197)**

<table>
<thead>
<tr>
<th>Pretest Subscale</th>
<th>Education Beta</th>
<th>T</th>
<th>Sig. T</th>
<th>Experience Beta</th>
<th>T</th>
<th>Sig. T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer/Positive</td>
<td>.2358</td>
<td>3.389</td>
<td>.0008*</td>
<td>.1109</td>
<td>1.539</td>
<td>.1255</td>
</tr>
<tr>
<td>Superior/Positive</td>
<td>.1620</td>
<td>2.292</td>
<td>.0230*</td>
<td>.0927</td>
<td>1.265</td>
<td>.2075</td>
</tr>
<tr>
<td>Peer/Negative</td>
<td>.2684</td>
<td>3.890</td>
<td>.0001*</td>
<td>.1072</td>
<td>1.500</td>
<td>.1352</td>
</tr>
<tr>
<td>Superior/Negative</td>
<td>.2990</td>
<td>4.375</td>
<td>.0000*</td>
<td>.1480</td>
<td>2.101</td>
<td>.0369*</td>
</tr>
</tbody>
</table>

*Significant at >.05.

The effects of education alone on pretest perceptions of performance feedback was significant when measured by the four subscales, showing that a small amount of the variance in staff nurse perceptions of performance feedback can be explained by the nurses' level of education. When experience was analyzed with education already in the equation, it was found to be a significant predictor of perceptions of performance feedback in only one subscale, negative feedback from superiors. Experience, however, explained only a small amount of the variance in pretest perceptions of negative performance feedback from superiors. Regressions performed on posttest data did not
reveal a significant explanatory power of education or experience on perceptions of performance feedback.

In conclusion, none of the seven hypotheses stating that aspects of performance feedback would significantly increase following implementation of a clinical ladder performance appraisal system were supported by data analyzed in this study. Significant differences were found between perceptions of pretest feedback from peers and superiors regarding several dimensions of performance feedback: frequency of positive feedback, specificity of negative feedback, helpfulness of negative feedback in giving direction, and negative feedback as a whole. Posttest data revealed no significant differences between perceptions of feedback from peers and superiors.

The hypothesis that educational background of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback has been supported by regression analysis of the pretest data, but not of the posttest data. The regression coefficients were small, however, offering little explanation of the variance in performance feedback. The hypothesis that the length of experience of the nurse would explain a significant amount of the variance in staff nurse perceptions of performance feedback was supported only by pretest negative feedback from superior, and this regression coefficient was also small.
Clinical Ladders and Performance Feedback

No significant differences were found in staff nurse perceptions of performance feedback when pre-implementation perceptions of performance feedback were compared to those obtained following the implementation of a clinical ladder performance appraisal system. This may be due to a number of reasons. First of all, the implementation of a clinical ladder performance appraisal system may not have had a significant impact on staff nurse perceptions of performance feedback in this instance.

Second, the effects of clinical ladders may be long term, and therefore may not be captured within the first year of implementation of the ladder. Change occurs slowly, and some staff nurses had difficulty buying into the concept of laddering, and in applying for and receiving the ladder levels they felt they deserved. A few nurses were not accepted to the level they desired on their first application, although most were accepted upon re-application. This caused some negative feelings. Also, leveling the entire staff was a staged process, and did not occur among all staff nurses as quickly as some had hoped.

A number of educational experiences were provided to the staff nurses regarding peer review and performance feedback in general. Staff
nurses on each unit received unit level inservices on performance feedback and peer review at the time that they began application procedures for the clinical ladder levels. Additional education on peer review and feedback was provided to individual staff nurses and units as needed. Many charge nurses and unit managers also received this same unit level education. In addition, charge nurses and unit managers received inservice education on coaching, peer review, and performance feedback. This information was to be disseminated to the staff nurses.

Prior to implementation of the clinical ladder, none of the staff nurses had experienced peer review at this institution, but at the time of the posttest all staff nurses had experienced some form of peer review. All staff nurses had at least level I ladder experience with limited peer review, but only about one third of the nurses experienced the full peer review system associated with application to higher levels. According to the nursing education staff, some of the nursing units appeared to embrace the concept of peer review quite readily, while other units appeared more reluctant to begin this new approach. Staff nurse feelings concerning peer review may also have had an effect on the feedback responses.

The effect of these learning experiences may have been to confuse the nurses, make them more discriminating in their posttest responses than in the pretest, or raise their expectations about performance feedback. Perhaps there was a response set bias in the pretest, so that in the posttest the nurses were more discriminating in their responses regarding feedback, or they may have had stronger feelings about feedback after their clinical ladder experience. The
mean scores on the feedback scale items rose on five of the nine feedback from peer items on the posttest, but fell on seven of the nine items on feedback from their superior. In addition, the inter-item correlations of the pretest responses were higher than the posttest responses.

Unit differences in performance feedback may have been due in part to the staff nurses' relationship with the individual head nurse as well as that head nurse's managerial style, but to insure anonymity of responses the questionnaires were not identified by unit. The nurse's relationship with the head nurse was addressed in the larger questionnaire, and examination of this data may help to explain these unit differences.

Some of the components of performance feedback may not be as empirically distinct as had previously been believed. The study by Larson et al. (1986) found that the feedback dimensions of frequency, timeliness, specificity, and sensitivity were empirically indistinct. This study suggests that it may be better to assess the overall quality of performance feedback than to focus on each dimension.

Increasing the number of responses available for each question may make the tool more discriminating. Perhaps a five or seven point scale may be better able to highlight any significant differences.

As the study was performed at a large children's specialty hospital, the results may not be applicable to the general staff nurse population. The staff nurses here were generally young, well educated, and had a mode of two years of experience.
Partial correlations showed a weak but significant correlation between educational background of the nurse and staff nurse perceptions of performance feedback in the pretest. Thus the greater the level of education of the staff nurse, the more positively the nurse perceives the performance feedback he/she receives. Level of education appears to be a stronger predictor of the variance in perceptions of performance feedback than length of experience, as shown by multiple regression analysis.

The only significant correlation between length of experience of the staff nurse and perceptions of performance feedback was in pretest negative feedback from superior. The fact that negative feedback from superiors had the strongest correlation to staff nurse education and experience may be logical, in that the more educated and experienced nurses may have felt more secure in their job performance, and may have viewed negative feedback in a more mature manner, and seen it as a positive growth experience.

Staff Nurse Perceptions of Performance Feedback

According to the modal responses to the performance feedback pretest and posttest, staff nurses appeared generally satisfied with the amount of feedback they received, though in the pretest nurses felt that peers gave a significantly greater amount of feedback than superiors. The staff nurses also felt that feedback from both peers and superiors was usually specific, gave them direction for their future performance, and was a somewhat true reflection of their performance. During the pretest, prior to any peer review education, the nurses felt that
feedback from superiors was significantly more specific and contained more information that gave them direction than feedback from peers. In addition, nurses felt that feedback from the job and their own assessment of their performance were both usually helpful.

Staff nurses generally felt on both the pretest and posttest that they received positive feedback more than once a month, but negative feedback less than once per six months. Yet they overwhelmingly felt that this amount of negative feedback was about right, even though the modal response for experience among these nurses was only two years. In addition, with the new clinical ladder leveling system in place, staff nurses had an even greater need to know how they were progressing toward meeting the criteria of their desired level. Perhaps negative feedback was viewed by the staff nurses only as being chastised for poor performance, rather than constructive criticism.

**Implications for Future Research**

The importance of research testing the proposed benefits of clinical ladders and peer review systems cannot be overemphasized. The fact that most of the hypotheses in this study were not supported by the data does not necessarily mean that clinical ladders and peer review have no perceived effect on performance feedback. The tool and methods employed by this study may not have captured the effects of clinical ladders and peer review on performance feedback.

I would recommend any future study on the effects of performance feedback incorporate the following changes. The study should institute a longitudinal design spanning several years, to capture the long term effects of clinical ladders, and to avoid measuring staff nurse
perceptions of a new system before that system is fully integrated into the culture of the institution. The feedback tool might also be revised to incorporate a more discriminating response format for each question, in order to capture more subtle changes in performance feedback.

In conclusion, clinical ladder performance appraisal systems hold much promise for nursing. They have been instituted in many hospitals, and have been viewed both as a positive step to the nurses employed at these hospitals, and an attraction to potential nurse employees. The proposed benefits of clinical ladders must continue to be rigorously tested, however, to justify the required investment in time and expense.
APPENDIX A

PERFORMANCE FEEDBACK TOOL
PLEASE PLACE AN "x" IN THE APPROPRIATE SPACE IN EACH OF THE 2 COLUMNS

<table>
<thead>
<tr>
<th>FROM YOUR PEERS</th>
<th>FROM YOUR SUPERHI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(nurses on the same level as yourself)</td>
<td>(whoever does your performance evaluation)</td>
</tr>
</tbody>
</table>

1. How often do you receive positive comments about your nursing performance:
   - a) Once a week or more often
   - b) Less than once a week, but more than once a month
   - c) Less than once a month
   - d) Less than once every 6 months

2. Do you feel this amount of positive feedback is:
   - a) Too much
   - b) About right
   - c) Too little

3. How often do these positive comments include specific information about what you did well:
   - a) Always
   - b) Usually
   - c) Seldom
   - d) Never

4. How often do these positive comments contain information that gives you direction for your future nursing performance:
   - a) Always
   - b) Usually
   - c) Sometimes
   - d) Never

5. To what extent do you believe these positive comments are a true reflection of your performance:
   - a) Very true reflection
   - b) Somewhat true reflection
   - c) Not very true reflection
   - d) Not at all true reflection

6. How often do you receive negative comments about your nursing performance:
   - a) Once a week or more often
   - b) Less than once a week, but more than once a month
7. Do you believe this amount of negative feedback is:
   a) Too much
   b) About right
   c) Too little
   a)__________
   b)__________
   c)__________

8. How often do these negative comments include specific information about what you could have done better:
   a) Always
   b) Usually
   c) Sometimes
   d) Never
   a)__________
   b)__________
   c)__________
   d)__________

9. How often do these negative comments contain information that gives you direction for your future nursing performance:
   a) Always
   b) Usually
   c) Sometimes
   d) Never
   a)__________
   b)__________
   c)__________
   d)__________

10. To what extent do you believe these negative comments are a true reflection of your performance:
    a) Very true reflection
    b) Somewhat true reflection
    c) Not very true reflection
    d) Not at all true reflection
    a)__________
    b)__________
    c)__________
    d)__________

11. How often do you find feedback that comes from the job itself (for example, you are able to finish all of your work on time) gives you direction for your future nursing performance:
    a) Always
    b) Usually
    c) Sometimes
    d) Never
    a)__________
    b)__________
    c)__________
    d)__________

12. How often do you find your own personal assessment of your nursing performance gives you direction for your future nursing performance:
    a) Always
    b) Usually
    c) Sometimes
    d) Never
    e) I don't personally assess my performance
    f) Comment...__________________
1. In what year were you born? 19

2. Are you ...
   ( ) female,
   ( ) male

3. What is your highest nursing degree?
   ( ) Diploma,
   ( ) Associate Degree
   ( ) Baccalaureate Degree
   ( ) Baccalaureate Degree plus some graduate work
   ( ) Masters Degree
   ( ) Masters Degree plus some additional graduate work
   ( ) Nursing Doctorate (ND)
   ( ) Doctorate (Ph.D. or DNS)

4. How many years of nursing experience as an R.N. do you have in total? (Actual number)
APPENDIX B

CONSENT FORM
March 28, 1989

Dear CMH Staff Nurse:

My graduate student Eileen French, R.N., B.S.N. and I, Sheila A. Haas, Ph.D., R.N. faculty at Loyola University of Chicago in the School of Nursing, would like to request your participation in her thesis research and my ongoing research by completing the enclosed questionnaire.

DESCRIPTION OF PROCEDURE:
All staff nurses at Children's Memorial Hospital are being asked to voluntarily complete the enclosed questionnaire. This should take less than a half hour. The questionnaire items relate to staff nurse perceptions of how their work environment influences their clinical practice. Each nurse will return the questionnaire in the enclosed addressed envelope. Each questionnaire has a code number to facilitate follow-up of non-respondents and enhance the validity of the research findings.

RISKS AND DISCOMFORTS:
No names are requested on the questionnaire. A number has been placed only on the questionnaire so that follow-up can be made to non-respondents. To maintain confidentiality only the researchers, Eileen French and Sheila A. Haas, will have access to the number coding. Results will only be reported in aggregate form. Your responses will be analyzed and reported anonymously and in combination with other responses.

POTENTIAL BENEFITS:
Data gathered from participants in studies such as this can aid in defining areas in the work environment of nurses which are beneficial and those which require change.

ALTERNATIVES:
The alternative to participation in this study is non-participation which will not prejudice your status in any way.

FINANCIAL RISKS:
There is no financial risk involved in participation in this study.

Thank you for participating and making this research possible.

Sheila A. Haas, Ph.D., R.N.  
Associate Professor

Eileen French, R.N., B.S.N.  
Graduate Student
REFERENCES


The author, Eileen T. French, received a Bachelor of Science in Nursing from Northern Illinois University in December, 1978. She was employed at the Rehabilitation Institute of Chicago from 1979 through 1989, as a staff nurse, head nurse, and clinical educator. Ms. French is a member of the Association of Rehabilitation Nurses, and became a Certified Rehabilitation Registered Nurse in 1986. She is currently completing studies towards a Master of Science in Nursing degree at Loyola University of Chicago.

Ms. French's publications include:


The thesis submitted by Eileen T. French has been read and approved by the following committee:

Dr. Sheila A. Haas  
Associate Professor  
Marcella Niehoff School of Nursing  
Loyola University of Chicago

Dr. Anne Jalowiec 
Associate Professor  
Marcella Niehoff School of Nursing  
Loyola University of Chicago

The final copies have been examined by the director of the Thesis Committee and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Science in Nursing.

Date: April 17, 1991  
Director's Signature: Sheila A. Haas, Ph.D., R.N.